A46 Newark Bypass

TR010065

7.35 Applicant's Comments on Nottinghamshire County Council's Local Impact Report

APFP Regulation 5(2)(q)

Planning Act 2008

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

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

A46 Newark Bypass

Development Consent Order 202[ ]

Applicant's Comments on Nottinghamshire County Council's Local Impact Report

Regulation Number:	Regulation 5(2)(q)
Planning Inspectorate Scheme Reference	TR010065
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Author:	A46 Newark Bypass Project Team, National Highways

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1. Introduction

1.1.1. The Development Consent Order (DCO) application for the A46 Newark Bypass (the "Scheme") was submitted on 26 April 2024 by National Highways (the "Applicant") and accepted for Examination on 23 May 2024.

1.1.2. The purpose of this document is to set out the Applicant's comments on Nottinghamshire County Council's Local Impact Report which was submitted at Deadline 1 [REP1-038]

1.1.3. **Table 1-1** contains a full schedule of the Applicant's comments.

Table 1-1

Contents

Table 1-1 - Applicant's comments on Nottinghamshire County Council's Local Impact Report

Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**
1. Introduction		
Overview		
1.1.	National Highways (NH) (the 'Applicant') is planning to upgrade the A46 Newark Bypass, which is classified as a 'Nationally Significant Infrastructure Project' (NSIP). NH intend to obtain the necessary highway orders and compulsory purchase orders using a Development Consent Order (DCO) statutory instrument (under the Planning Act 2008). Part of the 2008 Act process invites relevant local authorities to submit a Local Impact Report (LIR), which considers the impact of the proposed scheme from the local authorities' perspective.	No comments needed from the Applicant.
1.2.	This LIR has been prepared by Nottinghamshire County Council, the Local Highway Authority, to evaluate the local impacts of the A46 Newark Bypass DCO for the construction, operation and maintenance of a bypass connecting Farndon roundabout and the Winthorpe roundabout. It is understood that Newark & Sherwood District Council (NSDC), the Local Planning Authority, are intending to submit a separate LIR. However. the District Council has provided advice to the County Council on built cultural heritage (Chapter 8).	No comments needed from the Applicant.
1.3.	The report has been prepared in accordance with the Planning Inspectorate Advice Note on Local Impact Reports (2012) and the published guidance of the Planning Officers Society.	No comments needed from the Applicant.
Site Description and Surroundings		
1.4.	The scheme is located within the district of Newark & Sherwood in the County of Nottinghamshire.	No comments needed from the Applicant.
1.5.	The route runs to the west of Newark, approximately 1km from the town centre, and to the east of the village of Kelham (approximately 2km distant). The southern extent of the scheme is located close to Farndon, whilst the northern extent of the scheme is located close to Winthorpe.	No comments needed from the Applicant.
1.6.	The existing A46 route traverses through farmland for the majority of the scheme extent and passes over the River Trent as well as both the East Coast Mainline and Nottingham to Lincoln (Castle) rail line.	No comments needed from the Applicant.
1.7.	Newark is a historic market town, home of Newark Castle (famous for being the location where King John died), the National Civil War Museum and Newark Air Museum. The scheme extent also passes several large employment sites, including British Sugar (accessed via the A46 / Great North Road junction), Northern Road Industrial Estate (accessed via the A46 / Lincoln Road junction), and Newlink Business Park. The route also passes Newark Showground, which is a large venue hosting a variety of events throughout the year. As such, the wider Newark area attracts a large number of local, regional and national trips that are important for the local economy	No comments needed from the Applicant.
1.8.	Figure 1.1 summarises the scheme location.	No comments needed from the Applicant.

Written Representations		
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	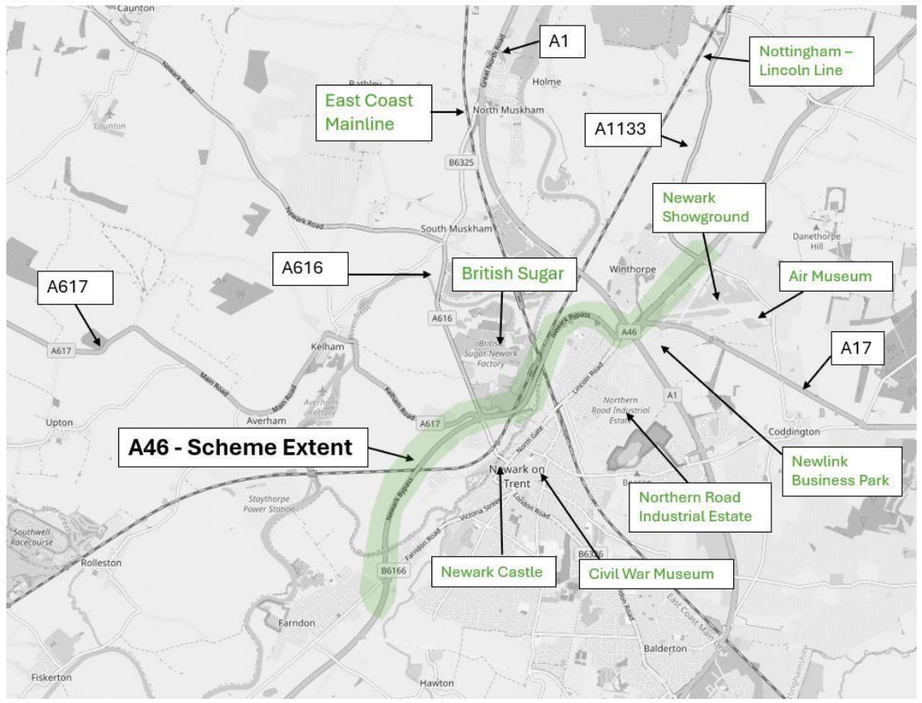 **Figure 1.1: Scheme Location**	
Details of the Scheme		
1.9.	The A46 forms part of the strategic Trans-Midlands Trade Corridor, connecting the M5 to the Humber Ports, with the section between Farndon roundabout, to the southwest of Newark, and the A1 to the east of Newark being the last remaining stretch of single carriageway between the M1 and A1	No comments needed from the Applicant.
1.10.	The A46 Newark Bypass scheme comprises on-line widening, on the north of side of the existing route, for most of its length between Farndon roundabout – at its western extent – and the A1 followed [to the east of the A1] by a new section of offline dual carriageway proposed between the A1 and Winthorpe roundabout, where the new dual carriageway ties into the existing A46 to the west of Winthorpe roundabout. The improvements will also result in amendments to the provision for Non-Motorised Users (NMUs). These NMU amendments may have an impact on pedestrians and cyclists in the immediate vicinity of the scheme, as well as wider public rights of way that may impact on equestrians.	No comments needed from the Applicant.
1.11.	The widening works require extensive earthworks along the existing embankments, and new structures where the route crosses the Nottingham to Lincoln and East Coast main railway lines, River Trent and the A1. The roundabouts at Farndon and Winthorpe will be enlarged and partially signalised, while the 'Cattle Market' roundabout will be grade separated by elevating the A46. Access to the A1 to / from A46 will also be improved by upgrading the 'Brownhill' and 'Friendly Farmer' roundabouts.	No comments needed from the Applicant.
1.12.	The DCO Scheme's Location Plan is shown in the DCO document 2.1 [**APP-004**].	No comments needed from the Applicant.
1.13.	Figure 1.2 shows an extract of the Scheme Location Plan.	No comments needed from the Applicant.

Written Representations		
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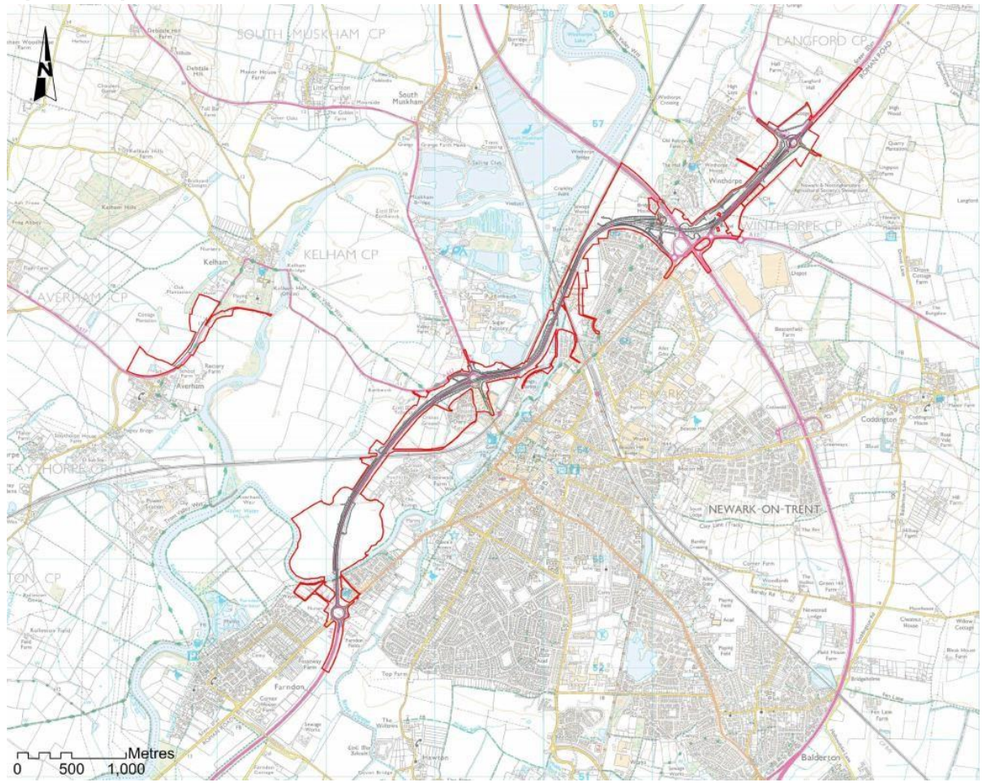
	Figure 1.2: Scheme Location Plan (Source: App-004 Scheme Location Plan, National Highways, April 2024) 	

2. Transport Planning

Relevant Local Transport-Related Policy Context
Nottinghamshire Plan

2.1.	The Nottinghamshire Plan[1] covers the period between 2021 to 2031 and sets out the 10-year vision for Nottinghamshire, considering the evolving ambitions for the County following the Covid-19 pandemic.	No comments needed from the Applicant.
2.2.	The Nottinghamshire Plan sets out the following ambitions which are relevant to the A46 scheme: Ambition 6: Making Nottinghamshire somewhere people love to live, work and visit. I. Ensure that developments across Nottinghamshire are attractive, sustainable and well planned. Ambition 7: Attracting investment in infrastructure, the economy and green growth I. Promote and drive the East Midlands Development Corporation, HS2, the Toton Campus and other major infrastructure projects. II. Protect our natural environment when new infrastructure is developed.	No comments needed from the Applicant.

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	Ambition 8: Improving transport and digital connections Improve local and regional transport connections to make journeys easier. Keep our highways safe and reduce congestion. Ambition 9: Protecting the environment and reducing our carbon footprint Promote greener travel	
2.3.	The aims of the A46 Scheme are well aligned with the Nottinghamshire Plan.	No comments needed from the Applicant.
Nottinghamshire Local Transport Plan		
2.4.	The Third Local Transport Plan (LTP3) sets out Nottinghamshire's transport strategy between 2011 and 2026 and outlines a programme of measures to be delivered over the short, medium and long term. The document is comprised of the Local Transport Plan Strategy and the Implementation Plan.	No comments needed from the Applicant.
2.5.	The LTP3 transport goals are to: provide a reliable, resilient transport system which supports a thriving economy and growth whilst encouraging sustainable and healthy travel improve access to key services, particularly enabling employment and training opportunities, and minimise the impacts of transport on people's lives, maximise opportunities to improve the environment and help tackle carbon emissions.	No comments needed from the Applicant.
2.6.	The following are the local transport objectives from the LTP3: Objectives related to **supporting economic growth** Tackle congestion and make journey times more reliable Improve connectivity to inter-urban, regional and international networks, primarily by public transport Address the transport impacts of planned housing and employment growth Encourage people to walk, cycle and use public transport through promotion and provision of facilities Support regeneration Objectives related to **helping protect the environment** Reduce transport's impact on the environment (air quality, buildings, landscape, noise etc.) Adapt to climate change and the development of a low-carbon transport system Objectives related to **improving health and safety** Improve levels of health and activity by encouraging active travel (walking or cycling) instead of short car journeys Address and improve personal safety (and the perceptions of safety) when walking, cycling or using public transport Objectives related to **improving accessibility** . Improve access to employment and other key services particularly from rural area . Provision of an affordable, reliable, and convenient public transport network Objectives related to maintaining and **improving existing infrastructure** . Maintain the existing transport infrastructure (roads, footways, public transport services etc.	No comments needed from the Applicant.

Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**
2.7.	The Implementation Plan details the transport improvements that will help to address the Local Plan objectives. The following specific reference to the given in relation to the A46 scheme: "*The County Council will continue (in collaboration with partners) to press for the A46 Newark improvements to be included and delivered during the second RIS period.*"	No comments needed from the Applicant.
2.8.	The objectives of the A46 Scheme are well aligned with the Nottinghamshire LTP.	No comments needed from the Applicant.
East Midlands Combined County Authority Local Transport Plan		
2.9.	It is understood that the East Midlands Combined County Authority (EMCCA) is producing a new Local Transport Plan (LTP) to replace the existing LTPs of Derby, Derbyshire, Nottingham and Nottinghamshire. No conflict is anticipated with major infrastructure schemes, such as that proposed with the A46.	No comments needed from the Applicant.
Bus Service Improvement Plan (BSIP)		
2.10.	The Nottinghamshire BSIP sets out the collaborative strategy between NCC and bus operators to improve bus services within the region. The NCC BSIP comprises of the following objectives: Comprehensive and simple network Reliable network Affordable services Integrated services Attractive, comfortable, safe and accessible services Coordinated transport Services that contribute to decarbonisation	No comments needed from the Applicant.
2.11.	The following strategies within the BSIP are applicable to the A46 scheme and wider Newark area: Launch new bus services (including a new bus service from Newark Northgate Station to Fernwood and Grantham, new evening Demand Responsive Transport in Newark and more buses per hour between Newark and Nottingham). Ensure bus services and associated infrastructure is provided as a priority for new developments. Bus stop infrastructure upgrades (including raised boarding kerbs and new / upgraded bus shelters).	No comments needed from the Applicant.
2.12.	It is understood that a key aim of the A46 Scheme is to improve journey time reliability along the corridor, with junction upgrades also relieving congestion. This aim aligns well with the BSIP objective to create a more reliable network; however, increased traffic flows on routes leading to / from the A46 corridor may impact the reliability of bus services within Newark and therefore undermine wider BSIP aspirations. This is considered further in the report, in the Section *Impacts on Public Transport*.	No comments needed from the Applicant.
Local Cycling and Walking Infrastructure Plan (LCWIP)		
2.13.	The D2N2 (Derby City, Derbyshire, Nottingham City and Nottingham) LCWIP sets out the strategic approach for developing comprehensive local cycling and walking networks within the region. The plan identifies a prioritised list of walking and cycling infrastructure improvements for future delivery in the short, medium and long term.	No comments needed from the Applicant.
2.14.	The following LCWIP Objectives are relevant to the A46 scheme: Objective 3 – Constrain Traffic Congestion Objective 4 – Address Climate Change and Improve Air Quality	No comments needed from the Applicant.
2.15.	Figure 2.1 shows the LCWIP network within proximity of the A46 Scheme, including the aspiration to create a continuous route via Fosse Road / Farndon Road and through the town centre (via Mill Gate,	No comments needed from the Applicant.

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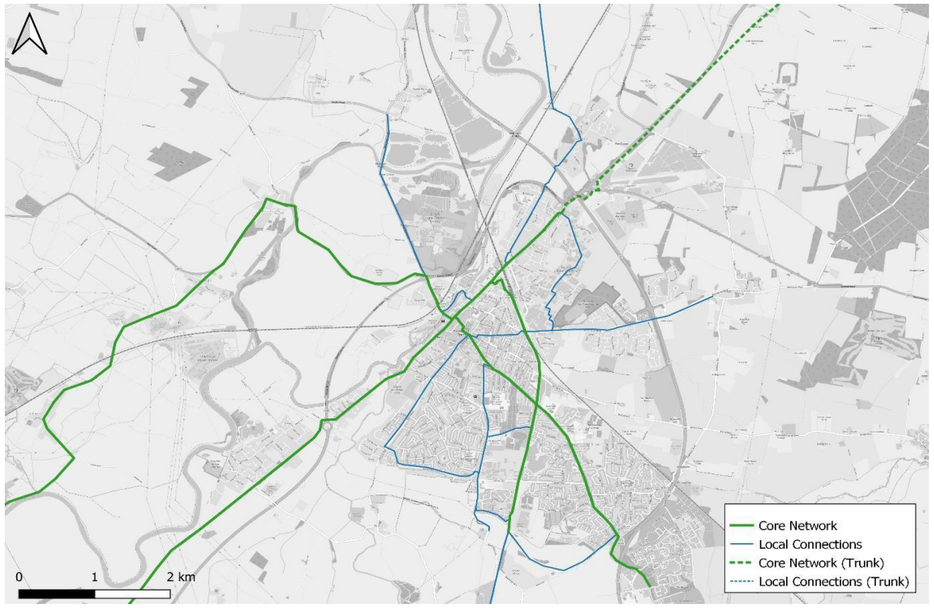
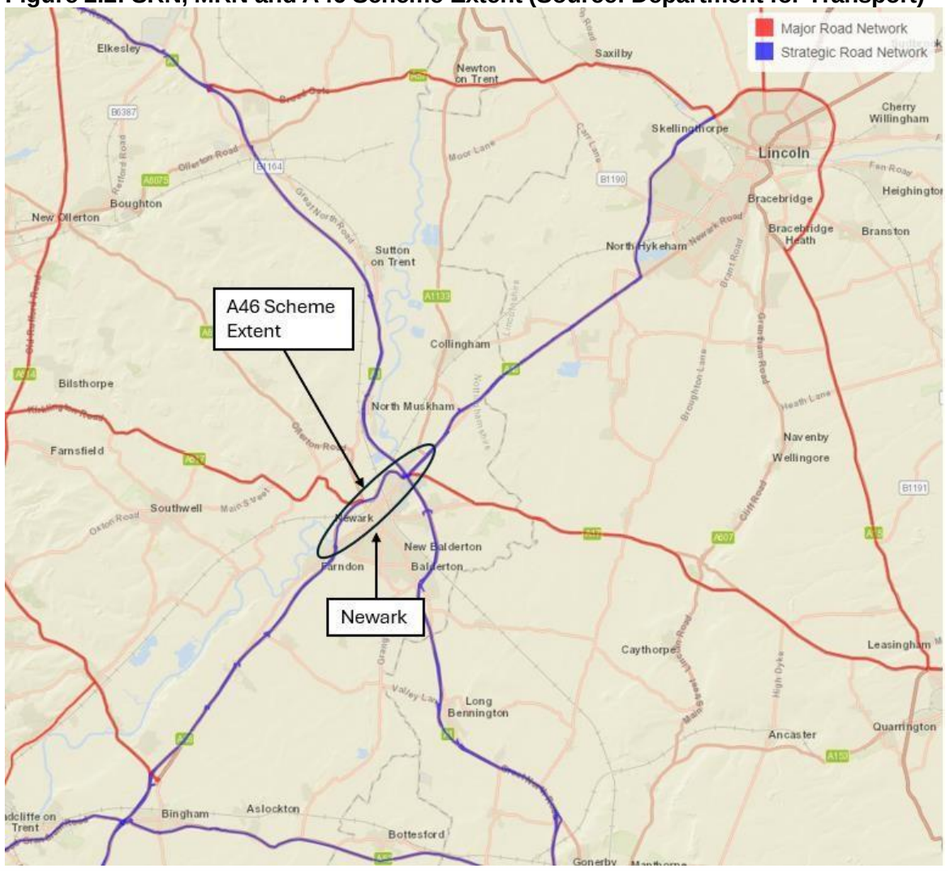
	Bar Gate, North Gate and Lincoln Road) before joining the A46 at the Brownhills roundabout and Friendly Farmer roundabout.	
2.16.	Other routes crossing the A46 Scheme extent include the route following the A617, which crosses over the Cattle Market junction (utilising existing cycle infrastructure) before continuing along the B6326 Great North Road towards Newark town centre.	No comments needed from the Applicant.
2.17.	The existing National Cycle Network (NCN) Route 64 is also shown in Figure 2.1, which currently crosses under the A46 to the west of the Brownhills roundabout	No comments needed from the Applicant.
2.18.	Table 2.1 summarises LCWIP routes (within proximity of the A46 scheme) included within NCCs 15-year delivery programme. Any routes not included within Table 2.1 are corridors prioritised for consideration beyond 2036/37, this includes the A46 Newark to Lincolnshire route. **Figure 2.1: LCWIP Routes**  **Table 2.1: Proposed LCWIP 15-year infrastructure programme (2022/23 to 2036/37) (NCC, 2022) – Newark** **Route Corridor** / **Type of Network** / **Funding Secured for delivery in 2022/23 – 23/24?** / **Proposed delivery priority – Short Term** / **Proposed delivery priority – Medium Term** / **Proposed delivery priority – Long Term**	No comments needed from the Applicant.

Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**
	Beacon Hill Road to town centre, Newark — Local — X Newark Bridleway 5/Cow Lane, Newark — Local — X Newark to Coddington — Local — X Winthorpe to Farndon via Newark town centre — Core — X A616 (Newark to South Muskham) — Local — X	
2.19.	Active Travel England, a major funding body for pedestrian and cycling improvements, now considers the potential for LCWIP schemes to be provided to LTN1/20 standards. The A46 Scheme provides the opportunity to ensure that future NCC LCWIP proposals that interface with the A46 corridor can be provided to these LTN1/20 standards.	No comments needed from the Applicant.
Rights of Way Management Plan (2018 – 2026)		
2.20.	The Rights of Way Management Plan for Nottinghamshire, published in late 2018 in accordance with the Countryside and Rights of Way (CRoW) Act 2000, assesses Nottinghamshire's current path network and its ability to cope with future needs. It sets out a series of actions designed to improve the path network for residents and visitors	No comments needed from the Applicant.
2.21.	The plan was developed through research and refined through public consultation on a draft plan during spring 2018.	No comments needed from the Applicant.
2.22.	The plan was developed through research and refined through public consultation on a draft plan during spring 2018. The plan notes the importance of the Rights of Way Network for a wide range of uses, including access to services, facilities and employment as well as providing a network of paths for pedestrians, cyclists and equestrians for leisure purposes. In addition, the plan shows how the Rights of Way network contributes to other policy objectives such as low carbon travel and the improvement of public health.	No comments needed from the Applicant.
Local Transport Context		
Existing Road network		
Network description		

Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**
2.23.	Figure 2.2 shows the relationship between the Strategic Road Network (SRN, managed and maintained by National Highways) and the Major Road Network and Local Road Network (both managed by Nottinghamshire County Council). **Figure 2.2: SRN, MRN and A46 Scheme Extent (Source: Department for Transport)**  	No comments needed from the Applicant.
2.24.	The A46 is a designated SRN until its junction with the A15 in Lincoln. Locally to the scheme, the SRN also covers the A1 and A52.	No comments needed from the Applicant.
2.25.	The Major Road Network (MRN) incorporates the more major local authority-controlled A roads. The A617 and A17 are designated MRN routes, and both meet the A46 within the scheme extent. Within the wider region, the A57 (connecting the A1 at Markham Moor to Lincoln), A15 (connecting Sleaford to Lincoln) and A614/A6097 corridor (connecting the A46 at Bingham to the A1 at Upper Morton) are also part of the MRN network.	No comments needed from the Applicant.
2.26.	Fosse Road, A616 (Ollerton Road), B6326, Lincoln Road and the A1133 also join the A46 within the scheme extent but are not designated SRN or MRN routes. All routes join the A46 via roundabout junctions	No comments needed from the Applicant.

Written Representations			
Reference	**Text from Local Impact Report**		**Applicant's Response**
Congestion Mapping			
2.27.	Congestion mapping (Figure 2.3 and Figure 2.4) produced by NCC shows the routes within proximity of the A46 scheme extent currently experiencing delay. Figure 2.3 shows delay per mile for the AM peak period (0800 – 0900hrs), whilst Figure 2.4 shows the delay in the PM peak (1700 – 1800hrs). Delay data for the congestion mapping has been taken from the TrafficMaster GPS data (2019) and mapped onto the 2018 Integrated Transport Network (ITN) layer **Table 2.2: Routes Experiencing Current Delays**		No comments needed from the Applicant.
	75 to 150 seconds	A46 Newark Bypass (between A46 / A616 / A617 junction) A46 approaching A46 / Newark Services / A17 junction) Routes within Newark Town Centre (incl. Beastmarket Hill, Lombard Street, Portland Street, Kirk Gate, King's Road and Sherwood Avenue.)	A46 (between A46 / Farndon Road junction and A46 / A617 / A616 junction) Lincoln Road (south of the A46 / Lincoln Road / A1 off/on-slip junction) Routes within Newark Town Centre (incl. Carter Gate, London Road, Sherwood Avenue, Lover's Lane, Warburton Street and Lime Grove)	No comments needed from the Applicant.
	150 seconds or more	• A46 / A617 / A616 junction approach (most arms) A46 / A1 off/on-slip / Lincoln Road / A17 junction A17 approach to A46 / A1 off/on- slip / Lincoln Road / A17 junction • Routes within Newark Town Centre (incl. The Wharf, Boar Lane, Middle Gate, Stodman Street, Carter Gate, Barnby Gate and Boundary Road).	A46 (on the approach to the A46 / Fosse Road / Farndon Road) B6326 (Great North Road) on the approach to the A46 / A617 / Great North Road junction) A1 off-slip (approaching the Lincoln Road / A46 / A1 off / on- slip junction). Lincoln Road (approaching the Lincoln Road / A46 / A1 off / on- slip junction) A17 (approaching the A17 / A46 / A1 off/on-slip) Northern Road Industrial Estate Routes within Newark Town Centre (incl. North Gate, Queens Road, Castle Gate, Sleaford Road, Beastmarket Hill, Stodman Street, Lombard Street, Friary Road and Beacon Hill Road)	No comments needed from the Applicant.

Written Representations		
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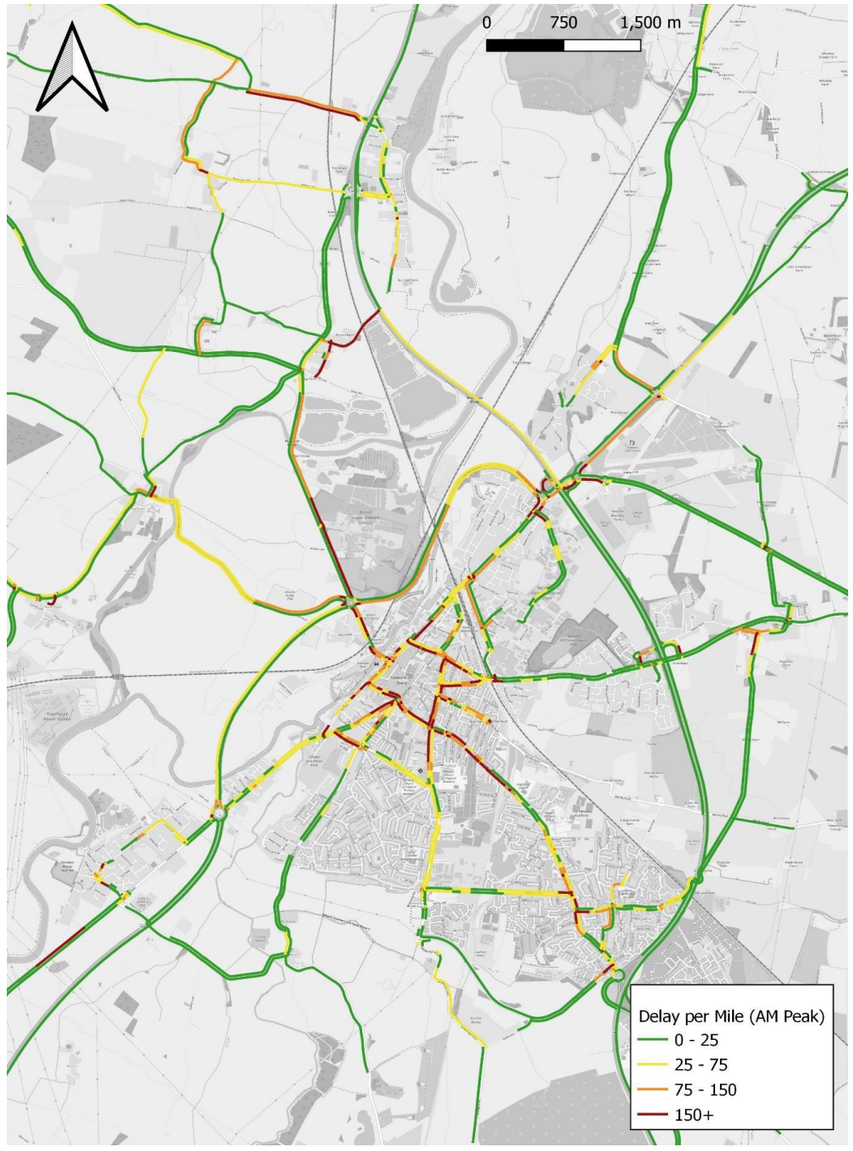
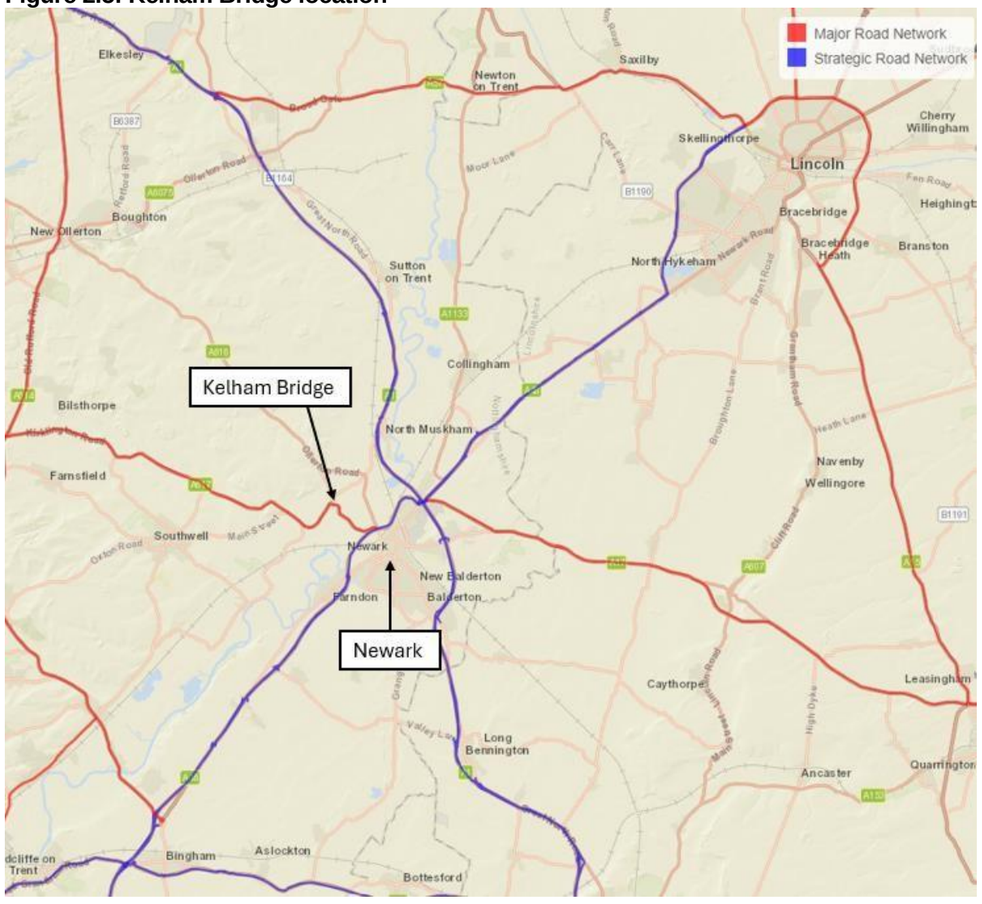
2.28.	The analysis shows that local routes are experiencing delays and could therefore be sensitive to potential re-assignment effects resulting from the implementation of the A46 scheme. This will be examined in more detail later in this LIR. **Figure 2.3: Delay per Mile (AM Peak – 0800 to 0900hrs)** 	No comments needed from the Applicant.

Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**
	Figure 2.4: Delay per Mile (PM Peak – 1700 to 1800hrs) 	
Locations of Concern		
2.29.	Existing locations of particular concern to NCC are as follows:	No comments needed from the Applicant.

Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**
Kelham Bridge		
2.30.	The A617 crosses the River Trent at Kelham Bridge, which is one of only ten road crossing points over the River Trent within Nottinghamshire. The location of Kelham Bridge vis-à-vis Newark is shown in Figure 2.5. **Figure 2.5: Kelham Bridge location** 	No comments needed from the Applicant.
2.31.	The bridge is a grade II listed structure and is too narrow to accommodate two large HGVs passing with a carriageway width of approximately 4.6m. This is illustrated in Figure 2.6, which also shows the bridge has two substandard footways and no cycle facilities (with more details in the later section). **Figure 2.6: Kelham Bridge Cross Section**	No comments needed from the Applicant.

Written Representations		
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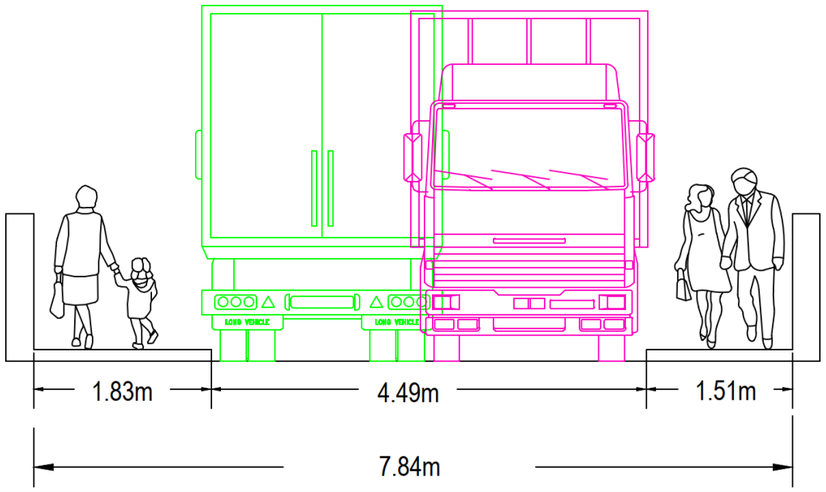
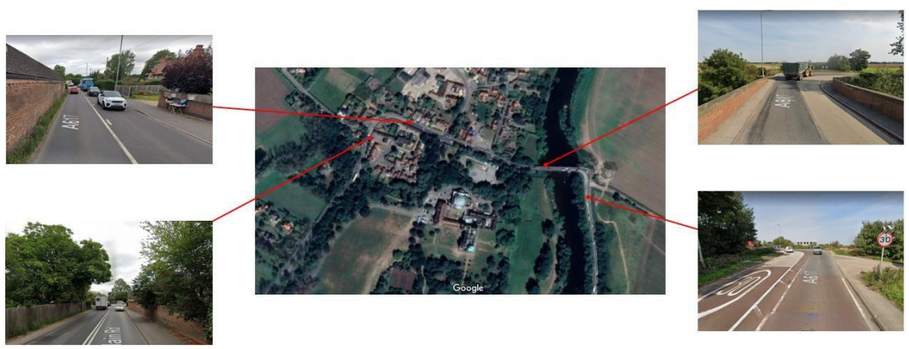
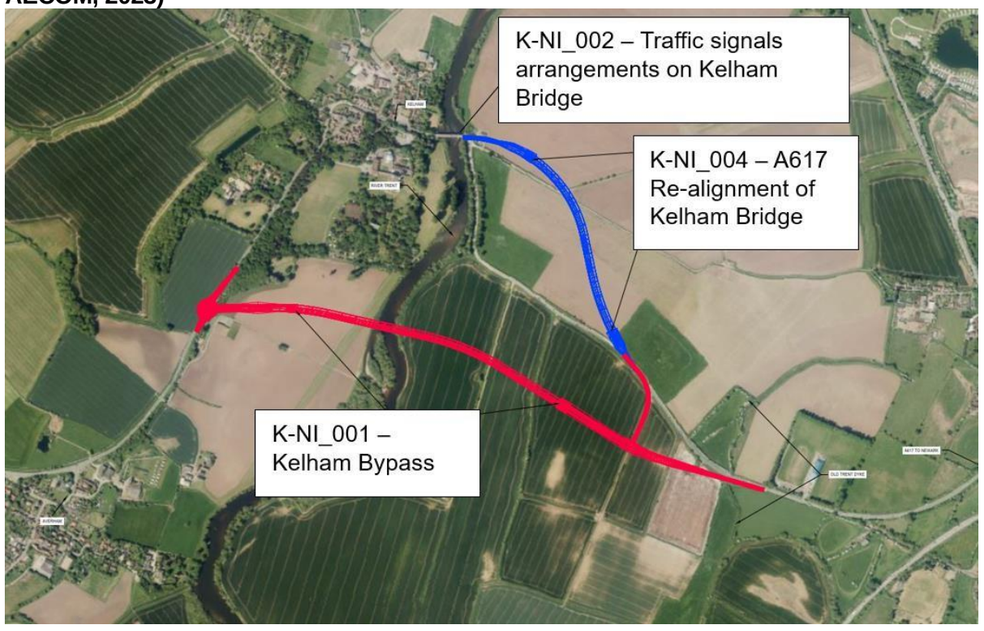
		
2.32.	In addition, the alignment of the A617 to the east of Kelham Bridge is via a 90-degree bend, resulting in poor visibility which exacerbates the above problems. The alignment regularly results in larger HGVs swinging out into the eastbound carriageway to access the bridge. To the west of Kelham, the A617 also has a 90-degree sharp bend resulting in poor forward visibility. This bend and poor visibility are key contributing factors for multiple collisions in this location, and the alignment impacts journey times due to vehicles having to slow to take the bend. HGVs regularly cross lanes to traverse the bend.	No comments needed from the Applicant.
2.33.	This is illustrated in Figure 2.7. **Figure 2.7: Kelham A617 Trent River Crossing** 	No comments needed from the Applicant.
2.34.	NCC is considering options to identify a preferred improvement scheme that will alleviate the issues at Kelham Bridge, which will assist with securing funding.	No comments needed from the Applicant.
2.35.	Three options (summarised in Figure 2.8) have been identified: Kelham Bypass. Designed to eliminate the requirement to pass over Kelham bridge and removes traffic from Kelham village, alongside improved NMU facilities.	No comments needed from the Applicant.

Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**
	A617 Re-alignment of the Approach to Kelham Bridge. Mitigates the alignment issues at Kelham Bridge but does not fully remove the issues of HGVs passing and poor NMU facilities, does not remove the risk of bridge strikes, and retains high traffic flows through Kelham village. Traffic signals arrangements on Kelham Bridge. Seeks to mitigate issues of HGVs passing through shuttle working to actively manage the flows of traffic over the bridge and therefore reducing the current conflict (but does not resolve poor NMU facilities and retains high traffic flows through Kelham village). **Figure 2.8: Kelham Shortlisted Schemes (Source: Kelham Strategic Outline Business Case, AECOM, 2023)**  	
2.36.	NCC would like to understand the potential impact or implications of the proposed Scheme on the operation of Kelham Bridge and how the Scheme may affect the assessment of the options and the deliverability of an improvement at the bridge. This will be discussed in more detail within Section *Forecast Changes in Traffic Flow*.	The Applicant notes from the information provided by NCC there would be an interface between the Scheme and option K-NI_001 in figure 2.8 of the NCC LIR. The roundabout shown on Main Steet would be partially located within an area designated as flood compensation for the Scheme as indicated by Works No. 125 on the Works Plans [AS-005]. Traffic flows on the A617 are forecast to increase as a result of the Scheme. The increase in traffic is primarily caused by the improvements at Cattle Market Junction, where the introduction of a flyover for mainline A46 traffic frees up capacity for other movements at the roundabout. To a lesser extent, similar improvements brought about by removing A46 through traffic from the A1/A46/A17 roundabouts also contributes to the forecast increases in traffic on the A617. The Applicant notes that the forecast increase in traffic flow on the A617 Kelham Road quoted in Table 2.11 of the NCC LIR is incorrect. As per Tables 6-2 and 6-3 of the Transport Assessment Report [APP-193] the forecast increase on this link is 1,300 vehicles per day in 2028, rising to 1,700 vehicles per day in 2043.

Written Representations		
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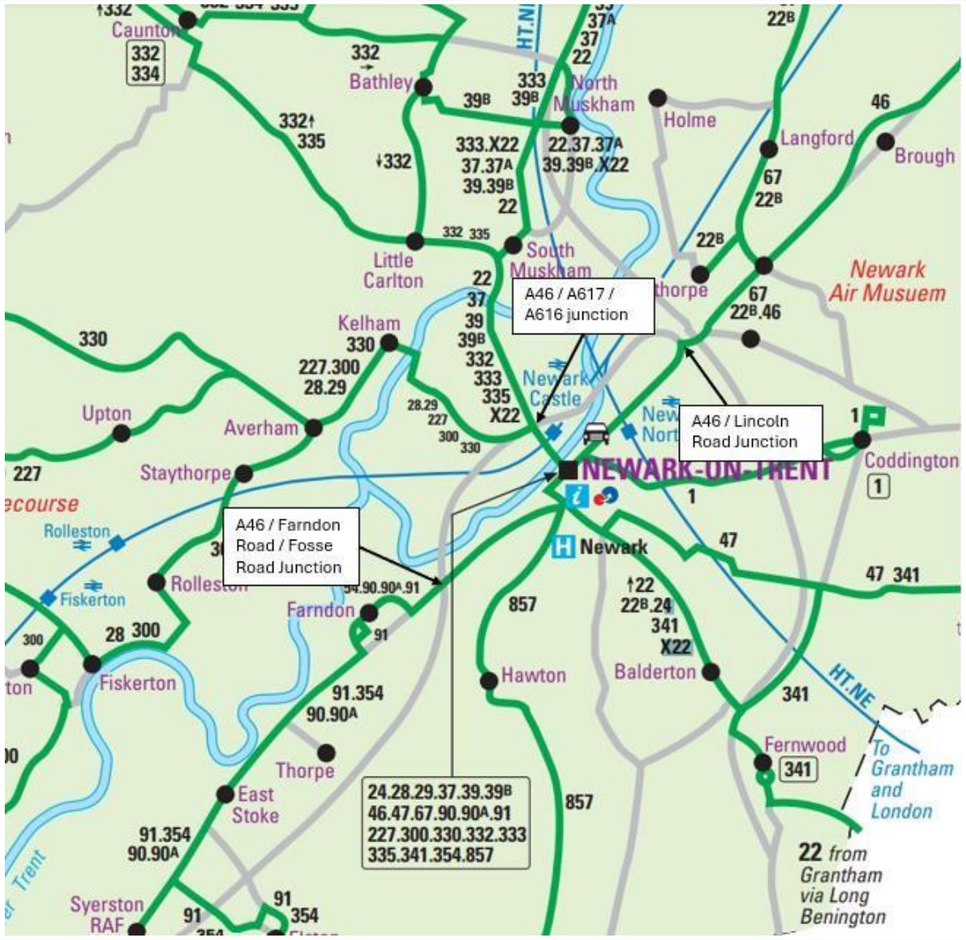
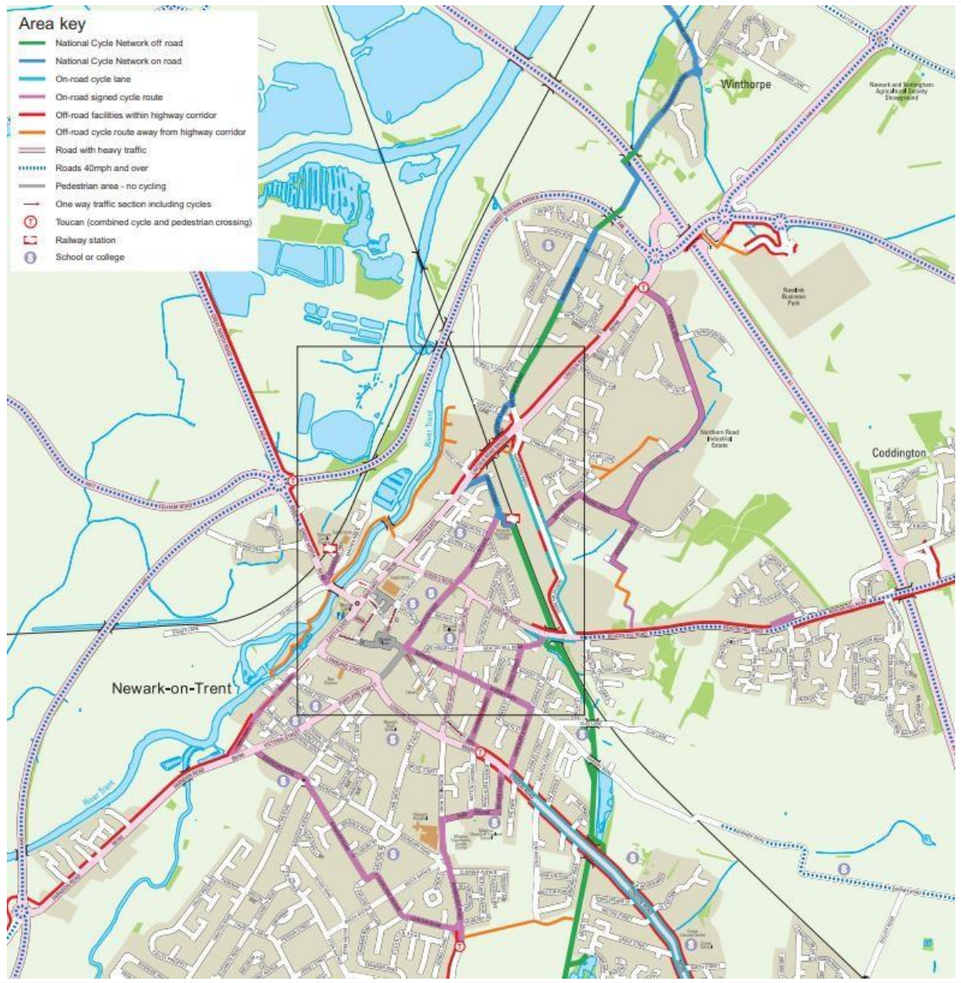
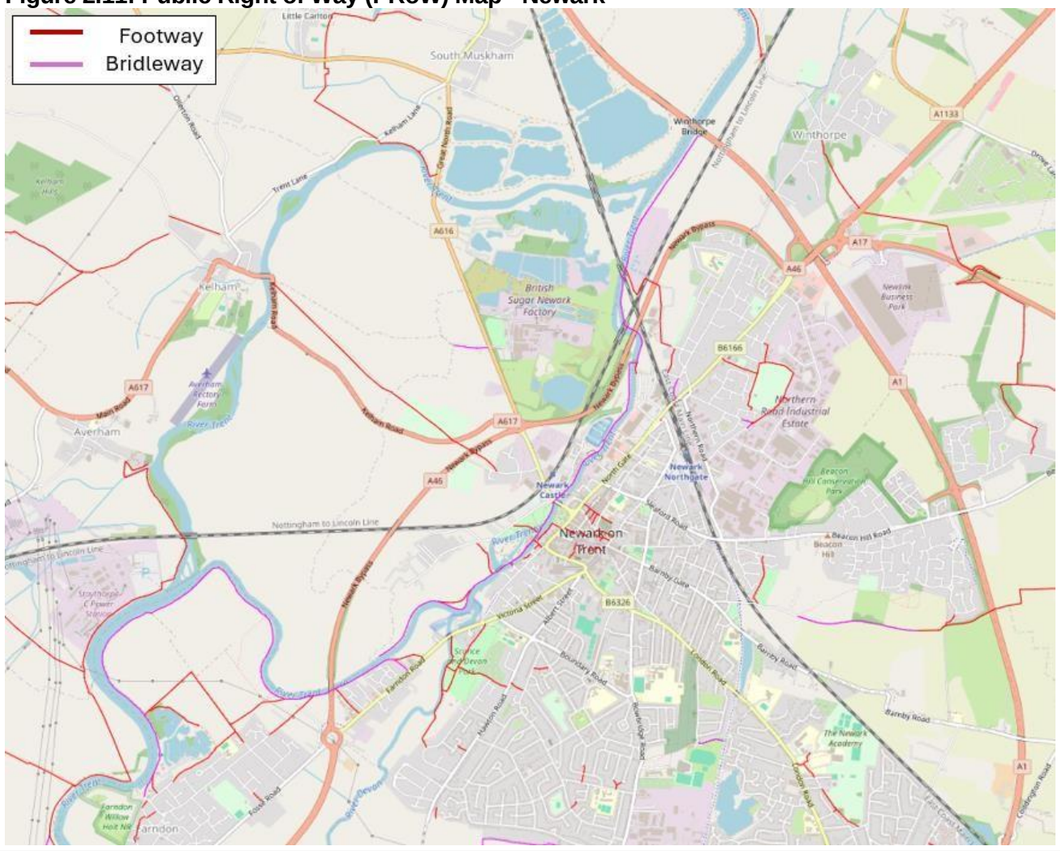
Great North Road		
2.37.	This route into Newark from the north-west of the town is capacity constrained by two main features: the river crossing (which limits access routes to the west of the town) and an at- grade level crossing (over the Lincoln to Nottingham railway line) located on Great North Road between the Great North Road / Manners Road and Great North Road / Ossington Way junction.	No comments needed from the Applicant.
2.38.	Frequent level crossing closures leads to queues backing up at the Great North Road / Bar Gate junction as well as onto the Cattle Market roundabout junction on occasion.	No comments needed from the Applicant.
2.39.	Great North Road is also an important route on the strategic cycle network. The narrow carriageway and high vehicle flows make it a very poor and difficult experience for cyclists. The frequent level crossing closures also adversely affect cycling and walking journey times and the impact of waiting in a queue of idling vehicles is also a concern to NCCA.	No comments needed from the Applicant.
2.40.	Further into Newark town centre, queuing traffic is also common at the B6166/Lombard Street and Bar gate / North Gate junctions.	No comments needed from the Applicant.
Collision Data		
2.41.	There are several existing collision clusters within proximity of the A46 scheme, and NCC anticipate that increased traffic flow on routes to / from the A46 will likely exacerbate the road safety issues. This is discussed further within the Section Impacts on road safety.	The Applicant notes that the accident analysis undertaken in support of the Scheme indicates that the vast majority of roads within Newark-on-Trent are forecast to experience a benefit as a result of Scheme improvements, with reductions in the overall number and severity of accidents. Benefits arise from the upgrade of the single carriageway sections of the widened A46 to dual carriageway, and from some traffic reassigning onto the widened A46 from comparatively less safe local roads. As noted by NCC, increases in traffic on some roads adjacent to the Scheme, such as the A17, are forecast to lead to some localised increases in accidents, although these are not of sufficient magnitude to outweigh the network wide benefits across the study area. On unimproved routes, such as the A17, the number of collisions would be forecast to change in proportion with the forecast changes in traffic flow. Collision rates, measured in terms of collisions per million vehicle kilometers (mvkm), are assumed to be unaffected on sections of highway that are unaltered. Further information on the accident appraisal can be found in section 14.6 and Tables 17.5-17.8 in the Combined Modelling and Appraisal Report which is included as Appendix A to the Transport Assessment Report [APP-193].
Public Transport Network Bus Network		
2.42.	Figure 2.92 summarises the bus services operating in the Newark area.	No comments needed from the Applicant.
2.43.	In addition to those shown in Figure 2.9, there is also a demand responsive service (Nottsbus On Demand) covering the south Newark area which launched in Spring 2024 and covers communities including Car Colston, Screveton, Flintham, Syerston, Elston, Thorpe, Hawton, Cotham, Kilvington, Alverton and Thoroton. Passengers can request the service between 09:30am – 2:30pm Monday to Saturday. An additional on demand evening service has recently been introduced (July 2024) covering Newark town centre, Coddington, Balderton, Hawtonville and Winthorpe between 7.30pm until midnight Monday to Saturday.	No comments needed from the Applicant.
2.44.	There are currently no bus services operating along the A46 for the majority of the scheme extent. The 67, 22B and 46 operate at the northern extent of the scheme (between the A17 / A46 'Friendly Farmer junction and A46 / A1133 'Winthorpe' junction) as highlighted in Figure 2.9. These services also route through the A46 / Lincoln Road 'Brownhills' junction.	No comments needed from the Applicant.

Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**
2.45.	The services operating on routes surrounding the A46 are shown below. High frequency services (more than 1 per hour during the day) are highlighted in **bold underlined** *A1133 (Passing through the A1133 / A46 'Winthorpe' junction)* **367** 22B 609B *A616 - Great North Road (passing through the A46 / A617 / A616 / Great North Road 'Cattle Market' junction)* 22 **37** 39 39B X22 *A617 (passing through the A46 / A617 / A616 / Great North Road 'Cattle Market' junction)* **28 / 29** 227 300 330 *Fosse Road / Farndon Road (passing through the A46 / Farndon Road / Fosse Road 'Farndon' junction)* 54 **90** 90A **Figure 2.9: Local Bus Network Map (Source: Nottinghamshire County Council)**	No comments needed from the Applicant.

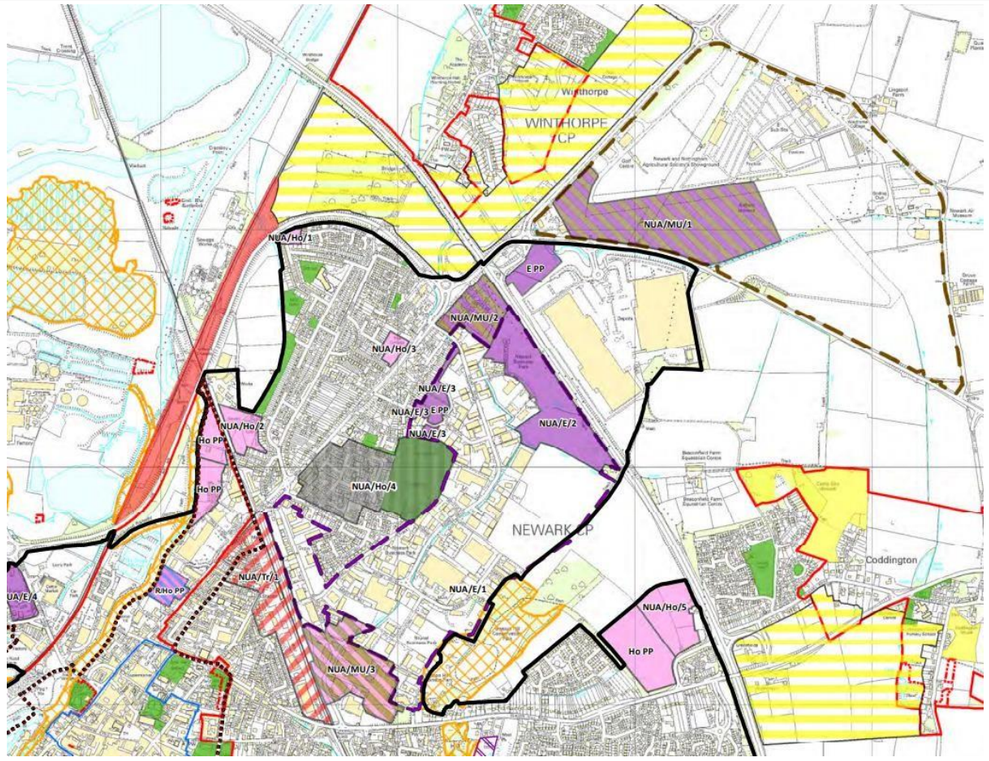
Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**
	
2.46.	Local bus services will experience delays on the network as per the congestion mapping shown in the preceding section of this report.	No comments needed from the Applicant.
Bus Network Improvements		
2.47.	The Nottinghamshire BSIP proposes to create a new service from Newark Northgate Station to Fernwood and Grantham, as well as to provide more buses per hour between Newark and Nottingham. The aspiration to create a new demand responsive evening service within Newark has already been delivered (July 2024).	No comments needed from the Applicant.
2.48.	It is not anticipated that any of the proposed bus service improvements will route along the A46 scheme extent, and therefore it is not anticipated that the A46 scheme will have a detrimental impact upon proposed bus network improvements.	No comments needed from the Applicant.
2.49.	Notwithstanding, NCC are keen to understand the likely impact of the scheme upon the existing level of service, and this is discussed in greater detail within Section Impacts on Public Transport.	The Applicant notes that a key benefit of the Scheme is a significant reduction in through traffic within the town centre. Forecasts undertaken with the traffic model show that the Scheme would reduce

Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**
		traffic flows on most local roads through Newark-on-Trent, including the B6326 London Road, Barnaby Road, Beacon Hill Road, Beckingham Road, Drove Lane, Farndon Road and Fosse Road. These reductions in traffic flows will benefit public transport services with reduced journey times and greater service reliability. More details on the volume of traffic flow are available in the Transport Assessment Report [APP-193].
Rail Network		
2.50.	Two rail stations are located within Newark: Newark Northgate and Newark Castle.	No comments needed from the Applicant.
2.51.	Newark Northgate serves the East Coast Main Line, providing connection to London and the North-east of England and Scotland.	No comments needed from the Applicant.
2.52.	Newark Castle is located on the Nottingham to Lincoln line and serves local destinations.	No comments needed from the Applicant.
2.53.	Neither station is located on (or in close proximity to) the A46 scheme, and therefore it is not anticipated that the scheme will lead to a notable impact upon rail users or access to the station. It is assumed that the Applicant has liaised with Network Rail to ensure the A46 scheme is futureproof against any planned improvements to the rail network.	The Applicant has engaged with Network Rail to ensure that the Scheme does not impede future enhancements or improvements to the rail network. The record of this engagement and agreement with Network Rail is included within the Statement of Common Ground [REP1-028].
Active Travel Network **Cycling**		
2.54.	Figure 2.10 summarises the cycle infrastructure currently in place within Newark. The following infrastructure is relevant to the A46 scheme: • Great North Road shared footway / cycleway – supported by a Toucan crossing point across the A46 (east) arm at the A46 / A617 / A616 / Great North Road roundabout • Fosse Road / Farndon Road shared footway / cycleway – the route diverts from Fosse Road via Crees Lane (prior to the A46 / Fosse Road / Farndon Road junction). A dropped kerb crossing point (with traffic island) is available across Farndon Road (approximately 40m east of the A46 / Fosse Road / Farndon Road junction) providing connection into International Logistics Centre. The shared footway / cycleway continues along Farndon Road towards Newark town centre. • The National Cycle Network connects Newark to Winthorpe via an off-road link routing underneath the A46. This route has now been extended to Girton, and work is currently being undertaken on extending the route further to meet the Fledborough to Lincoln multi-user route. • Newlink Business Park – a shared footway / cycleway connects the A46 to the Newlink Business Park.	No comments needed from the Applicant.
2.55.	None of the above infrastructure meets the current design standards (i.e. LTN1/20). **Figure 2.10: Newark Cycling Infrastructure (Newark Cycle Map, Nottinghamshire County Council)**	The Applicant confirms the walking and cycling routes have been designed in accordance with the local transport note (LTN) 1/20 (which provides guidance to local authorities on delivering high quality, cycle infrastructure) and are 3.0m wide shared use facilities which is acceptable where pedestrian use is low (Section 6.5.6 of LTN 1/20). Due to the width of the facility provided it would be possible to split some or all of the facilities into two 1.5m segregated routes, this would be agreed during detailed design with the Interested Party.

Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**
		
Walking & Wheeling		
2.56.	The Public Rights of Way (PRoW) network is shown in Figure 2.11. The figure shows that there is a PRoW (Trent Valley Way) crossing beneath the A46 to the north of Farndon roundabout and again mid-way between the Cattle Market junction and Brownhills roundabout, a footpath crossing the A46 to the west of the Cattle Market Junction and lastly a footpath crossing the A46 between the Friendly Farmer and Winthorpe roundabout.	No comments needed from the Applicant.
2.57.	The following walking and cycling infrastructure issues are relevant to the A46 scheme: • Kelham to Newark footpath – routing across the A617 and A46. Uncontrolled crossing point across both the A617 and A46. • Trent Valley Way – off-road footway following the River Trent. The route passes beneath the A46 to the north of the A46 / Fosse Road / Farndon Road junction and again halfway	No comments needed from the Applicant.

Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**
	between the A46 / A616 / A617 junction and the A46 / Lincoln Road / A1 off/on-slip junction. • Winthorpe to Newlink Business Park – this route crosses the A46 to the east of Newark Services. The barriered nature of the A46 in this location creates a severance issue for those using this footpath and there is currently no accessible crossing point available. **Figure 2.11: Public Right of Way (PRoW) Map - Newark** 	
Active Travel Network Improvements		
2.58.	As noted previously, NCC have an aspiration to create an integrated cycle network via the creation / maintenance of the following LCWIP routes relevant to the A46 scheme: • A617 connecting Newark to Fiskerton (crossing the A46 at the Cattle Market Junction). • Great North Road connecting South Muskham to Newark on Trent (crossing the A46 at the Cattle Market Junction). • Continuous route connecting Flintham to Lincolnshire via Newark Town centre (crossing the A46 at the Farndon roundabout, before re-joining the A46 at the Brownhills roundabout and traversing along the A46 to Potter Hill).	This is noted by the Applicant and we can confirm that the Scheme does not impede NCC's future aspirations.

Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**
	• Winthorpe Road connecting Newark to Lincolnshire via Winthorpe (passing under the A46 northwest of Brownhills roundabout)	
2.59.	NCC are keen to understand how the A46 scheme will impact existing cycle routes within its proximity, as well as whether the proposals safeguard the aspirations contained within the LCWIP. This is explored in greater detail within Section Impacts on active Travel.	The Applicant will respond to the specific questions in the relevant section of NCC's Local Impact Report below.
Future Developments		
2.60.	Figure 2.12 (taken from Newark & Sherwood District Council's Local Development Framework Allocations & Development Management Development Plan Document) summarises Local Plan site allocations identified within proximity of the A46 Scheme. Site allocations located close to the A46 corridor are summarised below: NUA/MU/1 – Land north of the A17 (Mixed use development comprising a hotel/conference facility, restaurant facilities to support the wider showground site, and employment uses). NUA/MU/2 – Land at the current Brownhills Motor Homes Site (Mixed use development comprising employment (B1/B2/B8) development, roadside services including a hotel and continued use of the site for the sale of Motor Homes). NUA/E/2 – Land west of the A1 on Stephenson Way (12.24-hectare employment site) NUA/E/3 – Land off Telford Drive (1.54-hectare employment site) NUA/Ho/3 – Land on Lincoln Road (approx. 24 dwellings) NUA/Ho/4 – Yorke Drive Estate and Lincoln Road Playing Fields (approx. 230 net increase in dwellings) NUA/Ho/2 – Land South of Quibells Lane (approx. 86 dwellings) NUA/E/4 – Land at the former Nottinghamshire County Council Highways Deport on Great North Road (2.07 employment site (B1/B2/B8 uses)). NAP 2A - Land South of Newark (approx. 2,600 dwellings and 4,000 employees). The site runs adjacent to the A46 and is connected via the Newark Southern Link Road (partially constructed) which will, once complete, connect the A1 to the A46. NAP 2C - Land around Fernwood (approx. 3,000 dwellings and 1,100 employees). The site is located to the east of the A1 at the south of Newark. It will be connected to the A46 via the Newark Southern Relief Road (see above). NAP 2B - Land east of Newark (approx. 1,000 dwellings and 100 employees). It's expected that some development trips to / from the site will route via the A46.	As noted in paragraph 3.3.17 of the Transport Assessment Report [APP-193], the future year transport network changes and development assumptions have been determined in-line with the Department for Transport's Transport Analysis Guidance (TAG) and make use of uncertainty logs. An uncertainty log is required for transport model forecasting and its purpose is to record the central forecasting assumptions that underpin the core scenario, as well as uncertainty around those central assumptions. The uncertainty log summarised the known uncertainties in the modelling and forecasting. The uncertainty log was developed in collaboration with local authorities in the vicinity of the Scheme (as set out in Section 12 of the Combined Modelling and Appraisal Report, which forms Appendix A to the Transport Assessment Report [APP-193]) and included residential and employment developments as well as proposed changes to infrastructure. The elements included within the uncertainty log were allocated levels of uncertainty in line with TAG guidance.
2.61.	Site allocations are a matter for NSDC; however, NCC would like to understand whether the A46 scheme will impact the delivery of strategic sites, particularly in terms of: any increase in traffic flow routing along key links and whether this may lead to congestion issues in future and / or undermine the ability to deliver key sites in future; accessibility by public transport; accessibility by active modes.	The Applicant has responded to the specific questions in the following sections of NCC's Local Impact Report Table 2.10: NCC Comment on Forecast Change in Traffic Flow (Operational) Table 2.11: NCC Comment on Junction Capacity (Operational) Table 2.12: NCC Comment on Journey Times (Operational) Table 2.14: NCC Comment on Public Transport (Operational) Table 2.15: NCC Comment on Active Travel (Operational)
2.62.	This is explored in greater detail within the following sections of this report: Design Impacts on the Local Road Network (Operational) Forecast Changes in Traffic Flow (Operational Impacts on Junction Capacity **Figure 2.12: Local Plan site allocations (Source: Newark & Sherwood District Council, 2013)**	No comments needed from the Applicant.

Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**
		
Scheme Design Principles		
2.63.	A **Scheme Design Report (APP-194)** has been prepared which contains a full detailed breakdown of the design of the Scheme but also contains the design principles with which the Scheme will be committed **Table 2.3: NCC Comment on Scheme Design Report APP-194** **Document** / **NCC Comment** Scheme Design Report APP-194 / **NCC recommend that the design principles should sit as a separate document that is secured within the DCO (as per recent National Highways schemes, such as the A66).**	The design principles are secured by way of Requirement 12 (Detailed Design) of the draft Development Consent Order [REP1-001]. The design principles can be found in Annex A of the Scheme Design Report [[APP-194] and listed as a certified document under Schedule 10 of the draft Development Consent Order and as such do not need to be a separate document.
Design Impacts on the Local Road Network (Operational)		

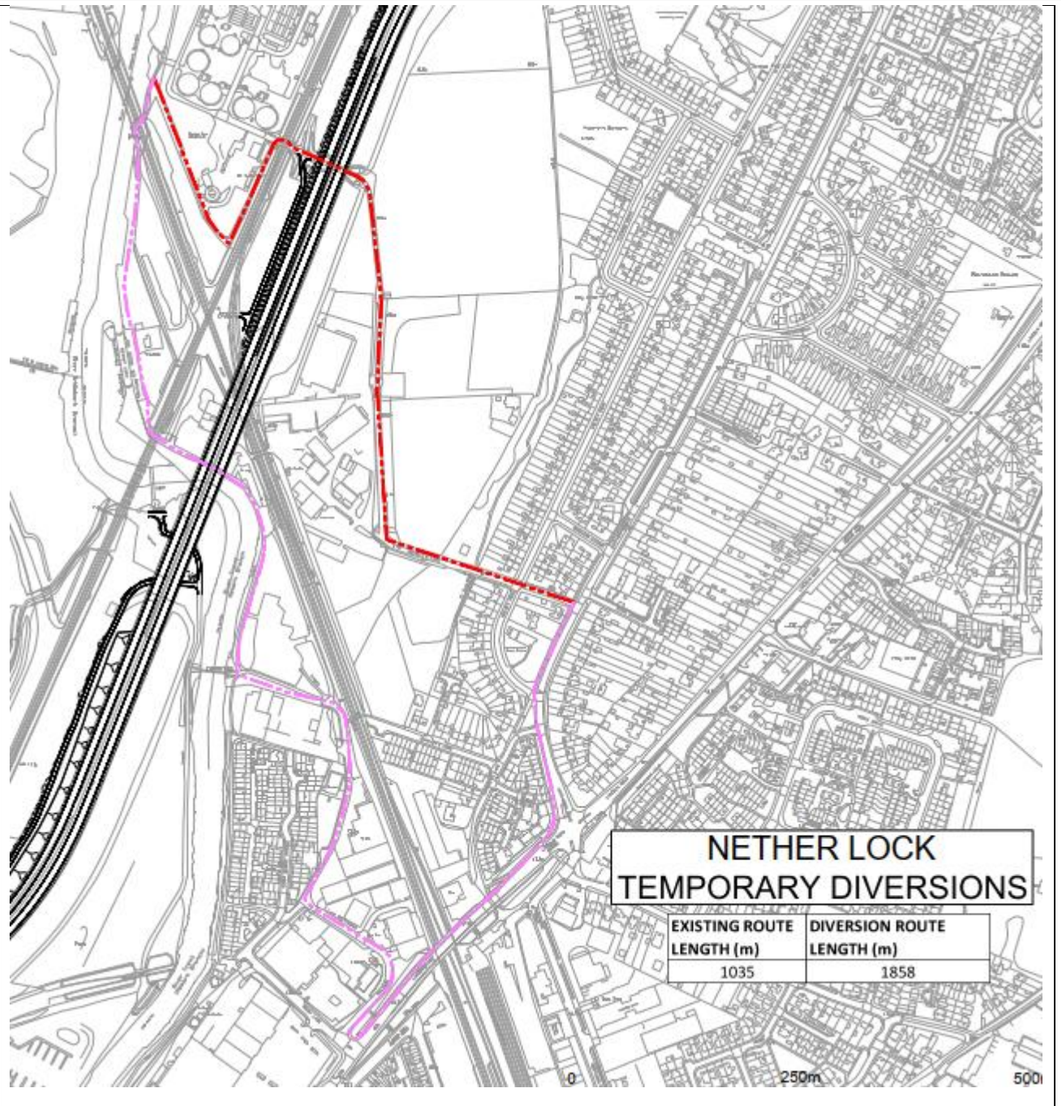
Written Representations

Reference	Text from Local Impact Report	Applicant's Response
2.64.	A review has been undertaken of the **General Arrangement drawings (AS-007).** Further comments on these drawings are also provided under Section Construction Traffic Management for matters relating to construction activities.	

Table 2.4: NCC Comment on General Arrangement Drawings AS-007

Sheet	NCC Comment	Response
1	The linework style for Flood Compensation Area extents and existing footway / cycleway could be mistaken.	The Applicant's believes they are sufficiently differentiated with a difference in line length and a call out box specifically identifying the line as flood compensation area.
2	Whilst not an NCC area of the network, NCC note that the Applicant is proposing a direct access for maintenance off the Dual Carriageway in vicinity to the Farndon East Borrow Pits area. NCC query if this has this been assessed from a road safety perspective due to being on the inside of horizontal curvature which may give rise to the risk of a shunt style collision. Furthermore, NCC would like clarification if full visibility, in accordance with the DMRB CD 123, been considered in this region to ensure that any existing vegetation to be removed has been correctly captured into the BNG assessment. Maintenance tracks running along the A46 do not include any passing place provision; NCC would recommend passing places are provided so as to minimise any interaction with wider land access for agricultural vehicles.	The Applicant confirms the direct access was discussed with NCC during the weekly consultation meetings with NCC and Newark and Sherwood District Council (NSDC). The only other access route would have been along Tolney Lane. This was not considered suitable as it would have involved agricultural and maintenance vehicles accessing through a residential area and would require a new crossing of the Old Trent Dyke. The access is shown indicatively at present and will be developed during detailed design where appropriate splays will be provided. The access will be low use and will be gated at the bottom of the embankment which will allow vehicles to stop safely off the A46 mainline. The provision of passing places along the access tracks were considered not necessary as the predominant use of the track will be for farm vehicles and maintenance vehicles who will be infrequent users. However, this will be assessed further during detailed design.
3a	NCC are concerned that the location of a maintenance access track off the A617 could give rise to a risk of side swipe or shunt style collisions for vehicles accessing or egressing. NCC request confirmation that this junction been afforded the appropriate visibility splays in accordance with CD123. For the transition point for the footway / cycleway to footway on the A617, further information is requested to show how cycle users travelling westbound would safely access the carriageway. NCC are concerned that this strategy needs to be reviewed in accordance with LTN1/20 guidance to ensure that cyclists can navigate the A617 and Cattle Market Roundabout safely. NCC request confirmation as to whether the crossings on the eastern slip roads of cattle market are controlled or uncontrolled crossings. The maintenance access track off A616 Great North Road should be designed to ensure that appropriate visibility for any pedestrian and cyclist interaction is considered. There is considerable diversion distance of Newark FP14; NCC seek clarification as to whether an underpass structure was considered in order to maintain connectivity (mindful of the location and risk of flooding), and whether the extents of the stopping up logical. Notwithstanding this, both the LAF and NCC have 'agreed' to the stopping. As per the SoCG, the proposal to divert any public use onto the roadside footway of the A617 to the Cattle Market Junction is acceptable provided the footway is widened to provide safe shared use. The proposed route for non-motorised users over the Cattle Market Roundabout should be segregated as far as possible from the carriageway and made safe, with user friendly, clearly signed, light controlled and marked out junctions (as do all junctions). NCC's view is that there needs to be some mitigation and opportunity to improve the links from east to west for NMUs. In particular, connecting to Newark Rugby Club.	The Applicant confirms the access is indicative at present and suitable site lines in accordance with CD123 will be provided at detailed design and the gate will be placed at the bottom of the embankment to allow vehicles to pull into the access safely. The Scheme has provided a 3.0m wide walking / cycling route around the Cattle Market gyratory with signalised crossings. The Scheme needs to curtail this facility into the existing walking route on the A617 as detailed on the General Arrangement Drawings [AS-007] and will agree a suitable transition with NCC at detailed design. The slip road at Cattle Market will be controlled crossings. The A616 maintenance access is an existing access point installed when the existing A46 was constructed. The Applicant acknowledges that the gradient needs to be reduced and that the sight lines and interaction with the walking/cycling route needs to be assessed further, this will be undertaken at detailed design and agreed with NCC. The diversion of FP14 around Cattle Market gyratory was discussed and agreed with NCC's PROW officer. The route is used infrequently and the provision of an underpass is not considered viable given the level of the carriageway at this location and its location within the flood zone. Any underpass would require the carriageway to be raised to provide the required headroom and in flood events, would be impassable. The existing route, when measured from Great North Road and the A617, is 665m long and the diverted route is 1020m long and is accessible for all users and is a safe route complying with LTN 1/20.

Written Representations			
Reference	**Text from Local Impact Report**		**Applicant's Response**
		NCC notes that a private access track is to be provided to the south of cattle market junction to access the proposed attenuation ponds. NCC note that no turning head facility has been provided and would recommend that this should be provided in order to minimise the chance of maintenance vehicles reversing onto the local road network in the vicinity of the Newark Cricket Ground. NCC would like to see further detail on the two-to-one merge on Great North Road heading south into Newark away from the Cattle Market roundabout, and how this design works in respect of side road access points.	
	3b	The site to the south of Cattle Market Junction (to the west of Great North Road) has been identified as a potential compound area (including flood relief culvert). This site has also been identified within the Newark & Sherwood Local Plan Site Allocation document as a strategic employment site (NUA/E/4 (comprising 2.07 hectares of B1/B2/B8 land)). NCC seek to understand how the site will be managed (including timescales) so as to align with NCC / NSDC's development aspirations.	The Applicant has held two meetings with the NCC Group Manager for Property Asset Management in 2022 and 2023 to discuss further the use of the old highway depot site as a temporary compound during the construction phase of the Scheme. NCC stated that they have held off making plans for the old highway depot site as they are aware of the Applicants proposals for its use as a compound during the construction phase of the Scheme. The area will be used as the main site compound and offices for the duration of the construction phase. Details of the activities at the compounds are provided in sections 2.6.26 to 2.6.32 and 2.6.236 to 2.6.243 in Chapter 2 of the Environmental Statement [APP-046].
	4	FP48-1 is impacted by the extension of the sewage treatment underpass. NCC seek clarification as to whether the impacts of this have been considered and if a temporary diversion has been factored into the assessment. NCC would want to understand the total diversion distance and time to determine if the diversion is appropriate for the types of users who will be utilising this route. For example, someone wishing to continue on a north / south movement would have to divert to get underneath the A46 and rail line. However, there is not a continuity in designated rights of way. NCC therefore need confirmation of what the signed route would be and confirmation it is appropriate, and support NH in providing a suitable network for NMUs impacted by the scheme.	The Applicant confirms a temporary diversion was factored into the assessment as described within the Section 2.6 Chapter 2, The Scheme of the Environmental Statement [APP-046] The existing route is shown in red and the diversion in magenta on the image below:

Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**
		

Written Representations			
Reference	**Text from Local Impact Report**		**Applicant's Response**
	5	A maintenance access track is to be provided on the on-slip to the A46 westbound in the vicinity of the Winthorpe Road Subway. This may give rise to side swipe or shunt style collisions. NCC seek clarification as to whether an alternative access off Brownhills Junction Link Road was considered. NCC wish to understand any temporary diversions or closures that would be required for the route off Winthorpe Road under the A46. NCC query whether the Applicant has sufficient powers to construct the footway cycleway in the land which connects to the eastbound carriageway of the A46 as it passes through the land understood to be owned by Newark Showground. NCC note than existing footpath FP3 shows a section running through the land not included in the order limits which will not be stopped up. Even though there isn't a continuous definitive line across the A46 (previously severed by the construction of the road), there is access across the adopted public carriageway to link the two paths together, therefore there needs to be a suitable link between the two parts of FP3. **NCC notes that a proposed footway / cycleway will be installed under the proposed A46 / A1 structure. NCC notes that this is bringing active travel users in close proximity to high-speed traffic which would make this route** less **desirable and also increase the risk of trespass on the strategic road network. NCC seek clarification as to whether there will be a fence of acoustic barrier. NCC query what other alternatives were explored by the Applicant such as a separate underpass to the east of the proposed overbridge.**	In relation to the maintenance access track to be provided on the on-slip to the A46 westbound in the vicinity of the Winthorpe Road Subway, the Application is considering the suggestion from NCC and this will investigated further during detailed design. The Applicant confirms the proposed construction phasing for the Brownhills junction is provided in Appendix A.2.2 of the Outline Traffic Management Plan [APP-196] and sections 2.6.144 to 2.6.160 of Chapter 2 The Scheme of the Environmental Statement [APP-046]. The construction phasing will maintain access to the properties along Winthorpe Road as well as maintaining the walking and cycling network. The combined footway/cycle track, shown as Works No 102 on Sheet 5 of the Works Plans [AS-005], has been included within the Order Limits of the Scheme. Agreement is being reached with the landowners as to the alignment of the footway/cycle track as the design within this land parcel is further developed. Please refer to the Statements of Common Ground between the Applicant and the Newark and Nottinghamshire Agricultural Society [REP1-027] and Lindum Developments Limited [REP1-023]. The Applicant disagrees with NCC that there is access across the A46 carriageway between footpath 2 and footpath 3. The definitive map shows that there is segregation between the two routes and there is no defined crossing point over the current central reservation. The combined footway/cycle track, Work No. 91 on Sheet 5 of the Works Plans [AS-005], utilises the extended span of the A46 /A1 bridge (Work No. 90) to cross under the new A46 alignment. Alternatives to this solution would have required the construction of either a separate underpass to the east of Work No. 90 or a large span footbridge over the A46 (Work No.100) and Friendly Farmer Link (Work No. 104). The boundary detail between the Vehicle Restraint System and the footway/cycle track has not been detailed but NCC's points on both trespass and acoustics will be considered in the detailed design.
	5	A site located to the east of the Friendly Farmer roundabout (located to the south of the A46) has been identified within Newark & Sherwood Local Plan Site Allocation document as a strategic mixed-use development site (NUA/MU/1 (hotel/conference facility, restaurant facility to support the wider showground uses, and employment uses)). The existing PRoW running adjacent to the A46 connecting to the Friendly Farmer roundabout is proposed to be stopped up, being replaced with a new footway / cycleway passing to the southeast of the Shell service station (see extract below).	The Applicant confirms the route of the proposed walking and cycle route was developed in conjunction with Lindum Developments Limited (the developer of the NUA/MU/1 site) and NCC's PROW officer. The route followed the proposed footway / cycle track of Lindum Developments Limited's proposed development at that time and did not impact on any development plans for the site. The Applicant confirms the alignment for the combined footway/cycle track between points F-5M and F-5O on sheet 5 of the Streets, Rights of Way and Access Plans [AS-006] was chosen following consultation with multiple stakeholders, including Lindum Developments Limited, within the NSDC Local Plan allocation NUA/MU/1. The route was selected to provide a replacement to the current footpath that runs along the southbound A46. The route provides a link to the existing footpath on the A17 and intercepts Winthorpe footpath 3. The intention was that the combined footway/cycle track would run through and provide access to the proposed development. Lindum Developments Limited's plans have since been further developed with an outline planning application (reference 23/02281/OUTM) submitted to NSDC in December 2023. It is expected that this outline planning application is to be determined in December 2024. The Applicant is currently drafting a legal agreement with Lindum Developments Limited for the site to ensure that, should their application be granted, provision is made as far as possible for i) the combined footway/cycle track between the A46 and Godfrey Drive that does not conflict with the Lindum's proposed development and ii) a temporary diversion route for the footpath along the southbound A46. Should the outline planning application be granted permission and Reserved Matters be

Written Representations

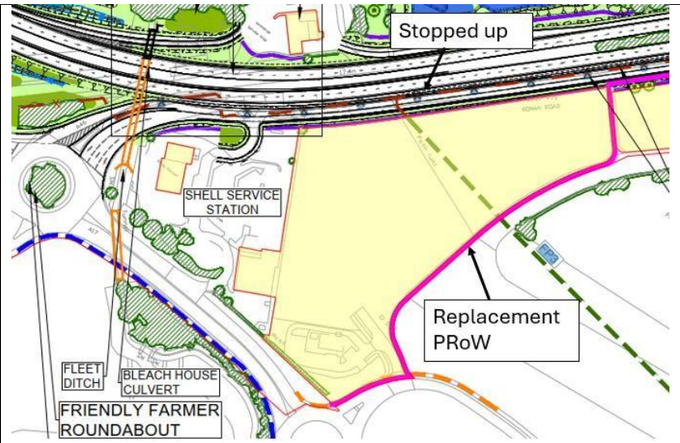
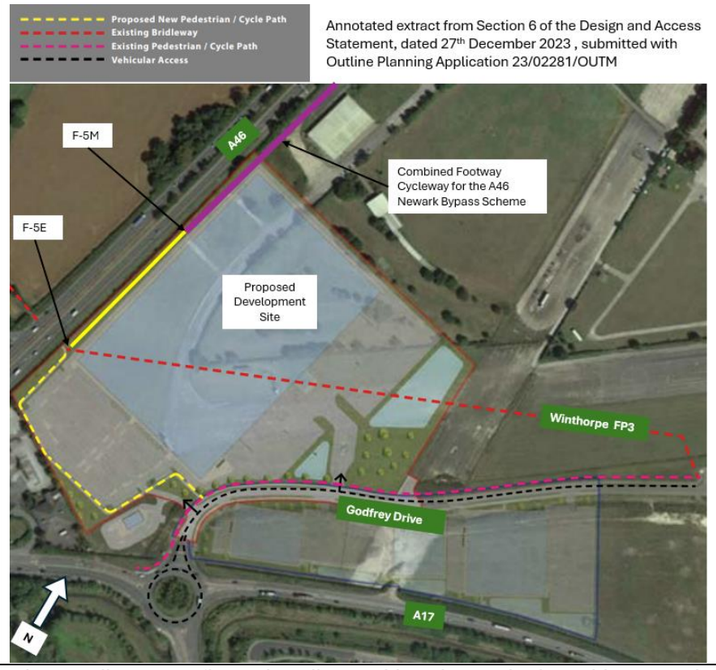
Reference	Text from Local Impact Report	Applicant's Response
	 This new route would pass through the site allocation NUA/MU/1. NCC seek clarification that the proposed route would not compromise the ability of NCC / NSDC to deliver the development aspiration at this site.	approved, the alignment for the combined footway/cycle track would be similar to that proposed in Section 6 of the developer's Design and Access Statement but with a corridor provide along the northern boundary of the development site to provide a continuous link between F-5E and F-5M (please refer to the figure below).  Annotated extract from Section 6 of the Design and Access Statement, dated 27th December 2023 , submitted with Outline Planning Application 23/02281/OUTM
6	For the proposed deceleration lane off the A46 diverge slip road, NCC seek clarification as to whether this has been designed in accordance with National Highways DMRB guidance to ensure that there is not a risk of shunt style collisions. NCC seek clarification as to whether this access would be gated given it is a private access to the Newark Showground. For cyclists travelling southbound on Drove Lane, using the proposed footway / cycleway, NCC seek clarification as to how cyclists will merge safely onto the road at the proposed termination point. Is there any desire line for why this route has been extended so far south off the roundabout? NCC seek clarification as to whether the cyclists' crossing facilities at Winthorpe Roundabout would be signal controlled. Road Markings for eastbound traffic in the right-hand lane and the chevron markings on the circulatory appear to conflict and push road users to exit in Lane 2.	The Applicant confirms the slip road has been designed in accordance with DMRB. The access will not be gated as it replaces the existing entrance off Drove Lane where the right turn off Drove Lane has been banned to improve safety and prevent vehicles queuing back onto Winthorpe Roundabout. Details of how southbound cyclists will merge onto Drove Lane safely will be developed during detailed design and agreed with NCC. The purpose of this route is to provide a safe walking and cycling route to the first Showground entrance. The crossings of the A46 will be signalised and those on Drove Lane and the A1133 will not be signalised. The Applicant is not clear on the point raised regarding eastbound traffic. The Applicant has reviewed all chevrons around Winthorpe Roundabout and believe these are correct for the intended vehicle movements. The Applicant will discuss this layout with NCC during detailed design.

Table 2.5: NCC Comment on Location Plan APP-004

Written Representations

Reference	Text from Local Impact Report	Applicant's Response

Document	NCC Comment	Response
APP-004 (Location Plan	Red line boundaries for the A46 scheme are shown to the south of Kelham village, some distance from the scheme. NCC require confirmation that this work (flood compensation area and temporary works compound) does not preclude delivery of the Kelham Bypass.	The interface with the proposals outlined for the Kelham bypass would be dependent on which option NCC decides to proceed with. The roundabout shown on Main Steet in Option K-NI_001 would be partially located within an area designated as flood compensation for the A46 Newark Bypass, Work No. 125 on the Works Plans [AS-005], and would need to be considered in the design for this option.

Speed Limit Plans

2.65. A review has been undertaken of the Permanent Speed Order Limit Plans (AS-014). **Table 2.6: NCC Comment on Permanent Speed Order Limit Plans AS-014**

Sheet	NCC Comment	Response
General	Interconnectivity of speed limits on A46 between Sheets 1 and Sheets 3 are not included into the DCO schedules.	The Applicant notes that the section of highway connecting Sheet 1 and Sheet 3 of the Permanent Speed Order Limits is not referred to in the draft Development Consent Order [REP1-001] Schedules. This is because Part 5, Schedule 3 of the draft Development Consent Order [REP1-001] sets out that where speed limits are indicated on the Permanent Speed Order Limit Plans [AS-014] but are not referenced in the Schedule, the national speed limit applies. The Applicant therefore confirms that the national speed limit applies between points 17 to 19 and 20 to 103 on Sheets 1 and 3 of the Permanent Speed Order Limit Plans [AS-014], in accordance with the text provided in Part 5, Schedule 3 of the draft Development Consent Order [REP1-001].
3	No designation is provided in Schedules for the application of 30mph speed limit on the circulatory of Cattle Market Junction. Currently national speed limit heading south on B6326, so powers would need to be specified for this speed limit change.	On that basis that the circulatory of Cattle Market Junction will be lit by street lamps the speed limit would revert to 30 mph and therefore a separate permanent speed order is not required.
5	Can the Applicant please confirm whether it is correct that between points 43 and 44, national speed limit will be in effect? This will primarily form a Private Means of Access for Bridge house Farm and will at its terminus have a pedestrian crossing, should this speed limit not be more proportional for its end use?	While the Applicant acknowledges that the national speed limit would apply here, the actual speed of drivers will be much lower than that given the geometry and length of road. On this basis no permanent speed limit order is required.
6	No coding provided on the Speed Limits Plans for full extents of Drove Lane and A1133 and cross referenced into the schedules.	The Applicant notes that the full extents of Drove Land and A1133 on Sheet 6 of the Permanent Speed Order Limits is not referred to in the draft Development Consent Order [REP1-001] Schedules. This is because Part 5, Schedule 3 of the draft Development Consent Order [REP1-001] sets out that where speed limits are indicated on the Permanent Speed Order Limit Plans [AS-014] but are not referenced in the Schedule, the national speed limit applies. The Applicant therefore confirms that the national speed limit applies between points 85 and the tie in to the existing Drove Lane and between point 93 and the tie in to the existing A1133 on Sheet 6 of the Permanent Speed Order Limit Plans [AS-014], in accordance with the text provided in Part 5, Schedule 3 of the draft Development Consent Order [REP1-001].

Clearways and Prohibitions

Written Representations

<table>
<tr><th>Reference</th><th>Text from Local Impact Report</th><th>Applicant's Response</th></tr>
<tr><td>2.66.</td><td>A review has been undertaken of the Traffic Regulation Measures (AS-013).
Table 2.7 NCC Comment on Traffic Regulation Measures AS-013
<table>
<tr><th>Sheet</th><th>NCC Comment</th></tr>
<tr><td>1</td><td>Existing A46 (northbound) carriageway from point 1/2 to point 1/9, a distance of 105 metres.
Applicant to confirm referencing as this does not seem to align with the plan.
Is this referring to the inset and why is the distances different from the row below?

Existing A46 (southbound) carriageway from point 1/10 to point 1/4, a total distance of 98 metres.
Missing inset reference in the wording.

Existing A46 (northbound) carriageway from point 1/9 to point 1/3, a distance of 45 metres.
Applicant to confirm references as these reference points do not seem to align to anything on the plans.

Existing A46 (southbound) carriageway from point 1/3 to point 1/10, a total distance of 45 metres.
Applicant to confirm references as these reference points do not seem to align to anything on the plans.</td></tr>
<tr><td>3</td><td>For points 3-C and 3-D there should be an existing speed limit order to be varied or revoked as this will change from national speed limit to 30mph under the Scheme.

Existing A46 (southbound) carriageway from point 3/4 to point 3/3, a distance of 65 metres – error in the drafting in the draft development consent order with the wording applied as a fraction.</td></tr>
<tr><td>5</td><td>In the relevant Schedule of the draft Development Consent Order, there is duplication for Reference 5-A, the schedule of the draft Development Consent Order should be updated.</td></tr>
<tr><td>6</td><td>Friendly Farmer multileader to be frozen off the Inset A.</td></tr>
</table></td><td>The Applicant notes NCC's comments on the Traffic Regulation Measures Plans [AS-013] and acknowledges the inconsistencies with references within the draft Development Consent Order [REP1-001]. A revised draft Development Consent Order [REP1-001] has been submitted at Deadline 2 of the Examination to rectify these inconsistencies.

In relation to each specific point raised on sheet 1 the Applicant notes the following:
This is an error and the draft Development Consent Order [REP1-001] will be updated to refer to read:
"Existing A46 (northbound) carriageway from point 1/2 to point 1/3, a distance of 105 metres."

This is an error and the draft Development Consent Order [REP1-001] will be updated to read: "Existing A46 (southbound) carriageway from point 1/3 to point 1/4, a total distance of 98 metres."

This is an error and this row will be deleted from the Schedule to the draft Development Consent Order.

This is an error and this row will be deleted from the Schedule to the draft Development Consent Order.

In relation to the first point on Sheet 3, as the current speed limit is the national speed limit there is no existing traffic regulation order to revoke.

In relation to the second point on Sheet 3 this typographical error in the draft Development Consent Order [REP1-001] and this will be rectified in the updated draft Development Consent Order [REP1-001] submitted at Deadline 2 of the Examination.

In relation to Sheet 5, the Applicant also confirms that there is a duplication when referring to point 5-A in Part 8, Schedule 3 of the draft Development Consent Order [REP1-001]. The revised draft Development Consent Order [RWP1-001] submitted at Deadline 2 of the Examination will rectify this duplication

In relation to the comment on Sheet 6, as the label is not creating confusion or making the plans less readable the Applicant is not proposing to update the plans to reflect this minor change. However, should the plans need to be updated in the future the Applicant will correct this.</td></tr>
<tr><td colspan="3">Streets, Rights of Way and Access Plans</td></tr>
<tr><td>2.67.</td><td colspan="2">A review has been undertaken of the Streets, Rights of Way and Access Plans (AS-006).
Table 2.8: NCC Comment on Streets, Rights of Way and Access Plans AS-006
<table>
<tr><th>Sheet</th><th>NCC Comment</th><th>Response</th></tr>
<tr><td>1</td><td>NCC would query why the Private Means of Access off Fosse Road is being stopped up and proposed in the same section. NCC query whether this should simply be limited to where there is a physical change in alignment rather than over the full extents.</td><td>The section has been included as minor alterations in vertical alignment may be required where the Private Means of Access ties into the field access at point P1-B. Alterations may also be required to the gated access from the Fosse Road.</td></tr>
<tr><td>3</td><td>Reference 3C – the description in section 4 should remove the words "inset" after H-3K.</td><td>The Applicant has corrected this error in the draft Development Consent Order submitted at Deadline 2 of the Examination [REP1-001].</td></tr>
</table></td></tr>
<tr><td>2.68.</td><td colspan="2">Drainage Engineering Plans</td></tr>
</table>

Written Representations

<table>
<tr><th>Reference</th><th>Text from Local Impact Report</th><th>Applicant's Response</th></tr>
<tr><td>2.69.</td><td>A review has been undertaken of the Drainage Engineering Plans (AS-012).
Table 2.9: NCC Comment on Drainage Engineering Plans AS-012
<table>
<tr><th>Sheet</th><th>NCC Comment</th></tr>
<tr><td>General</td><td>No catchment areas are shown for any modified highways which will not form part of the trunk road and will need to be maintained by NCC in future. NCC would request to see how the proposed scheme would alter any existing drainage assets which would be operated by NCC and whether they have taken on board best practice and the requirements of the DMRB.</td></tr>
</table></td><td>The catchment areas for new carriageway are generally draining into a National Highways attenuation pond as it is not feasible to split such small areas. The Applicant will continue to liaise with NCC during the detailed design period to agree catchments and outfalls if they then fall into NCC responsibility.</td></tr>
<tr><td colspan="3">Forecast Changes in Traffic Flow (Operational)</td></tr>
<tr><td>2.70.</td><td colspan="2">A review has been undertaken to examine the impact of the Scheme upon changing traffic flow levels and the anticipated impact upon the local road network. Key areas of concern from NCC's perspective are summarised in the table below.
Table 2.10: NCC Comment on Forecast Change in Traffic Flow (Operational)
<table>
<tr><th>Reference</th><th>Wording / Content</th><th>NCC Comment</th><th>Response</th></tr>
<tr><td>APP-193_Transport Assessment. Figure 6-2</td><td>Forecast AADT 2043</td><td>A large increase in AADT is forecast at the following locations. NCC seek clarification that additional assessment will be conducted in these locations:
A617 (Hockerton to Averham) (+19% AADT) – NCC are concerned that this route already experiences capacity issues owing to a pinch point at Kelham Bridge. Any increase in traffic flow will likely worsen journey times as well as collision rates (an existing collision cluster is noted in this location) and existing environmental impacts.
A616 (A46 to South Muskham) (+20% AADT)
A17 (Coddington to A46) (+118% AADT) – NCC are concerned about the increase in AADT flow and seeks clarification on why flows have increased so substantially (from 7,900 to 17,200 in 2043?). Where has traffic reassigned from?
A17 (Beckingham to Coddington) (+20% AADT)
Great North Road (South of Cattle Market roundabout) (+43% AADT) - NCC are concerned that this route already experiences capacity issues owing to a level crossing as well as traffic to / from Newark town centre (see earlier on Pinch Points).</td><td>The Applicant confirms that following discussions with NCC additional assessment is currently being undertaken at the following roundabout junctions:
B6326 Great North Road / Bar Gate
B6326 Great North Road / Ossington Way (Waitrose)
A17 / Stapleton Lane / Beckingham Road
A17 / Long Hollow Way / Godfrey Drive
Further detail on the specific changes in traffic flows identified is shown below:
A617 (Hockerton to Averham) – Traffic flows on the A617 are forecast to increase as a result of the Scheme. The increase in traffic is primarily caused by the improvements at Cattle Market Junction, where the introduction of a flyover for mainline A46 traffic frees up capacity for other movements at the roundabout. To a lesser extent, similar improvements brought about by removing A46 through traffic from the A1/A46/A17 roundabouts also contributes to the forecast increases in traffic on the A617.
A616 (A46 to South Muskham) – In a similar way to the forecast changes in traffic on the A617, flows on the A616 Great North Road are also forecast to increase as a result of the proposed improvements at Cattle Market Roundabout. The removal of A46 through traffic from the roundabout frees up capacity for other movements at this junction.
A17 (Coddington to A46) (+118% AADT), A17 (Beckingham to Coddington) (+20% AADT) – Traffic flows on the A17 adjacent to the A1/A46 junction at Newark-on-Trent are forecast to reduce in the future without scheme scenario to levels below those in the 2019 base year. The reduction in flow on the A17 is largely driven by the performance of the existing Friendly Farmer Roundabout in the Strategic Traffic Model, where indications are that the congestion problems experienced at this location in the base year are forecast to deteriorate in the future without the Scheme. As a result of the worsening situation at Friendly Farmer, A17 traffic is forecast to increasingly take alternative local routes in the future to avoid the Friendly Farmer junction.
Alternative routes forecast to be affected by traffic diverting from the A17 include via Beckingham Road through Coddington and also the route along Newark Road/Long Lane (via Barnby in the Willows). The introduction of the Southern Link Road in the future year forecasts also attracts some traffic away from the A17/A46 route by improving an alternative route to the south of Newark-on-Trent.
With the proposed Scheme, the introduction of a new link across the A1 for A46 through traffic removes a significant volume of traffic from the Friendly Farmer and Brownhills roundabouts. The removal of A46 through traffic leads to an improvement in capacity for routes via the A17 and as a result traffic flows on the A17 east of the A46 are forecast to increase. The increase in traffic on the A17 largely being a result of the reassignment of traffic back onto the A17 from the routes through Coddington and Barnby in the Willows noted above.</td></tr>
</table></td></tr>
</table>

Written Representations				
Reference	**Text from Local Impact Report**			**Applicant's Response**
				Great North Road (South of Cattle Market roundabout) (+43% AADT) – The introduction of a flyover for mainline A46 traffic at Cattle Market leads to a considerable improvement in conditions at the junction. A significant amount of capacity is freed up by removing the A46 through traffic from the roundabout and, as a consequence, the other movements at the junction are able to benefit from this. The reductions in delay at Cattle Market junction are forecast to make routes through the junction more attractive. This benefits users who currently put up with the delays and travel through the junction, but also impacts on journeys that are diverting onto other routes to avoid Cattle Market junction altogether. The B6326 Great North Road is the most direct route into the centre of Newark-on-Trent from the A46 and as a result of the improvements to Cattle Market junction this access into the town becomes more attractive, in preference to either the B6166 Lincoln Road (via Brownhills) or the B6166 Farndon Road, which are both forecast to experience reductions in traffic as a result of the Scheme. In addition, with the Scheme trips to/from the A46 north of Winthorpe, which were previously making use of the B6166 Lincoln Road to access the town, are now forecast to bypass the Friendly Farmer and Brownhills roundabouts on the proposed new link over the A1 and access the town via Great North Road. Similarly, some reassignment of trips from the A1 north of North Muskham onto the B6325/A616 Great North Road is also noted as a result of the improvements at Cattle Market.
	APP-193_Transport Assessment. Tables 6-5 & 6-6	Table 6-5: Comparison of two-way AADT total vehicle forecasts on local roads in 2028 with and without the Scheme Table 6-6: Comparison of two-way AADT total vehicle forecasts on local roads in 2043 with and without the Scheme	NCC congestion mapping shows that delays are experienced on several routes through the town centre in both the AM and PM peaks. There is also a known 'pinch point' on Great North Road at the level crossing. NCC would like to fully understand forecast traffic flow changes on key town centre routes, in particular: Queen's Road / Sleaford Road B6166 Castle Gate / Lombard Street Brunel Drive Bar Gate / North Gate	The Applicant notes that while traffic modelling indicates an increase in traffic on the A46 because of the Scheme, it also shows that a significant component of this increase is attributable to strategic through traffic that is effectively removed from the centre of Newark-on-Trent by the Scheme. These trips currently divert off the A46 and go through the town centre to avoid congestion. With the Scheme this through traffic is forecast to remain on the strategic road network. In particular, forecasts undertaken with the traffic model show that the Scheme would reduce traffic flows on most local roads through Newark-on-Trent, including the B6326 London Road, Barnaby Road, Beacon Hill Road, Beckingham Road, Drove Lane, Farndon Road and Fosse Road. More details on the volume of flow decreases are available in the Transport Assessment [APP-193]. In relation to the specific roads in the town centre that are identified the Applicant notes that the following forecast changes in daily traffic flows as a result of the proposed Scheme: Queen's Road / Sleaford Road – in 2028 traffic flows on Queen's Road / Sleaford Road are forecast to reduce as a result of the Scheme. The greatest reductions are noted at the eastern end of Sleaford Road where reductions of 300 vehicles per day are forecast, with reductions on Queen's Road being more modest. In 2043 a similar pattern is forecast, although traffic on the section of Queen's Road between King's Road and Appleton Gate is forecast to increase slightly (by 200 vehicles per day). Reductions in traffic between Friary Road and Beacon Hill Road are forecast to be between 400 and 700 vehicles per day. B6166 Castle Gate / Lombard Street – As a result of the Scheme, significant reductions in traffic flow are forecast for Castle Gate and Lombard Street in 2028 and 2043. Daily flows on Castle Gate are forecast to reduce by 2,600 and 2,900 vehicles and on Lombard Street by 2,700 and 4,500 vehicles AADT in 2028 and 2043 respectively. Brunel Drive – Forecast changes to traffic flows on Brunel Drive as a result of the Scheme are generally related to trips that have an origin or destination within the industrial estate, rather than being through trips. Reductions in flow elsewhere within the town, and particularly on the B6166 mean that journeys to/from the industrial estate are able to take advantage of more efficient routes out onto the strategic road network i.e. increases in traffic at the northern end of Brunel Drive are largely offset by reductions at the southern end. Bar Gate / North Gate – Significant reductions in traffic on Bar Gate and North Gate are forecast to occur as a result of the Scheme. In 2028 and 2043 reductions are forecast to be between 2,400 vehicles per day and 3,700 vehicles per day.

Written Representations				
Reference	**Text from Local Impact Report**			**Applicant's Response**
	APP-193_Transport Assessment: Appendix A (ComMA Report). Para 5.3.7	*"The MRTM2 matrices are suitable to be used for the PCF Stage 3 model because they represent recent demand patterns (2019). It is noted that they represent pre COVID-19 travel patterns. However, at present there are concerns that travel behaviour and patterns have not stabilised since COVID-19 and there are no plans to collect new demand data until conditions stabilise. There are no plans to collect further demand data."*	NCC are concerned that the 2019 pre-covid traffic patterns do not fully represent post-covid travel patterns. As per the traffic count data (6.7.1 of the ComMA), the Applicant could undertake a sensitivity test to show the travel patterns using the 2019 demand data are realistic in a post covid environment.	The Applicant confirms at the time of developing the traffic model to support the Scheme there was still uncertainty regarding the medium to long term impact of COVID-19 on traffic flows. The Scheme design has therefore been developed based on observed traffic data gathered before and after the pandemic and with forecasts based on the latest DfT forecasts. The Applicant recognises that in the intervening period the impacts of COVID-19 on traffic patterns have become clearer, and since the submission of the DCO application the Applicant has continued to monitor and evaluate the traffic changes that continue to evolve in the wake of the pandemic. In this regard sensitivity testing has been undertaken to capture the known impacts of COVID-19 on traffic levels since 2019 in relation to the core forecasting assumptions that are documented in the Transport Assessment Report [APP-193]. The traffic forecasts prepared in support of the Scheme, while adhering to Transport Appraisal Guidance (TAG) at the time the modelling work was undertaken, rely on national forecasts of trip end growth that predate the impacts of the pandemic. To account for this discrepancy a locally calibrated adjustment to the forecasts has been made. The broad approach to the derivation of the COVID-19 adjustment factor was based on a comparison of changes in observed traffic flows in the local area between March 2019 and March 2023, and the equivalent forecast change in trip ends from the Department for Transport's National Trip End Model (NTEM) over the same period. In addition to the direct impacts of COVID-19 on observed traffic volumes between 2019 and 2023, changes in fuel costs over this period have also been significant. Analysis has therefore been undertaken to also consider the extent to which the changes in observed traffic volumes are attributable to rising fuel costs, and a further adjustment factor to isolate the direct impacts of COVID-19 has been derived. It is necessary to make this distinction in the derivation of a COVID-19 adjustment factor as the impact of changes in fuel costs will be accounted for in the variable demand model. The outturn adjustment factors derived in this testing reflected an average car trip reduction of approximately 5%, with larger reductions occurring in the AM and PM peaks. The freight impact was found to be less severe with an increase of 3.7% and a decrease of 2.6% for LGVs and HGVs respectively. The adjustments were applied to the core scenario post variable demand modelling (VDM) forecast trip matrices and the models reassigned. When the resulting traffic flows were compared to the core forecasts a drop in traffic volume of approximately 3% was noted in the future year forecasts for the with (Do Something) and without (Do Minimum) Scheme scenarios. The differences in flow between the Do Minimum and Do Something remained very similar to the core forecasts and consequently the core traffic forecasts of the Scheme were considered to remain valid for the purposes of Scheme assessment.
	APP-193_Transport Assessment: Appendix A (ComMA Report). Figure 9-1	A46 zone plan – Newark area	The A46 Newark Bypass Model utilises a large model zone representing north-east Newark. NCC are concerned that the loading point of this zone may not represent the correct loading point for the large number of HGV movements from the Curry's national distribution centre on the A17 / A46.	The Applicant confirms that in the strategic A46 Newark Bypass Model the Currys National Distribution Centre is represented by a point zone that loads onto Long Hollow Way. This zone is also represented in the microsimulation operational model as an entry point on Long Hollow Way.
	APP-193_Transport Assessment: Appendix A (ComMA Report). Figure 12-7	Do-Minimum Schemes	The following schemes are included within the Do Minimum scenario. Where appropriate, NCC have added detail regarding the status of each scheme (which impacts the development uncertainty log). A52 (Gamston, Stragglethorpe, Bingham Road, Silverdale) – NCC wish to note that works at Gamston, Stragglethorpe, Bingham Road and	The Applicant notes the comments on the various changes to the status of Do Minimum schemes on the A52 and A614. Given the nature and location of the Do Minimum schemes that are not included in the modelling, the Applicant would note that the additional schemes are unlikely to be of significance to the assessment of the Scheme. The Nottingham Knight (A52/A60) and Wheatcroft (A52/A606) junctions are both to the south of Nottingham, where the impacts from the Scheme would be diluted within other traffic movements. The Kirk Hill junction improvement on the A6097 at East Bridgford is located on a potential alternative route to the A46 via Newark-on-Trent, for trips (in either direction) between the A46 south of Bingham and the A1 north of Apleyhead Interchange (A57). However, the nature of the improvement at East Bridgford would not be expected to have an appreciable impact on the strategic routing of traffic with regard to the assessment of the Scheme.

Written Representations				
Reference	**Text from Local Impact Report**			**Applicant's Response**
			Silverdale are now complete. Junction upgrades are also occurring at Nottingham Knight and Wheatcroft; however, it does not appear that these have been included within the Do Minimum modelling. A614 (Lowdham, Mickledale, Warren Hill, Ollerton, White Post) – NCC note that the junction upgrade at Mickledale is no longer going included in the MRN scheme, but are likely to be progressed by NCC separately. Junction upgrades are instead occurring at Kirk Hill, with these works not included within the Do Minimum modelling.	
	APP-193_Transport Assessment: Appendix A (ComMA Report). Para 13.4.2	*"The following trends in flow difference can be observed when comparing the Do-Something and Do- Minimum scenarios…. There is long distance route reassignment of north-south traffic from the M1 onto the A46/A1, and from the A607 onto the A46/A17"*	NCC are concerned with the increase in traffic along Great North Road accessing the A1 at North Muskham. NCC are also concerned with the increase in traffic along the A17. See elsewhere in this LIR for further information on these potential local impacts.	The Applicant confirms the introduction of a flyover for mainline A46 traffic at Cattle Market leads to a considerable improvement in conditions at the junction. A significant amount of capacity is freed up by removing the A46 through traffic from the roundabout and, as a consequence, the other movements at the junction are able to benefit. The reductions in delay at Cattle Market junction are forecast to make routes through the junction more attractive. This benefits users who currently experience delays whilst travelling through the junction, but also impacts on journeys that are diverting onto other routes to avoid Cattle Market junction altogether. Some reassignment of trips from the A1 north of North Muskham onto the B6325/A616 Great North Road, through South Muskham, is noted as a result. The introduction of a new link across the A1 for A46 through traffic removes a significant volume of traffic from the Friendly Farmer and Brownhills roundabouts. The removal of this traffic leads to an improvement in capacity for routes via the A17 and as a result traffic flows on the A17 east of the A46 are forecast to increase.
	APP-193_Transport Assessment: Appendix A (ComMA Report). Para 13.4.2	*"The future year forecasts have been developed for a 'Core Scenario' which is based on the Core Scenario traffic growth from the DfT's National Transport Model. Sensitivity tests have been carried out for the High Economy and Low Economy scenarios from the DfT's Common Analytical Scenarios (CAS)."*	NCC are seeking clarification that all CAS scenarios were tested, and the highest and lowest growth scenarios taken forward for further analysis (often other scenarios e.g. Technology Scenario present the highest sensitivity test).	As noted in paragraph 12.3.2 of the Combined Modelling and Appraisal Report, which forms Appendix A to the Transport Assessment Report [APP-193], the future year forecasts have been developed for a 'Core Scenario' which is based on the Core Scenario traffic growth from the DfT's National Transport Model. Sensitivity tests have been carried out for the High Economy and Low Economy scenarios from the DfT's Common Analytical Scenarios (CAS). Further details of the CAS that were tested, including model forecast outputs are documented in subsequent sections of the Combined Modelling and Appraisal Report, which forms Appendix A to the Transport Assessment Report [APP-193]. Additionally, a qualitative assessment of the CAS that were not modelled is provided in Table 15-17 of the Combined Modelling and Appraisal Report, which forms Appendix A to the Transport Assessment Report [APP-193].

Written Representations				
Reference	**Text from Local Impact Report**			**Applicant's Response**
	TR-00022 Transport Forecasting Package. Figure 21.	Forecast AADT Difference 2043 (Local)	NCC are particularly concerned about the increase in traffic flow at the following locations (some of which have already been highlighted above): A617 – through the Kelham Bridge pinch point Great North Road (between the A616 junction and North Muskham). A17 including access to Currys National Distribution Centre. Pelham Street / Clinton Street Albert Street Boundary Road Brunel Drive NCC are keen to understand the expected change in traffic flow along these routes, as well as the assessed impact. NCC are particularly concerned about the increase in traffic flow forecast along Brunel Drive given that the Northern Road Industrial Estate is the location of a number of strategic site allocations within NSDC's Local Plan (NUA/MU/2 (mixed use development site comprising employment and road side services including hotel)), NUA/E/2 (12.24 hectare employment site), NUA/E/3 (1.54 hectare employment site), NUA/MU/3 (mixed use development comprising at least 150 dwellings, employment provision and comparison retail provision of around 4,000 square metres).	The Applicant notes that details of forecast traffic flow changes resulting from the proposed Scheme on the A617, A616 and A17 can be found in the responses provided above. Commentary on the traffic flow changes at the other locations identified can be found below: Pelham Street / Clinton Street – the Applicant notes that issues with regard to the forecast increases in modelled traffic flows on Pelham Street have previously been the subject of discussions with officers from NCC and NSDC. The outcome of these discussions was an agreement to adopt a monitor and mitigate approach for this road. Albert Street - Traffic flows on Albert Street are forecast to increase by 800 vehicles per day (in both 2028 and 2043) as a result of the Scheme when compared to the Do Minimum scenario. However, when compared to the 2019 base year, traffic flows in 2028 with the Scheme are forecast to be only 200 vehicles per day higher on Albert Street. Boundary Road - Traffic flows on Boundary Road are forecast to increase slightly with the Scheme when compared to the Do Minimum scenario. In 2028, forecast increases of 600 vehicles per day above Do Minimum are noted for the section of Boundary Road outside Newark Hospital (the section of Boundary Road with the greatest difference). Significantly though, it is notable that both Do Minimum and Do Something flows on Boundary Road are both forecast to be substantially lower than flows in the 2019 base year model. The flow on the equivalent section of Boundary Road near Newark Hospital is modelled as being 1,300 vehicles per day lower with the Scheme than it is in the 2019 base year model. Forecast changes to traffic flows on Brunel Drive as a result of the Scheme are generally related to trips that have an origin or destination within the industrial estate, rather than being through trips. Reductions in flow elsewhere within the town, and particularly on the B6166 mean that journeys to/from the industrial estate are able to take advantage of more efficient routes out onto the strategic road network i.e. increases in traffic at the northern end of Brunel Drive are largely offset by reductions at the southern end.
	TR-00022 Transport Forecasting Package	N/A	Flow difference plots are only available for AADT values. NCC requires flow difference plots for the AM and PM peak hours. It would be beneficial if, in addition to the overview plots, more zoomed in plots are provided showing the Newark town centre area (in particular Pelham Street, Lombard Street and Boundary Road areas).	The document referred to by NCC does not form part of the application documents and was provided to NCC in their capacity as local highway authority. The Applicant notes that flow difference plots for all modelled years and time periods are provided in Appendix G of the Transport Forecasting Package that have been previously provided to NCC.
	TR-00026 Operational	*"The ATC data was used to calibrate speed*	It is understood that the ATC data was used to update the desired speed	The document referred to by NCC does not form part of the application documents and was provided to NCC in their capacity as local highway authority.

Written Representations				
Reference	**Text from Local Impact Report**			**Applicant's Response**
	Forecasting Report. Section 1.2.3	*distributions for the VISSIM model. Although there were ten ATCs within the network, only three were used as not all the ATCs reflected free-flowing traffic"*	distribution for the traffic model. This has been based upon only three available count sites, with only one on the scheme extent. NCC are seeking clarification that this is sufficient to validate the model sufficiently.	The Applicant confirms Section 1.3.3 of Operational Forecasting Report provides further explanation on the use of ATC data. The data was used for calibration of modelled speeds only where appropriate, with posted speed limits and defaults in VISSIM used across the model.
	Missing Information	N/A	**NCC are concerned that no consideration for event days at Newark Showground has occurred**. Event days attract a large number of people, with the Nottinghamshire County Show attracting 15,000 people in 2023 for example. NCC requires additional sensitivity testing, particularly around the northern extent of the scheme, to ascertain whether the scheme design can accommodate the additional demand. NCC requires assurance that the Applicant has future proofed access arrangements to Newark Showground.	The Applicant has provided a new westbound entrance off the new Friendly Farmer link road to remove traffic from Winthorpe roundabout and Drove Lane which currently contribute to the delays. The Drove Lane entrance to the bowling club area has also been made left out only, this will reduce the risk of traffic queuing back onto Winthorpe roundabout and creating congestion. The Applicant has also stated that is will work with the Showground operator during the detailed design stage to agree the signage required and also the potential to change signal timings on Winthorpe roundabout to improve flows into the Showground at weekends.

Impacts on Junction Capacity (Operational)

2.71. NCC have reviewed the information relating to the scheme's anticipated impact upon junction capacity, with key issues identified below.

Table 2.11: NCC Comment on Junction Capacity (Operational)

Reference	Wording / Content	NCC Comment	Response
APP-193_Transport Assessment. Table 6-15/16	Summary of Level of Service in operational assessments	**NCC note that Tables 6-15/16 show the overall (junction) LOS. NCC consider that the tables should also show the LOS of the worst performing arm as well, to show where capacity issues remain (for example at Brownhills - whilst the overall junction performs at a LOS of C in the PM Peak (2043), the A46 link arm performs at a LOS of F (with a queue of 450m)).**	The Applicant notes that in addition to the two summary tables referenced (Tables 6-15 and 6-16) in the Transport Assessment Report [APP-193], a detailed breakdown showing the assessed level of service for each approach arm at each of the junctions is subsequently provided in the Transport Assessment Report [APP-193] in Tables 6-17 to 6-38.

Written Representations				
Reference	**Text from Local Impact Report**			**Applicant's Response**
	APP-193_Transport Assessment.	N/A	NCC are very concerned that junction capacity assessments have only been conducted at junctions along the scheme extent. Little consideration has been given to junctions within the wider area, despite seeing large increases in AADT. The following junctions are likely to be impacted by the scheme: *Great North Road Junctions Impacted*: Increase in AADT: +6,300 Great North Road/Kelham Road Great North Road/Ossington Way/Tolney Lane Great North Road/Bar Gate *North Gate/Lincoln Bridge Road Junctions Impacted:* Increase in AADT: +2,700 Bar Gate/Kirk Gate Bar Gate/Slaughterhouse Lane Bar Gate/Handley Court North Gate Gate/Queens Road North Gate /Cow Lane North Gate /Maltings Retail Park North Gate /Meyrick Road North Gate /Currie Road North Gate /Northgate Retail Park North Gate /Summers Road North Gate /Lincoln Bridge Road North Gate /Trent Lane Northern Road /Lincoln Bridge Road/Winthorpe Lane/Lincoln Road Lincoln Road/Emmendingen Avenue Lincoln Road/Middleton Road Lincoln Road/Gainsborough Drive Lincoln Road/Stanhope Avenue Lincoln Road/Harvest Drive/Brunel Drive *A617 – Kelham Road Junctions Impacted:* Increase in AADT: +1,600 Kelham Road/Kelham Lane Kelham Bridge/Kelham Village – NCC are concerned that there is a known issue at this location, particularly concerning the narrow bridge, which sees a large number of bridge strikes.	The Applicant confirms that following discussions with NCC additional assessment is currently being undertaken at the following roundabout junctions: B6326 Great North Road / Bar Gate B6326 Great North Road / Ossington Way (Waitrose) A17 / Stapleton Lane / Beckingham Road A17 / Long Hollow Way / Godfrey Drive The Applicant notes that the forecast increase in traffic flow on the B6326 Great North Road quoted in the NCC LIR is incorrect. As per Tables 6-5 and 6-6 of the Transport Assessment Report [APP-193] the forecast increase on this link is 4,400 vehicles per day in 2028, rising to 5,500 vehicles per day in 2043. The Applicant notes that the forecast increase in traffic flow on North Gate/Lincoln Bridge Road quoted in the NCC LIR is incorrect. Significant reductions in traffic on North Gate/Lincoln Bridge Road are forecast to occur as a result of the Scheme. In 2028 reductions in flow are forecast to range between 1,800 and 3,700 vehicles per day over this section. The Applicant notes that the forecast increase in traffic flow on the A617 Kelham Road quoted in the NCC LIR is incorrect. As per Tables 6-2 and 6-3 of the Transport Assessment [APP-193] the forecast increase on this link is 1,300 vehicles per day in 2028, rising to 1,700 vehicles per day in 2043. The Applicant notes that the forecast increase in traffic flow on the A616 Great North Road quoted in the NCC LIR is incorrect. As per Tables 6-2 and 6-3 of the Transport Assessment [APP-193] the forecast increase on this link is 2,100 vehicles per day in 2028, rising to 3,000 vehicles per day in 2043. The Applicant notes that the forecast increase in traffic flow on the A616 Ollerton Road quoted in the NCC LIR is incorrect. As per Figure 6-1 and 6-2 of the Transport Assessment [APP-193] the forecast increase on the section of A616 Ollerton Road immediately south of Caunton is 500 vehicles per day in 2028, rising to 800 vehicles per day in 2043. Increases in traffic closer to South Muskham are slightly higher (700 vehicles per day in 2028 near Bathley Lane) and lower beyond Caunton as traffic dissipates. The Applicant notes that the forecast increase in traffic flow on the B6325 Great North Road at North Muskham quoted in the NCC LIR is incorrect. As per Figure 6-1 and 6-2 of the Transport Assessment [APP-193] the forecast increase on this link is 1,100 vehicles per day in 2028, rising to 1,500 vehicles per day in 2043. The Applicant notes that the forecast increase in traffic flow on the A1133 west of Winthorpe quoted in the NCC LIR is incorrect. As per Tables 6-2 and 6-3 of the Transport Assessment [APP-193] the forecast increase on this link is 200 vehicles per day in 2028, rising to 600 vehicles per day in 2043. The Applicant notes that the forecast increase in traffic flow on the A17 quoted in the NCC LIR is incorrect. As per Tables 6-2 and 6-3 of the Transport Assessment [APP-193] the forecast increases on this link are as follows: Between Coddington and the A46 flow increases of 5,600 vehicles per day are forecast in 2028 rising to 9,300 vehicles per day in 2043. Between Beckingham and Coddington increases of 2,300 vehicles per day are forecast in 2028 rising to 3,500 vehicles per day in 2043. As noted above, further to ongoing discussions with NCC, additional assessment is currently being undertaken at the following roundabout junctions on the A17: A17 / Stapleton Lane / Beckingham Road A17 / Long Hollow Way / Godfrey Drive

Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**
	NCC are concerned that the increase in AADT will lead to further issues at this location. Kelham Road/Blacksmith Lane Kelham Road/Ollerton Road Kelham Road/Broadgate Lane Kelham Road/Staythrope Road *A616 – Great North Road Junctions Impacted:* Increase in AADT: +4,100 Great North Road/British Sugar access Great North Road/Kelham Lane/Ollerton Road/Main Street *A616 Ollerton Road Junctions Impacted:* Increase in AADT: +1,300 Ollerton Road/Bathley Lane Ollerton Road/ Ollerton Road Ollerton Road/Canton Road/Newark Road Back Lane/A6075/Ollerton Road Ollerton roundabout A616/A614 *Great North Road Junctions Impacted:* Increase in AADT: +1,400 Great North Road/Crow Lane/Church Street Great North Road/A1 North Muskham Junction *A1133 Junctions Impacted:* Increase in AADT: +800 A1133/Gainsborough Road A1133/Whitemoor Lane *A17 Junctions Impacted:* Increase in AADT: +4,100 A17/Godfrey Drive/Long Hallow Way A17/Drove Lane A17/Beckingham Road/Stapleford Lane A17 Holdingham Roundabout *Brunel Drive Junctions Impacted - Increase in AADT: +500* Brunel Drive/Stephson Way Brunel Drive/Telford Drive **It is not expected that junction**	

Written Representations			
Reference	**Text from Local Impact Report**		**Applicant's Response**
		capacity testing to be conducted at all junctions listed above, but to identify junctions for analysis, NCC require AM and PM flow difference plots, to understand if there are any flow differences greater than +30 two-way in peak hours (as per Guidance on Transport Assessment, DfT, 2007). In the absence of this information, **NCC are particularly concerned about the following junctions:** **Great North Road / Bar Gate** **Great North Road / Ossington Way (Waitrose)** **A17 / Stapleton Lane / Beckingham Road** **A17 / Long Holloway Road / Godfrey Drive – this is the proposed site access into strategic site NUA/MU/1 within NSDC's Local Plan (proposed mixed use development comprising a hotel / conference facility, restaurant facilities to support the wider showground uses, and employment uses.)**	
	APP-193_Transport Assessment: Appendix A (ComMA Report). Para 3.3.7 – 3.3.8	*"The lack of a grade separated junction at Cattle Market Junction is being compounded by queuing on the B6326 because of frequent railway level crossing downtimes"*	NCC are concerned that, whilst the issue has been identified within the ComMA, no mitigation measures are proposed to futureproof against potential capacity issues associated with queuing back due to level crossing downtime, particularly due to the increase volume of trips using the route as a result of the scheme.	The Applicant confirms the traffic modelling undertaken for the Scheme takes account of the Newark Castle level crossing. Through discussions with Nottinghamshire County Council (the local highway authority) and based on the results from traffic modelling, the existing Great North Road would be widened to two lanes for southbound traffic from Cattle Market Roundabout towards the Kelham Road junction as part of the Scheme. Improving Newark Castle level crossing is not required, as the Scheme would not worsen or change the existing situation in relation to crossing operation and safety. NSDC has advised the Applicant that they are discussing improvements to the crossing with Network Rail. The traffic modelling indicates an improvement in conditions on Great North Road as a result of the upgrade to the Cattle Market Junction and the provision of additional southbound queuing capacity, which alleviates the effects of level crossing closures on Cattle Market Junction. Further information on traffic forecasts and modelling is detailed in the Transport Assessment Report [APP-193].
	A46 Cattle Market / Kelham Road Microsim Modelling report	In response to a comment contained within the Newark & Sherwood District Council's Statement of Common Ground[3], the Applicant conducted further	The microsimulation modelling analysis has been reviewed by NSDC's consultant, with the following comments made: The technical note only appears to provide information for the 2028 scheme opening year. Please could this be expanded to also include summary tables for the 2043 scheme design year (i.e. 15 years post opening). Is the data presented in Table 1 & 2 for the 2028 scheme opening year (it's not	The Applicant notes that further to ongoing dialogue with NSDC, work is currently underway to address the specific queries that NSDC have raised and to prepare additional microsimulation outputs. The previously supplied technical note is in the process of being updated and will be shared with NSDC/NCC in due course.

Written Representations				
Reference	**Text from Local Impact Report**			**Applicant's Response**
		Microsimulation modelling at the Great North Road / Former Cattle Market / Lorry Park Site.	clear from the table titles)? Are the average and maximum queue lengths in Tables 1 & 2 the averages and maximums observed for the whole of the AM and PM peak hours? Please could we have an explanation why the vehicle flows on Great North Road change with the 'New Do-Something' scenario? The changes are small but there is no mention of why flows have changed in the technical note. Please could we have confirmation of the start and end points for the measurement of the journey times on Great North Road. We assume that the main reason for the increased journey times on Great North Road is due to the inclusion of the relocated Lorry Park access junction in the model. Is that correct? Do the provided VISSIM videos show the 2028 scheme opening year performance (there is no labelling to confirm the years)? The VISSIM videos show the first three minutes for each of the AM and PM peaks. Would it be possible to see similar 3-minute videos at 30- minute intervals throughout both peak hours for the 2028 opening year and 2043 design years (as shown by the crosses in the table below)?	

Time	Year	
	2028 Opening Year	2043 Design Year
08:00 – 08:03	Provided	X
08:30 – 08:33	X	X
08:57 – 09:00	X	X
17:00 – 17:03	Provided	X
17:30 –	X	X

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Reference	**Text from Local Impact Report**	**Applicant's Response**

		17:33		
		17:57 – 18:00	X	X

Impacts on Journey Times (Operational)	
2.72.	A review has been undertaken on the analysis conducted to examine the impact of the scheme upon journey times. The review is summarised in the table below.

Table 2.12: NCC Comment on Journey Times (Operational)

Reference	Wording / Content	NCC Comment	Response
APP-193_Transport Assessment: Appendix A (ComMA Report). Figure 7-3 APP-193_Transport Assessment. Figure 6-3	Figures showing the journey time routes assessed during the scheme appraisal.	**NCC would like to see further journey time routes for both the DM and DS along the A15, representing trips to and from Grantham/Sleaford and Grimsby, as well as the A614 between Nottingham and Grimsby**.	The Applicant confirms the journey time routes presented in the Transport Assessment Report [APP-193] align with those used in the development and validation of the base year traffic models. The A15 and A614 are not considered to be of particular significance to the Scheme as they primarily cater for trips that are not aligned with the A46 route.
APP-193_Transport Assessment: Appendix A (ComMA Report). Figure 6-4	Journey time survey routes	**There are no journey time routes located within Newark-on-Trent. NCC would like to understand the impact upon journey times within the town centre and arterial routes such as the B6166, B6326 and Lincoln Road, Fosse Road.**	The Applicant notes that additional analysis would be required to pull out modelled journey times for the routes through the town centre. Given that the routes noted by NCC remain unchanged, and that town centre through traffic is generally forecast to reduce due to the Scheme, congestion in the town centre is expected to improve.

Written Representations			
Reference	**Text from Local Impact Report**		**Applicant's Response**
	APP-193_Transport Assessment. Para 6.4.13	*"By 2043 there is forecast to be a more marked change in journey times in the PM peak, with journey times increasing by around 14% in the eastbound direction but reducing by around 16% in the westbound direction. This increase in journey times is likely to be as a result of queuing back from Brownhills junctions, however it is worth noting that this increase equates to less than an extra 1 minute 30 seconds on each journey."*	NCC are concerned about the additional 1.5-minute delay caused by the scheme (in the DS) on the A617 EB in the PM peak (2043). Paragraph 6.4.13 states that the delay is likely a result of queuing back from the Brownhills junction; however, we note that traffic flow is forecast to reduce at this junction (Table 6-8 shows a -18% reduction in traffic flow in the AM peak and -15% in the PM by 2043) so we would like clarification as to why journey times would worsen at this location.	The Applicant notes that the eastbound A46 approach to Brownhills roundabout experiences delays in the 2043 DS scenario, which lead back through the new Brownhill Junction roundabout towards the A46 off-slip road. This is reflected in the journey time between Cattle Market Roundabout and Brownhills Roundabout. The reduction in flow on this approach to Brownhills Roundabout is related to the mainline A46 flows moving to the new link over the A1 that would be provided by the Scheme. However, the balance of flows differ on other approaches to the Friendly Farmer roundabout, which affects capacity due to conflicting movements creating gaps for subsequent entries (as it is an unsignalised roundabout). Additionally, the eastbound signalised gate between Brownhills and Friendly Farmer (used to assist the A1 southbound off-slip flow) also affects the eastbound capacity.
Impacts on Road Safety (Operational)			
2.73.	A review of information relating to the scheme impact upon road safety has been conducted, with the table below summarising the key areas of concern for NCC.		

Table 2.13: NCC Comment on Road Safety (Operational)

Reference	Wording / Content	NCC Comment	Response
APP-193_Transport Assessment. Figure 4-2	*Summary of accident benefits by section.*	Figure 4-2 summarises the routes considered as part of the COBALT assessment, and NCC are satisfied that these coincide with the routes that are forecast to see a change in AADT. **However, NCC are concerned that some routes (such as the A17, A617, A612 (Lowdham Junction), A616 and B1202) are expected to see an increase in collisions as a result of the A46 Scheme**. **NCC require additional information about the routes expected to see a worsening in collision rates (including extents, types of collisions etc.) so that we are able to identify whether mitigation would be required.**	The Applicant notes that the accident analysis undertaken in support of the Scheme indicates that the vast majority of roads within Newark-on-Trent are forecast to experience a benefit as a result of Scheme improvements, with reductions in the overall number and severity of accidents. Benefits arise from the upgrade of the single carriageway sections of the widened A46 to dual carriageway, and from some traffic reassigning onto the widened A46 from comparatively less safe local roads. As noted by NCC, increases in traffic on some roads adjacent to the Scheme, such as the A17, are forecast to lead to some localised increases in accidents, although these are not of sufficient magnitude to outweigh the network wide benefits across the study area. On unimproved routes, such as the A17, the number of collisions would be forecast to change in proportion with the forecast changes in traffic flow. Collision rates, measured in terms of collisions per million vehicle kilometers (mvkm) are assumed to be unaffected on sections of highway that are unaltered. The approach to forecasting road accident impacts using COBALT follows the recommendation found in the DfT Transport Analysis Guidance (TAG) Unit A4.1

Written Representations				
Reference	**Text from Local Impact Report**			**Applicant's Response**
	APP-193_Transport Assessment. Para 4.4.8	*"Network benefits arise from the upgrade of the single carriageway sections of the widened A46 to dual carriageway, and from some traffic reassigning onto the widened A46 from comparatively less safe local roads. Increases in traffic on some roads adjacent to the scheme, such as the A17, are forecast to lead to some localised increases in accidents, although these are not of sufficient magnitude to outweigh benefits elsewhere."*	NCC require further consideration of the impacts of and the mitigation measures in these locations.	The Applicant notes that the accident analysis undertaken in support of the Scheme indicates that the vast majority of roads within Newark-on-Trent are forecast to experience a benefit as a result of Scheme improvements, with reductions in the overall number and severity of accidents. Benefits arise from the upgrade of the single carriageway sections of the widened A46 to dual carriageway, and from some traffic reassigning onto the widened A46 from comparatively less safe local roads. As noted by NCC, increases in traffic on some roads adjacent to the Scheme, such as the A17, are forecast to lead to some localised increases in accidents, although these are not of sufficient magnitude to outweigh the network wide benefits across the study area. On unimproved routes, such as the A17, the number of collisions would be forecast to change in proportion with the forecast changes in traffic flow. Collision rates, measured in terms of collisions per million vehicle kilometers (mvkm) are assumed to be unaffected on sections of highway that are unaltered.
	Missing Information	*N/A*	It is noted that Winthorpe roundabout has been designed as a 'through-about' layout. NCC would like to understand how this has been considered within accident analysis (i.e. does COBALT account for this type of layout, is there evidence to suggest this layout is safer or sees more or less collisions?)	The Applicant can confirm that the proposed Winthorpe junction has been represented in COBALT as a signalised junction. The Scheme has been subject to a Road Safety Audit, including the interrogation of personal injury accident data, to consider whether there are any potential safety risks in the areas where the Scheme is forecast to increase traffic levels. The analysis has concluded that the Scheme would improve road safety for users, including at Winthorpe Roundabout. The Road Safety Audit is summarised in Chapter 4 of the Transport Assessment [APP-193].
Impacts on Public Transport (Operational)				
2.74.	This section summarises concerns, from NCCs perspective, relating to public transport. As noted within the Section *Local Transport Context,* it is not expected that there will be any direct impact upon rail users or access to the railway stations once the scheme is operational, and therefore this Section only captures concerns relating to the bus network. Notwithstanding, there are general concerns about the increase in traffic flow through the town centre which may impact rail users accessing the station and worsening severance issues for those accessing the station by foot / bicycle.			

Table 2.14: NCC Comment on Public Transport (Operational)

Reference	Wording / Content	NCC Comment	Response
TR-00022 Transport Forecasting Package. Figure 21. APP-193_Transport Assessment. Figure 6-5 & 6-7	Forecast AADT Difference 2043. 2043 DS link delays (AM peak & PM peak)	Figure 21 shows an increase in traffic flow (>500 AADT) along the A1133 with a corresponding increase to delay (shown in Figures 6-5 & 6-7). NCC are concerned that the A1133 is a bus route (with service 367 considered a high frequency route). NCC would request traffic flow plots for the AM and PM peaks to better understand the volume of additional traffic along this route.	The Applicant confirms traffic flows on the A1133 are forecast to increase by 200 vehicles per day in 2028 as a result of the Scheme, this increase in traffic would be expected to have a negligible effect on journey times. Fifteen years later in 2043 the equivalent forecast increase in traffic is 600 vehicles per day. While figures 6-5 and 6-7 of the Transport Assessment Report [APP-193] indicate a minimal increase in delay (in 2043) for the northbound direction (in the AM peak), the A1133 route as a whole is generally forecast to experience journey time savings. In 2028, forecast changes to journey time on the A1133 are minimal and range from a reduction of five seconds southbound in the AM peak, to an increase of 13 seconds in the northbound direction in the PM peak.

Written Representations				
Reference	**Text from Local Impact Report**			**Applicant's Response**
	TR-00022 Transport Forecasting Package. Figure 21. APP-193_Transport Assessment. Figure 6-5 & 6-7	Forecast AADT Difference 2043. 2043 DS link delays (AM peak) & PM peak	Similar to this, increased flow and delay is noted along the A617 (particularly in the AM peak). Again, this is a bus route and we are concerned that an increase in traffic flow here may undermine the bus network reliability. NCC would request traffic flow plots for the AM and PM peaks to better understand the volume of additional traffic along this route, as well as additional junction capacity testing as per Section 0.	The Applicant confirms that delays on the A617 are significantly reduced as a result of the Scheme, particularly on the approach to Cattle Market junction in the morning peak hour. Figures 6-4 and 6-5 in the Transport Assessment Report [APP-193] illustrate the forecast change to delays in 2043 with and without the Scheme. In the 2028 AM peak hour, eastbound journey time savings of just over a minute and a half are forecast to arise as a result of the Scheme, with more modest time savings in the rest of the day. A slight deterioration in westbound journey times along same section of the A617, starting from the exit of Cattle Market junction, is forecast to occur with the scheme. Increases up to 19 seconds are forecast in the AM peak in 2028 with smaller changes in other time periods. The scale of the westbound increase is not considered to be significant.
	TR-00022 Transport Forecasting Package. Figure 21. APP-193_Transport Assessment. Figure 6-5 & 6-7	Forecast AADT Difference 2043. 2043 DS link delays (AM peak) & PM peak	NCC are concerned that an increase in traffic flow along the A46 (to the south of Farndon roundabout between Bingham and Newark) may comprise reliability of the proposed Newark to Nottingham services (proposed within the BSIP). NCC request journey time analysis of this route.	The Applicant confirms the A46 south of Farndon, apart from the Southern Link Road roundabout, is grade separated dual carriageway and journey times would not be expected to be significantly impacted by the forecast increase in traffic on this section. The Southern Link Road junction has been assessed in the operational model and is forecast to operate without significant delays.
	APP-193_Transport Assessment. Tables 6-5 & 6-6	Table 6-5: Comparison of two-way AADT total vehicle forecasts on local roads in 2028 with and without the Scheme Table 6-5: Comparison of two-way AADT total vehicle forecasts on local roads in 2043 with and without the Scheme	Key bus routes within the town centre include Castle Gate/ Bar Gate / Northgate, Queens Road / Sleaford Road, Lombard Street / London Road, Albert Street and Boundary Road. **There is no traffic flow or delay information on some of these bus routes, and NCC request additional data, in particular:** **Queens Road / Sleaford Road** **Lombard Street** **Albert Street** **Boundary Road** **Castle Gate / Bar Gate / Northgate** **Of the information available, only AADT data is available. NCC would require information regarding the change in traffic flow along town centre links in the AM and PM peak period to determine whether town centre bus routes will likely be impacted.** **The increase in traffic flow along Albert Street and Boundary Road and at the bus station on Lombard Street may have a detrimental impact upon the reliability of bus services.**	A key benefit of the proposed Scheme is a significant reduction in through traffic within the town centre. Forecasts undertaken with the traffic model show that the Scheme would reduce traffic flows on most local roads through Newark-on-Trent, including the B6326 London Road, Barnaby Road, Beacon Hill Road, Beckingham Road, Drove Lane, Farndon Road and Fosse Road. More details on the volume of traffic flow are available in the Transport Assessment [APP-193]. Forecast link delays in 2043 for the AM and PM peak hours are illustrated in figures 6-4 to 6-7 of the Transport Assessment [APP-193]. (Equivalent figures showing delays in the other modelled years are available in Appendix I of the Transport Forecasting Package.) Queen's Road / Sleaford Road – in 2028 traffic flows on Queen's Road / Sleaford Roadare are forecast to reduce as a result of the Scheme. The greatest reductions are noted at the eastern end of Sleaford Road where reductions of 300 vehicles per day are forecast, with reductions on Queen's Road being more modest. In 2043 a similar pattern is forecast, although traffic on the section of Queen's Road between King's Road and Appleton Gate is forecast to increase slightly (by 200 vehicles per day). Reductions in traffic between Friary Road and Beacon Hill Road are forecast to be between 400 and 700 vehicles per day. Lombard Street – As a result of the Scheme, significant reductions in traffic flow are forecast for Lombard Street in 2028 and 2043. Albert Street – Traffic flows on Albert Street are forecast to increase by 800 vehicles per day (in both 2028 and 2043) as a result of the Scheme when compared to the Do Minimum scenario. However, when compared to the 2019 base year, traffic flows in 2028 with the Scheme are forecast to be only 200 vehicles per day higher on Albert Street. Boundary Road - Traffic flows on Boundary Road are forecast to increase slightly with the Scheme when compared to the Do Minimum scenario. In 2028, forecast increases of 600 vehicles per day above Do Minimum are noted for the section of Boundary Road outside Newark Hospital (the section of Boundary Road with the greatest difference). Significantly though, it is notable that both Do Minimum and Do Something flows on Boundary Road are both forecast to be substantially lower than flows in the 2019 base year model. The flow on the equivalent section of Boundary Road near Newark Hospital is modelled as

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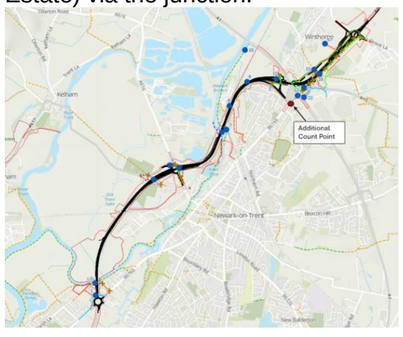
Reference	Text from Local Impact Report	Applicant's Response

			being 1,300 vehicles per day lower with the Scheme than it is in the 2019 base year model. Castle Gate / Bar Gate / North Gate – Significant reductions in traffic on Castle Gate, Bar Gate and North Gate are forecast to occur as a result of the Scheme. In 2028 and 2043 reductions are forecast to be between 2,400 vehicles per day and 3,700 vehicles per day. Forecast flow differences by time period are illustrated in the Transport Forecasting Package. For the reasons noted above the Applicant would expect the Scheme to improve the general reliability of bus services within Newark-on-Trent rather than result in any deterioration.
	Other		NCC would like confirmation as to whether the railway lines would be closed during construction.	Possessions will be required on the railway lines and will be agreed in advance with Network Rail.

Impacts on Active Travel (Operational)

2.75. NCC have conducted a review of the impacts of the scheme upon active travel users (including walkers, cyclists and horse-riders, as well as mobility users). The key areas of concern are highlighted in the table below.

Table 2.15: NCC Comment on Active Travel (Operational)

Reference	Wording / Content	NCC Comment	Response
APP-174_Walker, Cyclist and Horse-rider (WCH) Survey Results. Para 1.1.1	*"Walker, cyclists, and horse-rider (WCH) counts were undertaken at 17 locations within the vicinity of the proposed A46 Newark Bypass (the Scheme); see Appendix A (Walking, Cycling and Horse-riding Survey Locations) of this Report for locations."*	In general, NCC are happy with the count locations – although an additional count point on the footway connecting the A46 / Lincoln Road junction and Lincoln Road would have been beneficial to capture those routing to / from Lincoln Road (incl. Northern Road Industrial Estate) via the junction. 	Noted
APP-174_Walker, Cyclist and Horse-rider (WCH) Survey Results. Para 1.1.2	*"Each site was surveyed from 6am to 10pm on both a weekday and a weekend in early spring 2023 (between March and April)."*	NCC are concerned that WCH surveys were conducted between March and April, which lies outside of typical peak active travel periods (usually the summer period). Baseline active travel levels may therefore be underestimated.	The surveys were undertaken to verify those undertaken during the options selection stage of the Scheme and to confirm the observations undertaken by the Applicant. They could not be undertaken during the summer as this would have been too late to validate the data for the Statutory Consultation. Useage of routes was discussed with NCC's PROW officer and they concurred with our findings and views.
APP-056_ES Chapter 12 (Population and Human Health). Table 12-11	*Land take effects during construction*	Whilst not strictly related to active travel users, NCC are concerned about the restoration work planned for land	All land utilised on a temporary basis will be returned to its previous condition prior to the temporary use.

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Reference	**Text from Local Impact Report**			**Applicant's Response**
			parcels temporarily requisitioned as part of construction works. For example, land owned by Briggs Metals (to be used as a satellite construction compound) is currently used for animal grazing. NCC are seeking confirmation that land requisitioned will be returned on a like-for-like basis (i.e. in this example, can be used for livestock grazing).	
	General Arrangement Drawings (AS-007)	Sheet 3	NCC believe there is an opportunity to create a shared footway / cycleway along the A617 between Newark Rugby Club and the Cattle Market junction (to connect with existing cycle infrastructure at the Cattle Market junction). Ideally this route would be extended along the A617 to link with long term LCWIP aspirations. The above is mitigation for the extinguishment of Newark FP14 and is mitigation for the 'removal' of this path and should include a signalised crossing of the A616.	This was considered but it is outside of the Scheme extents and would have required a large amount of existing vegetation and trees to be removed and a ditch to be realigned requiring additional land take. The low use of this route does not represent good value when allocating public spending. The crossing of the A616 will be signalised.
	General Arrangement Drawings (AS-007)	Sheet 3	LTN1/20 makes clear that shared footways are "a last resort". Shared use paths are technically acceptable provided the pedestrian footfall is low (as per LTN1/20) but NCC require NH to demonstrate that full LTN1/20 standards cannot be achieved. Where the path passes under the A46 the tight turns present potential conflict points, visibility and stopping sight distance should be checked here for cyclists as per LTN1/20 guidance. The visibility from the A46 roundabout to the crossing on the eastern slip roads may also be reduced due to the position of the crossing point increasing the likelihood of personal injuries. Relocating the crossing closer to the roundabout exit/top of the slip road should be considered.	LTN 1/20 accepts shared use facilities can be implemented where they are of low use and have less than 300 walkers and 200 cyclists using the route daily and shared use is only a last resort if these figures are exceeded. Usage at these locations is classified as low and therefore acceptable, achieving full LTN 1/20 standards. If requested by NCC the 3.0m wide routes could be split into two 1.5m wide separated lanes. The Applicant will consider reducing the tight turn and moving the crossing point of the slip road closer to the roundabout during detailed design but will need to consider the potential hazards associated with vehicles queuing back onto the roundabout.
	General Arrangement Drawings (AS-007)	Sheet 5	The footway to be replaced with a footway / cycle way again is technically compliant with LTN 1/20 if footfall is suitably low (no more than 300 per hour). However, as already noted, shared use should be seen as a "last resort" and NH should demonstrate that full LTN1/20 compliance cannot be achieved. Controlled crossings should be provided on the link between the Friendly Farmer and A17 / Long Hollow Way / Godfrey Drive roundabouts adjacent to the Shell Service Station.	As per the response immediately above to Sheet 3. The crossing at the Friendly Farmer and A17 / Long Hollow Way / Godfrey Drive roundabouts adjacent to the Shell Service Station is an existing unsignalised not impacted by the Scheme and therefore no changes are proposed here.
	General Arrangement Drawings (AS-007)	Sheet 6	Shared use paths are acceptable provided the pedestrian footfall is low but, as already noted, should be seen as 'a last resort' and NH should demonstrate that full LTN1/20 compliance cannot be achieved.	As previous response.
	General Arrangement Drawings	N/A	A key design principle listed on page 21 of Gear Change is that "cyclists must be separated from pedestrians". LTN 1/20 builds on this and states that "in general, shared use facilities in streets with high pedestrian or cyclist flows should not be used and in urban areas the conversion of a footway to shared use should be regarded as a last resort".	The Applicant has provided 3.0m wide shared use facilities throughout the Scheme as the surveys undertaken have shown that footfall is significantly below 300 walkers per day as shown within the WCH survey results (see Transport Assessment Appendix C [APP-193]).

Written Representations				
Reference	**Text from Local Impact Report**		**Applicant's Response**	
			Whilst the proposed shared use areas are technically Active Travel England (ATE) and LTN 1/20 compliant (subject to pedestrian traffic volume being under 300 per hour / geometry) due to the paths not being in a busy urban setting, NCC would like confirmation as to why a segregated facility has not been pursued, i.e. can you prove footfall is less than 300 per hour or is a segregated facility not feasible due to space constraints. NH should clarify whether the proposals have been reviewed and approved by Active Travel England. From a review of the GA drawings, it would appear there is available space to have a suitable bi-directional cycleway and a footpath in most areas and this should be provided where it can be accommodated. **NCC's concern is that it will be left with substandard facilities on county highway that will fall to us to upgrade as and when opportunities arise to extend the cycling network. Therefore, NCC would like to see evidence of ATE involvement and, more specifically, their comments regarding the proposals. NCC need surety that ATE is happy with the Applicants Scheme**. Signal junctions throughout the extents could be installed as parallel crossings to improve the control of pedestrians and cyclists across the carriageways in numerous locations.	The Applicant and NCC have discussed the design of the walking and cycling facilities at the Statement of Common Ground meetings. Item 28, Alignment with Local Cycling and Walking Infrastructure Plan within the Statement of Common Ground is now agreed. Responses have been provided to [RR-057] in 7.10 Applicant's Responses to Relevant Representations [REP1-009]. The Applicant does not propose to undertake consultation with Active Travel England. Signalised crossings have been provided at Cattle Market Junction, Brownhills Junction, Winthorpe Roundabout and to the west of Friendly Farmer Roundabout.
	Transport Assessment, Appendix C (WCHAR), APP- 193	Figure 12	Figure 12 details the existing Non-Motorised User (NMU) routes at Farndon Roundabout; however, the Applicant's submissions do not reflect the works in 2023 that the Applicant completed on Farndon Road, with the existing footway on the westbound carriageway on approach to Farndon Roundabout having been upgraded to a shared footway / cycleway and extending along Farndon Road toward Newark town centre.	The Applicant confirms the transport assessment as set out in the Transport Assessment Report [APP-193] was completed prior to these works being completed. The works have extend the cycleway across the Farndon Road to terminate at the entrance to the entrance to the International Logistics Centre. This minor change in cycleway alignment will not impact the outcomes reported in the Transport Assessment Report [APP-193]. The Applicant will take this change into account during the detailed design.
	Transport Assessment, Appendix C (WCHAR), APP- 193	Figure 13	Linking to other comments raised where the Applicant is proposing to install a footway / cycleway on the A617, how cyclists continue westbound towards Kelham and how they safely merge onto the carriageway should be considered.	The Applicant will liaise and agree the transition with NCC during detailed design.
	Transport Assessment, Appendix C (WCHAR), APP- 193	N/A	The WCHAR document refers to opportunity FP11 – Hatchet Lane to BW6 – River Trent path. However, the Streets, Rights of Way and Access Plans and General Arrangement Plans do not denote a FP11.	Point 7 in Table 4 of section 4 of the WCHR, appendix C in the Transport Assessment Report [APP-1932], identifies an aspiration to permanently stop up the right of way across the railway as the gates have been permanently closed. A Temporary Prohibition Notice came into force on Footpath 11 at the East Coast Mainline in August 2015 for the interest of public safety. Point 7 in table 4 of the WCHAR is identified on the plan in

Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**
		Appendix A of the WCHAR. It is not shown on either the Streets, Rights of Way and Access Plans or the General Arrangement Plans as Newark Footpath 11 is not identified on the Definitive Map due to the Temporary Prohibition Notice.
Construction Traffic Management 2.75		
2.76.	A review has been conducted of the **Outline Traffic Management Plan [APP-196]** and is summarised in the table below. **Table 2.16: NCC Comment on Outline Traffic Management Plan APP-196**	

Reference	Wording / Content	NCC Comments	Response
Section 1.1.3	*1.1.3 A Traffic Management Plan (TMP) will be produced in consultation with the Local Highway Authorities (LHA), Nottinghamshire County Council and Lincolnshire County Council (in relation to diversion routes). and stakeholders such as the emergency services. Under requirement 11 of the draft DCO (TR010065/APP/3.1) the TMP that will be produced must be substantially in accordance with the OTMP and will be submitted to and approved in writing by the Secretary of State following consultation with the local highway authorities. The TMP will build on and comply with the commitments made in this OTMP.*	This section of the outline traffic management plan should be amended in order to provide NCC with an approval right over this document, not simply a consultation right. As drafted, this wording is vague and simply only requires the Applicant to issue the final traffic management plan to NCC. Section 1.1.3 should therefore be amended to ensure that the Traffic Management will be produced in consultation with the Local Highway Authority and, prior to any construction works commencing this traffic management plan would need to be approved by the Local Highway Authority. This change would also need to be reflected in Requirement 11 of the draft Development Consent Order. These changes will ensure that NCC has the relevant authority to challenge and ensure that the Traffic Management Plan does not result in a direct or indirect impact which could adversely impact the NCC local highway network.	The Applicant believes that the wording in Requirement 11 of the draft Development Consent Order [REP1-001] is suitable, sufficient and follows standard wording used across all National Highway Development Consent Orders.
Section 1.1.6	*1.1.6 The TMP will be developed to ensure that the following key objectives are considered and addressed:* • *Safety of the travelling public, walkers, cyclists and horse riders (WCH) and roadworkers to ensure that no person is injured either working within or travelling through the site on the SRN.* • *Clarity of TTM to ensure that the TMP is built around the customers and stakeholders.* • *Minimising delays to road users on both trunk and local roads.* • *To minimise the health and safety risks to the local community resulting from construction operations.* • *Minimise disruption to road users, local businesses and communities.* • *Meeting the needs of the relevant local highway authorities.* • *Addressing the needs of local*	The outline traffic management plan is very light on detail in relation to how public rights of way and other non-motorised users will be managed during the construction of the works. e.g. recent NSIP Solar Park Applications have produced an outline public right of way management plan. NCC requests that a similar document is prepared by the Applicant to fully assess and outline the management measures that will be put in place to mitigate ethe impacts of rights of way users and secure this as part of the Development Consent Order.	The Applicant will update the Outline Traffic Management Plan [APP-196] for deadline 2 and will include the footway, cycleway and Public Rights of Way diversions which are described in table 2-7 of Chapter 2 The Scheme of the Environmental Statement [APP-046].

Written Representations				
Reference	**Text from Local Impact Report**		**Applicant's Response**	
		stakeholders. • *Maintaining adequate access for the emergency services and affected properties during the construction works.*		
	Section 2.2.2	*TTM will be designed in accordance with Part 1 of Chapter 8 of the Traffic Signs Manual allowing working room to construct as well as the minimum safety zones.*	NCC recommends that this is changed to just Chapter 8 to ensure National Highways considers all parts of this guidance.	The reference to Parts 1, 2 and 3 of Chapter 8 will be included within the update to the Outline Traffic Management Plan [APP-198] which is submitted for deadline 2.
	Table 2-2 Construction Programme		NCC notes that the Applicant is considering a range of advance and pre-commencement works. As these works would need to be completed prior to the powers of the DCO being granted, NCC would require separate approvals to be sought to undertake any works that fall within NCC's planning authority jurisdiction. NCC note that the level of detail provided is high level and does not allow NCC to ascertain the scale and impact of the Scheme. NCC request that the Applicant complete a pre-commencement plan (in a similar manner that the Applicant conducted on the A428 Black Cat Scheme) in order to provide NCC with a level of detail which is secured as part of the Development Consent Order.	The Applicant confirms a Pre-Commencement Plan [APP-188] has been submitted as part of the application.
	Section 2.3.2	*Traffic management measures are detailed in the subsections below. The Applicant will be responsible for detailing each traffic management measure in full as the detailed design is progressed. The updated detail would be developed in consultation with the LHA and stakeholders and reflected in the TMP that will be produced and approved by the Secretary of State in accordance with Requirement 11 of the draft DCO (TR010065/APP/3.1) prior to construction commencing.*	As raised in its response to Section 1.1.3, NCC would require an approval right for any traffic management measures which would have a direct or indirect impact on the NCC's network.	The Applicant believes that the wording in Requirement 11 of the draft Development Consent Order [REP1-001] is suitable, sufficient and follows standard wording used across all National Highway Development Consent Orders. This identifies the Local Highway Authority as a consultee on the Traffic Management Plan.
	Section 2.3.4	*TTM in this stage would be limited to lane closures on the local road network to facilitate utility diversion works and asset surveys. Applications for temporary traffic management on the local road network during the advanced works phase will be made through the LHA.*	Liking to the above comment on Table 2-2, NCC requests that any pre-commencement plan considers a full indicative programme of when any advanced or pre-commencement works are required in order to ensure that any advanced works are programmed to minimise disruption on the Local Road Network. Any works prior to the Development Consent Order being granted would need to go through a separate planning approval process which would require approval by NCC.	A Pre-commencement Plan has been submitted with the Application [APP-188]. Temporary traffic management requirements in the advanced and pre-commencement phase will be coordinated with the local highway authority. Table 2-4 of Chapter 2 The Scheme of the Environmental Statement [APP-046] provides the advance works activities which are proposed in advance of the DCO being granted. The advanced works would be undertaken by the Applicant either through existing powers or through powers obtained through separate planning application, as in the case for the demolition works.

Written Representations			
Reference	**Text from Local Impact Report**		**Applicant's Response**
Section 2.3.6	*A series of partial lane closures and temporary signals will be required along Kelham Road and the Great North Road for the utility diversions and construction of a works access and egress into the Scheme office site at the old Nottinghamshire County Council highway depot.*	NCC note that the Applicant refers to partial lane closures and temporary signals on the Great North Road to facilitate access to the Scheme Office Site. These works will be in close proximity to Cattle Market Roundabout and the level crossing adjacent to Newark Castle Station. NCC requests that VISSIM modelling of these traffic management proposals are presented by the Applicant for NCC to understand whether there will be any adverse impacts to the safe operation of the Local Highway Network.	The lane closures and traffic signals referred to in paragraph 2.3.6 of the Outline Traffic Management Plan refer to overnight closures where tie-in works are required. As these are limited to overnight closures, VISSIM modelling is not considered required.
Section 2.3.17	*The Cattle Market roundabout is a strategic junction for the town of Newark and the surrounding villages, with an interface with the Newark lorry park and British Sugar.* *Traffic is already impacted at this junction with the operation of the level crossing on the Great North Road.*	NCC would like to see the construction VISSIM modelling (video outputs) for the construction phases at this area of the network to understand any adverse impacts on the performance of the local road network. In terms of outputs, the applicant has provided max and average queue length data. NCC would like to see video outputs. The Transport Assessment indicates that there is an impact in performance at this junction with construction traffic added (see below for more on this).	Junction modelling for the construction phase will be undertaken for the Cattle Market Junction as the detailed traffic management design progresses.
Section 2.5.4	*Narrow running lanes and running of the hard strip will be required for the temporary traffic management along the A46. It is anticipated that a 50mph temporary maximum speed limit will be implemented*	NCC requests clarity from the Applicant as to the locations where road users would require running within the hardstrip. This poses a hazard to road users in areas where surface water gullies act as the surface water collection system. Current drafting suggests it is the A46 only; however, the A57 will require TM being put in place which may generate the same risk, albeit likely being able to be mitigated by a temporary reduction in speed limit.	Narrow lane running is proposed along the length of the A46 between Farndon Roundabout and a point approximately 400m north of Winthorpe Roundabout. No traffic management measures are proposed for the A57, it is being proposed as a diversion route, however a short section of traffic management is proposed on the A17 as presented in table 2-5 of the Outline Traffic Management Plan. The wide separating lane on the current A46 provides the necessary room for the safe running of narrow lanes along this section of the A46.
Section 2.9.2	*A traffic management forum will be formed prior to the start of construction with relevant members of the LHA, emergency services and representatives from adjacent schemes. The traffic management forums will include discussions on the identification and management of the interface between local and regional schemes.*	NCC request that this is introduced into the Draft Development Consent Order as a requirement. All traffic management works will need to be agreed with NCC where any proposed works could have a direct or indirect impact on NCC's network.	This commitment is included in the Outline Traffic Management Plan [APP-196] and so is already secured. Requirement 11 of the draft Development Consent Order requires a Traffic Management Plan to be submitted which is substantially in accordance with the OTMP and for the approved Traffic Management Plan to be complied with. NCC is a consultee in relation to Traffic Management Plan to be submitted pursuant Requirement 11.
Section 2.12.2	*An incident management plan will be developed by the Applicant, local highways authorities and emergency services.*	**NCC requests that the incident management plan is both consulted and approved by the Local Highway Authority to ensure that any impacts or responsibilities on the Local Highways Authority are understood**.	Requirement 11 of the draft Development Consent Order [REP1-001] already identifies NCC, as Local Highway Authority, as a consultee on the Traffic Management Plan, which will incorporate the incident management plan.

Written Representations			
Reference	**Text from Local Impact Report**		**Applicant's Response**
Section 2.17.6	*The Applicant will produce a Construction Communications Plan to detail how the Applicant will communicate with the stakeholders and members of the public on the construction of the Scheme, including the impacts of the TTM. The Construction Communications Plan will be provided as part of the Second Iteration Environmental Management Plan. Adherence with the Second Iteration Environmental Management Plan is secured by Requirement 3 in Schedule 2 of the draft Development Consent Order (TR010065/APP/3.1)*	NCC requests that the Applicant produces an outline communications plan and introduces this into the Development Consent Order in order to provide a full account of how construction will be communicated to affected stakeholders.	The Applicant will produce an Outline Construction Communications Plan for submission at Deadline 3 of the Examination.
Section 2.18.3	*During the Scheme delivery, the current network occupancy procedures will be followed for accessing the network. Road space bookings will be issued each week, in line with National Highways' booking requirements.*	NCC and the Applicant will need to establish a clear communications procedure for any road space booking procedures to ensure that any works on the strategic and local highway network do not give risk to unnecessary disruption to road users.	This comment is noted.
Section 2.18.6	*In order for the Scheme to positively contribute to the accuracy of information relating to traffic management, the following steps will be taken: Ensuring that planned start times are met, and that any deviation from the planned start time is reported to the appropriate Network Control Centre (NCC) within National Highways so that they can ensure management of the overall network is maintained. If there is a delay for any reason, reporting this to the NCC as early as possible, and not later than the planned start time*	An alternative acronym should be used to avoid confusion with Nottinghamshire County Council (NCC) used elsewhere in the application.	The acronym NCC in regard to the National Control Centre will be removed in the updated Outline Traffic Management Plan [APP-196] and submitted at Deadline 2 of the Examination.
Section 2.20.1	*The Applicant will have continued liaison and communications with the LHA.*	NCC requests details on how this liaison will be structured and its frequency. This should be captured as part of the outline communications plan which have been highlighted in NCC's above comments.	The development of the Traffic Management Plan will be undertaken at the monthly traffic management workshops in the lead up to the construction phase as detailed in the Outline Traffic Management Plan [APP-196]. This engagement, along with the review of the Traffic Management Plan, will form the consultation set out in Requirement 11.
Section 2.22.1	*The Applicant will ensure that abnormal load assessments will be undertaken for the structures to be constructed at the Cattle Market and Brownihills (sic) junctions*.	NCC requests details of the type of abnormal loads required to facilitate construction and whether any of these will be required on the Local Road Network. If abnormal loads vehicles are required these will need to be approved by NCC.	The Applicant can confirm that the new bridge structures at Cattle Market Roundabout, shown as Work Nos. 41 and 48 on the Works Plans [AS-005] have been assessed for abnormal loads. The specific details of abnormal loads required during the construction phase will be determined as the detailed design and construction preparation progresses. Currently it is expected that the abnormal loads would be for the bridge beam and crane deliveries at Windmill Viaduct, Work No. 7 on

Written Representations				
Reference	**Text from Local Impact Report**			**Applicant's Response**
				the Works Plans [AS-005]. Nottingham to Lincoln Railway Line West crossing, Work No. 26 on the Works Plans [AS-005], Nether Lock Viaduct, Work No. 64 on the Works Plans [AS-005] and the A1 bridge crossing, Work No. 90 on the Works Plans [AS-005]. The process for booking and managing abnormal loads on the highway network, both strategic and local, require the supplier to seek approval from the highway authorities. The application process for abnormal load movements has been added to the updated Outline Traffic Management Plan which is submitted at deadline 2.
	A.1 Proposed diversion routes		Diversion signage should take accordance of any local route access to avoid disruption to local commuter traffic and any unnecessary diversion of local traffic.	The comment on diversion signage is noted and will be incorporated into the Traffic Management Plan.
	A.1.4 A1 between North Muskham and Brownhills and Friendly Farmer roundabouts.		**NCC has concerns relating to the diversion route identified in A.1.4. The diversion of A46 traffic via the A57 and B1164 will introduce a large increase in road users having to utilise Dunham Toll Bridge. NCC note that, without careful planning, this could result in significant disruption to local and strategic road users.**	The Applicant recognises the need for detailed planning when implementing the diversion presented in Appendix A.1.4 of the Outline Traffic Management Plan. This diversion route is used during the extended weekend closure for the A1 bridge installation. The interface with the toll bridge is identified in table 2-1 of the Outline Traffic Management Plan [APP-196]. The methodology selected for this structure has been chosen to reduce the disruption on the highway network and keep closures to a minimum.
	A.1.7 Drove Lane		NCC notes that the Applicant has identified Drove Lane for a diversion route during construction works. Drove Lane is subject to a 7.5t weight restriction and therefore appropriate TTRO suspension would be required, with TTM to be implemented in order to ensure that strategic road traffic can utilise this diversion route safely.	The 7.5t weight restriction on Drove Lane is noted however Drove Lane is not being proposed as a strategic diversion route in the Outline Traffic Management Plan [APP-196]. Appendix 1.7 of the Outline Traffic Management Plan [APP-196] indicates the diversion local traffic would need to take when the entry/exist from Winthorpe Roundabout to Drove Lane is closed during overnight works.
	Appendix A.2		NCC requests the Applicant to provide indicative programme estimates for the various phases depicted in Appendix A.2 A number of these construction phases will be complex in nature and are likely to result in disruption to local and strategic road users. NCC wish to understand the estimated duration for each phase in order to understand which construction phase needs to be considered in further detail.	The Applicant confirms the Cattle Market Junction and Brownhills junction works are programmed to take approximately 2.5 years to complete. The works at the Friendly Farmer roundabout and Winthorpe roundabout are estimated to take 2 years to complete. Detailed construction programmes for the individual phases will be developed as the detailed design and construction preparation progresses.
	Figure A-10		NCC notes that Phase 3 looks to be the most disruptive construction phase at Cattle Market Roundabout. NCC would like to see construction traffic modelling for this phase in order to understand the traffic impacts on the local road network. Furthermore, NCC would like to understand how access /	Temporary traffic signals will be utilised during the construction phases on Cattle Market roundabout to retain the controlled pedestrian crossing.

Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**

		egress into the central construction phase area is to be provided. NCC is also interested in understanding how existing active travel provisions and connectivity would be maintained during the traffic management works. The junction currently operates as a non-signalised roundabout with controlled pedestrian crossings; is it proposed that the temporary layouts would be fully signal controlled?	Access and egress to the central construction area within phase 3 will be via works access and exist points within the temporary traffic management. Junction modelling during the construction phase will be undertaken for the Cattle Market Junction as the detailed traffic management design progresses. Full traffic management design details will be included in the Traffic Management Plan in accordance Requirement 11 of the draft Development Consent Order [REP1-001].
Other Points			Responses
NCC notes that the Applicant's submission documents currently do not contain reference to an outline travel plan or the commitment to produce a travel plan for construction staff. NCC request that the Applicant prepare this information in line with other submissions prepared by National highways, e.g. the A428 Black Catto Caxton Gibbet Improvement Scheme. (See below for more on this from the Transport Assessment)			Requirement 3 of the draft Development Consent Order [REP1-001] includes the need for a Construction Worker Travel and Accommodation Plan as part of the Second Iteration Environmental Management Plan.
The A46 is a designated high load and heavy load route and therefore any proposed diversions must ensure that any diverted traffic considers the suitability of that route for high and heavy load vehicles. Where diversion routes are not capable of accommodating high or heavy load vehicles, National Highways must put in place a communications strategy.			This is noted by the Applicant and is included in section 2.10 of the Outline Traffic Management Plan [APP-196].
NCC are concerned that construction works at the Friendly Farmer / Brownhills area may lead to a diversion of traffic via Beckingham Road / Beacon Hill Road through Coddington Village, leading to adverse impacts for local residents. NCC seek clarification whether this has been reviewed, assessed and mitigated where appropriate by the Applicant.			The dual carriageway at Friendly Farmer is being retained during the construction phasing therefore the Applicant does not consider that traffic will divert along the much longer route of the A17, Beckingham Road and Beacon Hill Road to try and bypass the works.

Construction (General)

2.76. A review of Chapter 8 of the **Transport Assessment (APP-193)** has also been conducted in addition to the above.

Table 2.17: NCC Comment on Transport Assessment (APP-193), Construction Chapter

Reference	NCC Comment	Responses

Written Representations

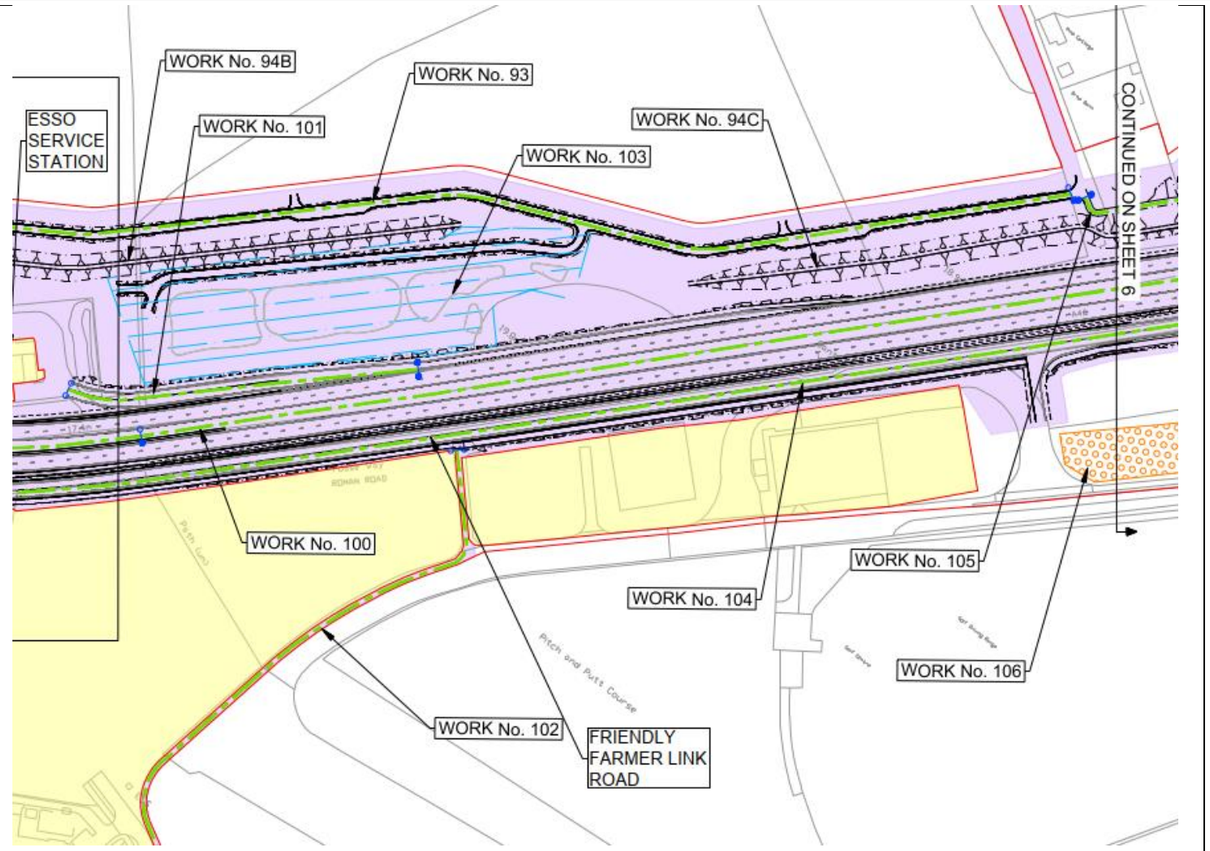
Reference	Text from Local Impact Report		Applicant's Response
	Transport Assessment Chapter 8	The Transport Assessment includes outputs from VISSIM modelling of the construction stage. We note that this modelling has been done on the basis of impacts in the AM peak hour only, as it is suggested that staff will not travel in the PM peak hour. Notwithstanding this, Para 8.3.16 of the TA states that "*Construction Worker Travel and Accommodation Plan (CWTAP) would also be developed by the Principal Contractor as the Scheme progresses through the detailed design phase. The CWTAP would be produced as part of the second iteration of the Environmental Management Plan (TR010065/APP/6.5).*" NCC would re-iterate that a Travel Plan is required now to align with the modelling assumptions for construction traffic. NCC also requests a PM peak analysis to be conducted, given that the assumption has been to divide HGV trips by 11 hours and therefore indicates HGV traffic in the PM peak hour. Furthermore, additional justification is needed for excluding 50% of staff trips (para 8.4.8 of the TA) from the modelling which seems to artificially reduce the potential impact of the construction stage.	The Applicant confirms analysis of construction traffic on the performance of the highway network in the evening peak hour is not considered to be necessary as the morning peak impacts are expected to be greater. The AM assessment included a substantial volume of workforce commuting movements that would not be present in the evening peak hour. Also, as noted in paragraph 8.4.11 of the Transport Assessment Report [APP-193], while the daily HGV flows have been evenly distributed over an 11-hour period for the purposes of the construction traffic assessment, this is considered to be conservative as HGV movements are likely to be timed outside of peak hours to avoid congestion. Requirement 3 of the draft Development Consent Order [REP1-001] requires the Applicant to produce a Construction Worker Travel and Accommodation Plan as part of the Second Iteration Environmental Management Plan.
2.77.	A review of the **General Arrangement Plans (AS-007)** has been conducted with respect to construction proposals: **Table 2.18: NCC Comments on General Arrangement Plans AS-007 (Construction)**		

Sheet	NCC Comment	Response
1	NCC query the practicalities of using A46 Farndon Roundabout circulatory as a compound location. Whilst not an NCC area, NCC are responsible for a number of roads connecting into this roundabout and construction movements into and out of this roundabout could give rise to an increase in collisions. Newark Bridleway No.2 is to be temporarily diverted during construction. NCC request details on the temporary bridleway diversion in order to ensure that it is safe and practicable for all users. Especially in light of the area also being used as a temporary works area. NCC are concerned that the existing footpath / trail Newark FP3 leading from Fosse Road to Newark Bridleway No.2 is narrow and maintaining this existing footpath during the temporary works looks to not be possible from a safety perspective. NCC seek clarification as to whether this track is being considered in order to ensure it is capable of taking the proposed construction vehicles.	Work No. 9 on Sheet 1 of the Works Plans [AS-005] indicates the location of a temporary compound. This compound would be used during the construction of the roundabout widening works and as a location for the proposed Road Work Recovery Vehicles. Vehicles using the works access would be equipped with the required chevrons and beacons. The details of the Bridleway 2 diversion are provided in table 2-7 in Chapter 2 of the Environmental Statement [APP-046]. The temporary works area shown on sheet 1 of the Works Plans [AS-005] is separate to the bridleway diversion shown in Work No 3. Footpath 3 remains open during the construction phase and is used as part of the diversion route for BW2. It is not used as a construction access route. During operation of the Scheme the access track is used by National Highways and other parties as a maintenance access route. A plan showing the diversions has been prepared in response to Question 13.0.16 of the Examiner's Written Questions [TR010065/APP/7.33].
3	NCC request clarity of how access is to be provided to the land to the west of the Smeaton Arches for the proposed temporary works area which would not result in disturbance to traffic on the A616 Great North Road or give rise to a risk of shunt style collisions.	Access is via the current field access track which will be extended and adapted to meet the temporary works requirements.
4	Significant compound areas are proposed off Quibbells Lane. NCC seek clarification regarding the number of construction vehicles that will be utilising this route (which is through a local residential area) and whether the noise and air quality impacts have been considered. For access to the land where a temporary bridge for construction traffic will be installed, NCC seek clarification as to the proposed maintenance access route for operation and whether the Applicant has the necessary rights to use the permanent access route within the proposed order limits.	Chapter 5 (Air Quality) of the Environmental Statement [AS-021] considers the potential impacts associated with the construction phase of the Scheme, including those associated with construction vehicle movements. Construction vehicles would access compound areas off Quibell's Lane from the A46 via Brownhills Roundabout, Lincoln Road, Winthorpe Road and Quibbell's Lane. As detailed in Section 5.5 of Chapter 5 (Air Quality) of the Environmental Statement [AS-021], construction traffic flows for the Scheme have been screened against the traffic scoping criteria set out in DMRB LA 105 which includes a change of more than 1000 total vehicles or 200 heavy-duty vehicle (HDV) movements per day on an annual average daily traffic (AADT) basis. To compare construction traffic flows with the DMRB LA 105 traffic scoping criteria, the construction traffic flows were provided for each route accessing the individual works areas or compounds from the A46. Where routes from the A46

Written Representations		
Reference	**Text from Local Impact Report**	**Applicant's Response**
	NCC seek clarification as to how construction traffic and commercial traffic have been considered during the operation of the compound off Trent Lane and Quibbells Lane. NCC seek clarification as to how the Bridleway BW6 will be maintained safely for equestrian users with the introduction of construction vehicles associated with the temporary works area for the Nether Lock Rail Bridge works.	provide access to multiple works areas or compounds the number of construction vehicles on each route were combined to give a total construction traffic flow on each route. The section of Lincoln Road between the A46 and Winthorpe Road would provide access to both Quibell's Lane and Trent Lane. The year with the most construction traffic utilising this route would be 2025, where there is an expected 96 total movements and 86 HDV movements per day. The largest number of construction vehicles accessing Quibell's Lane, via Winthorpe road is expected to occur in 2028 and would be 27 total movements and 14 HDV movements per day. As the expected construction traffic flows are below the screening criteria of 1000 total vehicles and 200 HDV, the potential air quality effects are not considered to be significant and traffic flows associated with the construction phase were not considered further in line with DMRB LA 105. Chapter 11 (Noise and Vibration) of the Environmental Statement [APP-055] presents the outcomes of the construction noise and vibration assessment which includes construction traffic on haul roads relevant to Quibells Lane, see Table 11-29 and Table 11-30 of Chapter 11 (Noise and Vibration) of the Environmental Statement [APP-055], indicating no relevant receptors are likely to be subject to Moderate or Major Adverse impacts during the daytime (impacts less than LOAEL or assessed to be minor or negligible, thus not considered to be significant). The maintenance access route to assets on the west side of the River Trent is via the existing access track which runs between Kings Marina and the Hydroelectric Power Station. Permanent rights have been sought over the access track. The Order Limits along Quibells Lane are such that a separate construction access track will be constructed to provide access to the compound area in Work No. 71 as shown on sheet 4 of the Works Plans [AS-005] and sheet 3 of the Locations of Temporary Works Areas Required During Construction [AS-027]. This segregates the construction traffic from the commercial traffic and sewage treatment work traffic along the narrow section of Quibells Lane. Trent Lane and its continuation into Maltkiln Lane is a suitably constructed and wide road that is suitable for both commercial and construction traffic. Table 2-1 in the Outline Traffic Management Plan identifies the interface with the businesses on Trent Lane and Maltkin Lane and proposes restricted delivery times for large delivery vehicles. The temporary works area at Nether Lock Bridge, Work No. 62 on the Works Plans [AS-005], is segregated from Bridleway 6 and will be secured via fencing.
Review of Works Plans [AS-005]		
2.78.	A review has been undertaken of the **Works Plans (AS-005)**. **Table 2.19: NCC Comments on Works Plans AS-005 (Construction)**	

Work Number	NCC Comment	Response
3	NCC would query with the Applicant whether the proposed diversion suitable for Work No.3 is suitable. As it does not afford equestrian users with an appropriate diversion to continue south on Newark Bridleway 2, this would leave equestrian users stranded unless they are continuing west into Farndon. If proposing to use the Farndon Underpass to maintain connectivity, NCC seeks clarification as to whether this complies with the minimum height for ridden or led horses in accordance with CD143.	The proposed diversion for Newark Bridleway 2 is required to incorporate the existing subway under the A46 at Farndon as there is no other suitable crossing point over the A46 at this location. The head room of the existing subwayhas been confirmed via on site measurements as 2.795 metres which is above the minimum headroom of 2.7 metres for led horses in CD143 - Designing for walking, cycling and horse-riding. Dismount signs and mounting blocks would be provided prior to and after the subway for equestrian use.
6	NCC seek clarification of the practicalities of constructing work number 6 with the limits of deviation provided.	Work No.6 designates the existing footpath 3 and access track. It is to be retained by the Scheme. The Applicant is seeking to secure permanent rights on this track such that it can be used as a maintenance access

Written Representations			
Reference	**Text from Local Impact Report**		**Applicant's Response**
			route. The Order Limits are therefore sufficient for the need.
	10	NCC request clarity from the Applicant that sufficient works limits have been provided associated with Work No.10 which looks to only show half the existing access width as being permissible to use.	The Applicant can confirm that Work No.10 is sufficient for the temporary compound which is proposed. Work No. 10 will not be using the existing field access which NCC have referred to.
	12C	Work No.12C not listed on sheet 1 yet referred to in the draft Development Consent Order Schedule 1.	Work No.12c is the restoration of the Farndon West Borrow Pit Area. It is labelled on Sheet 2 of the Works Plans [AS-005] and continues onto Sheet 1.
	23	NCC seek clarification as to whether the proposed culvert looks to tie into the existing watercourse at an angle, and if this work also requires any localised realignment of the watercourse and if this work is considered as its own listed work?	Work No.23 covers the construction of a culvert extension under the A46. There would likely be localised realignment of the Old Trent Dyke at the new headwall and this is incorporated within the Work No. The Applicant does not agree that this specific detail should have its own listed work reference as it is associated works with the culvert extension.
	47	NCC asks for confirmation that limits of deviation offered by respective highway works number 45 offers sufficient limits of deviation to construct temporary access into this land.	Work No. 45 relates to the realignment of the Great North Road up to Cattle Market Roundabout. The Applicant is satisfied that the limits of deviation are appropriate.
	55	Limits of deviation provided for Work No.55 conflicts with the general arrangement plans which shows elements of this parcel of land for vegetation to be retained.	The retained vegetation south between the Great North Road and the maintenance access track in Work No.54, as shown on sheet 3 of the General Arrangement Plans [AS-007] and sheet 3 of the Environmental Master Plan [AS-026], is retained by the Scheme.
	58	Can the Applicant confirm whether the merge visibility has been applied in accordance with DMRB CD122 Section 3.23 to 3.25 in order to ensure that the full width extension of the network Nottingham to Lincoln Railway Line East Crossing has been considered within the works plans.	The merge visibility was below desirable minimum due to the horizontal constraints, a departure has been signed off by National Highways.
	74	The limits of deviation extend into vegetation to be retained, has this been factored into any BNG calculations for potential loss or, if in error, please amend the limits of deviation accordingly.	BNG calculations are based on the Environmental Masterplan [AS-026] as well as other construction information including the General Arrangement Plans [AS-007] as described in paragraph 2.1.9 of Environmental Statement - Appendix 8.14 (the Biodiversity Net Gain Technical Report [APP-159]). Any design changes will be addressed through an update to the Environmental Masterplan [AS-026] and BNG calculations will be updated accordingly. This is secured through the BNG Management and Monitoring Plan and Biodiversity Net Gain Audit and Report required under First Iteration Environmental Management Plan [APP-184].
	75	NCC seek clarification as to whether the merge visibility has been applied in accordance with DMRB CD122 Section 3.23 to 3.25 for the merge onto the A46.	The Applicant notes that this work number refers to the new access track next to the Brownhills southern slip road merge and diverge to the new A46. Assuming NCC are referring to these then the Applicant confirms that a departure from standard is required in this location and it will be progressed at detailed design stage.
	85	NCC seek clarification as to whether the temporary works areas extends into the verge of the A1; can the Applicant confirm if this is an error in drafting?	The Applicant can confirm that this is not an error in drafting and that the temporary works area reflects the requirements of the Scheme.
	96	NCC seek clarification as to whether the watercourse profile and section needs realigning to suit the culvert extension?	The Works Plans adequately represent the intent of the works to be undertaken for Work No. 96. The comments raised refer to specific details that will be included within the detailed design.
	104	Does the works also include the removal of the existing gantry or is this to be retained?	The gantry is removed as part of the works associated with Work No. 104

Written Representations			
Reference	**Text from Local Impact Report**		**Applicant's Response**
	106	Obscured under label for Friendly Farmer Link Road	 The Applicant will correct the Works Plans [AS-005] for Deadline 3.
	107	NCC seek clarification as to how this attenuation pond will be accessed for maintenance and any emergency spillage issues arising.	National Highways maintenance team will have access along the new 3.0m wide footway / cycleway route for light commercial vehicles which will be able to access and close off the penstock if a spillage occurs. They can also park in an emergency for a spillage on lane 1 of the approach to Winthorpe roundabout and access from this side if needed.
	124	NCC seek clarification as to the types of road closures to facilitate the construction of the proposed culvert.	The methodology for the culvert crossing under the A617 is described in section 2.6.42 of Chapter 2 of the Environmental Statement [APP-046]. Temporary traffic signals would be utilised to construct the culvert crossing in two phases.
	128	NCC seek clarification as to whether the temporary works area offer the space for material storage and welfare units considering it will act as an access route.	The Applicant can confirm that the temporary works area identified in Work No. 128 is sufficient to meet the Scheme's requirements.
	Other	NCC seek clarification as to what work number the diversion of slough dyke fall under.	The diversion of Slough Dyke is required for the construction of Work No. 90, the new A1/A14 bridge as shown on sheet 5 of the Works Plans [AS-005].

Utilities Work Plans (AS-016)

2.79. A review has been undertaken of the **Utilities Work Plans (AS-016)**.

Table 2.20: NCC Comments on Utilities Work Plans AS-016 (Construction)

Sheet	NCC Comment
General	NCC seek clarification as to whether the proposed limits of deviation for the proposed utility diversion considers both the permanent and any temporary diversions that may be necessary to facilitate the works.
General	NCC seek clarification as to whether the Utility limits of deviation consider any site compounds or laydown areas that the Statutory Undertakers may require or are they proposed to utilise designated temporary works areas defined in the works plans?
4	NCC seek clarification as to whether the Proposed Diversion U16 co-ordinate with the proposed attenuation pond from a long-section perspective.

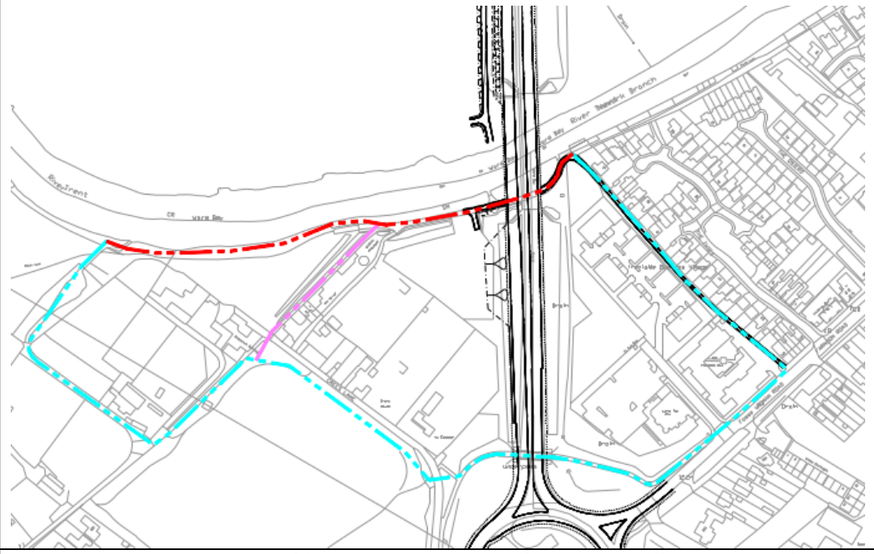
The limits of deviation consider the need for the permanent diversions. Any temporary diversions that are required during the construction phase are within the Order Limits of the Scheme.

The Order Limits include temporary satellite compounds and laydown areas that are to be used for the delivery of the Scheme.

The protection works proposed for U16 will be coordinated with the detailed design for the attenuation ponds in Work No. 74.

Misc Construction Issues

Table 2.21: NCC Comments on Works Plans AS-005 (Construction)

Document	*Topic*	NCC Comment	Response
APP-056_ES Chapter 12 (Population and Human Health). Table 12-12	*Access effects during construction*	Clarification is sought as to which diversionary option has been selected. The Transport Assessment (Table 7-1) states that two options are considered, whilst the ES Chapter 12 (Table 12-12) mentions only one diversionary route (adding +700m). Irrespective, NCC are concerned that the selected diversionary route is not suitable for cyclists / equestrians given that it routes through an existing footway (either FW2 or FW3 depending upon which option is selected). NCC would like to view the proposed diversion route, including information about the suitability for cyclists / equestrians and mobility users.	The image below shows the diversion routes for BW2. The cyan route will be used by equestrians only and walkers and cyclists will use the magenta route which joins into the cyan equestrian route. 
APP-056_ES Chapter 12 (Population and Human Health). Table 12-12	*"Whilst this crossing is currently officially temporarily closed due to safety hazards associated with crossing the A46, construction of the Scheme will result in the official permanent closure of FP14."*	NCC are concerned about the closure of FP14. Whilst the route is noted to be temporarily closed, there is clearly still demand for this route (15 users), and NCC note that this route is the only off-road route between Kelham and Newark town centre as well as connecting the Cricket Ground with the Rugby	The alternative route for FP14 is along Kellham Road, along Great North Road and across the signalised junction at Cattle Market Junction. This provides access to both the A616 and A617. The Applicant notes that Footpath 14 is permanently stopped up with the route above becoming the new alignment.

			Ground. NCC would like to understand whether alternative (safe) options are available for these users (e.g. via the A617). In principle, NCC are satisfied with the proposed stopping up but there needs to be suitable provision for NMUs from Kelham Road to the A616 and A617.	
	APP-056_ES Chapter 12 (Population and Human Health). Table 12-12	*Construction of the Crankley Point Sewage Treatment Works underpass extension and the earthworks operations associated with the embankment widening will result in the temporary closure and diversion of Newark FP48#1 for a period of 24 months.*	NCC are concerned about the 2km diversion of FP48-1, particularly considering that the route sees approx. 50 users over the 2-day surveyed period (likely more during the summer months). NCC would like to see the proposed diversion route, and an assessment of whether any alternative diversion routes are available.	The diversion route for footpath 48-1 is required during the construction of the sewage treatment works underpass extension, Work No 70 on sheet 4 of the Works Plans [AS-005]. The diversion route is described in table 2-7 of Chapter 2 of the Environmental Statement [APP-046]. The footpath would be diverted south on Quibell's Lane to Newark BW10, cross the Lincoln Road railway bridge and join the Trent Valley Way to join Newark BW5. There are limited options to cross the A46 and the railway lines in this area with only the at grade crossing at the sewage treatment works and the railway bridge at Nether Lock offering a route under the A46 and either across or under the railway. The route selected provides the shortest diversion and utilises the existing footpaths and Public Right of Way network.
	APP-056_ES Chapter 12 (Population and Human Health). Table 12-12	*"Construction of the Brownhills junction will lead to temporary changes in access to National Cycle Network 64 and the Trent Valley Way along Winthorpe Road. Access will be maintained throughout the construction phase, with diversions phased over 24-months."*	NCC would like to see the diversionary routes noted in Table 12-12 for this route, given that it is a key active traveller route (421 over the 7- day survey period).	The construction phasing for the Brownhills junction is described in 2.6.144 to 2.6.160 of Chapter 2 of the Environmental Statement [APP-046] and in the Outline Traffic Management Plan [APP-196]. The existing active travel route along Winthorpe Road will be segregated during construction with the junction constructed in two phases. Upon completion of phase 1 the active travel route will be moved onto the new alignment, allowing the remainder of the dual carriageway to be constructed across the alignment of Winthorpe Road.
	Transport Assessment, Appendix C (WCHAR), APP- 193	N/A	Linking to other comments, the proposed diversion route would terminate in a dead end for equestrian users but also require pedestrians or cyclists to rejoin BW2 via FP3 which will be used as an access during construction. NCC seek clarification as to how	FP3 is not being used as an access during construction.

			construction traffic and non-motorised users will be safely segregated whilst this diversion route is in effect.	

3. Water		
Baseline information		
3.1.	The Applicant has undertaken an assessment of the likely significant effects of road drainage and water environment as part of the Environmental Statement (ES), which has been reviewed by Nottinghamshire County Council (NCC).	No comments needed from the Applicant.
3.2.	Chapter 13: Road Drainage and Water Environment is supported by the following documents which have also been reviewed: Figure 13.1 Surface Water Constraints; Figure 13.2 River Waterbody Catchments; Figure 13.3 Flooding Constraints; Figure 13.4 Groundwater Constraints; Appendix 13.1 Water Framework Directive Compliance Assessment; Appendix 13.2 Flood Risk Assessment; Appendix 13.3 HEWRAT Assessment; Appendix 13.4 Drainage Strategy Report; and Appendix 13.5 Surface Water Quality Monitoring.	No comments needed from the Applicant.
3.3.	The review of baseline information included watercourses, waterbodies, water quality monitoring, surface water environmental permits or discharge consents, flood risk areas, groundwater levels, groundwater abstraction, groundwater consented discharges, aquifer designations and vulnerability, Water Framework Directive (WFD) groundwater status, and designated sites within the study area. This information is considered relevant to the assessment to provide baseline conditions of the water environment within or in the vicinity of the Scheme.	No comments needed from the Applicant.
3.4.	The study area used for sensitive surface water receptors, drainage systems, fluvial flood risk, groundwater receptors and designated sites is 1 km from the Order Limits. The study area is considered suitable as pollutants are expected to disperse and to have been diluted beyond a 1 km radius.	No comments needed from the Applicant.
3.5.	Risk assessment of the likely significant effects of the construction and operation stage has been conducted in accordance with the Design Manual for Roads and Bridges (DMRB) LA 113 – Road drainage and the water environment. In section 13.5 of Chapter 13: Road Drainage and Water Environment, a framework has been provided for assessing and managing effects associated with the water environment. Environmental Assessment and Monitoring guidance (DMRB LA 104) has been used to assess the significance of the effect on the receptor value and the magnitude of the impact. As part of the assessment, a worst- case scenario approach has been adopted in order to adequately account for all potential impacts. The assessment is considered appropriate	No comments needed from the Applicant.
3.6.	Chapter 13: Road Drainage and Water Environment concluded that there are no likely significant construction or operational adverse effects. The assessment is considered to meet the policy requirements set out in the relevant national and local planning policy documents.	The Applicant welcomes this response from NCC.
Water Framework Directive Compliance Assessment		
3.7.	The Water Framework Directive (WFD) compliance assessment included as Appendix 13.1 considers the compliance of the Scheme with the relevant WFD objectives for the designated ground and surface	The Applicant welcomes this response from NCC.

	waterbodies that may be affected. The assessment determines if the Scheme may cause deterioration or prevent the improvement of the overall status (or potential for heavily modified and artificial waterbodies) of these waterbodies. The report is in accordance with the Planning Inspectorate guidance, the Environment Agency's WFD guidance and position paper. The Environment Agency's WFD guidance and position paper was produced by the Planning Inspectorate in Advice note 18, and the requirements of DMRB LA 113 – Road drainage and the water environment section 3.50 to 3.572. The level of assessment, methodology and desk-based research to provide a WFD baseline is adequate for the current stage of the application.	
Flood Risk Assessment		
3.8.	Given that the Scheme is partly located within Flood Zone 3 and is over 1 hectare in size, a Flood Risk Assessment (FRA) has been undertaken and included as Appendix 13.2. The assessment provides the flood risk impact of the Scheme during the construction and operation phase. In order to inform the flood mitigation measures required, which would include the compensation of floodplains, hydraulic modelling has been conducted as part of the FRA.	No comments needed from the Applicant.
3.9.	The Sequential Test is applied as part of site selection and Exception Test has also been applied as part of the FRA. The Scheme seeks to improve an existing highway route that passes through Flood Zone 3. Therefore, it is not viable to relocate the works to a zone with a lower probability of flooding or to avoid crossing the A1, the River Trent and other watercourses. The Scheme alignment was developed following a comprehensive assessment of different alignment options which considered all environmental impacts (inclusive of flood risk).	No comments needed from the Applicant.
3.10.	The FRA states that other options performed better with regard to flood risk but performed less well with regard to other potential impacts. Taking into account wider sustainability objectives, no reasonably available alternatives to locate the Scheme in areas of lower flood risk were identified. This review couldn't confirm that the potential impacts on other areas mean the alternative options are not "reasonably available" but it is assumed this will have been tested through the DCO process.	The Applicant confirms Section 3.2. in Chapter 3 (Assessment of Alternatives) of the Environmental Statement [APP-047] outlines the methodology for the assessment of alternative Scheme options. In total, five potential corridor options were assessed. A qualitative assessment of the impact of the five Scheme options was undertaken. Although there were route options that performed better on flood risk criteria, the selected route option was the best scoring with the application of the Scheme objectives and the National Policy Statement for National Networks and Early Assessment and Sifting Tool assessment methodology. Taking into account wider sustainability objectives, there are no reasonably available alternatives to locate the Scheme in areas of lower flood risk. Therefore, the Applicant considers that the Sequential Test has been passed and the Exception Test must be applied.
3.11.	According to the FRA the Scheme is classified as Essential Transport Infrastructure, considering it forms part of the strategic road network and the need for the upgrade is set out in the Case for the Scheme. A part of the Scheme passes through Flood Zone 3b. This may be acceptable for Essential Transport Infrastructure subject to the application of the Exception Test.	The Applicant confirms taking into account wider sustainability objectives, there are no reasonably available alternatives to locate the Scheme in areas of lower flood risk. Therefore, the Applicant considers that the Sequential Test has been passed and the Exception Test must be applied. The Exception Test has been applied in the Flood Risk Assessment [APP-177].
3.12.	The FRA was supported by hydraulic modelling to assess flood risk to and from the Scheme where it passes through Flood Zone 3. Changes in flood depth as a result of the combined permanent and temporary works elements have been compared to baseline depths. The inclusion of the Scheme with temporary works provided a conservative assessment of the flood risk impact of the temporary works. The FRA reports some increases in flooding resulting from the Scheme, both during construction and operation however the results are stated to demonstrate there is no significant impact on flooding based on the DMRB significance criteria and available information on affected receptors. According to the FRA, since the Scheme is a Nationally Significant Infrastructure Project (NSIP), the Exception Test was satisfied in terms of the benefits to the community and safety and flood mitigation measures have been incorporated into the design. The new road would be at a low risk of flooding and would also be safe for the lifetime of the development without increasing flood risk to receptors elsewhere.	No comments needed from the Applicant.
3.13.	The flood risk impacts to the Scheme have been comprehensively assessed and the structure and content of the FRA are in accordance with the National Policy Statement for National Networks (NPSNN) Sections 4 and 5, and National Planning Policy Framework (NPPF).	The Applicant welcomes this response from NCC.

HEWRAT Assessment		
3.14.	To understand the pollution of routine runoff that is expected to be discharged into the receiving watercourses and ensure that drainage design (and appropriate mitigation) is compliant with the Environmental Quality Standards (EQS), a Highways England Water Risk Assessment Tool (HEWRAT) assessment and the application of the Metal Bioavailability Assessment Tool (M-BAT) has been completed, included as Appendix 13.3. Overall, a proportional rating is given to the severity and risk of the sources with respect to the impacts and the risk.	No comments needed from the Applicant.
Drainage Strategy Report		
3.15.	A report on the road drainage strategy and preliminary design has been prepared to outline the existing drainage regime, provide a summary of the drainage philosophy agreed upon with stakeholders, and present the proposed drainage design that will be developed during the detailed design process. The initial design of the proposed drainage regime has been reasonably placed where suitable taking into account the risk of pollution and flooding extent based on the HEWRAT and FRA.	No comments needed from the Applicant.
Surface Water Quality Monitoring		
3.16.	Surface water quality monitoring was undertaken in January, April, and July 2023 to establish the baseline surface water quality within and in the vicinity of the Scheme during winter high flow and spring/summer lower flow conditions. The monitoring report is provided as Appendix 13.5 of the ES. The applicant states that surface water monitoring and groundwater monitoring would be undertaken during construction to ensure there is no deterioration in water quality as a result of the Scheme. Further monitoring will be undertaken as stated and is proposed to be undertaken quarterly. A reasonable level of assessment has been undertaken by the Applicant and the report is in accordance with the following legislation: The Environment Act 2021; Flood and Water Management Act 2010; Environmental Permitting (England and Wales) Regulations 2016 (as amended); Nitrate Pollution Prevention Regulations 2015; Water Act 2014; The Water Resources Act 1991 (Amendment) (England and Wales); and Environmental Damage (Prevention and Remediation) Regulations 2009.	No comments needed from the Applicant.
National and Local Policy		
Relevant National Policy		
3.17.	Chapter 13: Road Drainage and Water Environment assessed impacts according to the National Policy Statement for National Networks (NPSNN) and National Planning Policy Framework (NPPF) that was in effect at the time of writing, and was published for consultation in March 2023. Chapter 13: Road Drainage and Water Environment has been reviewed in accordance with the latest NPSNN published in March 2024.	No comments needed from the Applicant.
3.18.	The submission documents include the document 'National Policy Statement for National Networks Accordance Tables', outlining how the Scheme complies with each section of the NPSNN relevant to Chapter 13: Road Drainage and Water Environment.	No comments needed from the Applicant.
3.19.	When determining an application for development consent in relation to flood risk, the policies relating to climate change adaption in paragraphs 4.36 to 4.47 of the NPSNN should be taken into account. Paragraph 5.91 refers to advice in the NPPF (paragraphs 165 to 175) regarding directing development away from areas at the highest risk of flooding but where development is necessary, advising that it should be made safe without increasing flood risk elsewhere	The Applicant can confirm that the Flood Risk Assessment (Appendix 13.2 of the Environmental Statement Appendices) [APP-177] for the Scheme is compliant with the NPSNN.

3.20.	Advice on assessments is given to applicants in paragraphs 5.92 - 5.97 of the NPSNN which advises schemes located in Flood Zones 2 and 3 (medium and high probability of river and sea flooding), within Flood Zone 1 (low probability of river and sea flooding), or schemes of 1 hectare or greater or subject to other sources of flooding or critical drainage problems be accompanied by a FRA. This should identify and assess the risks of all forms of flooding to and from the Scheme and demonstrate how these flood risks will be managed, taking climate change into account. Applicants for schemes which may be affected by, or may add to, flood risk are advised to seek sufficiently early pre-application discussions with the Environment Agency and, where relevant, other flood risk management bodies such as lead local flood authorities, Internal Drainage Boards (IDB), and reservoir owners and operators	The Applicant can confirm that the Flood Risk Assessment (Appendix 13.2 of the Environmental Statement Appendices) [APP-177] for the Scheme is compliant with the NPSNN. The Flood Risk Assessment (Appendix 13.2 of the Environmental Statement Appendices) [APP-177] discusses early engagement with the flood risk management bodies (the EA, Trent Valley IDB, LLFA and Canal & Rivers Trust) which took place at flood risk steering group meetings for the Scheme.
3.21.	The flood risks during construction and operation are outlined in the ES and further assessed in FRA (Appendix 13.2), as described previously. The site-specific FRA also takes into account the impacts of climate change listed above. The FRA concluded a low risk of flooding from all sources both to the Scheme and as a result of the Scheme. This considered the proposed mitigation which includes floodplain storage compensation areas and implementation of the proposed drainage strategy (Appendix 13.4 Drainage Strategy Report). The Scheme has followed the NPSNN in undertaking a site-specific FRA and included appropriate drainage mitigation.	No comments needed from the Applicant.
Relevant Local Policy		
The Nottinghamshire Plan 2021-31		
3.22.	Reducing impact on the environment is one of the focuses of the Nottinghamshire 10-year vision. Nottinghamshire County Council, alongside their partners, will protect the communities most at risk of flooding through designing new development with flood protection as part of Ambition 3 over the next four years. Ambition 9 includes carrying out more Natural Flood Management schemes across the county, supporting watercourse owners with their responsibilities and working with their partners to reduce the risk of flooding to homes and businesses.	The Applicant confirms the Flood Compensation Areas (FCAs) that form part of the Scheme are designed to integrate into the landscape with various environmental and biodiversity benefits. Farndon East FCA includes a permanent lake, and Farndon West FCA incorporates wetland ponds.
3.23.	Chapter 13: Road Drainage and Water Environment and the accompanying technical appendices have assessed the importance of protecting and enhancing the environment and protecting the communities from flooding within the local area and nearby communities.	No comments needed from the Applicant.
Corporate Environmental Policy		
3.24.	Nottinghamshire County Council also set out an Environmental policy and plan to enhance Nottinghamshire's natural habitats and landscapes, while reducing the council's impact on the environment. Nottinghamshire County Council will ensure that environmental consideration in its policies, plans, procurement and use of financial resources is embedded. They will also ensure that they are compliant with the environmental legislation to deliver their commitment to protecting and enhancing the natural and built environment.	No comments needed from the Applicant.
3.25.	Chapter 13: Road Drainage and Water Environment has considered the importance of protecting and enhancing the environment within the Scheme extent.	No comments needed from the Applicant.
Newark & Sherwood Local Development Framework Core Strategy & Allocations (Amended Core Strategy)		
3.26.	**Core Policy 9** (Sustainable Design) states that new development proposals should demonstrate sustainable design that proactively manages surface water including, where feasible, the use of Sustainable Drainage Systems to protect and enhance the natural environment. Core Policy 9 states that the district council will prepare a Supplementary Planning Document (SPD) setting out guidance to developers on the sustainable design of development. This has not yet been published.	No comments needed from the Applicant.
3.27.	Core Policy 9 (Sustainable Design) also states that in areas at risk of flooding, and to direct development away from areas at highest risk, national planning policy requires a sequential approach to flood risk. A Strategic Flood Risk Assessment (SFRA) has been produced to inform decisions over	The Applicant can confirm that the Flood Risk Assessment (Appendix 13.2 of the Environmental Statement Appendices) [APP-177] for the Scheme takes the Strategic Flood Risk Assessment (SFRA) into account.

	site allocations in the determination of planning applications. The SFRA was reviewed and updated in 2016 to provide the necessary evidence base to inform 'Plan Review'. The District Council will expect developers, as part of proposals, to take the study into account.	
3.28.	The Newark and Sherwood District SFRA entirely covers the Scheme area and looks at flooding from a variety of different sources. The Level 2 SFRA identifies the Scheme as being partially within the functional floodplain (Flood Zone 3b).	No comments needed from the Applicant.
3.29.	With regards to meeting the requirement for Core Policy 9, the mitigation measures from the potential surface water impact during construction and operation of the newly proposed SuDS are not specifically defined within Chapter 13: Road Drainage and the Water Environment but a preliminary drainage design has been set out in the Drainage Strategy Report (Appendix 13.4).	The Applicant can confirm Appendix 13.4 (Drainage Strategy Report) of the Environmental Statement [APP-187] has been developed to outline the drainage design and mitigation measures incorporated within the Scheme. Pollution prevention measures outlined within the drainage design have been identified to mitigate potential adverse effects upon surface waters and groundwater from runoff. These include SUDS in the form of a network of swales, ponds, reedbeds, and wet grassland areas as part of the proposed highways drainage. Maintenance of the drainage network (as outlined within the Register of Environmental Actions and Commitments of the First Iteration Environmental Management Plan [APP-184]) will also be undertaken to reduce the risk of blockages which could lead to overflow of the system and result in contaminated runoff.
3.30.	**Core Policy 10** (Climate Change) states the District Council is committed to tackling climate change's causes and impacts and delivering a reduction in the District's carbon footprint. Developments should take into account potential adverse environmental impacts that during construction and operation should be mitigated to minimise the impacts of climate change. New development proposals should be steered away from those areas at the highest risk of flooding, by applying the sequential approach to its location. Where appropriate the Authority will seek to secure strategic flood mitigation measures as part of the new development. Following the Sequential Test, the Exception Test should be applied in line with national guidance.	The Applicant confirms that, taking into account wider sustainability objectives, there are no reasonably available alternatives to locate the Scheme in areas of lower flood risk. Therefore, the Applicant considers that the Sequential Test has been passed and the Exception Test must be applied. In the Flood Risk Assessment [APP-177], the Exception test has been applied. Flood risk mitigation measures will be provided as part of the Scheme, including floodplain compensation areas at Farndon East FCA, Farndon West FCA and Kelham & Averham FCA.
3.31.	New development must also ensure that surface water runoff is positively managed through the design and layout of the development to make sure that there are no unacceptable impacts in runoff into surrounding areas or the existing drainage regime.	The Applicant confirms the drainage design for the Scheme is in accordance with DMRB LA113 and surface water runoff will not worsen any flooding that currently occurs for 1:100 plus climate change rainfall events, as outlined within Appendix 13.4 (Drainage Strategy Report) of the Environmental Statement Appendices [APP-187].
3.32.	The appropriate climate change uplifts have been considered for the FRA and flood mitigation measures have been examined during the construction and operational phase. As part of the policy requirements, a Sequential Test as well as an Exception Test were completed. Nature based solutions (NbS) and Sustainable Drainage Systems (SuDS) were the primary principles implemented in draining, treating and attenuating the extended catchment of the Scheme. Above-ground SuDS have been integrated with environmental and landscaping features to produce additional benefits where practical. A blue-green corridor has been utilised to tie attenuation features and landscaping into a holistic design.	No comments needed from the Applicant.
Conflicts		
3.33.	In summary, subject to the development being carried out as proposed within the DCO application documents and further details being agreed as part of the subsequent DCO requirement, Nottinghamshire County Council is of the view that the impacts of this proposal would be neutral.	The Applicant welcomes this response from NCC.

4. Minerals and Waste

4.1.	This Section presents a review of the documents submitted in support of the Scheme, including Chapter 10: Material Assets and Waste, of the ES, in context with both the local and national minerals and waste legislation and policy.	No comments needed from the Applicant

Baseline		
Waste		
4.2.	There is one permitted/authorised landfill site which lies immediately adjacent to the boundary of the Scheme. British Sugar Plc operates an active landfill site at the Newark Sugar Factory. The existing A46 road is partially located on the southeastern edge of this landfill site. Within 500 metres of the Order Limits, British Sugar Plc has one closed site (British Sugar Borrow Pits), which lies approximately 300 metres from the Scheme. A historic landfill is also present at Muskham Road, approximately 210 metres from the Scheme.	No comments needed from the Applicant.
Minerals		
4.3.	The majority of the Scheme falls within a Minerals Safeguarding Area (MSA) for sand and gravel.	No comments needed from the Applicant.
4.4.	It is considered that minerals and waste facilities have been identified adequately within the Environmental Statement and the supporting DCO documentation.	No comments needed from the Applicant.
Summary of Legislative and Policy Framework Review		
4.5.	When determining a DCO application, regard should be given to the relevant National Policy Statements (NPS), as well as national and local planning policy.	No comments needed from the Applicant.
Local Policy		
4.6.	With regard to the local policy context, the relevant development plan documents in this case comprise the following: • Nottinghamshire and Nottingham Local Aggregates Assessment (2022); • Nottinghamshire Minerals Local Plan (2021); and • Nottinghamshire and Nottingham County Council Waste Core Strategy (2013).	No comments needed from the Applicant.
Nottinghamshire and Nottingham Local Aggregates Assessment (2022)		
4.7.	The Nottinghamshire and Nottingham Local Aggregates Assessment (LAA) was adopted in December 2023 and covers both Nottinghamshire County Council (NCC) and Nottingham City Council. It is a requirement of the National Planning Policy Framework (NPPF) for all Mineral Planning Authorities (MPAs) to produce a yearly LAA assessing the demand and supply for aggregates within their jurisdiction over the past 10 years. The 2023 assessment was the most recent available at the time of this application's submission and provides details of sales of aggregates within Nottinghamshire County and Nottingham City in 2022 and provides historic data from 2013 to 2022. Chapter 10: Material Assets and Waste refers to the 2022 version of this report and uses data from this earlier report in the baseline of the assessment. **Nottinghamshire County Council recommend that Table 10-6: Aggregates sales and reserves for Nottinghamshire and Nottingham is updated in respect of the most recent 2023 version of this report. Where appropriate, the assessment should also be updated following this change in baseline conditions**.	The Applicant's assessment contained within Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054] was completed prior to the publication of the Nottinghamshire and Nottingham Local Aggregates Assessment 2022, which became available online from December 2023. However, the Applicant has reviewed the updated information available for the permitted reserves of total aggregates (as of December 2022), provided in Nottinghamshire and Nottingham Local Aggregates Assessment 2022. The total permitted reserves for aggregates at 31 December 2022 is 31.84 million tonnes as reported in Nottinghamshire and Nottingham Local Aggregates Assessment 2022 compared to 32.62 million tonnes at December 2021 and stated in Table 10-6 of Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054]. The total aggregates likely to be used by the Scheme is approximately 930,600m3 (Table 10-16 and 10-17 of Chapter (Material Assets and Waste) of the Environmental Statement [APP-054]). This is 3.5% of the regional availability of the aggregate (based on total aggregate reserve available in December 2022), compared to

		3.42% (based on total aggregate reserve available in December 2021). It has been reported in Table 10-18 of Chapter (Material Assets and Waste) of the Environmental Statement [APP-054] that 'the use of the available sand and gravel by the Scheme is anticipated to be less than approximately 3.5%'. The percentage use of sand and gravel, based on the regional availability of total aggregates, does not change significantly despite the small reported decrease in the total permitted reserves for aggregates at 31 December 2022. Moreover, the Scheme has demonstrated that at least 46% of fill materials would consist of reused or recycled materials and from borrow pits (Table 10-18 of Chapter (Material Assets and Waste) of the Environmental Statement [APP-054]). It is considered that conclusions reported in Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054] would not change when taking into account the more recent information available in the Nottinghamshire and Nottingham Local Aggregates Assessment 2022 as the increase in percentage use of aggregate available within the region, on the conclusions in the ES is negligible. The Applicant therefore does not propose to update the local policy and baseline information with that data in Table 10-1 and Table 10-6 of Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054].
Nottinghamshire Minerals Local Plan (2021)		
4.8.	The Nottinghamshire Minerals Local Plan (NMLP) was adopted by NCC in March 2021 and replaces the previous plan adopted in 2005. The plan covers the period up to 2036 and sets out NCC's approach towards future mineral extraction in Nottinghamshire. It states that the purpose of the plan is to balance *"the economic benefits and need for minerals, against the environmental disruption and harm that mineral extraction can cause"*.	No comments needed from the Applicant.
4.9.	The following policies are considered of relevance: • Policy SP1: Minerals Provision; • Policy SP7: Minerals Safeguarding, Consultation Areas and Associated minerals Infrastructure; • Policy DM13: Incidental Mineral Extraction; • Policy DM15: Borrow Pits; • Policy MP1: Aggregate Provision; • Policy MP2: Sand and Gravel Provision; • Policy MP3: Sherwood Sandstone Provision; • Policy MP4: Crushed Rock (limestone) Provision; and • Policy MP5: Secondary and Recycled Aggregates.	No comments needed from the Applicant.
4.10.	Policy SP1 (Minerals Provision) emphasises the importance of identifying land suitable for mineral extraction to maintain an adequate supply of minerals in the county and ensuring that the best use is made of the County's finite minerals resources. It further states that "*proposals for mineral development must demonstrate that they have prioritised the avoidance of adverse social, economic and environmental impacts of the proposed development.*"	No comments needed from the Applicant.
4.11.	Policy SP7 (Minerals Safeguarding, Consultation Areas and Associated Minerals Infrastructure) sets out the need for both Minerals Safeguarding Areas (MSAs), areas of mineral resources which are worthy of safeguarding, and Minerals Consultation Areas	No comments needed from the Applicant.

	(MCAs), areas within Nottinghamshire where the District and Borough authorities are required to consult the Mineral Planning Authority (MPA) over non-minerals development.	
4.12.	Policy SP7 states that: "*Non-minerals development within minerals safeguarding areas will have to demonstrate that mineral resources will not be needlessly sterilised as a result of the development and that the development would not pose a serious hindrance to future extraction in the vicinity.* *Where this cannot be demonstrated, and where there is a clear and demonstrable need for the non-minerals development, prior extraction will be sought where practicable*."	No comments needed from the Applicant.
4.13.	Paragraph 3.84 recognises that not all non-mineral development proposals within or close to a MSA/MCA represent a risk to future minerals extraction, with the main risks coming from proposals to extend built-up areas and new development in the open countryside.	No comments needed from the Applicant.
4.14.	DM13 (Incidental Mineral Extraction) states that "*planning applications for the extraction of minerals as a necessary element of other development proposals on the same site will be supported where it can be demonstrated that the scale and duration of the mineral extraction does not result in adverse environmental impacts and that it brings environmental and other benefits to the development it is incidental to.*" The Applicant has produced an Outline Materials Management Plan (OMMP) (Appendix A, First Iteration Environmental Management Plan (EMP)) to identify ways in which site won materials can be reused during construction, though does acknowledge that the Scheme will result in waste from site won materials which are of poor quality or which otherwise cannot be reused onsite.	No comments needed from the Applicant.
4.15.	DM15 (Borrow Pits) states that borrow pits will be supported where they are adjacent to or close to the project/s they are intended to serve, are time-limited to the life of the project and material is to be used only for the specified project, can be worked and reclaimed without any unacceptable environmental impacts. The Applicant identifies that borrow pits within the order limit will be used to reduce the requirement for off-site materials and will be backfilled with other site-won material. The use of borrow pits is commonplace on road schemes.	No comments needed from the Applicant.
4.16.	Policies MP1-MP4 relate to the requirement to ensure the adequate supply of aggregates and minerals, in particular MP2 (Sand and Gravel Provision). MP5 (Secondary and Recycled Aggregates) states that "*development proposals which will increase the supply of secondary and/or recycled aggregates will be supported where it can be demonstrated that there are no significant environmental, transport or other unacceptable impacts.*"	No comments needed from the Applicant.
Nottinghamshire and Nottingham County Council Waste Core Strategy (2013)		
4.17.	NCC and Nottingham City Council jointly prepared a Waste Core Strategy which was adopted in December 2013. It covers the period up to 2031. It partly replaces the saved policies in the existing Waste Local Plan, adopted in January 2002. The policies of the Core Strategy and the saved policies in the Waste Local Plan will remain in force until the new Waste Local Plan is adopted by both councils. The following policies are considered to be of relevance to the Scheme: • Policy WCS2: Waste Awareness, Prevention and Reuse; • Policy WCS3: Future Waste Management Provision;	No comments needed from the Applicant.

	• Policy WCS5: Disposal Sites for Hazardous, Non-Hazardous and Inert Waste; • Policy WCS8: Extensions to Existing Waste Management Facilities; and • Policy WCS10: Safeguarding Waste Management Sites.	
4.18.	Policy WCS2 states that all new development should be designed, constructed and implemented to minimise the creation of waste, maximise the use of recycled materials and assist in the collection, separation, sorting, recycling and recovery of waste arising from the development.	No comments needed from the Applicant.
4.19.	Policy WCS10 states that the following sites will be safeguarded for waste management facilities: a) Existing authorised waste management facilities including potential extensions and sites which have a valid planning permission that has not yet been implemented; or b) Sites allocated in the Site Allocations Document. Safeguarding will only apply to the above-identified sites and any land immediately adjacent to the site where a need to safeguard has been clearly demonstrated.	No comments needed from the Applicant.
Emerging Local Policy		
4.20.	Nottinghamshire CC and Nottingham City Council submitted the Nottinghamshire and Nottingham Waste Local Plan to the Secretary of State on 5th March 2024.	No comments needed from the Applicant.
4.21.	The relevant policies are:	No comments needed from the Applicant.
4.22.	**SP1 Waste prevention and reuse** – All new development should be designed, constructed, and operated to minimise the creation of waste, maximise the use of recycled materials, and assist with the collection, separation, sorting, recycling and recovery of waste arising from the development during its use.	No comments needed from the Applicant.
4.23.	**SP2 Future Waste Management Provision** – The policy aims to provide sufficient waste management capacity to meet identified needs and will support proposals for waste management facilities which help to move waste management up the waste hierarchy.	No comments needed from the Applicant.
4.24.	**SP4 Residual Waste Management** – Proposals for the recovery of inert waste to land will be permitted where it can be demonstrated that: This will provide a significant benefit or improvement which cannot practicably or reasonably be met in any other way. The waste cannot practicably and reasonably be reused, recycled or processed in any other way. The use of inert waste material replaces the need for non-waste materials. The development involves the minimum quantity of waste necessary to achieve the desired benefit or improvement. It will not prejudice the restoration of permitted mineral workings and landfill sites.	No comments needed from the Applicant.
4.25.	**SP8 Safeguarding Waste Management Sites** – The policy will seek to avoid the loss of existing permitted waste management facilities, having regard to the long-term need for the facility and the wider benefits of any development proposal.	No comments needed from the Applicant.
4.26.	It is not the intention of Policy SP8 to unreasonably restrict non-waste development and, in most cases, by taking a more flexible approach it may be possible to accommodate non-waste development by making changes to the proposed layout of any housing or mixed-use scheme. Mitigation therefore could include using parking or landscape areas to provide a	No comments needed from the Applicant.

	buffer zone from any existing or potential waste facility. The suitable mitigations will depend on the non-waste development proposed as well as the type of waste facility and the nature of its operations.	
National Policy		
4.27.	With regard to the national policy context, the following documents are of material consideration to the Scheme: • National Networks National Planning Policy Statement (2014); • National Networks National Planning Policy Statement (2024); and • National Planning Policy for Waste (2014).	No comments needed from the Applicant.
National Networks National Planning Policy Statement (2024)		
4.28.	Since the submission of the application by the Applicant, a subsequent NPSNN was produced in May 2024. There are no substantive differences between the two with regard to minerals and waste.	No comments needed from the Applicant.
Minerals		
National Networks National Planning Policy Statement (2014)		
4.29.	There are 12 designated National Policy Statements (NPS) that set out government policy on different types of national infrastructure development, including energy, transport, water, wastewater, and waste. The National Policy Statement for National Networks (NPSNN) was first published in December 2014 by the Department for Transport.	No comments needed from the Applicant.
4.30.	In relation to safeguarding mineral resources, paragraph 5.169 of the NPSNN states: *"Applicants should safeguard any mineral resources on the proposed site as far as possible."*	No comments needed from the Applicant.
4.31.	Paragraph 5.182 goes on to state: *"Where a proposed development has an impact on a Mineral Safeguarding Area (MSA), the Secretary of State should ensure that the applicant has put forward appropriate mitigation measures to safeguard mineral resources."*	No comments needed from the Applicant.
4.32.	The Scheme would result in the sterilisation of some sand and gravel resources designated under the MSA. The Applicant considers that the Scheme would not represent a risk to the MSA, as the Scheme consists of widening and improvement of existing sections of the A46 around Newark (i.e., not a new development) and is not located in overly open countryside. The Scheme would therefore appear to be in line with the criteria laid out within Paragraph 3.84 of the Nottinghamshire Minerals Local Plan (2021).	No comments needed from the Applicant.
4.33.	There are no existing mineral extraction sites located in close proximity to the Scheme boundary, and given that much of the works are in relatively close proximity to residential areas, it is considered unlikely that the Scheme would result in the infringement of future potential mineral extraction sites.	No comments needed from the Applicant.

4.34.	Whilst prior extraction of the sand and gravel should be considered and is always preferred, it is acknowledged that this may be impractical given the relatively small areas of land take which are spread across the Scheme and their irregular shape which would hinder effective extraction. The benefit of prior extraction of the mineral would also have to be balanced against the likely impact it would have on the programme for the Scheme (i.e., a not inconsiderable delay) and the adverse environmental effects associated with mineral extraction.	No comments needed from the Applicant.
4.35.	However, whilst Nottinghamshire County Council are generally content with the information provided throughout the application documents in relation to the impact of the Scheme on minerals, the Applicant has not produced a standalone Mineral Safeguarding Assessment for the Scheme. This would need to demonstrate that, on balance, mineral sterilisation is acceptable due to a clear and demonstrable need for the Scheme and that prior extraction would not be practicable. It would also need to demonstrate that the Scheme would not infringe on the ability of the County to maintain an adequate supply of mineral. **As it stands, Nottinghamshire County Council does not consider this to have been sufficiently demonstrated**.	The Applicant confirms: 1. The need for the scheme is set out in Section 2.1 of Chapter 2 (The Scheme) of the Environmental Statement [APP-046], the Case for the Scheme [APP-190] and in paragraph 10.8.21 of Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054]. 2. Current local policies relevant for minerals, that have been considered for the Scheme are set out in paragraph 10.3.57 of Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054]. 3. Paragraph 10.8.21 of Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054] provides information on how the Scheme complies with the local policies for non-mineral development and why it does not pose a risk to the Mineral Safeguarding Area (MSA). 4. The study area stated in paragraph 10.7.2 of Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054] provides information on potential constraints to MSA within 500m of the Order Limits. The Scheme is spread across relatively small land take of irregular shape and has been shown on Figure 10.1 (Material Assets and Waste Management First Study Area) of the Environmental Statement Figures [APP-092]. Moreover, Figure 10.1 (Material Assets and Waste Management First Study Area) of the Environmental Statement Figures [APP-092] does not show any existing mineral extraction sites located in close proximity to the Order Limits, indicating that the Scheme will not cause any hinderance in the operation of any existing mineral extraction sites. 5. Paragraph 10.8.21 of Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054] states that 'The total area for the sand and gravel MSA within Nottinghamshire is over 377 square kilometres, while the total area of the Scheme within the MSA is approximately 1.8 square kilometres, which represents approximately 0.48 percent of the MSA area.'' It has been stated in paragraph 10.10.14 of Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054), that the Applicant will consider the potential use of site won materials that includes minerals derived from excavation activities within the Scheme. So, there is a potential that some of the minerals present within the MSA that lie within the Order Limits will be extracted and utilised within the Scheme and would not be subject to sterilisation. 6. Section 2.5 of Chapter 2 (The Scheme) of the Environmental Statement [APP-046] provides information that approximately 6.5 kilometres (approximately 4 miles) in length of the existing A46 will be upgraded as part of this Scheme and that the location of the Scheme is in close proximity of residential areas. Based on the information stated in bullet points one to six, it is evident that on balance, mineral sterilisation of 0.48 percent of the MSA area within Nottinghamshire, which is a relatively small MSA spread across the Scheme, is reasonable to be considered acceptable as the Scheme clearly demonstrates the need for its construction.

		The Scheme has been described in Section 2.3 of Chapter 2 (The Scheme) of the Environmental Statement [APP-046]. The Scheme consists of widening and improvement of existing sections of the A46 around Newark for approximately 6.5 kilometers and is not located in an open countryside area as stated in paragraph 10.8.21 of Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054]. Hence, due to the nature of the Scheme, which extends over 6.5km, and information presented in bullet points four to six, prior extraction of mineral as a mineral development may not be technically appropriate and suitable. The Scheme is not a new development and is not located in an open countryside area as stated in paragraph 10.8.21 of Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054]. This has also been stated in Section 2.3 and Section 2.5 of Chapter 2 (The Scheme) of the Environmental Statement [APP-046]. So based on information presented in bullet points four and five, the Scheme demonstrates that it would not infringe on the ability of the Nottingham County Council to maintain an adequate supply of minerals. The Applicant considers that sufficient information has been provided within the Environment Statement to demonstrate the: • clear and demonstrable need for the Scheme, thus mineral sterilisation of 0.48 percent of MSA could be acceptable; • prior extraction would not be practicable; and • Scheme would not infringe on the ability of the Nottinghamshire County Council to maintain an adequate supply of mineral. Hence, the Applicant does not consider the need to submit a separate standalone Mineral Safeguarding Assessment report.
Waste		
National Networks National Planning Policy Statement (2014)		
4.36.	In relation to Waste, the NPSNN states in paragraph 5.40 that sustainable waste management is implemented through the 'waste hierarchy', including prevention; preparing for reuse; recycling; other recovery, including energy recovery; and disposal.	No comments needed from the Applicant.
4.37.	Paragraph 5.41 goes on to state that *"Large infrastructure projects may generate hazardous and non-hazardous waste during the construction and operation…"*.	No comments needed from the Applicant.
4.38.	In relation to an applicant's assessment, the NPSNN states in paragraph 5.42 *"The applicant should set out the arrangements that are proposed for managing any waste produced. The arrangements described should include information on the proposed waste recovery and disposal system for all waste generated by the development. The applicant should seek to minimise the volume of waste produced and the volume of waste sent for disposal unless it can be demonstrated that the alternative is the best overall environmental outcome"*.	The Applicant has set out the mitigation measures in paragraphs 10.10.3 and 10.10.4 of Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054] including the arrangements for minimising and management of the waste arisings from the Scheme. Paragraph 10.10.5 of Chapter 10 Materials Assets and Waste of the Environmental Statement [APP-054] refers to information on waste management facilities within 10 kilometres of the Order Limits that would be utilised to manage waste arisings from the Scheme. The Scheme has produced an Outline Site Waste Management Plan (Appendix B.1 of First Iteration Environmental Management Plan [APP-184]) that identifies the strategic approach for the management of waste generated during the construction phase of the Scheme. The Scheme has produced an Outline Materials Management Plan (Appendix B.2 of First Iteration Environmental Management Plan [APP-184]) which sets out how excavated materials will be reused on the Scheme and do not become waste. The Scheme has produced an Outline Soil Management Plan (Appendix B.3 of First Iteration Environmental Management Plan [APP-184]) which sets out how soils are to be managed in accordance with Defra's Code of Practice (CoP) and do not become waste. Paragraph 10.10.10 of Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054] states that material and waste audits would be undertaken throughout the construction phase of the Scheme to ensure that reuse and recycling targets are met on site.

National Planning Policy for Waste (2014)		
4.39.	The National Planning Policy for Waste (NPPW) was published in October 2014.	No comments needed from the Applicant.
4.40.	Under the heading 'Determining planning applications', paragraph 8 states that when determining planning applications for non-waste development, local planning authorities should ensure that: • *"the likely impact of proposed, non-waste related development on existing waste management facilities, and on sites and areas allocated for waste management, is acceptable and does not prejudice the implementation of the waste hierarchy and/or the efficient operation of such facilities;* • *new, non-waste development makes sufficient provision for waste management and promotes good design to secure the integration of waste management facilities with the rest of the development and, in less developed areas, with the local landscape. This includes providing adequate storage facilities at residential premises, for example by ensuring that there is sufficient and discrete provision for bins, to facilitate a high quality, comprehensive and frequent household collection service; and* • *the handling of waste arising from the construction and operation of development maximises reuse/recovery opportunities, and minimises off-site disposal."*	No comments needed from the Applicant.
4.41.	The supporting text in the draft Nottinghamshire and Nottingham Waste Plan helps identify potential conflicts with safeguarded waste facilities. Non-waste development can be sensitive to the operations of waste facilities if they are within close proximity to each other. However, permitted and existing waste facilities should not have unreasonable restrictions placed upon them because of a new development being permitted after they have been established. As per NPPF, it is for the applicant of the new development as the 'agent of change' to demonstrate that their Proposed Development will not affect the operations of waste facilities and provide suitable mitigation to address any identified significant adverse impacts which the Proposed Development may have on the existing waste operation. District and Borough Councils within Nottinghamshire are encouraged to consult and collaborate with NCC on applications that are near-existent or permitted waste management facilities.	No comments needed from the Applicant.
4.42.	Where proposed non-waste development would have an unacceptable impact on a waste management facility, such as the loss of waste management capacity, prejudice of site operation or restrict future development, then permission should not be granted unless there are wider social and/or economic benefits that outweigh the need and retention of the waste facility. Applicants will also need to demonstrate that either there is suitable and equivalent capacity provided elsewhere, prior to the non-waste development beginning, or demonstrate the waste facilities capacity is no longer required.	The Applicant confirms Table 10-13 of Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054] provides information of all permitted waste management facilities within 10 kilometres of the Scheme. No waste management facility has been identified within 500 metres of the Order Limits. Table 10-10 of Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054] provides information on all permitted and historical landfill sites with 500 metres of the Scheme. There is one active landfill site within 500 metres of the Order Limits. Figure 10.1 (Material Assets and Waste Management First Study Area) of the Environmental Statement Figures [APP-092] shows that the existing A46 road is located over an edge of the permitted landfill site area and paragraph 10.8.31 of Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054], states that work undertaken in the proximity of the permitted landfill site would include landscaping works for retaining existing vegetation and proposed areas to have species rich grassland, and linear belts of shrubs and trees, compatible with existing use. The Scheme will therefore not cause the loss of waste management capacity, prejudice of site operation or restrict future development. Paragraph 10.10.3 to paragraph 10.10.12 of Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054] states mitigation measures to minimise the volume of waste produced during construction phase, the waste generation from the operational phase of the Scheme was considered to be minimal and thus

		the Scheme will not cause significant impact and reduction in temporary occupation of waste management facilities and permanent reduction in landfill void space.
Potential Conflicts		
4.43.	Whilst Nottingham County Council are generally content with the information provided throughout the application documents in relation to the impact of the Scheme on minerals, the Applicant has not produced a standalone Mineral Safeguarding Assessment for the Scheme to draw this information together in one document. **A standalone Mineral Safeguarding Assessment should be produced** and would need to demonstrate that, on balance, mineral sterilisation is acceptable due to a clear and demonstrable need for the Scheme and that prior extraction would not be practicable. It would also need to demonstrate that the Scheme would not infringe on the ability of the County to maintain an adequate supply of minerals.	Please see response drafted by the Applicant for 4.35.
4.44.	In addition, Nottinghamshire County Council recommend that Table 10-6: Aggregates sales and reserves for Nottinghamshire and Nottingham in Chapter 10: Material Assets and Waste is updated in respect of the Nottinghamshire and Nottingham Local Aggregates Assessment December 2023. Where appropriate, the assessment should also be updated following this change in baseline conditions	The Applicant's assessment contained within Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054] was completed prior to the publication of the Nottinghamshire and Nottingham Local Aggregates Assessment 2022, which became available online from December 2023. However, the Applicant has reviewed the updated information available for the permitted reserves of total aggregates (as of December 2022), provided in Nottinghamshire and Nottingham Local Aggregates Assessment 2022. The total permitted reserves for aggregates at 31 December 2022 is 31.84 million tonnes as reported in Nottinghamshire and Nottingham Local Aggregates Assessment 2022 compared to 32.62 million tonnes at December 2021 and stated in Table 10-6 of Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054]. The total aggregates likely to be used by the Scheme is approximately 930,600m3 (Table 10-16 and 10-17 of Chapter (Material Assets and Waste) of the Environmental Statement [APP-054]). This is 3.5% of the regional availability of the aggregate (based on total aggregate reserve available in December 2022), compared to 3.42% (based on total aggregate reserve available in December 2021). It has been reported in Table 10-18 of Chapter (Material Assets and Waste) of the Environmental Statement [APP-054] that 'the use of the available sand and gravel by the Scheme is anticipated to be less than approximately 3.5%'. The percentage use of sand and gravel, based on the regional availability of total aggregates, does not change significantly despite the small reported decrease in the total permitted reserves for aggregates at 31 December 2022. Moreover, the Scheme has demonstrated that at least 46% of fill materials would consist of reused or recycled materials and from borrow pits (Table 10-18 of Chapter (Material Assets and Waste) of the Environmental Statement [APP-054]). It is considered that conclusions reported in Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054] would not change when taking into account the more recent information available in the Nottinghamshire and Nottingham Local Aggregates Assessment 2022 as the increase in percentage use of aggregate available within the region, on the conclusions in the ES is negligible. The Applicant therefore does not propose to update the local policy and baseline information with that data in Table 10-1 and Table 10-6 of Chapter 10 (Material Assets and Waste) of the Environmental Statement [APP-054]**.**
5. Biodiversity		
Baseline conditions		
5.1.	The existing ecological features identified during the desk study, consultations and field surveys are summarised with full details including survey methods and field survey results being provided in appendices (with the Badger, Otter and Barn Owl appendices being	The Applicant confirms Section 8.6 (Assessment assumptions and limitations) within Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] details the consideration of age and validity of survey data with reference to CIEEM's guidance on this matter. It states that survey results will need to be reviewed prior to construction to identify areas where protected species have previously been recorded 'likely absent' from

	confidential). The age and validity of environmental surveys should be considered in accordance with guidance on the Lifespan of Ecological Reports and Surveys from the Chartered Institute of Ecology and Environmental Management (CIEEM) and, where appropriate, surveys repeated prior to construction.	suitable habitat that may be directly impacted and therefore may require re-surveying to ensure the species is still absent. Further survey results and any associated mitigation required will be provided to the relevant environmental stakeholders for consultation, as detailed in the First Iteration Environmental Management Plan [APP-184], which will be developed into the Second Iteration Environmental Management Plan to be implemented during construction of the Scheme. Adherence with the Second Iteration Environmental Management Plan is secured by Requirement 3 of the draft Development Consent Order [REP1-001].
Habitats		
5.2.	Broad habitat types are described but without an indication of the area for each habitat type nor the percentage of the baseline study area taken up by a given habitat. **Providing the area of habitat types, including the percentage areas of the different habitat types would assist in understanding their extent and proportion within the Scheme area**.	Appendix 8.14 (Biodiversity Net Gain Technical Report) of the Environmental Statement Appendices [APP-159] details the area of habitat types as associated distinctiveness and condition for each (where applicable). The table below summarises the total baseline area and percentage of habitat types within the Order Limits. The table details the baseline habitat types, area (two decimal places) and percentage (rounded to the nearest whole percentage) within the Order Limits. Appendix 8.1 (Extended Phase 1 Habitat Technical Report Part 2) of the Environmental Statement Figures [APP-146] details the extent of these habitats across the Scheme.

Habitat type within the Order Limits	Total area within the Order Limits (ha)	Percentage of habitat type in the Order Limits (%)
A1.1.1 - Broadleaved woodland - semi-natural	12.73	6
A1.1.2 - Broadleaved woodland - plantation	27.41	13
A1.2.2 - Coniferous woodland - plantation	0.07	0
A1.3.2 - Mixed woodland - plantation	0.57	0
A2.1 - Scrub - dense/continuous	2.81	1
A2.2 - Scrub - scattered	2.59	1
A3.1 - Broadleaved parkland/scattered trees	0.31	0
A3.3 - Mixed parkland/scattered trees	0.00	0
B2.1 - Neutral grassland - unimproved	0.15	0
B2.2 - Neutral grassland - semi-improved	7.67	4
B4 - Improved grassland	17.08	8
B5 - Marsh/marshy grassland	0.32	0
B6 - Poor semi-improved grassland	27.47	13
C3.1 - Other tall herb and fern - ruderal	3.48	2
F2.2 - Marginal and inundation - inundation vegetation	0.01	0
G1 - Standing water	0.46	0
G2 - Running water	1.52	1
J1.1 - Cultivated/disturbed land - arable	68.22	32
J1.2 - Cultivated/disturbed land - amenity grassland	5.94	3
J1.3 - Cultivated/disturbed land - ephemeral/short perennial	0.02	0
J1.4 - Introduced shrub	0.02	0
J3.4 - Caravan site	0.03	0
J3.6 - Buildings	0.26	0
J4 - Bare ground	2.66	1
J5 - Hardstanding	24.11	11
J5 - Other habitat	4.17	2

		Total 210.08 99* *This does not equal 100% due to rounding of the percentages provided in the table above to whole percentages.
5.3.	Apart from air quality, off-site impacts and in-combination effects have not been fully addressed, in some cases not all. The Scheme will be a significant feature in the landscape, impacting ecological features such as habitat connectivity.	The Applicant confirms Section 8.7 (Study area) within Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] details the study area for each biodiversity resource with the potential to be affected by the Scheme, known as the zone of influence (ZoI), which includes off-site impacts. For example, assessment of surface water quality takes into account hydrological connectivity with receptors outside of the Order Limits. This aligns with the approach set out in DMRB LA 113 (Road drainage and the water environment). In-combination effects on biodiversity are included within Chapter 8 (Biodiversity) of the Environmental Statement [APP-052]. As detailed in Section 8.5 (Assessment methodology) of Chapter 8 (Biodiversity) of the Environmental Statement [APP-052], the assessment characterises each ecological impact by considering whether it is direct, indirect or cumulative as part of the complexity of an impact. For example, assessment of the residual effect from combined impacts (such as habitat loss, residual light spill, noise and vibration disturbance) on bats concludes a Slight Adverse effect during construction following the implementation of mitigation measures, which is not a significant. This in-combination assessment is then scoped out of the combined assessment in Chapter 15: Combined and Cumulative Effects of the Environmental Statement [APP-059] so as not to duplicate the assessment already undertaken. Further to this, an assessment of in-combination effects of the Scheme with other projects has been completed as part of the Habitat Regulations Assessment [APP-185], which found there to be no in-combination effects on the SAC/ Ramsar. Further clarity on the HRA in-combination assessment and how the conclusions have been reached will be provided within an updated Habitat Regulations Assessment [APP-185] and will be issued to the Examining Authority at Deadline 3 of the Examination. Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] details the relevant local policy taken into account in the assessment of the Scheme in terms of biodiversity. For example, Nottinghamshire Biodiversity Action Plan (BAP) key targets were considered during development of the Scheme design, with implementation of the mitigation hierarchy. This includes avoidance of semi-natural woodland loss where possible, for example retention around Brownhills roundabout and Friendly Farmer roundabout south of the A46 flyover, which would continue to provide habitat as stepping stones for passerine bird species to navigate the urban area south of and parallel to the flyover. Implementing the next stage of the mitigation hierarchy, unavoidable loss to woodland was then minimised with consideration of how the Scheme's landscape planting would tie into the retained habitat to provide larger, better quality and more joined up green networks. The Scheme also sought opportunities to enhance existing habitat and create new areas of habitat, considering connectivity. For example, creation of a network of ditches in Farndon West FCA exceeds the compensation required for the unavoidable culverting of a total of approximately 40 metres of Old Trent Dyke LWS.
Protected species		
5.4.	The accounts for protected species are presented in alphabetical order. It would be useful to have indicated this at the outset of the section, as listing according to the taxonomic order is commonly used. White-clawed Crayfish, Hedgehog and Brown Hare were scoped out of the assessment in the case of the former because it is not known from the study area and because of the widespread distribution of the plague carrying Signal Crayfish.	The Applicant confirms the alphabetical order of protected species within Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] was deemed the most efficient format to be accessible for a greater diversity of readers (including non-technical and non-environmental specialist), to locate the information of interest.
5.5.	The account of the breeding birds is not very specific as to whether the species found were breeding or just present, with the former being expressed in different degrees of certainty (Sections 8.8.50 to 8.8.59). **Nottinghamshire County Council request that further detail is provided, outlining whether breeding birds were identified as breeding or present to understand the potential impact on breeding birds.**	Appendix 8.5 (Breeding Bird Technical Report) of the Environmental Statement Appendices [APP-150] details where breeding was confirmed for breeding bird species and identifies bird species utilising habitat suitable for nesting. For example, it details observations of adult mallards with young, active nest sites of mute swan, kestrel, lapwing, a house martin colony and an active rookery (10+ nests). The information requested regarding whether breeding birds were identified as breeding or present is therefore presented in the Environmental Statement.

5.6.	No accounts were presented in Chapter 8: Biodiversity for any native plant species of note, e.g. higher plants or mosses and liverworts. **Nottinghamshire County Council request confirmation as to whether any native plant species of note were observed during ecological surveys**.	The Applicant confirms Appendix 8.1 (Extended Phase 1 Habitat Technical Report Part 1) of the Environmental Statement Figures [APP-145] notes three England red listed plant species were noted during the National Vegetation Classification (NVC) surveys: Quaking grass *Briza media*, field scabious *Knautia arvensis* and ragged-robin *Silene flos-cuculi*. Appendix B (NVC floristic tables) within Appendix 8.2 (National Vegetation Classification Technical Report) of the Environmental Statement Figures [APP-147] details bryophytes recorded during surveys. These include common feather-moss *Kindbergia praelonga*, rough–stalked feather moss *Brachythecium rutabulum*, Swartz's Feather-moss *Oxyrrhynchium hians*. The presence of these species were considered in the assessment within Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] when assigning biodiversity resource importance, significance of effect and proportionate mitigation.
5.7.	Off-site impacts and in-combination effects are not fully addressed. Including reference to relevant chapters (for example Chapter 15: Combined and Cumulative Effects, Section 15.3.13) where biodiversity has been scoped out of the combined assessment would improve the ease of readability and strength of Chapter 8: Biodiversity.	The Applicant confirms Section 8.7 (Study area) within Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] details the study area for each biodiversity resource with the potential to be affected by the Scheme, known as the zone of influence (ZoI), which includes off-site impacts. For example, assessment of surface water quality takes into account hydrological connectivity with receptors outside of the Order Limits. This aligns with the approach set out in DMRB LA 113 (Road drainage and the water environment). In-combination effects on biodiversity are included within Chapter 8 (Biodiversity) of the Environmental Statement [APP-052]. As detailed in Section 8.5 (Assessment methodology) of Chapter 8 (Biodiversity) of the Environmental Statement [APP-052], the assessment characterises each ecological impact by considering whether it is direct, indirect or cumulative as part of the complexity of an impact. For example, assessment of the residual effect from combined impacts (such as habitat loss, residual light spill, noise and vibration disturbance) on bats concludes a Slight Adverse effect during construction following the implementation of mitigation measures, which is not a significant. This in-combination assessment is then scoped out of the combined assessment in Chapter 15: Combined and Cumulative Effects of the Environmental Statement [APP-059] so as not to duplicate the assessment already undertaken. Further to this, an assessment of in-combination effects of the Scheme with other projects has been completed as part of the Habitat Regulations Assessment [APP-185], which found there to be no in-combination effects on the SAC/ Ramsar. Further clarity on the HRA in-combination assessment and how the conclusions have been reached will be provided within an updated Habitat Regulations Assessment [APP-185] and will be issued to the Examining Authority at Deadline 3 of the Examination.
Invasive non-native species		
5.8.	Table 1 provides a summary of invasive non-native species that were shown to be found within the study area. However, there is no clear account of how invasive non-native plant and animal species were surveyed. Nottinghamshire County Council request that further clarification is provided in this regard. **Table 1: Summary of invasive non-native species found in the study area**	Non-native plant and animal species were identified as anecdotal evidence during site-based surveys for multiple disciplines, including botanical focused surveys (Appendix 8.1 (Extended Phase 1 Habitat Technical Report Part 1) of the Environmental Statement Figures [APP-145] and Appendix 8.2 (National Vegetation Classification Technical Report) of the Environmental Statement Appendices [APP-147]). Appendices 8.1 to 8.15 of the Environmental Statement Appendices [APP-145 to APP-160] detail survey methodologies relevant to each biodiversity receptor and observations of non-native plant and animal species.

Species	Distribution	Implication for biodiversity resources of the Scheme	Scheduled in legislation ("must not cause to spread into wild")
Flora			
Indian Balsam (also known as Himalayan Balsam)	Associated with the riparian habitat of the River Trent	No risk of species being spread	Yes
Orange Balsam	Old Trent Dyke	Can be dominant	
Least Duckweed	Old Trent Dyke	Can be dominant	

Fauna			
American Mink	Associated with the riparian habitat of the River Trent	Direct impact (not indirect as indicated) on Water Vole (and other small mammals)	
Signal Crayfish	Main channel of the River Trent	No risk of species being spread	Yes
Chinese Mitten Crab	Main channel of the River Trent	No risk of species being spread	Yes
Northern River (or Florida) Crangonyctid	In two ponds	No risk of species being spread	
Bloody-red Mysid	Main channel of the River Trent	No risk of species being spread	
Demon Shrimp	Main channel of the River Trent	No risk of species being spread	
Asian Clam	Main channel of the River Trent	No risk of species being spread	Yes
Zebra Mussel	Main channel of the River Trent	No risk of species being spread	Yes
Seven other species	Main channel of the River Trent	No risk of species being spread	Depends on which species

5.9.	Table 1 also indicates those species which are scheduled in legislation (Wildlife and Countryside Act 1981 (as amended) and the Invasive Alien Species (Enforcement and Permitting Order 2019) which prohibits the spread of these species into the wild as well as other restrictions. Although these plants and animals may be outside the Order Limits, **the Invasive Non-Native Species (INNS) Management Plan and Biosecurity Risk Assessment, as committed to in the First Iteration Environmental Management Plan (FIEMP), should include provision for measures to not only ensure that the construction of the Scheme does not cause any of these species to be spread but that these and other invasive non-native species are not spread into the Scheme**, e.g., on excavators caked in soil from a previous site contaminated with Japanese Knotweed.	The Applicant confirms Commitment B10 of the Register of Environmental Actions and Commitments within the First Iteration Environmental Management Plan [APP-184] has been updated to clarify that control measures for preventing the spread of INNS includes from invasive species working areas within the Order Limits and the spread of INNS into the Order Limits, within the control of the Applicant, as a result of Scheme construction activities (e.g. transportation in building materials and vehicle tyre tread). Impact pathways with potential to spread INNS to within the Order Limits, such as building materials and vehicles, will be treated at source and be the responsibility of the supplier. Where there is reasonable doubt that INNS could be introduced to this Scheme, the contaminated material or vehicle will not be allowed within the Order Limits.
Wider Chapter Review		
Consultation		
5.10.	A programme of consultation has been ongoing since March 2022. It is noted that Natural England (4 May 2023) confirmed that they were content with the survey methods not being used in isolation. Additionally, the Environment Agency's comment on the need to ensure no detrimental impact on the River Trent and hence the Humber Special Area of Conservation was taken into consideration (see below sections on Sites designated for their biodiversity value and Habitat Regulations Assessment).	No comment required from the Applicant.

5.11.	There is no reference to a draft Statement of Common Ground with any of the key stakeholders. It is assumed these will be produced during the Examination period.	The Applicant confirms draft Statements of Common Ground [REP1-020 to REP1-031] were submitted to the examination at Deadline 1 of the Examination. These will be regularly updated throughout the examination period.
Assessment methods and study areas		
5.12.	A full description of the assessment methods used is provided demonstrating that these are comprehensive, conforming to the most up to date guidance. A thorough account is provided of the study areas.	No comment required from the Applicant.
5.13.	There are a number of occasions when surveys could not be undertaken for various reasons or parts of areas planned to be surveyed were inaccessible. **A table summarising these deviations from the planned programme would be valuable, identifying when a follow- up survey was undertaken to demonstrate that coverage of the study areas was complete**. **This would assist Nottinghamshire County Council in discharging its responsibilities with respect to protected species**.	The Applicant confirms 5.85% of land within the Order Limits had no access granted so ecological surveys were not completed and 2.27% of land within the Order Limits had intermittent access facilitating partial completion of ecological survey. The extent of these areas are detailed in Figure 8.5 (Land Access Constraints) of the Environmental Statement Figures [APP-085]. Using professional judgement, precautionary assumptions have been made based upon a reasonable worst-case scenario (e.g. assumed presence of a protected species in specific areas as detailed in Chapter 8 (Biodiversity) of the Environmental Statement [APP-052]) and forms a baseline that assigns greater ecological importance than what may be present. Pre-construction surveys / searches (commitment B1, B2, B5, B6, B7, B8 B9, B14) set out in the Register of Environmental Actions and Commitments within the First Iteration Environmental Management Plan [APP-184] will not change the outcome of the assessment or the proposed mitigation in Chapter 8 (Biodiversity) of the Environmental Statement [APP-052]. Stakeholders agreed during an online presentation (on 02 June 2023) that an acceptable level of survey effort has been undertaken where access issues cannot be resolved. Details of this can be found in the Statement of Common Ground with Natural England [REP1-026] submitted at Deadline 1 of the Examination. As a realistic worst-case assessment has been applied, the Applicant considers this not to be a material limitation to the assessment reported in Chapter 8 (Biodiversity) of the Environmental Statement [APP-052].
Mitigation		
5.14.	The mitigation hierarchy, as dealt with in the DMRB, includes avoidance as part of the Design stage. However, evidence of avoidance is noticeable in its absence in Chapter 8: Biodiversity. This is particularly important given the loss of habitat (including Priority Habitats) to the Scheme. In order to comply with planning policy, such evidence is needed to demonstrate that avoidance was given due consideration and where successes were achieved.	The Applicant confirms the Scheme has been designed by implementing the mitigation hierarchy to minimise habitat loss, with a focus on avoiding high value and/or irreplaceable habitat present (where possible) as detailed in Chapter 2 (The Scheme) of the Environmental Statement [APP-046]. Chapter 3 (Assessment of Alternatives) of the Environmental Statement [APP-047] details the environmental benefits resulting from design development. As detailed in Chapter 8 (Biodiversity) of the Environmental Statement [APP-052], design iterations led to a greater gradient steepness of the widened carriageway embankment to reduce the neighbouring access track corridor from 5.0 metres to 3.0 metres in order to avoid removal of the trees. Whilst Scheme design iterations have resulted in the retention of all veteran trees, there will be an unavoidable permanent adverse impact to three veteran trees due to the direct partial impact to their root protection areas (RPAs) and the proximity of one of these veteran trees to the Order Limits, which will require a minor crown lift (<0.5 metres). In relation to tree T038, the Scheme elements that infringe on the edge of the Root Protection Area (RPA) of this tree in the current design proposals will be reviewed at the detailed design stage. It is anticipated that the initial gradient of the proposed earth bund to the west of the tree as presented in the Complete Tree Protection Plans - Part 2 [AS-020] can potentially be revised during detailed design, locally steepening the slope profile to 1:2 to reduce the footprint of the bund. The alignment of the access road and swale to the west/southwest of the tree will be further reviewed with the objective of removing the minor incursion into the RPA if possible. Similarly, it is anticipated that the footprint of the headwall to the north of the tree can be adapted during detailed design to remove the minor incursion into the section of the RPA currently identified. In regard to trees T136 and T139, the design has been developed to limit incursions as far as practicable, steepening proposed earthworks to limit the footprint of the Scheme with the provision of 70-degree slopes to the widened embankment to reduce the neighboring access track corridor from 5.0 metres to 3.0 metres in order to avoid removal of the trees. Unfortunately, there is currently no scope to reduce this further.

		Whilst the objective is to retain all veteran trees on site the Arboricultural Impact Assessment [APP-140] transparently notes the RPA infringements and Section 8.11.12 Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] notes, "there will be an unavoidable permanent adverse impact to three veteran trees due to the direct partial impact to their RPAs. It is very unlikely that this would result in a slow decline in tree health or accelerate the death of the tree and therefore the integrity of this resource will not be affected. It is anticipated that, with arboricultural supervision to ensure works are undertaken in line with best practice, the level of disturbance stated above can be tolerated by these trees. It is difficult to predict this with certainty and therefore ongoing monitoring is proposed to inform any remedial action. Following the implementation of this mitigation, a minor adverse impact on an irreplaceable resource of national importance is anticipated, resulting in a Slight Adverse effect during construction that is not significant.". Any impacts to veteran trees will be carefully managed, and it is anticipated that, with arboricultural supervision to ensure works are undertaken in line with best practice (as detailed in the First Iteration Environmental Management Plan [APP-184]), the level of disturbance to the veteran tree can be tolerated by these trees. It is very unlikely that this would result in a slow decline in tree health or accelerate the death of the tree and therefore the integrity of this resource will not be affected. Another example is the design evolution to attempt to avoid loss of lowland meadow Habitat of Principal Importance (HPI), however widening of the eastern side of Great Road North was not feasible. Whilst loss of this HPI could not be fully avoided as the design had to accommodate the tie in of the A617 and A616 arms into the enlarged Cattle Market roundabout, the total permanent loss was minimised to 110 square metres (~0.4% of the total contiguous area of the HPI). Following the mitigation hierarchy, approximately 920 square metres of lowland meadow HPI will be temporarily lost (during construction) in order to facilitate proposed strengthening works at Smeaton Arches north of Cattle Market roundabout. This accounts for 3% of the total contiguous area of lowland meadow HPI. Where habitat loss has been unavoidable, replacement habitats are proposed to be created as detailed in Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026)]. Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] details the impact assessment, the effects on designation sites, habitats, protected and notable species during construction and operation of the Scheme and proportionate mitigation and compensation for unavoidable losses of biodiversity. Following the mitigation hierarchy, the quantity (area) of each habitat type required to compensate for the unavoidable permanent loss of habitats of ecological value have been informed by the Natural England Biodiversity Metric 3.1, as reported in Appendix 8.14 (Biodiversity Net Gain Technical Report) of the Environmental Statement Appendices [APP-159]. As detailed in the Statement of Common Ground with Natural England [REP1-026], this approach and a compensation planting design was agreed with Natural England and would achieve a greater than 1:1 compensation of habitat of the equivalent condition for Habitats of Principal Importance (HPI) or of greater ecological value for Non-Habitats of Principal Importance where possible.
5.15.	Mitigation and compensation have been carefully considered and are dealt with in detail. Table 8-9 in Chapter 8: Biodiversity provides a valuable summary although **it is not clear what is meant by "Not applicable" for some of the operational impacts**, e.g. invertebrates, reptiles and Water Vole. Whilst the impact may be neutral, it is only applicable as a result of barriers being successfully implemented. **Nottinghamshire County Council request further clarification on this**.	The Applicant confirms Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] considers that there are no impact pathways on receptors where "Not applicable" has been assigned in Table 8-9 within Chapter 8 (Biodiversity) of the Environmental Statement [APP-052]. This differs from "Neutral", which acknowledges an impact pathway/s on receptors, with the lowest Level of Impact shown in Table 8-2 within Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] as "No Change", where there is no observable impact, either positive or negative, though an impact pathway exists.
Design, mitigation, compensation and enhancement measures		
5.16.	Summary tables would provide a valuable focus on mitigation and compensation measures including actions needed and where details were yet to be provided, e.g. the number, location and design of fish escape passages to be finalised with the Environment Agency.	The Applicant confirms Table 8-9 within Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] summarises mitigation and compensation measures that are set out in the Register of Environmental Actions and Commitments within the First Iteration Environmental Management Plan [APP-184], to reduce construction

		and post-construction impacts. The First Iteration Environmental Management Plan [APP-184] will be developed into the Second Iteration Environmental Management Plan for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001]. The Applicant has brought forward the refinement of the fish escape passage design and produced a Technical Note, outlining fish escape passage options considered, and justification for the selected option. This will be appended to an updated Habitat Regulations Assessment [APP-185] and issued to the Examining Authority at Deadline 3 of the Examination
Summary of Legislative and Policy Framework Review		
Legislation Animal welfare act 2006		
5.17.	The legislation listed and described in Chapter 8: Biodiversity is generally adequate, however, an additional and relevant piece of national legislation to include within the "National legislation" section of Chapter 8: Biodiversity is the Animal Welfare Act 2006 which protects vertebrate animals from harm. **The provisions of this Act should be taken into account within the assessment by ensuring the welfare of any mammals potentially affected by the Scheme are considered**, for example Fox, Hedgehog and Badger falling into excavations and being unable to get out or, in the case of excavations with accumulated water, drowning. Avoidance mitigation measures should be included within the Second Iteration EMP.	The Applicant confirms the Animal Welfare Act 2006 applies to 'protected' animals (i.e. domesticated), animals not living in a wild state and wild animals that are held captive and does not include protected species. Therefore, domestic animals (such as cats, dogs, livestock) are not 'protected species' by law, and as such are not assessed in Chapter 8 (Biodiversity) of the Environmental Statement [APP-052]. The assessment in Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] was undertaken in line with DMRB LD 118 Biodiversity Design, best practice guidance (Natural England and DEFRA (2014) *Protected species and development: advice for local planning authorities*) and professional judgement. The assessment has considered the requirements of the Wild Mammals (Protection) Act 1996 and includes mitigation measures to ensure any risk of unnecessary suffering of wild mammals is avoided, where reasonably practicable. Commitment B9 set out in the Register of Environmental Actions and Commitments within the First Iteration Environmental Management Plan [APP-184], states use of best practice measures will be set out in the Landscape and Ecology Management Plan (LEMP) (to be produced as part of the Second Iteration Environmental Management Plan). This includes best practice such as covering excavation or where not possible, provision of a safe means of escape, ensuring the welfare of any mammals potentially affected by the Scheme are considered, for example fox, hedgehog and badger. Embedded mitigation measures for impact pathways such as noise, vibration, lighting and dust, have been incorporated into the Scheme design as set out in Chapter 2 (The Scheme) of the Environmental Statement [APP-046]. Embedded mitigation, such as limited working hours and reducing the impact at source, are likely to reduce the impacts to receptors to a non-significant effect with regard to animals protected under the Animal Welfare Act 2006. The impacts upon wildlife that are not a protected species by law, such as rabbits and deer, have not been assessed as part of Chapter 8 (Biodiversity) of the Environmental Statement [APP-052]. However, as outlined in Chapter 2 (The Scheme) of the Environmental Statement [APP-046], directional planting has been designed to mitigate mammal vehicle collisions. Whilst the mammals assessed in the Environmental Statement are those which constitute protected species, all wild mammals will benefit from directional planting. The indicative location of directional planting is detailed in Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026] and has been informed by available roadkill data.
National Planning Policy		
National Policy Statement for National Network (2024)		
5.18.	Chapter 8: Biodiversity includes a comprehensive review of the legislation and policies pertinent to the Scheme.	No comment required from the Applicant.
5.19.	The National Policy Statement for National Network (NPSNN) (2024) states at paragraphs 5.46 and 5.47 that applicants should consider the direct and indirect impacts on habitats and protected species, showing how a scheme has taken advantage of opportunities to conserve and enhance biodiversity, including scheme specific mitigation. The NPSNN states a scheme should identify where and how mitigation measures will be secured in the	No comment required from the Applicant.

	long term. A First Iteration Environmental Management Plan (EMP) has been produced detailing construction mitigation measures. Chapter 8: Biodiversity states the First Iteration EMP will be developed into a Second Iteration EMP for the construction of the Scheme. As part of the Second Iteration EMP, a Landscape and Ecology Management Plan (LEMP), Invasive Non-Native Species Management Plan and Biodiversity Net Gain Management Plan will be produced. The outlined plans are considered applicable and proportionate to the Scheme	
5.20.	At paragraph 5.47, the NPSNN recommends applicants look for opportunities "*to enhance, expand or connect existing habitats and create new habitats in accordance with biodiversity net gain requirements*". Appendix 8.14: Biodiversity Net Gain (BNG) Technical report assessed the following predicted percentage change: • 4.99% net gain in habitat units; • 8.17% net gain in hedgerow units; and • 36.93% net gain in river units.	No comment required from the Applicant.
5.21.	The NPSNN, at paragraph 5.50, requires compensation measures if avoidance or bespoke mitigation measures are insufficient or not possible. The Scheme involves the loss of lowland meadow beyond what is acceptable under Biodiversity Metric 4.1 because it is a habitat of very high distinctiveness. A bespoke compensation agreement with Natural England is required. Following the completion of a bespoke compensation agreement, the Scheme's mitigation would be in accordance with the NPSNN.	The Applicant confirms Natural England's position, detailed in the Statement of Common Ground with Natural England [REP1-026], acknowledged that Biodiversity Metric 3.1 has been used and raised no concern, welcoming that the version of the metric used throughout the Scheme is consistent. Proposals set out in the outline compensation agreement include lowland meadow compensation totaling 0.7505ha, as detailed in Appendix 8.14 (Biodiversity Net Gain Technical Report) of the Environment Statement [APP-159] and in Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026]. Natural England considers in principle that the bespoke compensation proposed is appropriate, subject to appropriate ongoing management.
5.22.	No concerns have been identified in relation to the requirements of the NPSNN and the provided assessment set out within Chapter 8: Biodiversity and its associated appendices.	No comment required from the Applicant.
Local Planning Policy		
Nottinghamshire and Nottingham Local Nature Recovery Strategy (LNRS)		
5.23.	The 'Local Policy' section of Chapter 8: Biodiversity whilst acknowledging the "Nottingham County Council Green Estates Development Strategy and Plan 2013-2023", does not refer to the Nottinghamshire and Nottingham Local Nature Recovery Strategy (LNRS) as established by the Environment Act 2021 to: • help reverse the ongoing decline of nature in England by establishing priorities for nature recovery and identify locations to create or improve habitat most likely to provide the greatest benefit for nature and the wider environment, and in doing so contribute to the national Nature Recovery Network; • inform the delivery of mandatory Biodiversity Net Gain (BNG) and help to guide local planning policy for nature recovery; inform the delivery of mandatory Biodiversity Net Gain(BNG) and guide public and private investment, including through the new Environmental Land Schemes (ELMS) and woodland planting funding; and • help to guide local planning policy for nature recovery.	With regards to Nottinghamshire and Nottingham Local Nature Recovery Strategy (LNRS), the Nottinghamshire County Council (NCC) website states *"A draft strategy is due to be ready for public engagement in early Spring 2025. The Local Nature Recovery Strategy for Nottinghamshire will be published in Summer 2025."*. In October 2024, the Applicant reviewed the "most valuable existing areas for nature" shown on the NCC Local Habitat Map on the NCC website. These comprised of local nature reserves (LNRs) and local wildlife sites (LWSs), which were also assessed within Chapter 8 (Biodiversity) of the Environmental Statement [APP-052]. The development of the Scheme design is aligned with the principle of the Environment Act 2021, in the absence of publication of the Nottinghamshire and Nottingham LNRS. The mitigation hierarchy was applied throughout design iterations to first avoid and then reduce the area of habitat loss and the Applicant has worked to maximise biodiversity improvements across the Scheme, including consideration of habitat connectivity to the wider landscape (beyond the Order Limits) so that green corridors have potential to contribute to the national Nature Recovery Network. The Applicant has worked in collaboration with stakeholders to develop the habitat provision detailed in Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026]. While there is no mandatory requirement for Biodiversity Net Gain (BNG) for Nationally Significant Infrastructure Projects (NSIPs) such as this Scheme, the Scheme design will increase the biodiversity units for hedgerow units, river units and habitat units within the parameters of the Scheme. The Applicant considers that the Environmental Land Management Schemes (ELMS) and woodland planting funding are not appropriate for the provision of essential mitigation for the Scheme. As detailed in Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026], some land will be reinstated

		post-construction to previous land use (e.g. arable land within Brownhills borrow pit area) as it is not required for the delivery of essential mitigation. The farmers or landowners of areas 'reinstated to previous land use' can seek opportunities to participate in ELMS or seek woodland planting funding.
5.24.	A draft strategy is due to be ready for public engagement in spring 2025 with the final strategy being published later in 2025. **Provision should be made within the ES to ensure that the Scheme is integrated as far as is reasonable within the Nottinghamshire and Nottingham LNRS**.	With regards to Nottinghamshire and Nottingham Local Nature Recovery Strategy (LNRS), the Nottinghamshire County Council (NCC) website states "A draft strategy is due to be ready for public engagement in early Spring 2025. The Local Nature Recovery Strategy for Nottinghamshire will be published in Summer 2025.". In October 2024, the Applicant reviewed the "most valuable existing areas for nature" shown on the NCC Local Habitat Map on the NCC website. These comprised of local nature reserves (LNRs) and local wildlife sites (LWSs), which were also assessed within Chapter 8 (Biodiversity) of the Environmental Statement [APP-052]. The development of the Scheme design is aligned with the principals of the Environment Act 2021, in the absence of publication of the Nottinghamshire and Nottingham LNRS.
Other local planning policy		
5.25.	Newark and Sherwood District Council produced a Green Infrastructure Strategy 2010, responding to the need to plan for predicted growth, enhance quality of life and ensure environmental sustainability in the District for generations to come.	No comments needed from the Applicant.
5.26.	Newark and Sherwood District Council also produced an Amended Core Strategy/Development Plan in 2019, including a section on biodiversity and green infrastructure.	No comments needed from the Applicant.
Conflicts		
5.27.	In summary, whilst the majority of the survey and assessment is considered to be proportionate and adequately derived, some matters require further clarification: • The provisions of the Animal Welfare Act 2006 should be taken into account within the assessment by ensuring the welfare of any animals potentially affected by the Scheme are considered. • Provision should be made within the ES to ensure that the Scheme is integrated as far as is reasonable within the Nottinghamshire and Nottingham LNRS. • A summary should be provided, detailing deviations from the planned survey programme and identifying when follow-up surveys were undertaken. • The area and percentage area of habitat types should be provided to enable an understanding of their extent and proportion within the Scheme area. • It is recommended that it is differentiated whether identified breeding birds were breeding or only present. • Clarification should be provided on how non-native plant and animal species were surveyed, as no clear account of this could be found. • The INNS Management Plan and Biosecurity Risk Assessment should include measures to ensure construction vehicles do not spread non-native species within the Scheme footprint. • Clarification should be provided on what "Not Applicable" means for some operational impacts as set out in Table 8-9, of Chapter 8: Biodiversity.	The Applicant confirms the Animal Welfare Act 2006 applies to 'protected' animals (i.e. domesticated), animals not living in a wild state and wild animals that are held captive and does not include protected species. Therefore, domestic animals (such as cats, dogs, livestock) are not 'protected species' by law, and as such are not assessed in Chapter 8 (Biodiversity) of the Environmental Statement [APP-052]. The assessment in Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] was undertaken in line with DMRB LD 118 Biodiversity Design, best practice guidance (Natural England and DEFRA (2014) *Protected species and development: advice for local planning authorities*) and professional judgement. The assessment has considered the requirements of the Wild Mammals (Protection) Act 1996 and includes mitigation measures to ensure any risk of unnecessary suffering of wild mammals is avoided, where reasonably practicable. Commitment B9 set out in the Register of Environmental Actions and Commitments within the First Iteration Environmental Management Plan [APP-184], states use of best practice measures will be set out in the Landscape and Ecology Management Plan (LEMP) (to be produced as part of the Second Iteration Environmental Management Plan). This includes best practice such as covering excavation or where not possible, provision of a safe means of escape, ensuring the welfare of any mammals potentially affected by the Scheme are considered, for example fox, hedgehog and badger. Embedded mitigation measures for impact pathways such as noise, vibration, lighting and dust, have been incorporated into the Scheme design as set out in Chapter 2 (The Scheme) of the Environmental Statement [APP-046]. Embedded mitigation, such as limited working hours and reducing the impact at source, are likely to reduce the impacts to receptors to a non-significant effect with regard to animals protected under the Animal Welfare Act 2006. The impacts upon wildlife that are not a protected species by law, such as rabbits and deer, have not been assessed as part of Chapter 8 (Biodiversity) of the Environmental Statement [APP-052]. However, as outlined in Chapter 2 (The Scheme) of the Environmental Statement [APP-046], directional planting has been designed to mitigate mammal vehicle collisions. Whilst the mammals assessed in the Environmental Statement are those which constitute protected species, all wild mammals will benefit from directional planting. The indicative location of directional planting is detailed in Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026] and has been informed by available roadkill data. With regards to Nottinghamshire and Nottingham Local Nature Recovery Strategy (LNRS), the Nottinghamshire

County Council (NCC) website states *"A draft strategy is due to be ready for public engagement in early Spring 2025. The Local Nature Recovery Strategy for Nottinghamshire will be published in Summer 2025."*. In October 2024, the Applicant reviewed the "most valuable existing areas for nature" shown on the NCC Local Habitat Map on the NCC website. These comprised of local nature reserves (LNRs) and local wildlife sites (LWSs), which were also assessed within Chapter 8 (Biodiversity) of the Environmental Statement [APP-052]. The development of the Scheme design is aligned with the principles of the Environment Act 2021, in the absence of publication of the Nottinghamshire and Nottingham LNRS.

The mitigation hierarchy was applied throughout design iterations to first avoid and then reduce the area of habitat loss and the Applicant has worked to maximise biodiversity improvements across the Scheme, including consideration of habitat connectivity to the wider landscape (beyond the Order Limits) so that green corridors have potential to contribute to the national Nature Recovery Network. The Applicant has worked in collaboration with stakeholders to develop the habitat provision detailed in Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026]. While there is no mandatory requirement for Biodiversity Net Gain (BNG) for Nationally Significant Infrastructure Projects (NSIPs) such as this Scheme, the Scheme design will increase the biodiversity units for hedgerow units, river units and habitat units within the parameters of the Scheme.

The Ecological Surveys Justification Report issued to Natural England in December 2022 detailed deviations away from standard practice and justification for these. All the relevant detail from the Ecological Surveys Justification Report has been included in the relevant biodiversity technical appendices Appendix 8.1 to 8.15 of the Environmental Statement [APP-145 to APP-160]. The First Iteration Environmental Management Plan [APP-184] states follow-up surveys that are required pre-construction.

Appendix 8.14 (Biodiversity Net Gain Technical Report) of the Environmental Statement Appendices [APP-159] details the area of habitat types as associated distinctiveness and condition for each (where applicable). The table below summarises the total baseline area and percentage of habitat types within the Order Limits. The table details the baseline habitat types, area (two decimal places) and percentage (rounded to the nearest whole percentage) within the Order Limits. Appendix 8.1 (Extended Phase 1 Habitat Technical Report Part 2) of the Environmental Statement Figures [APP-146] details the extent of these habitats across the Scheme.

Habitat type within the Order Limits	Total area within the Order Limits (ha)	Percentage of habitat type in the Order Limits (%)
A1.1.1 - Broadleaved woodland - semi-natural	12.73	6
A1.1.2 - Broadleaved woodland - plantation	27.41	13
A1.2.2 - Coniferous woodland - plantation	0.07	0
A1.3.2 - Mixed woodland - plantation	0.57	0
A2.1 - Scrub - dense/continuous	2.81	1
A2.2 - Scrub - scattered	2.59	1
A3.1 - Broadleaved parkland/scattered trees	0.31	0
A3.3 - Mixed parkland/scattered trees	0.00	0
B2.1 - Neutral grassland - unimproved	0.15	0
B2.2 - Neutral grassland - semi-improved	7.67	4
B4 - Improved grassland	17.08	8
B5 - Marsh/marshy grassland	0.32	0
B6 - Poor semi-improved grassland	27.47	13
C3.1 - Other tall herb and fern - ruderal	3.48	2

F2.2 - Marginal and inundation - inundation vegetation	0.01	0
G1 - Standing water	0.46	0
G2 - Running water	1.52	1
J1.1 - Cultivated/disturbed land - arable	68.22	32
J1.2 - Cultivated/disturbed land - amenity grassland	5.94	3
J1.3 - Cultivated/disturbed land - ephemeral/short perennial	0.02	0
J1.4 - Introduced shrub	0.02	0
J3.4 - Caravan site	0.03	0
J3.6 - Buildings	0.26	0
J4 - Bare ground	2.66	1
J5 - Hardstanding	24.11	11
J5 - Other habitat	4.17	2
Total	210.08	99*

*This does not equal 100% due to rounding of the percentages provided in the table above to whole percentages.

Appendix 8.5 (Breeding Bird Technical Report) of the Environmental Statement Appendices [APP-150] details where breeding was confirmed for breeding bird species and identifies bird species utilising habitat suitable for nesting. For example, it details observations of adult mallards with young, active nest sites of mute swan, kestrel, lapwing, a house martin colony and an active rookery (10+ nests).

Non-native plant and animal species were identified as anecdotal evidence during site-based surveys for multiple disciplines, including botanical focused surveys (Appendix 8.1 (Extended Phase 1 Habitat Technical Report Part 1) of the Environmental Statement Figures [APP-145] and Appendix 8.2 (National Vegetation Classification Technical Report) of the Environmental Statement Appendices [APP-147]). Appendices 8.1 to 8.15 of the Environmental Statement Appendices [APP-145 to APP-160] detail survey methodologies relevant to each biodiversity receptor and observations of non-native plant and animal species. The Register of Environmental Actions and Commitments contained within the First Iteration Environmental Management Plan [APP-184] includes measures to ensure construction vehicles do not spread non-native species within the Scheme footprint (see commitment B10).

The Applicant confirms Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] considers that there are no impact pathways on receptors where "Not applicable" has been assigned in Table 8-9 within Chapter 8 (Biodiversity) of the Environmental Statement [APP-052]. This differs from "Neutral" as this acknowledges an impact pathway/s on receptors, with the lowest Level of Impact shown in Table 8-2 within Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] as "No Change", where there is no observable impact, either positive or negative, though an impact pathway exists.

Biodiversity Net Gain

5.28.	It is noted that Natural England's Biodiversity Metric 3.1 was used to calculate net gains for the Scheme. Biodiversity Metric 4.0 was published on 19 April 2023 whereas Appendix 8.14 was published and submitted to the Planning Inspectorate on the 26 April 2024. Whilst Nottinghamshire County Council accepts Natural England's advice on the use of older metrics (i.e., users of previous versions of the Biodiversity Metric should continue to use that metric (unless requested to do otherwise by their client or consenting body) for the duration of the project it is being used for), just over one year had passed between the publishing of Biodiversity Metric 4.0 and the submission of the DCO application. Nottinghamshire County Council is of the opinion that there was available time to update	The Applicant confirms switching to Biodiversity Metric 4.0 during the assessment period would have led to significant extra work, disrupted the design process and was not required by Natural England. Changes to the Biodiversity Metric between 3.1 and 4.0 included the addition of new habitats and changes to how habitat condition was assessed. If the Scheme were to have changed to Biodiversity Metric 4.0 during the assessment this may have led to habitat surveys needing to be repeated. The Biodiversity Metric was updated regularly during the Scheme design and the outputs were used to inform aspects of the design such as the landscape proposals. Changing to Biodiversity Metric 4.0 during or following completion of the design work may have led to different habitat requirements resulting in reworking of the design. Both published guidance and Scheme specific consultation with Natural England confirmed that there was no requirement to change to an updated metric during the assessment. See paragraph 1.1.5 of Appendix 8.14 (Biodiversity Net Gain Technical Report)

	the calculations using a more recent version of the Biodiversity Metric (specifically 4.0), to provide Biodiversity Net Gain calculations that are more in-line with the most recent methodologies. Nottinghamshire County Council accepts that updating to the Statutory Biodiversity Metric, published 29 November 2023, could have required more effort, potentially including additional survey work, which could have unnecessarily delayed the applications submission. **Can the Applicant provide justification for retaining the use of Metric 3.1, given the time that has elapsed between publication of Metric 4.0 and Appendix 8.14**.	of the Environmental Statement Appendices [APP-159] for further details. There is no requirement in law or policy to deliver Biodiversity Net Gain at this date for Nationally Significant Infrastructure Projects,
5.29.	Appendix 8.14 states that compensatory measures are proposed off-site at Doddington Hall. These proposals and information provided to demonstrate that the proposed habitat is a Plantation Woodland and that it is feasible to transition this to Lowland Mixed Deciduous Woodland appear to be appropriate. Off-site compensation is subject to legal agreement with the relevant landowner, and the created habitat must be maintained for 30 years.	No comments needed from the Applicant.
6. Arboriculture		
Baseline		
6.1.	The Applicant describes the arboricultural baseline conditions in Section 2 of Appendix 7.4 Arboricultural Impact Assessment (AIA) (Ref: TR010065/APP/6.3). The information presented in the AIA regarding baseline tree survey and desk study data has been derived from site walkovers in 2021 and 2023, a desk study of publicly available information and information held by Newark and Sherwood District Council (NSDC), National Highways and The Department for Environment, Food and Rural Affairs (Defra).	No comments needed from the Applicant.
Introduction, methodology and limitations		
6.2.	The AIA assessment has been undertaken in general accordance with British Standard (BS) 5837:2012 'Trees In Relation to Design, Demolition And Construction – Recommendations'. The baseline tree survey includes a reasonable level of detail on individual trees, groups, woodlands and hedgerows.	No comments needed from the Applicant.
6.3.	Section 1.3.3 and 1.3.9 to 1.3.10 of the AIA states that trees were plotted indicatively due to a lack of topographical information at the time of the survey and that accuracy is not guaranteed to less than 5m accuracy. It is also noted that tree positions were later checked against topographical information to confirm that no significant accuracy issue was identified. It is not clear if this means that trees have been plotted to topographical positions, and if only some trees, it is not clear which trees have been plotted to topographical positions. This is critical for some aspects of the AIA where sub 5m accuracy could make a significant difference to the level of impact on given trees e.g., veteran trees such as T038, T136 and T139.	The Applicant confirms whilst original plotting of trees was undertaken using GPS, Section 1.3.9 and 1.3.10 of Appendix 7.4 (Arboricultural Impact Assessment Part 1) of the Environmental Statement Appendices [APP-140] confirms that tree positions were aligned using National Tree Mapping Data provided by Bluesky and later was further confirmed using topographical survey data which is contained in the Tree Protection Plans within Appendix 7.4 (Arboricultural Impact Assessment) Part 4 [AS-088] and Part 5 [AS-089] of the Environmental Statement Appendices.
6.4.	Section 2.2 of the AIA notes that the site contains multiple trees subject to Tree Preservation Order and/or trees located within Conservation Areas both of which provide statutory protection. It also includes a section on ancient woodland in Section 2.3. The AIA does not mention other relevant tree related statutory and non-statutory designations such as: the Forestry Act (1967) which requires a felling licence to fell more than $5m^3$ of timber (subject to relevant exceptions, including full planning consent);; or the Hedgerow Regulations (1997) which controls the removal of certain hedgerows (however this is	The Applicant confirms an exemption for felling licenses is detailed by the Forestry Commission in the guidance "Tree Felling – Getting Permission - updated 2023" which states "An exception applies where the felling of trees is immediately required for the purpose of carrying out development that is authorised by the approval of full planning permission, or is allowed as permitted development (i.e. any permission that is granted, or deemed to be granted, under the Town and Country Planning Act 1990, including any planning conditions or s.106 agreements attached to a full planning consent). The approved planning permission will detail the extent of the approved development and may also define the trees that are allowed to be felled or those that must be retained".

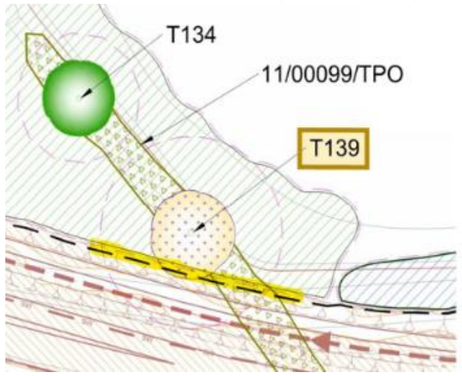
	mentioned in Chapter 8: Biodiversity of the Environmental Statement (ES)).	Similarly, the Hedgerow Regulations 1997 have exemptions in Section 4 pertaining to developments granted under the Town and Country Planning Act 1990 and in Section 4.12 where "work for the Secretary of State in respect Highways work – such as building new trunk roads where an environmental assessment is a standard procedure". Both exemptions would apply to a Development Consent Order. The Forestry Commission, who review and grant felling licenses, have also been consulted throughout the project and have commented as Relevant Representatives on this project [RR-023] as have the Local Authorities for Newark and Sherwood District Council (and Nottingham City Council).
6.5.	Priority habitats/habitats of principal importance are mentioned in Section 2.5 of the AIA with reference to Defra's MAGIC map. These include Deciduous Woodland and Wood Pasture and Parkland. The AIA states that these habitats should be retained and preserved where possible in accordance with the NPSNN (2014) and the NPPF. The AIA does not consider the level of impact to these features although they are impacted (e.g., W133 or G114 which are recorded as Lowland Mixed Deciduous Woodland, and T655 which appears to be located within an area of Wood Pasture and Parkland).	The Applicant confirms Section 2.5.2 and Table 2-1 of Appendix 7.4 (Arboricultural Impact Assessment Part 1) of the Environmental Statement Appendices [APP-140] notes the Habitats of Principal Importance (HPIs) and their locations. Table 4-2 of the Arboricultural Impact Assessment Part 1 [APP-140] contains a summary of actions for each tree, tree group, hedgerow and woodland, and notes the immediate impacts on W133, G114 and T655. The extent of removal for W133 and G114 are detailed in the Tree Protection Plans within Appendix 7.4 (Arboricultural Impact Assessment) Part 4 [AS-088]. • W133 will require partial removal • G141 will require partial removal • T655 will require felling but is not located within and area of Woodpasture and Parkland (see Section 6.6 below). Impacts on Habitats of Principal Importance (HPIs) are also recorded in Chapter 8 (Biodiversity) of the Environmental Statement [APP-052].
6.6.	Where Wood Pasture is ancient (present since 1600) it would be considered a form of ancient woodland and would therefore be an irreplaceable habitat, potentially requiring a minimum buffer zone of 15m from its recorded boundary. To determine the status of Wood Pasture reference to historic mapping and other sources would be required. Natural England are currently updating the Ancient Woodland Inventory, including the identification of Ancient Wood Pasture; this is being rolled out across the UK (data currently unavailable for Nottinghamshire)	The Applicant confirms there are two areas of wood pasture within the Order Limits. One of the areas of wood pasture is situated at Langford Hall where realignment of the access is taking place. Realignment for access to Langford Hall has been designed to minimise impact on trees by conducting detailed surveys of individual trees to ascertain the access route with the lowest arboricultural impact. This selected option also ties into an existing hard standing access to the wood pasture area, minimising the impact further. One tree (T655 - a semi to early mature beech) situated between an existing access road and an open field of improved grassland will require removal for this option. Whilst the area T655 is located in is identified as 'Woodpasture' in Defra's MAGIC map application, detailed ecological surveys of the area identified this strip of trees as Broadleaved Woodland – Plantation. See Appendix 8.1 (Extended Phase 1 Habitat Technical Report Part 2) of the Environmental Statement Appendices [APP-144] for further details. Another area of wood pasture is located at Kelham where barrier and ground protection are specified to protect trees located at the edge of the wood pasture adjacent to the Order Limits. In regards to the age of the wood pasture habitats, within the cultural heritage desk-based assessment [AS-099], paragraph 4.6.9 states: *Linear strips and clumps of woodland dot the 1 kilometre study area and contribute to its character. There is no woodland classed as ancient and most woodland growth appears to be relatively recent. There are concentrations along the banks of the River Trent, as well as within non-designated landscaped parks at Kelham (MM828), Langford (MM829) and Winthorpe Halls (MM830). Plantations played an important role in the landscape design of late 18th century parkland, as they formed strong boundaries and were used to funnel and shield views*. Impacts on Habitats of Principal Importance (HPIs) are also recorded in Chapter 8 (Biodiversity) of the

		Environmental Statement [APP-052].
6.7.	Traditional Orchards (Priority Habitat Inventory) are present within or immediately adjacent to the study area (such as in areas shown on sheet two and sheet 15 of the Tree Constraints Plan) but are not mentioned in the AIA report	The Applicant confirms all traditional orchards are outside the order limits.
6.8.	Section 1.3.4 of the AIA refers to Standing Advice from Natural England and the Forestry Commission (2022) but does not include the requirement that the buffer zone for an ancient or veteran tree should be an uncapped radius equivalent to 15 x stem diameter or canopy spread +5m, whichever is greater.	The Applicant confirms no veteran trees have had their Route Protection Area (RPA) capped. This can be viewed in the Tree Survey Schedule within Appendix 7.4 (Arboricultural Impact Assessment Part 1) of the Environmental Statement Appendices [APP-140].
6.9.	There is a presumption in the AIA report (such as in section 1.3.14) that the RPA is the limit of constraints associated with trees but this should also refer to the spread of the canopy (which can sometimes extend beyond the RPA).	The Applicant can confirm that Section 5.1.2 of Appendix 7.4 (Arboricultural Impact Assessment Part 1) of the Environmental Statement Appendices [APP-140] states *"The barriers should be erected in accordance with BS 5837:2012 and positioned to enclose the defined RPA and 'above ground' structure of the trees."*
Summary of existing trees and related policy		
6.10.	Section 2 includes a very brief review of national policy such as NPPF (last accessed 2023) and NPSNN (2014) (last accessed 2023). There is no mention of local planning policy which could be relevant.	The Applicant acknowledges local planning policy of relevance includes the Nottinghamshire Biodiversity Action Plan (BAP) which includes key targets "to create and appropriately manage complementary habitats" such as woodland, and through planning control or other land use consultation processes, "to allow no further loss of areas of wood pastures". Policy DM9 of the Newark & Sherwood Local Development Framework also states that development proposals should take account of the distinctive character and setting of individual conservation areas including natural features. Furthermore, in accordance with Core Policy 12, "natural features of importance within or adjacent to development sites should, wherever possible, be protected and enhanced" Local planning policy has been considered within Chapter 7 (Landscape and Visual Effects) [APP-051] and Chapter 8 (Biodiversity) [APP-052] of the Environmental Statement.
6.11.	Section 2.4 relates to ancient, veteran and notable trees and confirms the Woodland Trusts Ancient Tree Inventory (ATF) has been consulted. The report states that eight veteran trees have been identified and refers to the very broad Ancient Tree Forum guidance on recognising ancient and veteran trees (this states that '*a veteran tree can be any age but is a tree which shows ancient characteristics'*). T136 (ash) is classed as veteran but with 1300mm stem diameter it meets the girth criteria for ancient status for the species as per guidance from the Ancient Tree Forum (this is a point of accuracy only, as veteran and ancient trees are of equal status in planning terms).	The Applicant confirms Appendix 7.4 (Arboricultural Impact Assessment) of the Environmental Statement Appendices [APP-140] references the National Planning Policy Framework (NPPF) Paragraph 186 (c) and directly quotes their definition of irreplaceable habitats. All ancient trees qualify as veterans.
6.12.	The AIA report does not reference any definitions for veteran trees included within planning policy. The NPPF (2023) defines a veteran tree as a tree which, because of its '*age, size and condition, is of exceptional biodiversity, cultural or heritage value'*. The 2014 NPSNN does not include a definition but the 2024 NPSNN includes a definition which states *'a tree which, may not be very old, but they have significant decay features, such as branch death and hollowing'*. Both the ATF definition (referred to by the applicant) and the 2024 NPSNN definition highlight that a veteran tree is not necessarily of a particular age.	The Applicant confirms Appendix 7.4 (Arboricultural Impact Assessment) of the Environmental Statement Appendices [APP-140] references the National Planning Policy Framework (NPPF) Paragraph 186 (c) and directly quotes their definition of irreplaceable habitats. To note the Scheme has been assessed against the 2015 NPSNN, as this is the NPS against which the Secretary of State will make their decision. The Applicant has used the broad definition of irreplaceable habitat referenced by the NPPF to define a veteran tree within Appendix 7.4 (Arboricultural Impact Assessment) of the Environmental Statement Appendices [APP-140]. The Applicant acknowledges that the 2024 NPSNN includes a definition which states '*a tree which, may not be very old, but they have significant decay features, such as branch death and hollowing*'. The Scheme has been assessed against the 2024 NPSNN and a copy of this assessment has been submitted at Deadline 2 of the Examination [REF7.39].
6.13.	The Tree Survey Schedule (included as Appendix C and D) contains multiple trees with recorded veteran or ancient characteristics but have not been identified as such. This raises concerns	The Applicant confirms regardless of the degree of inherent subjectivity in current veteran tree survey methods, the majority of the trees listed are being retained. The trees highlighted for removal are listed below with their

	about whether the assessment has consistently and reliably taken such features into account. Whilst there is some subjectivity in relation to the classification of ancient or veteran trees (and the larger, older and the greater volume and range of habitat features provided, the more likely a tree is to be veteran) the following example tree features (not exhaustive) are at least mature for the species and have recorded veteran characteristics (such as extensive decay) and are presented in Table 1, below: Table 22: Outline summary of trees with recorded veteran or ancient features **Potential Veteran Features** **(Bold =** The greatest veteran features **Red** = To be removed for the Scheme **Red and underlined** = The greatest veteran features and to be removed by the Scheme) T040, T086, **T134,** T137, T159, T160, T161, **T189,** G238, **T251,** T416, T417, T418, T476, T480, T483, T604, **T614, T625,** T636, T637, T692, **T754, T761** (ancient girth as per draft guidance from ATF), **T768,** T769, T816, T817, T818, T819, T826 (ash 810mm stem diameter, unlikely semi mature as listed), **T832, T839, T852** (ancient girth as per draft guidance from ATF), T853. T854, **T865,** G981, G983 and W1026.	stem diameters all within the bracket for "locally notable" for their species. T086 – stem diameter 800mm, ash T137 – stem diameter 900mm, ash T189 – stem diameter 840mm, oak These trees do not appear on the Ancient Tree Inventory. Trees T086, T137 and T189 were originally surveyed by consultants during preliminary design. The tree data was then used by consultants during detailed design to form the basis of the Arboricultural Impact Assessment and Tree Protection Plans. Samples of the original data (approximately 10%) were sense checked and ground-truthed by a qualified arboriculturist on site, with the focus being on higher quality trees in close proximity to the design which may be under threat, Tree T137 was part of this sample. Further survey work was also carried out by qualified arboriculturists due to changes in the Order Limits (primarily around the Langford Hall and Kelham areas and in areas where the Order limits widened) which identified further veteran trees. The Tree Survey Schedule within Appendix 7.4 (Arboricultural Impact Assessment Part 1) of the Environmental Statement Appendices [APP-140] is transparent in highlighting trees which are developing veteran features, detailing these in the comments section.
Risks to Trees		
6.14.	Section 3.1.2 should refer to excavation and/or trenches as either could result in root severance (not just trenches).	The Applicant confirms this amendment will be captured in the Table of Errata [TR010065/APP-7.38] submitted at Deadline 2 of the Examination.
6.15.	Section 3.1.3 should refer to damage to tree stems and crowns (not just stems).	The Applicant confirms this amendment will be captured in the Table of Errata [TR010065/APP-7.38] submitted at Deadline 2 of the Examination.
6.16.	Section 3.2.2 refers to a commitment (secured by the First Iteration Environmental Management Plan (FIEMP) [TR010065/APP/6.5]) that the RPA of retained trees should remain undisturbed	The Applicant can confirm this is correct, encroachment into and disturbance of an RPA can be mitigated by ground protection as well as barriers.
6.17.	Section 3.2.2 states that the RPA of a tree should be circular or where appropriate as a square of equivalent area – this should state 'polygon' rather than square as it may not be uniform or square in shape.	The Applicant confirms this amendment will be captured in the Table of Errata [TR010065/APP-7.38] submitted at Deadline 2 of the Examination.
Impact Assessment		
Arboricultural Impact Assessment		
6.18.	The AIA focuses on impacts to veteran trees and impacts to trees from floodplain compensation areas.	No comments needed from the Applicant.
6.19.	Table 4.2 'Actions for the Scheme' does include a column to identify whether impacted trees are subject to a TPO or Conservation Area but the total number of protected tree features impacted is not stated.	A total of 63 arboricultural features (i.e. an individual tree, tree group, woodland or hedge) protected by either TPO or CA status, will be impacted by the Scheme (impacts include felling, partial felling (groups) or pruning works). The Applicant confirms this amendment will be captured in the Table of Errata [TR010065/APP-7.38] submitted at Deadline 2 of the Examination.
6.20.	There is no assessment reviewing the impact to trees subject to non-statutory designations	The Applicant confirms impacts on Tree Preservation Order (TPO) trees are recorded in Table 4.2 of Appendix

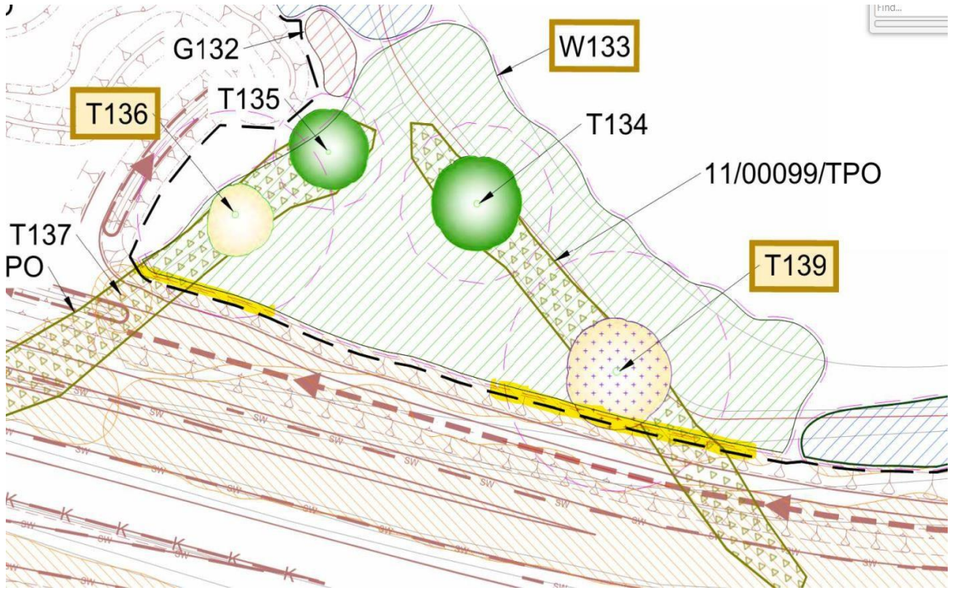
	(e.g., how many trees removed are part of Priority Habitat Inventory Deciduous Woodland or Wood pasture & Parkland). A Developmental Consent Order (DCO) typically includes a schedule of TPOs or other protected tree features to record any impacts such as removal or pruning (as per government guidance[4]). It is noted that the draft DCO includes a schedule of trees subject to tree preservation orders (Schedule 8). The AIA should consider whether trees to be removed are all within the Order Limits or whether any are off site (i.e., where tree stems are located beyond the Order Limits but their roots or canopy is located within the Order Limits) and whether the draft DCO includes sufficient powers in relation to them.	7.4 (Arboricultural Impact Assessment Part 1) of the Environmental Statement Appendices [APP-140]. Impacts on Habitats of Principal Importance (HPIs) are also recorded in Chapter 8 (Biodiversity) of the Environmental Statement [APP-052]. The Applicant confirms no wood pasture will be removed and all trees to be removed are within the Order Limits.
6.21.	Tree loss is very extensive, however, there is no real consideration of tree loss beyond that which is immediately required due to a conflict with the development. For example, additional trees may require removal or management due to a loss of companion shelter/exposure or because they are unsuitably close to new features. On this basis, the AIA may undercount tree loss for the Scheme.	Canopy and RPA buffers have been considered to confirm retention of as many trees as possible. Where individual trees are shown as retained in Table 4.2 of Appendix 7.4 (Arboricultural Impact Assessment Part 1) of the Environmental Statement Appendices [APP-140] these trees are considered fully retainable. The extent of tree groups shown as retained on the Tree Protection Plans indicate fully retainable canopy cover (on the 2D plan view of the plans). Section 5.4.1 within Appendix 7.4 (Arboricultural Impact Assessment Part 1) of the Environmental Statement Appendices [APP-140] highlights there will be a level of uncertainty when felling some trees within a group or woodland to establish a new group/woodland edge. These would be described in the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001].
6.22.	There is no reference to any compensation for tree removals e.g. via new planting or where and how this would be delivered in the AIA. However, tree and hedgerow planting is shown on ES Figure 2.3: Environmental Masterplans ([TR010065/APP/6.2]).	The Applicant confirms that where habitat loss has been unavoidable, replacement habitats are proposed to be created as detailed on Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026].
Impacts to Veteran Trees		
6.23.	The wider submission should include justification for the Scheme layout especially in relation to veteran trees and why alternative design to avoid or reduce impacts are not feasible	The Applicant confirms the Scheme has been designed to minimise habitat loss, with a focus on avoiding high value and/or irreplaceable habitat present, such as veteran trees and habitats of principal importance(where possible), as detailed in Chapter 2 (The Scheme) of the Environmental Statement [APP-046].
6.24.	There is a level of uncertainty as to whether all likely Veteran trees have been correctly recorded as such (see Table 1 above).	The Applicant confirms regardless of the degree of inherent subjectivity in current veteran tree survey methods, the majority of the trees listed are being retained. The trees highlighted for removal are listed below with their stem diameters all within the bracket for "locally notable" for their species. T086 – stem diameter 800mm, ash T137 – stem diameter 900mm, ash T189 – stem diameter 840mm, oak These trees do not appear on the Ancient Tree Inventory. Trees T086, T137 and T189 were originally surveyed by consultants during preliminary design. The tree data was then used by another consultancy during detailed design to form the basis of the Arboricultural Impact Assessment and Tree Protection Plans. Samples of the original data (approximately 10%) were sense checked and ground-truthed by a qualified arboriculturist on site, with the focus being on higher quality trees in close proximity to the design which may be under threat. Tree T137 was part of this sample.
6.25.	Some of the impacts to the veteran trees (with incursion ranging from circa 10-20% of the RPA) show extensive earthworks and new drainage (e.g., T139 has a cumulative impact of circa 20% of its total RPA) and this is highly likely to change soil and moisture conditions in the trees rootzone. It is difficult to envisage that this would not have a detrimental impact on the health of the tree or its associated biodiversity value (including mycorrhiza within the RPA which may be essential to the health of the tree). In relation to the NPPF (2023) and	The Applicant confirms the design has been amended to retain veteran trees. In regard to trees T136 and T139, the design has been developed to limit incursions as far as practicable, steepening proposed earthworks to limit the footprint of the Scheme with the provision of 70-degree slopes to the widened embankment to reduce the neighbouring access track corridor from 5.0 metres to 3.0 metres in order to avoid removal of the trees. Unfortunately, there is no scope to reduce this further.

	the draft NPSNN (2024) (noted that these are not the primary policy tests in this instance) it would be required to demonstrate wholly exceptional circumstances and compensation measures in relation to unavoidable detrimental impacts to irreplaceable habitat features.	The mitigation measures suggested in the Arboricultural Impact Assessment [APP-140] are to further decrease the impact on these trees, primarily through the application of "no-dig" construction methods and cellular confinement systems such as CellWeb. Monitoring logs from the construction supervision will also be required. The exact specifications will be included in the more detailed Arboricultural Method Statement to be prepared as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001APP-021]. Whilst the objective is to retain all veteran trees on site the Arboricultural Impact Assessment [APP-140] transparently notes the RPA infringements and Section 8.11.12 Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] notes, "there will be an unavoidable permanent adverse impact to three veteran trees due to the direct partial impact to their RPAs. It is very unlikely that this would result in a slow decline in tree health or accelerate the death of the tree and therefore the integrity of this resource will not be affected." It is anticipated that, with arboricultural supervision to ensure works are undertaken in line with best practice, the level of disturbance stated above can be tolerated by these trees. It is difficult to predict this with certainty and therefore ongoing monitoring is proposed to inform any remedial action. The need for management of the retained veteran tree crown (for clearance of maintenance vehicles) would be assessed during the annual monitoring surveys of the veteran tree health (as detailed in the First Iteration EMP [APP-184]). Any impacts to veteran trees will be carefully managed, and it is anticipated that, with arboricultural supervision to ensure works are undertaken in line with best practice (as detailed in the First Iteration Environmental Management Plan [APP-184]), the level of disturbance to the veteran tree can be tolerated by these trees. It is very unlikely that this would result in a slow decline in tree health or accelerate the death of the tree and therefore the integrity of this resource will not be affected.
6.26.	The report indicates that supervision and temporary or permanent ground protection will help to ensure the trees are protected. BS5837 indicates that specialist construction (e.g. permanent ground protection/hard surfacing) would not generally be appropriate for veteran trees in section 7.4. It recommends that no construction, including new hard surfacing, occurs within the RPA of a veteran tree. In relation to excavation works for the drainage pipe, the AIA states that this work would be in accordance with BS5837 section 7.2. This should also refer to BS5837 section 7.7. This covers the careful excavation of shallow service runs that can be flexibly installed working around significant tree roots. It may not be feasible to apply this approach for drainage pipes which typically have strict cross-fall requirements and are of large diameter (so allow less flexibility).	The Applicant confirms this amendment will be captured in the Table of Errata [TR010065/APP-7.38] submitted at Deadline 2 of the Examination.
6.27.	The AIA does not include any consideration of the potential impact of nitrogen deposition (especially on the veteran trees). It does not account for dust which is likely to be associated with construction works including the use of a haul road within the RPA of T139, or mitigation measures that could be used to control dust pollution (e.g., the use of screens or other measures set out in the FIEMP [TR010065/APP/6.5]).	The Applicant acknowledges that the Scheme will result in an increase in the total nitrogen deposition rate. However, it is unlikely that the Scheme would affect the integrity of trees due to habitats continuing to function at current nitrogen level exceeding critical loads. The increase in nitrogen deposition during operation is not anticipated to affect the integrity of HPIs or nitrogen sensitive habitats within designated sites and, subsequently, the animal species they support. This is because the habitats identified within 200 meters of the ARN are not highly sensitive (for example, woodland designated for lichens or low nutrients communities, such as chalk grassland) and they are still functional despite current (2022 baseline) exposure to nitrogen in exceedance of critical loads. Chapter 5 (Air Quality) of the Environmental Statement [AS-021] presents the construction dust assessment which has followed National Highways' DMRB LA 105 guidance. The construction dust assessment identifies sensitive receptor locations within 200 metres of any construction activities and construction compounds to determine the risk potential. Construction dust will be controlled using best practicable means, such as wetting

		down and minimising the height of stockpiles. Therefore, construction dust effects on trees are not considered to be significant. The mitigation (dust control) measures are secured in the Register of Environmental Actions and Commitments within the First Iteration Environmental Management Plan [APP-184]. The First Iteration Environmental Management Plan [APP-184] will be developed into the Second Iteration Environmental Management Plan for implementation during construction and is secured through Requirement 3 of the draft Development Consent Order [REP1-001].
6.28.	Where an unavoidable incursion within an RPA takes place (e.g., for a new structure, but this could also equally apply to other infrastructure where functional RPA would be lost or detrimentally impacted, such as hard surfacing or drainage) BS5837 section 5.3 indicates that the lost area of RPA should be compensated for elsewhere, contiguous with its RPA and the project arboriculturist should propose a series of mitigation measures to improve the soil environment used by the tree for growth.	The Applicant confirms an incursion within the RPAs of the veteran trees T036 (17.4%), T136 (15.8%) and T139 (27.9%). The incursions will be mitigated for through further refinement of the design, the use of no-dig cellular confinement systems (i.e, CellWeb or similar) and arboricultural supervision during construction. To compensate for any deterioration in the functionality of the RPA, new rooting area directly contiguous of the RPA will be protected and excluded from construction works. Mitigation measures such as soil aeration, decompaction, mulching or remediation will also be explored, and appropriate measures captured, in the production of an Arboricultural Method Statement as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001].
6.29.	This has not been demonstrated, especially for the three impacted veteran trees (T038, T136 and T139).	The Applicant confirms this provision is secured by the production of an Arboricultural Method Statement as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001].
6.30.	T139 (veteran) is proposed to be pruned to 4.5m above ground level to provide a vertical clearance. It is assumed that this is to provide a clearance for construction traffic. As the existing ground level will likely be raised (for the haul road and temporary/permanent ground protection) it should be reviewed whether this clearance will be sufficient for construction traffic (typical highways clearances are >5.2m). Additional pruning could have a greater impact on the health and condition of the tree.	The Applicant confirms that the pruning required for T139 will be limited to the extreme southern extents of the crown (i.e. not crown lifting to the trunk) as the majority of the canopy will be secured behind protective barriers.  The Applicant confirms this provision is secured by the production of an Arboricultural Method Statement as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001].
Outline Arboricultural Method Statement (OAMS):		
6.31.	The OAMS includes general information on tree protection measures such as barriers and ground protection which generally accord with BS5837.	No comments needed from the Applicant.
6.32.	Section 5.1.4 refers to the construction of a *pipeline* which is likely an error, the Applicant should confirm if this is the case.	The Applicant confirms this is an error. This amendment will be captured in Table of Errata [TR010065/APP-7.38] submitted at Deadline 2 of the Examination.
6.33.	Section 5.4. 'Supervision and Inspection' limits inspection and supervision to works near six arboricultural features only. Typically, an arboriculturist (or equivalent) should be	The Applicant confirms this provision is secured by the production of an Arboricultural Method Statement produced as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through

	engaged to confirm the position of tree protection measures from the outset for all trees and to oversee the amendment of any protection measures as well as any sensitive works within the RPA of retained trees. Failure to correctly install or maintain protection measures is a key reason for tree damage on development sites and robust control measures are required to ensure approved protection measures are implemented and maintained.	Requirement 3 of the draft Development Consent Order [REP1-001].
6.34.	Section 5.4.1 partly addresses uncertainty in relation to the removal of part of a tree group or woodland. However, this is not reflected in the extent of removals shown on the tree protection plan which indicates a fairly optimistic interpretation of tree loss (e.g., with tree retention shown up to the foot of earthworks in some cases). The AIA should be transparent that the final extent of tree removals cannot be fully determined at this stage and would need to be determined following setting out and post-initial site clearance works.	The Applicant confirms this is the purpose of Section 5.4.1 within Appendix 7.4 (Arboricultural Impact Assessment Part 1) of the Environmental Statement Appendices [APP-140]. Canopy and RPA buffers are considered to retain as many trees as possible. Where individual trees are shown at retained in Table 4.2 of Appendix 7.4 (Arboricultural Impact Assessment Part 1) of the Environmental Statement Appendices [APP-140] these trees are considered fully retainable. The extent of tree groups shown as the retainable on the Tree Protection Plans are also shown as fully retainable canopy cover (on the 2D plan view of the plans). Section 5.4.1 within Appendix 7.4 (Arboricultural Impact Assessment Part 1) of the Environmental Statement Appendices [APP-140] highlights there will be a level of uncertainty in when felling in a group/woodland to establish a new group/woodland edge. These situations would be further described in the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001].
6.35.	Section 5.5.2 states that careful excavation within the RPA of veteran trees is limited to a depth of 600mm, whilst this aligns with the BS5837 guidance on the typical depth of most tree roots, it is widely accepted that tree roots can develop to greater depths (e.g. Crow, P. 2005 – The Influence of Soils and Species on Tree Root Depth). There are understandable constraints in relation to the feasibility of deeper excavation (e.g. requirement to shore up excavation for safe working) however a 1m depth is considered more reasonable, especially given the irreplaceable value of the trees.	The Applicant confirms this amendment will be captured in the Table of Errata [APP-7.38] submitted at Deadline 2 of the Examination.
6.36.	Whilst there does appear to be a commitment to delivering a detailed Arboricultural Method Statement in the FIEMP [TR010065/APP/6.5], there does not appear to be a commitment to provide an updated Tree Protection Plan post-consent, should there be changes to the design, the likely level of tree removals or the baseline environment.	The Applicant can confirm an as-built drawing for the tree protection plan would be provided as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001].
Appendix C and D: Tree Survey Schedules		
6.37.	Use of estimated remaining contribution is inconsistent with the BS5837 Table 1: cascade chart, where a category B tree should have at least 20 years remaining future contribution, however, trees are recorded as such with 10+ years (e.g., T366).	The Applicant confirms as per paragraph 4.5.7 of BS5837:2012 estimated remaining contribution is compared to life expectancy. If a tree can realistically and safely be retained as dead or dying habitat, the category will be upgraded despite a lower life expectancy score.
6.38.	Use of life stage is inconsistent with crack willow (T368) listed as *mature* with a stem diameter of 450mm and yet T365 is classed as *early mature* but has a stem diameter of 810mm.	The Applicant confirms this amendment is captured in the Table of Errata [APP-7.38] submitted at Deadline 2 of the Examination.
6.39.	T482 *black poplar* – It should be confirmed whether this tree is a hybrid black poplar (*Populus x canadensis*) or a native black poplar (*Populus nigra subsp betulifolia*) which is nationally rare.	The Applicant can confirm that T482 is a hybrid black poplar and is being retained.
6.40.	No botanical/scientific names are included in the schedule but this is referred to in the key on page 57 of the AIA.	Botanical/scientific names of species within the Tree Survey Schedule are as follows: **Common name** / **Scientific/botanical name** Apple spp. / *Malus spp.* Blackthorn / *Prunus spinosa*

		Common lime — *Tilia x europaea* Common ash — *Fraxinus excelsior* Corsican pine — *Pinus nigra var. maritima* Crack willow — *Salix fragilis* Common elder — *Sambucus nigra* Common hawthorn — *Crateagus monogyna* Common hazel — *Corylus avellana* Common horse chestnut — *Aesculus hippocastanum* Common alder — *Alnus glutinosa* Common holly — *Ilex europeae* Cedar of Lebanon — *Cedrus libani* Downy birch — *Betula pubescens* Silver birch — *Betula pendula* European beech — *Fagus sylvatica* English elm — *Ulmus procera* Field maple — *Acer campestre* Flowering cherry — *Prunus ssp* Wild cherry — *Prunus avium* Goat willow — *Salix caprea* Willow spp — *Salix ssp* Grey poplar — *Populus canescens* Hybrid black poplar — *Populus nigra ssp* Hornbeam — *Carpinus betulus* Norway maple — *Acer platanoides* Pedunculate oak — *Quercus robur* Turkey oak — *Quercus cerris* Rowan — *Sorbus aucuparia* Sycamore — *Acer pseudoplatanus* Scots pine — *Pinus sylvestris* Swedish whitebeam — *Sorbus x intermedia* Sweet chestnut — *Castanea sativa* Yew — *Taxus baccata* The Applicant confirms this amendment will be captured in the Table of Errata [TR010065/APP/7.38 submitted at Deadline 2 of the Examination.
Tree Constraints Plan (TCP)		
6.41.	The sheet orientation of the drawings is not consistent, for example sheets 5 and 9 are portrait, not landscape.	The Applicant can confirm the Appendices of the Arboricultural Impact Assessment [AS-086, AS-087, AS-088, AS-089] show the correct orientation.
Tree Protection Plan (TPP)		
6.42.	The sheet orientation of the drawings is not consistent, for example sheet 9 is portrait and not landscape.	The Applicant can confirm the Appendices of the Arboricultural Impact Assessment [AS-086, AS-087, AS-088, AS-089] show the correct orientation.

6.43.	T136 (veteran), T139 (veteran) (see Figure 1 below), T144, T214, T217, G131, G129a and G223 (as examples – there may be other instances): The tree protection measures conflict with the footprint of the proposed earthworks indicating that the tree protection measures are not viable. Earthworks often require a) working space beyond their footprint, b) a 'toe' where excavation is necessary and c) potentially temporary works to address/amend ground levels beyond the footprint of embankment. It is not clear that the assessment has taken this into account and is it therefore questionable if the AIA/TPP is a realistic interpretation of the likely impact of the Scheme. **Figure 13 Example of fence positions which do not appear to be viable (in yellow)** 	The Applicant confirms the positioning of protective barriers is indictive and will require careful setting out on site. It is acknowledged that this is a local pinch point, and the working methodologies will be adjusted to prioritise tree retention. This provision would be secured by the production an Arboricultural Method Statement produced as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001].
6.44.	It is not clear why G112, T113, part of G114, G115 and G117 are shown to be removed (see sheet 10) they appear to be set well back from construction works.	G112, T113, part of G114, G115 and G117 are to be removed to provide the required working space for the temporary access track and working room to construct the embankments in this location
6.45.	The design justification should be reviewed in relation to T038 (a veteran tree) as there is substantial incursion into the trees RPA. For example, could the access route to the north and west be adjusted and the drainage connection be shortened to provide a greater clearance of the tree. The design justification should be reviewed in relation to T136 and T139 (both veteran trees) as there is substantial incursion into the RPA of these trees. Could the earthworks be reduced, in particular using steeper slopes or retaining features.	The Applicant confirms the Scheme has been designed by implementing the mitigation hierarchy to minimise habitat loss, with a focus on avoiding high value and/or irreplaceable habitat present (where possible) as detailed in Chapter 2 (The Scheme) of the Environmental Statement [APP-046]. Chapter 3 (Assessment of Alternatives) of the Environmental Statement [APP-047] details the environmental benefits resulting from design development. As detailed in Chapter 8 (Biodiversity) of the Environmental Statement [APP-052], design iterations led to a greater gradient steepness of the widened carriageway embankment to reduce the neighbouring access track corridor from 5.0 metres to 3.0 metres in order to avoid removal of the trees. Whilst Scheme design iterations have resulted in the retention of all veteran trees, there will be an unavoidable permanent adverse impact to three veteran trees due to the direct partial impact to their root protection areas (RPAs) and the proximity of one of these veteran trees to the Order Limits, which will require a minor crown lift (<0.5 metres). In relation to tree T038, the Scheme elements that infringe on the edge of the RPA of this tree in the current design proposals will be reviewed at the detailed design stage. It is anticipated that the initial gradient of the proposed earth bund to the west of the tree as presented in the Complete Tree Protection Plans - Part 2 [AS-020] can potentially be revised during detailed design, locally steepening the slope profile to 1:2 to reduce the

		footprint of the bund. The alignment of the access road and swale to the west/southwest of the tree will be further reviewed with the objective of removing the minor incursion into the RPA if possible. Similarly, it is anticipated that the footprint of the headwall to the north of the tree can be adapted during detailed design to remove the minor incursion into the section of the RPA currently identified. Total infringement of CellWeb into the RPA for tree T038 is 17.4%, note that no excavation will take place in the RPA. In regard to trees T136 and T139, the design has been developed to limit incursions as far as practicable, steepening proposed earthworks to limit the footprint of the Scheme with the provision of 70-degree slopes to the widened embankment to reduce the neighboring access track corridor from 5.0 metres to 3.0 metres in order to avoid removal of the trees. Unfortunately, there is currently no scope to reduce this further. Total infringement of CellWeb in to the RPA for tree T136 is 15.8%., Total infringement of CellWeb in to the RPA for tree T13 is 27.9%. Note that no excavation will take place in the RPA of either tree. The Applicant confirms that protection during construction will be secured by the production of an Arboricultural Method Statement produced as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001]. Whilst the objective is to retain all veteran trees on site the Arboricultural Impact Assessment [APP-140] transparently notes the RPA infringements and Section 8.11.12 Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] notes, "there will be an unavoidable permanent adverse impact to three veteran trees due to the direct partial impact to their RPAs…. It is very unlikely that this would result in a slow decline in tree health or accelerate the death of the tree and therefore the integrity of this resource will not be affected. It is anticipated that, with arboricultural supervision to ensure works are undertaken in line with best practice, the level of disturbance stated above can be tolerated by these trees. It is difficult to predict this with certainty and therefore ongoing monitoring is proposed to inform any remedial action. Following the implementation of this mitigation, a minor adverse impact on an irreplaceable resource of national importance is anticipated, resulting in a Slight Adverse effect during construction that is not significant.". Any impacts to veteran trees will be carefully managed, and it is anticipated that, with arboricultural supervision to ensure works are undertaken in line with best practice (as detailed in the First Iteration Environmental Management Plan [APP-184]), the level of disturbance to the veteran tree can be tolerated by these trees. It is very unlikely that this would result in a slow decline in tree health or accelerate the death of the tree and therefore the integrity of this resource will not be affected.
Wider ES Review		
6.46.	The wider ES has not been reviewed in relation to Arboriculture.	No comments needed from the Applicant.
Summary of Legislative and Policy Framework Review		
National Policy		
6.47.	The National Policy Statement for National Networks (NPSNN) sets out the policy which the Scheme should comply with and forms the basis for informing the judgement on the impacts of the Scheme. The ES and AIA is based on the 2014 version which was current at the time of the assessment and the draft revision was published in March 2023. A revised version of the NPS was issued in May 2024.	A revised National Networks National Policy Statement was designated on 24 May 2024. The 2024 NNNPS has effect for any applications for development consent accepted for examination after the designation of the revised NNNPS. This 2015 NNNPS has effect for any applications for development consent accepted for examination prior to 24 May 2024. As the Scheme was accepted for examination on the 23 May 2024 the 2015 NNNPS has effect.
6.48.	Table 2 below outlines the requirements of the NPSNN (version 2014) for arboriculture and following the review of the DCO application (AIA report and plans), whether the	One of the areas of wood pasture is situated at Langford Hall where realignment of the access is taking place. Realignment for access to Langford Hall has been designed to minimise impact on trees by conducting detailed

	requirement is adequately met. **Table 2: Compliance with NPSNN**	surveys of individual trees to ascertain the access route with the lowest arboricultural impact. This selected option also ties into an existing hard standing access to the wood pasture area, minimising the impact further. One tree (T655 - a semi to early mature beech) situated between an existing access road and an open field of improved grassland will require removal for this option. Whilst the area T655 is located in is identified as 'Woodpasture' in Defra's MAGIC map application, detailed ecological surveys of the area identified this strip of trees as Broadleaved Woodland – Plantation. See Appendix 8.1 (Extended Phase 1 Habitat Technical Report Part 2) of the Environmental Statement Appendices [APP-144] for further details. Another area of wood pasture is located at Kelham, barrier and ground protection are specified to protect trees located at the edge of the wood pasture adjacent to the order limits. Within the cultural heritage desk-based assessment [AS-099], paragraph 4.6.9 states: *Linear strips and clumps of woodland dot the 1 kilometre study area and contribute to its character. There is no woodland classed as ancient and most woodland growth appears to be relatively recent. There are concentrations along the banks of the River Trent, as well as within non-designated landscaped parks at Kelham (MM828), Langford (MM829) and Winthorpe Halls (MM830). Plantations played an important role in the landscape design of late 18th century parkland, as they formed strong boundaries and were used to funnel and shield views.* The Applicant confirms the design has been amended to retain veteran trees. In relation to tree T038, the Scheme elements that infringe on the edge of the RPA of this tree in the current design proposals will be reviewed at the detailed design stage. It is anticipated that the initial gradient of the proposed earth bund to the west of the tree as presented in the Complete Tree Protection Plans - Part 2 [AS-020] can potentially be revised during detailed design, locally steepening the slope profile to 1:2 to reduce the footprint of the bund. The alignment of the access road and swale to the west/southwest of the tree will be further reviewed with the objective of removing the minor incursion into the RPA if possible. Similarly, it is anticipated that the footprint of the headwall to the north of the tree can be adapted during detailed design to remove the minor incursion into the section of the RPA currently identified. In regard to trees T136 and T139, the design has been developed to limit incursions as far as practicable, steepening proposed earthworks to limit the footprint of the Scheme with the provision of 70-degree slopes to the widened embankment to reduce the neighboring access track corridor from 5.0 metres to 3.0 metres in order to avoid removal of the trees. Unfortunately, there is no scope to reduce this further. The Applicant confirms that further detail on the provision of mitigation measures during construction is secured by the production of an Arboricultural Method Statement produced as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001]. Whilst the objective is to retain all veteran trees on site the Arboricultural Impact Assessment [APP-140] transparently notes the RPA infringements and Section 8.11.12 Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] notes, , there will be an unavoidable permanent adverse impact to three veteran trees due to the direct partial impact to their RPAs and the proximity of one of these veteran trees to the Order Limits, which will require a minor crown lift (<0.5m). It is very unlikely that this would result in a slow decline in tree health or accelerate the death of the tree and therefore the integrity of this resource will not be affected. It is anticipated that, with arboricultural supervision to ensure works are undertaken in line with best practice, the level of disturbance stated above can be tolerated by these trees. It is difficult to predict this with certainty and therefore ongoing monitoring is proposed to inform any remedial action. Following the implementation of this mitigation, a minor adverse impact on an irreplaceable resource of national importance is anticipated, resulting in a Slight Adverse effect during construction that is not significant.

Paragraph of NPSNN	Requirement of the NPSNN	Does the AIA comply with the requirement
5.3.2	*Ancient woodland is a valuable biodiversity resource both for its diversity of species and for its longevity as woodland. Once lost it cannot be recreated. The Secretary of State should not grant development consent for any development that would result in the loss or deterioration of irreplaceable habitats including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the national need for and benefits of the development, in that location, clearly outweigh the loss. Aged or veteran trees found outside ancient woodland are also particularly valuable for biodiversity and their loss should be avoided.* *Where such trees would be affected by development proposals, the applicant should set out proposals for their conservation or, where their loss is unavoidable, the reasons for this.*	The NPSNN does not include extensive requirements in relation to trees and is focused on irreplaceable habitats. There is no ancient woodland identified via desk study or ecology site visits and therefore none is considered to be at risk of loss or deterioration (although the status of wood pasture should be confirmed as if ancient wood pasture, this is a form of ancient woodland and T655 which is to be removed, is located within this habitat feature). The NPSNN is clear that consent should be refused (unless the benefits outweigh the loss) for development that results in the loss of irreplaceable habitats (including veteran trees) although it then makes a distinction for the loss of (not detrimental impact to) trees outside ancient woodlands. Therefore the key issues are likely to be whether a) all veteran or ancient trees have been adequately identified/classified by the tree survey (which is questionable, see Table 1 above) and b) whether any veteran or ancient trees are to be subject to loss or deterioration. With extensive RPA incursions of up to 20% for recorded veteran trees there is not sufficient consideration or justification in the AIA to demonstrate that this would not result in deterioration. Where trees which may be

			veteran but have not been classified as such (e.g. T189) are to be removed, if they are found to be veteran this would equate to the loss of irreplaceable habitat. The loss of the irreplaceable habitat must be balanced against the need for the Scheme. On this basis, Nottinghamshire County Council believes that the AIA does not robustly meet the requirements of the NPSNN.	
	5.3.5	*Other species and habitats have been identified as being of principal importance for the conservation of biodiversity in England and Wales and therefore requiring conservation action. The Secretary of State should ensure that applicants have taken measures to ensure these species and habitats are protected from the adverse effects of development. Where appropriate, requirements or planning obligations may be used in order to deliver this protection. The*	Deciduous Woodland is to be removed to facilitate the Scheme. Trees likely to be within wood pasture are also to be removed. The development is unlikely to be able to avoid the loss of such features and therefore, the need for the Scheme must be balanced against this loss.	

		Secretary of State should refuse consent where harm to the habitats or species and their habitats would result, unless the benefits of the development (including need) clearly outweigh that harm.	
6.49.	Overall, the requirements of the NPSNN (version 2014) for arboriculture are not demonstrably met in the AIA, further information to satisfy some requirements or parts of some requirements may be contained within other submission documents within the ES, however these have not been reviewed as part of the review for arboriculture.		No ancient woodland are present within the Order Limits. The Applicant confirms all veteran trees are retained and the design has been amended to the maximum extent possible within the constraints of the local areas surrounding the veteran trees, protection measures have been specified for the construction phase in the Arboricultural Impact Assessment [APP-140] and Tree Protection Plans Part 4 [AS-088] and Part 5 [AS-089]. Whilst the objective is to retain all veteran trees on site the Arboricultural Impact Assessment [APP-140] transparently notes the RPA infringements and Section 8.11.12 Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] notes, "there will be an unavoidable permanent adverse impact to three veteran trees due to the direct partial impact to their RPAs…. It is very unlikely that this would result in a slow decline in tree health or accelerate the death of the tree and therefore the integrity of this resource will not be affected. It is anticipated that, with arboricultural supervision to ensure works are undertaken in line with best practice, the level of disturbance stated above can be tolerated by these trees. It is difficult to predict this with certainty and therefore ongoing monitoring is proposed to inform any remedial action. The Applicant confirms that provision of remedial mitigation measures for disturbance to the veteran trees will be secured by the production of an Arboricultural Method Statement produced as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001]. Following the implementation of this mitigation, a minor adverse impact on an irreplaceable resource of national importance is anticipated, resulting in a Slight Adverse effect during construction that is not significant."
6.50.	In May 2024, the NPSNN was updated and includes additional or revised requirements for arboriculture as described in Table 3. **Table 3: Compliance with NP SNN (May 2024)**		The Applicant confirms regardless of the degree of inherent subjectivity in current veteran tree survey methods, the majority of the trees highlighted by the respondent in 6.13 are being retained. The trees highlighted for removal are listed below with their stem diameters all within the bracket for "locally notable" for their species. T086 – stem diameter 800mm, ash T137 – stem diameter 900mm, ash T189 – stem diameter 840mm, oak These trees do not appear on the Ancient Tree Inventory. Trees T086, T137 and T189 were originally surveyed by consultants during preliminary design. The tree data was then used another consultancy during detailed design to form the basis of the Arboricultural Impact Assessment and Tree Protection Plans. Samples of the original data (approximately 10%) were sense checked and ground-truthed by a qualified arboriculturist on site, with the focus being on higher quality trees in close proximity to the design which may be under threat. Tree T137 was part of this sample. The Applicant confirms the design has been amended to retain veteran trees. In relation to tree T038, the Scheme elements that infringe on the edge of the RPA of this tree in the current design proposals will be reviewed at the detailed design stage. It is anticipated that the initial gradient of the proposed earth bund to the

Paragraph of NPSNN	Requirement of the NPSNN	Does the AIA comply with the requirement
5.63	*The Secretary of State should not grant development consent for any development that would result in the loss or deterioration of irreplaceable habitats including ancient woodland and ancient and veteran trees unless there are wholly exceptional reasons (for example, where the public benefit would clearly outweigh the loss or deterioration of habitat) and a suitable compensation strategy exists.* Ancient Woodland is defined as: *An area of woodland that has been continuously wooded since at least 1600 AD. It includes Ancient Semi Natural Woodlands (ASNW), Plantations on Ancient Woodland Sites (PAWS), Ancient Wood Pasture and* *Parkland (AWPP) and Infilled Ancient Wood Pasture and Parkland (IAWPP). All ancient trees are veteran trees, but not all veteran trees are ancient.* Ancient trees are defined as: *A tree which, can be of a great age relative to others of the same species, be large, depending on species, site and management history, have significant decay features such as hollowing and a crown structure typical of old age and have evidence of past use and management (such as pollarding).* Veteran trees are defined as: *A tree which, may not be very old, but they have significant decay features, such as branch death and hollowing.*	The AIA identifies that three veteran trees will be impacted, it is not clear or robustly justified that these impacts will not result in deterioration. There are multiple additional trees which are not considered by the AIA to qualify as veteran but which could be considered to be veteran given their maturity and the presence or potential presence of extensive decayed or dead wood habitat (as stated in the Tree Survey Schedule). The May 2024 NPSNN includes a specific definition of veteran trees which focuses on the presence of significant decay features. The AIA considers trees as veterans where they are not old enough to be ancient but have features consistent with those of ancient trees. At least one potential veteran tree is to be removed. Therefore the AIA may not comply with the requirement to avoid the loss or deterioration of veteran trees. The loss of the irreplaceable habitat which must be balanced against the need for the Scheme, with wholly exceptional reasons being demonstrated.

west of the tree as presented in the Complete Tree Protection Plans - Part 2 [AS-020] can potentially be revised during detailed design, locally steepening the slope profile to 1:2 to reduce the footprint of the bund. The alignment of the access road and swale to the west/southwest of the tree will be further reviewed with the objective of removing the minor incursion into the RPA if possible. Similarly, it is anticipated that the footprint of the headwall to the north of the tree can be adapted during detailed design to remove the minor incursion into the section of the RPA currently identified.

In regard to trees T136 and T139, the design has been developed to limit incursions as far as practicable, steepening proposed earthworks to limit the footprint of the Scheme with the provision of 70-degree slopes to the widened embankment to reduce the neighboring access track corridor from 5.0 metres to 3.0 metres in order to avoid removal of the trees. Unfortunately, there is no scope to reduce this further. The mitigation measures suggested are to further decrease the impact on these trees. This is also detailed in the Applicant's Response to Relevant Representations [REP1-009] in response to the Forestry Commission's Relevant Representation [RR-023]. Impacts on Habitats of Principal Importance (HPIs) are also recorded in Chapter 8 (Biodiversity) of the Environmental Statement [APP-052].

The Applicant confirms this provision is secured by the production of an Arboricultural Method Statement produced as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001].

Whilst the objective is to retain all veteran trees on site the Arboricultural Impact Assessment [APP-140] transparently notes the RPA infringements and Section 8.11.12 Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] notes, "there will be an unavoidable permanent adverse impact to three veteran trees due to the direct partial impact to their RPAs…. It is very unlikely that this would result in a slow decline in tree health or accelerate the death of the tree and therefore the integrity of this resource will not be affected. It is anticipated that, with arboricultural supervision to ensure works are undertaken in line with best practice, the level of disturbance stated above can be tolerated by these trees. It is difficult to predict this with certainty and therefore ongoing monitoring is proposed to inform any remedial action. Following the implementation of this mitigation, a minor adverse impact on an irreplaceable resource of national importance is anticipated, resulting in a Slight Adverse effect during construction that is not significant".

5.68	*When considering proposals, the Secretary of State should consider whether the applicant has maximised such opportunities and enhancement of wider biodiversity, in and around developments. The Secretary of State may use requirements or planning obligations where appropriate in order to ensure that such beneficial features are delivered, and ongoing*	The AIA does not set out a consideration of design alternatives or to justify why the proposed layout (and associated impacts) are the most optimal. The AIA does not include substantive information on any enhancement or compensatory measures such as new planting.

Paragraph of NPSNN	Requirement of the NPSNN	Does the AIA comply with the requirement
	management and maintenance secured.	
5.69	*The Secretary of State should ensure that applicants have taken measures to ensure (Habitats and Species of Principal Importance)…. are protected from the adverse effects of development by using requirements, planning obligations, or licence conditions. The Secretary of State should refuse consent where harm to the habitats or species and their habitats would result, unless the benefits of the development (including need) clearly outweigh that harm.*	Lowland Deciduous Woodland and Wood Pasture & Parkland are Habitats of Principal Importance and are to be removed or partly removed for the Scheme (and in arboricultural terms this equates to harm). Therefore, the AIA does not meet this requirement unless the benefits of the Scheme clearly outweigh the harm. .

	5.195	*Existing trees and woodlands should be retained where possible. The applicant should assess the impacts on, and loss of, all trees and woodlands within the project boundary and avoid and mitigate for any direct and indirect effects and any risk of net deforestation as a result of the scheme (Irreplaceable Habitats require separate consideration 5.57-5.58*). Mitigation may include the use of buffers to enhance resilience, improvements to connectivity, and improved woodland management. Where woodland loss is unavoidable, compensation schemes will be required, and the long-term management and maintenance of newly planted trees should be secured. Opportunities for tree planting and woodland creation should be maximised.*	The AIA records extensive loss of trees and woodlands as a result of the Scheme. It does not include any consideration of avoidance or mitigation for any direct or indirect effects and any risk of net deforestation as a result of the Scheme. Buffers in the form of RPAs are applied however in places these conflict with the layout of the Scheme or sit on its immediate edge raising questions in relation to working space. There are no substantive measures in the AIA in relation to improved connectivity or woodland management. No compensation is proposed within the AIA.
	*** This is** believed **to be an error in the NPSNN and** that **it should refer to the reader to paragraphs 5.62 and 5.63.**	
6.51.	Overall, the requirements of the NPSNN (version 2024) for arboriculture are not demonstrably met in the AIA documents, further information to satisfy some requirements or parts of some requirements may be contained within other submission documents within the ES, however these have not been reviewed as part of the review for arboriculture.	The Applicant confirms there are no ancient woodlands within the Order Limits. The Applicant confirms all veteran trees are retained and the design has been amended to the maximum extent possible within the constraints of the local areas surrounding the veteran trees, protection measures have been specified for the construction phase in the Arboricultural Impact Assessment [APP-140] and Tree Protection Plans Part 4 [AS-088] and Part 5 [AS-089]. The Applicant confirms that provision of remedial mitigation measures for disturbance to the veteran trees will be secured by the production of an Arboricultural Method Statement produced as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001]. Whilst the objective is to retain all veteran trees on site the Arboricultural Impact Assessment [APP-140] transparently notes the RPA infringements and Section 8.11.12 Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] notes, "there will be an unavoidable permanent adverse impact to three veteran trees due to the direct partial impact to their RPAs…. It is very unlikely that this would result in a slow decline in tree health or accelerate the death of the tree and therefore the integrity of this resource will not be affected. It is anticipated that, with arboricultural supervision to ensure works are undertaken in line with best practice, the level of disturbance stated above can be tolerated by these trees. It is difficult to predict this with certainty and therefore ongoing monitoring is proposed to inform any remedial action. Following the implementation of this mitigation, a minor adverse impact on an irreplaceable resource of national importance is anticipated, resulting in a Slight Adverse effect during construction that is not significant."
Local Policy		
6.52.	The AIA report does not consider local planning policy.	The Applicant acknowledges local planning policy of relevance includes the Nottinghamshire Biodiversity Action

		Plan (BAP) which includes key targets "to create and appropriately manage complementary habitats" such as woodland, and through planning control or other land use consultation processes, "to allow no further loss of areas of wood pastures". Policy DM9 of the Newark & Sherwood Local Development Framework also states that development proposals should take account of the distinctive character and setting of individual conservation areas including natural features. Furthermore, in accordance with Core Policy 12, "natural features of importance within or adjacent to development sites should, wherever possible, be protected and enhanced. Local planning policy has been considered within Chapter 7 (Landscape and Visual Effects) [APP-051] and Chapter 8 (Biodiversity) [APP-052] of the Environmental Statement.
6.53.	Newark and Sherwood Amended Core Strategy Development Plan sets out policy up until 2023 and presents the objectives for development in the area. Core Policy 12, Biodiversity and Green Infrastructure includes the following extracts with relevance to arboriculture:	No comments needed from the Applicant.
6.54.	The policy states that the council will: *"Expect proposals to take into account the need for continued protection of the District's ecological, biological and geological assets. With particular regard to sites of international, national and local significance, Ancient Woodlands and species and habitats of principal importance identified in Section 41 of the Natural Environment and Rural Communities Act 2006 and in the Nottinghamshire Local Biodiversity Action Plan;* *Seek to secure development that maximises the opportunities to conserve, enhance and restore biodiversity and geological diversity and to increase provision of, and access to, green infrastructure within the District;* *Promote the appropriate management of features of major importance for wild flora and fauna."*	No comments needed from the Applicant.
6.55.	The Scheme as reported in the AIA may not conserve or protect ecological and biological assets such as wood pasture/parkland and deciduous woodland priority habitats which are at risk or potentially at risk. The Scheme also does not promote the appropriate management of veteran trees due to the RPA incursions (and possible loss or deterioration of other trees not classified as veteran) which typically provide niche habitat to some of the most threatened species in Europe (e.g. saproxylic invertebrates).	The Applicant confirms there are two areas of wood pasture within the Order Limits. One of the areas of wood pasture is situated at Langford Hall where realignment of the access is taking place. Realignment for access to Langford Hall has been designed to minimise impact on trees by conducting detailed surveys of individual trees to ascertain the access route with the lowest arboricultural impact. This selected option also ties into an existing hard standing access to the wood pasture area, minimising the impact further. One tree (T655 - a semi to early mature beech) situated between an existing access road and an open field of improved grassland will require removal for this option. Whilst the area T655 is located in is identified as 'Woodpasture' in Defra's MAGIC map application, detailed ecological surveys of the area identified this strip of trees as Broadleaved Woodland – Plantation. See Appendix 8.1 (Extended Phase 1 Habitat Technical Report Part 2) of the Environmental Statement Appendices [APP-144] for further details. Another area of wood pasture is located at Kelham, barrier and ground protection are specified to protect trees located at the edge of the wood pasture adjacent to the order limits. The Applicant confirms all veteran trees are retained and the design has been amended to the maximum extent possible within the constraints of the local areas surrounding the veteran trees. Protection measures have been specified for the construction phase in the Arboricultural Impact Assessment [APP-140] and Tree Protection Plans Part 4 [AS-088] and Part 5 [AS-089]. The Applicant confirms that provision of remedial mitigation measures for disturbance to the veteran trees will be secured by the production of an Arboricultural Method Statement produced as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001]. Whilst the objective is to retain all veteran trees on site the Arboricultural Impact Assessment [APP-140]

		transparently notes the RPA infringements and Section 8.11.12 Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] notes, "there will be an unavoidable permanent adverse impact to three veteran trees due to the direct partial impact to their RPAs…. It is very unlikely that this would result in a slow decline in tree health or accelerate the death of the tree and therefore the integrity of this resource will not be affected. It is anticipated that, with arboricultural supervision to ensure works are undertaken in line with best practice, the level of disturbance stated above can be tolerated by these trees. It is difficult to predict this with certainty and therefore ongoing monitoring is proposed to inform any remedial action. Following the implementation of this mitigation, a minor adverse impact on an irreplaceable resource of national importance is anticipated, resulting in a Slight Adverse effect during construction that is not significant."
Wider ES Review		
6.56.	Chapter 8: Biodiversity of the ES has also been reviewed in relation to impacts on veteran trees, given the matters raised above.	No comments needed from the Applicant.
6.57.	Paragraph 8.9.37 states: *"One veteran tree currently 4.5 metres in height pre-construction, will undergo a crown lift during construction. Following this initial crown lift, it is anticipated that crown clearance management will be minimal during operation, as a low frequency of vehicles will use the maintenance track annually."*	No comments needed from the Applicant.
6.58.	This **indicates the tree is 4.5m in height but it is actually inferring that the tree has a crown clearance of 4.5m above existing ground level.**	The Applicant confirms this amendment will be captured in the Table of Errata [APP-7.38] submitted at Deadline 2 of the Examination.
6.59.	The AIA Table 4.2 indicates that the crown lift will be to 4.5m (and Appendix C records current canopy clearance for the tree as 4m with the first significant branch at 3m to the south). Paragraph 4.1.8 of the AIA indicates the tree will be pruned on its southern side by 0.5m. As the first significant branch is at 3m (as per the Appendix C) this would only achieve a 3.5m clearance of existing ground level.	The Applicant confirms the canopy height and first significant branch are different measurements. The height of the canopy is not the same as the first location of trunk branches. Pruning requirements for T139 will be limited to the southern extent of the canopy only with the majority of the crown situated behind protective barriers.
6.60.	As per the comments made above, it is uncertain if the proposed crown lift has taken into account the likely increase in ground levels for the haul route and maintenance track, in other words, where the ground level is increased the level of pruning will need to increase to achieve the same vertical clearance. The level/extent of earthworks shown on the plans suggests a relatively substantial increases in levels.	The proposed crown lift has taken into account the ground levels relating to the haul route and maintenance track. The height increase of the maintenance track is approximately 1m and the levels then slope down (1:2 gradient) to under the edge of the canopy therefore there will be no substantial increase in levels under the southern tip of the crown.
6.61.	Paragraph 8.10.4 states that: *"Two layers of permeable Cellweb matting, or similar brands, will sufficiently distribute the load of heavy construction plant that cannot be excluded from the RPA of retained veteran trees, mitigating compaction of the soil along this track and resulting in no change to water availability to the veteran tree RPA. The physiological condition of veteran trees will be monitored prior to the commencement of construction and following the installation of temporary protection measures. Further details on the methods for the protection of trees are provided in Appendix 7.4 (Arboricultural Impact Assessment) of this ES Appendices (TR010065/APP/6.3). Annual inspections will be undertaken of veteran trees T038, T136 and T139 during construction to monitor the physiological condition and effectiveness of mitigation detailed in the aforementioned appendix. This matting will also be used in Great North Road Grassland LWS where lowland meadow will be subject to temporary long-term loss (during the construction period) to reduce soil compaction, ensuring suitable ground conditions endure to allow for successful recreation of lowland meadow from green hay cut post-construction. These measures are secured via Table 3-2 REAC within the First Iteration EMP (TR010065/APP/6.5)."*	No comments needed from the Applicant.
6.62.	The proposals indicate extensive earthworks as well as new haul route/maintenance tracks. The	The Applicant can confirm that the earthworks will take place on top of Cellweb (or equivalent ground protection

	applicant should confirm whether the earthworks will take place on top of the Cellweb (or equivalent) matting or whether this will be sited on unprotected ground.	system).
6.63.	BS5837 section 7.4 indicates that this approach (e.g., Cellweb) is not appropriate for veteran trees. Notwithstanding this, if it is unavoidable, this methodology would be an appropriate measure to minimise compaction of the soil, and although there is limited robust evidence of the effectiveness of such systems, they are well used and generally accepted. Alternatives could include raised surfaces supported on piles to bridge the RPA	Section 7.4 of BS5837 Permanent hard surfacing within the RPA states "*This subclause does not apply to veteran trees, where it is recommended that no construction, including the installation of new hard surfacing, occurs within the RPA*". The clause applies to both Cellweb and the application of piles. Both have benefits and constraints however Cellweb would avoid piling into the root protection area.
6.64.	Moreover, veteran trees typically develop a symbiotic relationship with mycorrhizal fungi which help the tree access water and nutrients. Any change to the soil environment (such as covering it with geotextiles and washed stone contained within geoweb panels) could have a negative impact on these fungi which could lead to a negative impact on the tree, as its ability to access water and nutrients would be reduced	Whilst the objective is to retain all veteran trees on site the Arboricultural Impact Assessment [APP-140] transparently notes the RPA infringements and Section 8.11.12 Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] notes, "there will be an unavoidable permanent adverse impact to three veteran trees due to the direct partial impact to their RPAs…. It is very unlikely that this would result in a slow decline in tree health or accelerate the death of the tree and therefore the integrity of this resource will not be affected. It is anticipated that, with arboricultural supervision to ensure works are undertaken in line with best practice, the level of disturbance stated above can be tolerated by these trees. It is difficult to predict this with certainty and therefore ongoing monitoring is proposed to inform any remedial action. Following the implementation of this mitigation, a minor adverse impact on an irreplaceable resource of national importance is anticipated, resulting in a Slight Adverse effect during construction that is not significant."
6.65.	Paragraph 8.11.12 states: *"Whilst Scheme design iterations have resulted in the retention of all veteran trees, there will be an unavoidable permanent adverse impact to three veteran trees due to the direct partial impact to their RPAs and the proximity of one of these veteran trees to the Order Limits, which will require a minor crown lift (<0.5 metres). It is very unlikely that this would result in a slow decline in tree health or accelerate the death of the tree and therefore the integrity of this resource will not be affected. It is anticipated that, with arboricultural supervision to ensure works are undertaken in line with best practice, the level of disturbance stated above can be tolerated by these trees. It is difficult to predict this with certainty and therefore ongoing monitoring is proposed to inform any remedial action. Following the implementation of this mitigation, a minor adverse impact on an irreplaceable resource of national importance is anticipated, resulting in a Slight Adverse effect during construction that is not significant."*	No comments needed from the Applicant.
6.66.	The Applicant acknowledges that there is uncertainty surrounding the impact of the Scheme on veteran trees (in particular, T139), where it is stated in paragraph 8.11.12 "*It is difficult to predict this with certainty and therefore ongoing monitoring is proposed to inform any remedial action"*. It is correct to acknowledge the level of uncertainty in relation to any impact on the health and condition of the veteran trees. In the context of this acknowledged uncertainty, Nottinghamshire County Council do not agree with the conclusion that "*It is **very** unlikely that this would result in a slow decline in tree health or accelerate the death of the tree and therefore the integrity of this resource will not be affected*" as set out in paragraph 8.11.12, in particular, given that the exact extent of earthworks and construction methods is unlikely to be known at this stage. The assessments reported in the ES should assume a reasonable worst case where there is uncertainty and should take into account the established Limits of Deviation (LoD). Paragraph 2.5.120 of Chapter 2: The Scheme, states that *"the vertical LoD are referenced against the vertical profile levels indicated on the Engineering Plans and Sections [TR010065/APP/2.6]… and permit deviation of up to a maximum of 1 metre upwards or downwards for all works"*. In addition, the Works Plans [TR010065-000353-2.3] show the lateral LoD for highways works and drainage assets, Sheet 3 of 7 illustrates that the LoD for highways works and drainage assets in the vicinity of T139 and T136 is beyond that of the earthworks, which are shown in Figure 1 above. Therefore, the highway works and drainage assets could be located further within the RPA of these veteran trees, worsening the stated impacts on them. **The Applicant should confirm if the conclusion regarding impacts on veteran trees within ES Chapter 8:**	The height increase of the maintenance track is approximately 1m and the earthworks will take place on top of Cellweb (or equivalent ground protection system) therefore the anticipated impact on the rooting area is minimal. It is confirmed that the impacts have taken into account the lateral and vertical LoD of the highway works and drainage assets. There is no intention to raise the levels of the access track or highway in this location.

	Biodiversity has taken into account the lateral and vertical LoD of highways works and drainage assets.	
6.67.	Nottinghamshire County Council welcomes the commitment to monitoring as set out in paragraph 8.11.12 of ES Chapter 8: Biodiversity. However, whilst, monitoring will allow an understanding of changes in tree condition, deterioration can be very difficult to address once it becomes visible, therefore, **a robust framework of remedial measures should be committed to in the event that the trees do show decline during the monitoring period**	The Applicant confirms this provision is secured by the production of an Arboricultural Method Statement produced as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001].
Potential Conflicts		
6.68.	The AIA generally accords with BS5837 and contains a reasonable level of detail in relation to the tree survey. The report indicates that trees were provisionally positioned using GPS and aerial imagery and then were subsequently checked against topographical information and no significant accuracy issue was detected. Where trees (particularly veteran trees) are subject to impacts its key that they are accurately positioned so the extent of impact is fully understood. The AIA does not allow an understanding of whether trees are positioned to topographical stem position locations or not (this could be achieved by showing the topographical survey plan as a layer in the Tree Constraints Plan or by marked tree records with an Asterix or other symbol to denote indicative positioning).	The Applicant confirms whilst original plotting of trees was undertaken using GPS, Section 1.3.9 and 1.3.10 of Appendix 7.4 (Arboricultural Impact Assessment Part 1) of the Environmental Statement Appendices [APP-140] confirms that tree positions were aligned using National Tree Mapping Data provided by Bluesky and later was further confirmed using topographical survey data which is contained in the Tree Protection Plans within Appendix 7.4 (Arboricultural Impact Assessment) Part 4 [AS-088] and Part 5 [AS-089] of the Environmental Statement Appendices.
6.69.	The Scheme impacts three recorded veteran trees and there is limited justification that this will not negatively impact on their health and condition. A number of trees not classified as veteran could be considered potential veterans based on the survey data provided in the AIA (although it is noted that the arboricultural classification of veteran trees is relatively subjective) and some of these trees are subject to impacts or removal.	The Applicant confirms regardless of the degree of inherent subjectivity in current veteran tree survey methods, the majority of the trees highlighted by the respondent in 6.13 are being retained. The trees highlighted for removal are listed below with their stem diameters all within the bracket for "locally notable" for their species. T086 – stem diameter 800mm, ash T137 – stem diameter 900mm, ash T189 – stem diameter 840mm, oak These trees do not appear on the Ancient Tree Inventory. Trees T086, T137 and T189 were originally surveyed by consultants during preliminary design. The tree data was then used by another consultancy during detailed design to form the basis of the Arboricultural Impact Assessment and Tree Protection Plans. Samples of the data (approximately 10%) were sense checked and ground-truthed by a qualified arboriculturist on site, with the focus being on higher quality trees in close proximity to the design which may be under threat. Tree T137 was part of this sample, The Applicant confirms the design has been amended to retain veteran trees. In relation to tree T038, the Scheme elements that infringe on the edge of the RPA of this tree in the current design proposals will be reviewed at the detailed design stage. It is anticipated that the initial gradient of the proposed earth bund to the west of the tree as presented in the Complete Tree Protection Plans - Part 2 [AS-020] can potentially be revised during detailed design, locally steepening the slope profile to 1:2 to reduce the footprint of the bund. The alignment of the access road and swale to the west/southwest of the tree will be further reviewed with the objective of removing the minor incursion into the RPA if possible. Similarly, it is anticipated that the footprint of the headwall to the north of the tree can be adapted during detailed design to remove the minor incursion into the section of the RPA currently identified. In regard to trees T136 and T139, the design has been developed to limit incursions as far as practicable, steepening proposed earthworks to limit the footprint of the Scheme with the provision of 70-degree slopes to the widened embankment to reduce the neighboring access track corridor from 5.0 metres to 3.0 metres in order to avoid removal of the trees. Unfortunately, there is no scope to reduce this further. The mitigation measures suggested are to further decrease the impact on these trees. This is also detailed in the Applicant's

		Response to Relevant Representations [REP1-009] in response to the Forestry Commission's Relevant Representation [RR-023]. Impacts on Habitats of Principal Importance (HPIs) are also recorded in Chapter 8 (Biodiversity) of the Environmental Statement [APP-052]. The Applicant confirms this provision is secured by the production of an Arboricultural Method Statement produced as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001].
6.70.	The Scheme requires the removal of areas of priority habitat (Deciduous Woodland and Wood Pasture & Parkland). If the wood pasture were to be ancient this would equate to a form of ancient woodland.	The Applicant confirms one of the areas of wood pasture is situated at Langford Hall where realignment of the access is taking place. Realignment for access to Langford Hall has been designed to minimise impact on trees by conducting detailed surveys of individual trees to ascertain the access route with the lowest arboricultural impact. This selected option also ties into an existing hard standing access to the wood pasture area, minimising the impact further. One tree (T655 - a semi to early mature beech) situated between an existing access road and an open field of improved grassland will require removal for this option. Whilst the area T655 is located in is identified as 'Woodpasture' in Defra's MAGIC map application, detailed ecological surveys of the area identified this strip of trees as Broadleaved Woodland – Plantation. See Appendix 8.1 (Extended Phase 1 Habitat Technical Report Part 2) of the Environmental Statement Appendices [APP-144] for further details.Another area of wood pasture is located at Kelham. Barrier and ground protection are specified to protect trees located at the edge of the wood pasture adjacent to the Order Limits. Where habitat loss or deterioration has been unavoidable, replacement habitats are proposed to be created as detailed on Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026]. The lowland mixed deciduous woodland within the Order Limits would increase through the proposals as the baseline includes 2.26ha and post-development there would be 3.84ha. Off site compensation at Doddington Hall would also enhance an area of plantation woodland into lowland mixed deciduous woodland (see Tables 5.1 and 5.3 in Appendix 8.14 (Biodiversity Net Gain Technical Report) of the Environmental Statement Appendices [APP-159].
6.71.	Within the AIA there is no reference to compensation for tree and woodland loss and limited mitigation or enhancement (generally focused on tree protection).	The purpose of the Arboricultural Impact Assessment [APP-140] is to record the arboricultural impact. Where habitat loss or deterioration has been unavoidable, replacement habitats are proposed to be created as detailed on Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026].
6.72.	In relation to NPSNN 2014 and 2024 the AIA does not fully address the potential deterioration of irreplaceable habitat associated with the three veteran trees subject to an RPA incursion and also includes references to further potential veteran trees (not identified at such) at risk of impact or loss.	The Applicant confirms all veteran trees are retained and the design has been amended to the maximum extent possible within the constraints of the local areas surrounding the veteran trees, protection measures have been specified for the construction phase in the Arboricultural Impact Assessment [APP-140] and Tree Protection Plans Part 4 [AS-088] and Part 5 [AS-089]. The Applicant confirms that provision of remedial mitigation measures for disturbance to the veteran trees will be secured by the production of an Arboricultural Method Statement produced as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001]. Whilst the objective is to retain all veteran trees on site the Arboricultural Impact Assessment [APP-140] transparently notes the RPA infringements and Section 8.11.12 Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] notes, "there will be an unavoidable permanent adverse impact to three veteran trees due to the direct partial impact to their RPAs…. It is very unlikely that this would result in a slow decline in tree health or accelerate the death of the tree and therefore the integrity of this resource will not be affected. It is anticipated that, with arboricultural supervision to ensure works are undertaken in line with best practice, the level of disturbance stated above can be tolerated by these trees. It is difficult to predict this with certainty and therefore ongoing monitoring is proposed to inform any remedial action. Following the implementation of this mitigation, a minor adverse impact on an irreplaceable resource of national importance is anticipated, resulting in a Slight Adverse effect during construction that is not significant."
6.73.	On this basis, Nottinghamshire County Council believes that the AIA does not satisfy the	The Applicant confirms all veteran trees are retained and the design has been amended to the maximum extent possible within the constraints of the local areas surrounding the veteran trees, protection measures have been

	requirement of either iteration of the NPSNN, unless: a. the AIA can further justify no impact (resulting in deterioration) for the three veteran trees b. robust justification can be provided that other trees with veteran features should not qualify as veterans; c. the benefits of the Scheme outweigh the loss (in relation to NPSNN 2014); and d. wholly exceptional circumstances can be demonstrated, with compensation measures provided (in relation to NPSNN 2024).	specified for the construction phase in the Arboricultural Impact Assessment [APP-140] and Tree Protection Plans Part 4 [AS-088] and Part 5 [AS-089]. The Applicant confirms that provision of remedial mitigation measures for disturbance to the veteran trees will be secured by the production of an Arboricultural Method Statement produced as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001]. The Applicant confirms regardless of the degree of inherent subjectivity in current veteran tree survey methods, the majority of the trees highlighted by the respondent in 6.13 are being retained. The trees highlighted for removal are listed below with their stem diameters all within the bracket for "locally notable" for their species. T086 – stem diameter 800mm, ash T137 – stem diameter 900mm, ash T189 – stem diameter 840mm, oak These trees do not appear on the Ancient Tree Inventory. Trees T086, T137 and T189 were originally surveyed by consultants during preliminary design. The tree data was then used by another consultancy during detailed design to form the basis of the Arboricultural Impact Assessment and Tree Protection Plans. Samples of the original data (approximately 10%) were sense checked and ground-truthed by a qualified arboriculturist on site, with the focus being on higher quality trees in close proximity to the design which may be under threat. Tree T137 was part of this sample, Whilst the objective is to retain all veteran trees on site the Arboricultural Impact Assessment [APP-140] transparently notes the RPA infringements and Section 8.11.12 Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] notes, "there will be an unavoidable permanent adverse impact to three veteran trees due to the direct partial impact to their RPAs…. It is very unlikely that this would result in a slow decline in tree health or accelerate the death of the tree and therefore the integrity of this resource will not be affected. It is anticipated that, with arboricultural supervision to ensure works are undertaken in line with best practice, the level of disturbance stated above can be tolerated by these trees. It is difficult to predict this with certainty and therefore ongoing monitoring is proposed to inform any remedial action. Following the implementation of this mitigation, a minor adverse impact on an irreplaceable resource of national importance is anticipated, resulting in a Slight Adverse effect during construction that is not significant."
6.74.	The Scheme may not meet the requirement of either NPSNN 2014 or 2024 in relation to the Protection of Habitats of Principal Importance (such as Lowland Deciduous Woodland and Wood Pasture & Parkland) which are removed or partly removed for the Scheme - in arboricultural terms this equates to harm. Therefore, Nottinghamshire County Council believes that the AIA does not meet this requirement unless the benefits of the Scheme clearly outweigh the harm.	The Applicant confirms one of the areas of wood pasture is situated at Langford Hall where realignment of the access is taking place. Realignment for access to Langford Hall has been designed to minimise impact on trees by conducting detailed surveys of individual trees to ascertain the access route with the lowest arboricultural impact. This selected option also ties into an existing hard standing access to the wood pasture area, minimising the impact further. One tree (T655 - a semi to early mature beech) situated between an existing access road and an open field of improved grassland will require removal for this option. Whilst the area T655 is located in is identified as 'Woodpasture' in Defra's MAGIC map application, detailed ecological surveys of the area identified this strip of trees as Broadleaved Woodland – Plantation. See Appendix 8.1 (Extended Phase 1 Habitat Technical Report Part 2) of the Environmental Statement Appendices [APP-144] for further details.d Another area of wood pasture is located at Kelham. Barrier and ground protection are specified to protect trees located at the edge of the wood pasture adjacent to the order limits. Where habitat loss or deterioration has been unavoidable, replacement habitats are proposed to be created as detailed on Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026]. The lowland mixed deciduous woodland within the Order Limits would increase through the proposals as the baseline includes 2.26ha and post-development there would be 3.84ha. Off site compensation at Doddington Hall would also enhance an area of plantation woodland into lowland mixed deciduous woodland (see Tables 5.1 and 5.3 in Appendix 8.14 (Biodiversity Net Gain Technical Report) of the Environmental Statement Appendices [APP-159]

6.75.	**Nottinghamshire County Council is concerned with the proposed mitigation measures for veteran trees and requests that the Applicant set out and commit to monitoring of veteran tree health, and remedial measures that could be implemented where veteran tree health to decline.**	Whilst the objective is to retain all veteran trees on site the Arboricultural Impact Assessment [APP-140] transparently notes the RPA infringements and Section 8.11.12 Chapter 8 (Biodiversity) of the Environmental Statement [APP-052] notes, "there will be an unavoidable permanent adverse impact to three veteran trees due to the direct partial impact to their RPAs…. It is very unlikely that this would result in a slow decline in tree health or accelerate the death of the tree and therefore the integrity of this resource will not be affected. It is anticipated that, with arboricultural supervision to ensure works are undertaken in line with best practice, the level of disturbance stated above can be tolerated by these trees. It is difficult to predict this with certainty and therefore ongoing monitoring is proposed to inform any remedial action. Following the implementation of this mitigation, a minor adverse impact on an irreplaceable resource of national importance is anticipated, resulting in a Slight Adverse effect during construction that is not significant.". The Applicant confirms the exact specification will be included in the detailed Arboricultural Method Statement produced as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001].
6.76.	**Nottingham County Council requests that the Applicant confirm if the conclusion regarding impacts on veteran trees within ES Chapter 8: Biodiversity has taken into account the lateral and vertical LoD of highways works and drainage assets**, as shown in Sheet 3 of 7 on the Works Plans [TR010065-000353-2.3] and as described in paragraph 2.5.120 of Chapter 2: The Scheme	The Applicant confirms that the impacts have taken into account the lateral and vertical LoD of the highway works and drainage assets.
Summary		
6.77.	In summary, the AIA contains a reasonable level of detail and generally follows industry best practice in relation to the level of detail collected.	No comments needed from the Applicant.
6.78.	The Scheme results in extensive tree loss, much of which is likely to be unavoidable due to the nature and layout of the proposals.	No comments needed from the Applicant.
6.79.	There are some inconsistencies in relation to tree retention close to areas of works and therefore tree removals in practice could be greater than those reported.	No comments needed from the Applicant.
6.80.	Tree loss includes trees located within habitats of principal importance such as deciduous woodland	No comments needed from the Applicant.
6.81.	The AIA assessment in relation to veteran trees is inconsistent and requires further robust justification, including a re-evaluation of some trees not classed as veterans but with clear veteran characteristics	The Applicant confirms regardless of the degree of inherent subjectivity in current veteran tree survey methods, the majority of the trees highlighted by the respondent in 6.13 are being retained. The trees highlighted for removal are listed below with their stem diameters all within the bracket for "locally notable" for their species. T086 – stem diameter 800mm, ash T137 – stem diameter 900mm, ash T189 – stem diameter 840mm, oak These trees do not appear on the Ancient Tree Inventory. Trees T086, T137 and T189 were originally surveyed by consultants during preliminary design. The tree data was then used by another consultancy during detailed design to form the basis of the Arboricultural Impact Assessment and Tree Protection Plans. Samples of the original data (approximately 10%) were sense checked and ground-truthed by a qualified arboriculturist on site, with the focus being on higher quality trees in close proximity to the design which may be under threat. Tree T137 was part of this sample.

6.82.	Nottinghamshire County Council requests that monitoring and remedial actions in relation to veteran trees are committed to at this stage.	The Applicant confirms the exact specification can be included in the detailed Arboricultural Method Statement produced as part of the Second Iteration Environmental Management Plan developed from the First Iteration Environmental Management Plan [APP-184] for implementation during construction and secured through Requirement 3 of the draft Development Consent Order [REP1-001].

7. Landscape		
7.1.	The review has carried out with reference to the documents listed below: *2.6 Engineering Plans and Sections (Application document reference: TR010065/APP/2.6) Rev 1 April 2024* • Part 1 – Typical Cross Sections *6.1 Environmental Statement (Application document reference: TR010065/APP/6.1) Rev 1 April 2024* • Chapter 2 The Scheme • Chapter 7 Landscape and Visual Effects • Chapter 15 Combined and Cumulative Effects *6.2 Environmental Statement (Application document reference: TR010065/APP/6.2)* • Figure 2.2 Environmental Constraints Plan • Figure 2.3 Environmental Masterplan • Figure 2.4 Locations of Temporary Works Areas Required During Construction • Figure 7.1 Published Regional Character Areas and Policy Zones • Figure 7.2 Landscape Character Areas • Figure 7.3 Zone of Theoretical Visibility • Figure 7.4 Visual Receptor Location Plan • Figure 7.5 Visual Effects Plan • Figure 9.1 Topography *6.3 Environmental Statement (Application document reference: TR010065/APP/6.3)* • Appendix 7.1 Landscape Character Policy Zone Descriptions • Appendix 7.2 Visual Baseline and Impact Schedules • Appendix 7.3 Key Visual Receptor Photographs and Photomontages Part 1 • Appendix 7.3 Key Visual Receptor Photographs and Photomontages Part 2	No comment required from the Applicant.
Landscape and Visual Impact Assessment (LVIA) Methodology		
7.2.	The LVIA methodology adopted for this application is in line with the methodology as set out within the Design Manual for Road and Bridges (DMRB) LA 107 Landscape and Visual Effects assessing construction and operational impacts for Year 1 and Year 15. It also follows industry best practice which is currently: • Guidelines for Landscape and Visual Impact Assessment (Landscape Institute and the Institute for Environmental Management and Assessment Third Edition 2013), • Landscape Character Assessment (Natural England 2014) and for the visualisations: • TGN 06/19 Visual Representation of Development Proposals (Landscape Institute 2019).	No comment required from the Applicant.
Summary		
7.3.	The correct methodology and guidance document have been followed and the	No comment required from the Applicant.

	applicant has applied these to the assessment.	
Study Area		
7.4.	The study area (shown on Figure 7.1 to Figure 7.3 of the Environmental Statement) is identified as two km from the Scheme alignment. This has been determined by the extent of the Scheme using the guidance within DMRB LA 107. Chapter 7 Landscape and Visual Effects, paragraph 7.7.1. (Application document reference: TR010065/APP/6.1) sets out the factors that were considered to determine the study area.	No comment required from the Applicant.
7.5.	Beyond the study area the applicant did not consider that there would be significant effects upon landscape character due to intervening built form and existing vegetation (Chapter 7 Landscape and Visual Effects, paragraph 7.7.3). We agree with this conclusion. However, we noted that the last sentence of this paragraph is repeated. Clarification on whether this is referring to visual receptors is required from the applicant as built form and existing vegetation would also limit the extent of visibility of the Scheme from visual receptors at this distance.	The Applicant can confirm that the repeated sentence is an error, and agrees that the sentence applies to both landscape and visual receptors. This can be found in the Table of Errata [TR010065/APP/7.38] which is submitted at Deadline 2 of the Examination.
Zone of Theoretical Visibility		
7.6.	The applicant's Zone of Theoretical Visibility (ZTV) is based on the operational Scheme and shown on Figure 7.3. This is based on a viewer height of 1.6m and a maximum height of 4.2m for heavy goods vehicles (HGVs) (Chapter 7, paragraph 7.5.5). The applicant's ZTV was based on a Digital Surface Model (DSM) with woodland/buildings beyond the highway corridor included as screening elements but to give a worst-case scenario the existing vegetation alongside the road corridor had not been included.	No comment required from the Applicant.
7.7.	To check the validity of the ZTV we mapped the ZTV using the same parameters (in terms of viewer height and HGV height) using both a digital terrain model (DTM) that uses contour heights only and DSM that uses both contour and heights of surface features buildings/vegetation. Our results were broadly similar with the applicant's ZTV but gave a slightly reduced coverage of area of ZTV likely to be due to the inclusion of existing roadside vegetation acting as a screen/filter along the road corridor.	No comment required from the Applicant.
7.8.	Whilst the applicants ZTV shows the ZTV being clipped at the 2km study area boundary the ZTV goes beyond this. However, we agree that due to the distance, low lying land in proximity to the scheme and extent of intervening overlapping vegetation that impacts to visual receptors would be negligible and beyond this there would not be significant visual impacts.	No comment required from the Applicant.
7.9.	The areas of greatest magnitude of visual change are where there will be new elevated sections of carriageway introduced into the landscape where currently the road alignment is at grade. The applicant's typical cross sections (*Application document reference: TR010065/APP/2.6)* show these are located at the Cattle Market Junction *(Sections E, F)* and around the Brownhills junction *(Sections M, N, O).* The applicant doesn't specifically reference the height of the proposed structures around the Brownhills Junction but for the Cattle Market Junction the proposed grade separated junction is estimated to be around 7- 8 metres above the existing ground level (p. 2.5.11 ES Volume 1 Chapter 2 The Scheme). Further information on the height of proposed earthworks above the existing ground level around the Brownhills junction should be provided within Chapter 7.	The Applicant can confirm the height of Brownhills Junction is 7.9 metres at its highest as set out in 7.4.3 of the Scheme Design Report [APP-194].
Summary		

7.10.	The ZTV captures the extent of theoretical visibility within the Study area and has been used as suitable aid to identify key visual receptors. We agree with the ZTV as shown on Figure 7.3. Clarification on the height of the proposed carriageway, and embankments around the proposed Brownhills Junction should be provided.	See response to 7.9 above.
Local Designations		
7.11.	Local designations within the study area are shown on Figure 2.2 Environmental Constraints Plan and listed in Table 7.6 of the ES Chapter 7. The table has listed five conservation areas of which two are in close proximity to the Scheme (within Order Limits). These are Winthorpe Conservation Area and Newark Conservation Area. Other designations are listed buildings, scheduled monuments, Newark Castle Gardens Registered Park and Garden and designated trees (those identified as notable, veteran and with TPOs). Nature conservation designations have not been within Table 7.6. and whilst Chapter 7 Landscape and Visual Effects does not cover the ecological value and significance (contained in Chapter 8 Biodiversity) these designations do contribute to the landscape character and visual qualities of the Scheme's location. This is particularly relevant for those visual receptors on Public Rights of Way (PRoW) along the River Trent where Local Wildlife Sites (LWS) contribute to the local character of the area. Examples of these receptors are: • VP11 - PRoW Farndon Bridleway within River Trent Staythorpe LWS to the southwest of the Scheme. • VP13 - PRoW Newark Bridleway 5 within Newark Trent Grasslands LWS • Representative views covered by VP 31 and 32 - PRoW Newark Bridleway 5, Trent Banks/Wharves, Newark Local Wildlife Site (LWS) which extends over the section of the River Trent between Farndon Marina to the southwest to the southern side of Nether Lock Viaduct to the north	The Applicant can confirm that only landscape specific designations have been expressly listed in Table 7.6. Ecological designations have not been listed within Table 7.6 of Chapter 7 (Landscape and Visual Effects) of the Environmental Statement [APP-051], as ecological designations are not assessed in their own right in the assessment of landscape and visual effects. However, the applicant recognises that the landscapes that sit within the ecological designations do contribute to the baseline landscape character and visual amenity, and therefore have contributed to the value and sensitivity to change and subsequent assessment of visual impacts and effects for all relevant viewpoints. Further information in regards to ecological designations and the impact upon them is presented in Chapter 9 [App-050] and Figure 2.2 - Environmental Constraints [A-026] of the Environmental Statement.
Summary		
7.12.	The applicant has not identified all key designations that contribute to Landscape Character or visual matters which include nature conservation sites. These designations haven't been listed in Table 7.6. though they have been identified on the Constraints Plan Figure 2.2 Environmental Constraints Plan. These should be included within Chapter 7 Landscape and Visual Effects assessment.	See response to 7.11 above
Landscape Character		
7.13.	The study area lies within National Character Area 48 *Trent and Belvoir Vale* (Natural England 2014) and at a county level the Newark and Sherwood (NSDC) Character Areas and Policy Zones as set out in the Landscape Character Assessment Supplementary Planning Guidance (Newark and Sherwood District Council 2013). Refer to Figure 7.1 Published Regional Character Areas and Policy Zones.	No comment required from the Applicant.
7.14.	The applicant has identified landscape character areas, LCAs (shown on Figure 7.2 Landscape Character Areas) which broadly reflects the Character Areas within NSDC SPD providing further level of definition particularly to the urban areas around Newark, Farndon and the area around Winthorpe. The sensitivity to change of each of these LCAs was determined as follows: LCA 1 Trent Washlands – Medium sensitivity LCA 2 Winthorpe Village and Farmlands – High sensitivity	No comment required from the Applicant.

<table>
<tr><td></td><td>LCA 3 East Nottinghamshire Sandlands – Low sensitivity
LCA 4 Newark - High sensitivity
LCA 5 South Nottinghamshire Farmlands - Medium sensitivity
LCA 6 Farndon Village - High sensitivity
LCA 7 Mid- Nottinghamshire Farmlands – Medium sensitivity</td><td></td></tr>
<tr><td>7.15.</td><td>The applicant determined the levels of magnitude of change for the construction and operational stages for each of the LCAs as set out below.

Magnitude of Change<table><tr><th>Landscape Character Area</th><th>Magnitude of Change Construction</th><th>Magnitude of Change Operation Yr1</th><th>Magnitude of Change Operation Yr15</th></tr><tr><td>LCA 1 Trent Washlands</td><td>Moderate adverse</td><td>Moderate adverse</td><td>Minor adverse</td></tr><tr><td>LCA 2 Winthorpe Village and Farmlands</td><td>Major adverse</td><td>Major adverse</td><td>Moderate adverse</td></tr><tr><td>LCA 3 East Nottinghamshire Sandlands</td><td>Moderate adverse</td><td>Minor adverse</td><td>Minor adverse</td></tr><tr><td>LCA 4 Newark</td><td>Negligible</td><td>No change</td><td>No change</td></tr><tr><td>LCA 5 South Nottinghamshire Farmlands</td><td>Negligible</td><td>No change</td><td>No change</td></tr><tr><td>LCA 6 Farndon Village</td><td>Negligible</td><td>No change</td><td>No change</td></tr><tr><td>LCA 7 Mid-Nottinghamshire Farmlands</td><td>Negligible</td><td>No change</td><td>No change</td></tr></table></td><td>No comment required from the Applicant.</td></tr>
<tr><td>7.16.</td><td>As the Scheme directly impacts on the Trent Washlands, Winthorpe Village and Farmlands and East Nottinghamshire Sandlands LCAs these will be the areas that will experience change to landscape character. We agree with these findings.

Landscape Effects<table><tr><th>LCA</th><th>Landscape Effect Construction</th><th>Landscape Effect Operation Yr1</th><th>Landscape Effect Operation Yr15</th></tr><tr><td>LCA 1 Trent Washlands</td><td>Moderate adverse</td><td>Moderate adverse</td><td>Slight adverse</td></tr><tr><td>LCA 2 Winthorpe Village and Farmlands</td><td>Large adverse</td><td>Large adverse</td><td>Moderate adverse (residual significant effect)</td></tr><tr><td>LCA 3 East Nottinghamshire Sandlands</td><td>Slight adverse</td><td>Slight adverse</td><td>Slight adverse</td></tr><tr><td>LCA 4 Newark</td><td>Slight adverse</td><td>No change</td><td>No change</td></tr><tr><td>LCA 5 South Nottinghamshire Farmlands</td><td>Neutral</td><td>Neutral</td><td>Neutral</td></tr><tr><td>LCA 6 Farndon Village</td><td>Slight adverse</td><td>Neutral</td><td>Neutral</td></tr><tr><td>LCA 7 Mid-Nottinghamshire Farmlands</td><td>Slight adverse</td><td>Neutral</td><td>Neutral</td></tr></table></td><td>No comment required from the Applicant.</td></tr>
<tr><td>7.17.</td><td>The resulting level of significance of effect are a combination of level of sensitivity and magnitude of change summarised above and shown in Table 7-7 Chapter 7</td><td>Please see response to 7.24 below.</td></tr>
</table>

	Landscape and Visual Effects. Significant effects are those that are classed as Moderate adverse or above. Winthorpe Village and Farmlands is the only LCA that still has a residual Significant Impact in Year 15. We agree with these finding but consider further mitigation could provide improved landscape integration into the surrounding area as outlined in the Table 1 below setting out additional mitigation.	
Summary		
7.18.	The defined landscape character areas within the study area and their baseline levels of sensitivity to change are appropriate. We agree with the levels of effect for the character area for the construction and operational period as set out in paragraphs 7.11.3 to 7.11.20, 7.7.11.27 to 7.11.37 and summarised in Table 7-7. However, there may be scope for additional planting particularly within Trent Washlands LCA (focused on Cattle Market Junction) and within Winthorpe Village and Farmlands the latter being where the residual impact is still significant at year 15. Refer to Table 1 for recommendations.	Please see response to 7.24 below.
Viewpoint Selection and Assessment of Visual Receptors		
7.19.	The applicant assessed 63 visual receptors of which seven are associated with the proposed works to accommodate Kelham and Averham Flood Compensation Area. Residential visual receptors were grouped with a representative viewpoint of the most severe impact for the group.	No comment required from the Applicant.
7.20.	Visual Baseline and Impact Schedules (Appendix 7.2 Visual Baseline and Impact Schedules) described the sensitivity, baseline changes in view and effect on visual receptors for construction Year 1, winter and Year 15 summer for the Scheme. A number of these were classed as key visual receptors of which baseline winter and summer photographs were provided for Viewpoints 9, 10 11, 18, 31, 32, 36, 47 and 49 with photo montages and visualisations (LI Type 4) provided for 3, 24, 41, and 43	No comment required from the Applicant.
7.21.	We carried out a site visit to check key viewpoints on site that were identified following a review of the development proposals. These particularly focused on those areas where new structures would be introduced into the landscape and from visual receptors in closer proximity to the proposed development.	No comment required from the Applicant.
7.22.	The majority of residential receptors are to the southeast of the scheme along the northwestern edge of Newark as it fringes the River Trent and existing infrastructure corridor. The A46 is primarily being widened to the north which allows for existing vegetation to be retained along the southeast facing road embankment. Should existing vegetation subsequently need to be removed in localised areas or ash die back be found to thin the canopy allowing views out to the road then replacement planting should be provided.	The Applicant confirms that the proposed planting set out within Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026] is in relation to the preliminary design developed to date. During detailed design, any amendments to the design that may impact existing planting to be retained will be assessed and mitigated for as part of the design development process to ensure no new or materially different effects are experienced in relation to landscape and visual effects.
7.23.	The proposed Scheme will be most visible where the road is a new element in the landscape, particularly where it is elevated. This is notably around the Cattle Market Junction and Brownhills Junction. These areas are also in closer proximity to more sensitive areas of landscape, from the approach to the castle and historic core of Newark (lying within Newark Town conservation area) and Winthorpe Conservation Area respectively.	No comment required from the Applicant.
7.24.	Viewpoints where we consider there could be additional mitigation are listed below. **Table 1: Viewpoint Analysis**	

Viewpoint number	Comments	Recommendation	Responses
Viewpoint 11	In the winter there will be medium distance views east from the bridleway (Farndon BW1 bridleway) located further north from viewpoint 11 across to Farndon West Borrow Pits Area and to the new road embankment. Aerial photography shows some gaps in existing riverside vegetation along the River Trent in this location.	Sensitively placed additional planting would help filter views across the river from this bridleway.	Viewpoint 11 The Applicant can confirm that the environmental design, as set out within Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026], has included provision for additional planting immediately adjacent to the River Trent to fill gaps between existing riverside vegetation, and also beyond, with strategically placed tree planting within the Farndon West Flood Compensation Area to further help filter gaps in vegetation where they cannot be filled on the river edge itself. Shrub and tree planting on the embankments of the A46 would also provide a further layer of screening at height over time.
Viewpoint from Great North Road, Newark in a north-northwest direction towards Castle Market Roundabout	Viewpoint 18 view is representative of elevated views to the north from the top of the castle Gate House. North of the Nottingham-Lincoln railway line crossing there are also views experienced by pedestrians/ road users along Great North Road heading towards Cattle Market Junction away from Newark. Although this is within a narrow field of view, framed by existing street trees, the elevated carriageway will be more apparent particularly as a lit structure with moving traffic.	The views from receptors leaving Newark travelling towards Cattle Market junction should be considered from Great North Road. Additional street tree planting would filter views on the approach to this junction from Newark.	Viewpoint from Great North Road The Applicant has given full consideration to opportunity to provide street trees along Great North Road when leaving Newark. Whilst space restrictions prevent street trees on the footway itself, the applicant has proposed a hedgerow with tree planting along the boundary of the proposed compound alongside Great North Road, as well as to the north of the compound adjacent to Cattle Market Junction. Trees on the south bound carriageway would remain as shown on Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026].
Viewpoint 24	We agree with the levels of visual effect for the elevated carriageway and retaining wall viewed from Sandhills park. These are: Construction year - Very large adverse Year 1 and Year 15 - Large adverse. However unclear as to why these visual effects cannot be reduced by additional planting to filter views of the retaining wall and lit elevated junction. The environmental function of proposed planting immediately northeast of Sandhills is *water quality* and *nature conservation* (coded EFH/D on Figure 2.3 Environmental Masterplan Sheet 3 of 7) presumably as this area is part of a Local Wildlife Site. Additional planting here should also have a visual screening function (EFA) and enhancing the built environment function (EFC).	Include additional planting between the proposed roundabout junction and the residential area along Sandhills Park to help screen the proposed retaining wall from residents and improve the road frontage.	Viewpoint 24 The Applicant can confirm that planting opportunities in respect to screening Sandhills Park have been maximised within the design and site constraints present in this location, including those associated with adherence to DMRB design standard LD117 which precludes planting of shrubs and trees in close proximity to the carriageway. The Applicant can confirm that lighting of Cattle Market junction will be at grade only and not raised on top of the elevated carriageway.

	Viewpoint 25	We agree with the levels of visual effect from this viewpoint. However closer to this junction, for pedestrians and road users approaching Newark from the Great North Road, the elevated road with lit traffic will be more visible and potentially in the same view as the top part of St Mary Magdalene Church Spire for a short section of footway. This view is also the approach into Newark for road users, and users of the proposed footway/cycleway around the junction.	Given the gateway location of this junction and proximity to the town centre, the ability to contribute to the streetscape with sensitive design and street tree planting should be fully explored. As shown (Figure 2.3 Environmental Masterplan Sheet 3 of 7) the location of the proposed noise barrier along the southwestern corner of the roundabout leaves limited scope for planting. The reconfiguration of the noise barrier (tested by modelling if necessary) to allow for some additional visual mitigation should be carried out.	Viewpoint 25 The Applicant has considered planting opportunities wherever feasible in order to reduce landscape and visual impacts associated with Cattle Market Junction. However, due to space constraints further planting is not achievable in this area beyond that already presented in Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026].
	Viewpoint 41 (Photomontage 41) (Within Winthorpe Village and Farmlands LCA 2)	The photomontage representing the visual change for viewpoint 41 shows the proposed the elevated A46 on 1:2 gradient embankments with the A46 Brownhills roundabout junction in the midground with new light columns. The height of the new overbridge is not specified in Chapter 2 The Scheme or Chapter 7 Landscape and Visual Effects but is assumed to be around 8m in height. This structure could be better integrated by additional planting. Further planting to filter views south from properties to the southern end of the end of The Spinney in Winthorpe from impacts of lighting around the slip road to the service station	Consider additional planting on the proposed embankment of the A46 and hedgerow trees within the proposed hedge along the connecting road between Winthorpe Lane and the new roundabout would help to filter views from visual receptors represented by viewpoint 41. Provision of additional tree planting (potentially with an evergreen component to reflect other similar species in LCA 2) north of the alongside the acoustic barrier along slip road to service station.	The Applicant can confirm that the proposed landscape bunds are shown to be fully vegetated either with woodland or with tree and shrub planting to create a continuous belt of mature planting, with the exception of two small gaps to accommodate access tracks. Beyond the access track a hedgerow with trees is proposed to provide a further layer of screening and aid landscape integration with the landscape beyond. Planting has also been proposed adjacent to the acoustic barrier on the slip road into the Shell Service station where space permits, as shown on Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026].
Lighting proposals				
7.25.	Chapter 2 describes the extent of proposed lighting (p. 2.5.88) but does not explicitly show on a drawing where there is an introduction of lighting into the landscape which was previously unlit as opposed to an upgrade to existing lighting already present. We assume that lighting proposals will be modified/upgraded at junctions already lit (Farndon, Cattle Market Junction, Brownhills/Friendly Farmer Junctions Winthorpe Roundabout) with new lighting along the new Friendly Farmer link road and the new Brownhills roundabout junction to the west of the A1.		The Applicant confirms the assumption is correct, further details on the lighting at Brownhills Junction is described within paragraph 2.5.31 of Chapter 2 (The Scheme) of the Environmental Statement [APP-046].	
Summary				
7.26.	We broadly agree with the applicants' findings for the levels of effect on visual receptors.		The Applicant can confirm new lighting in previously unlit areas is only proposed for Friendly Farmer link,	

	Chapter 2 describes the extent of proposed lighting (p. 2.5.88) but does not explicitly show on a drawing where there is an introduction of lighting into the landscape which was previously unlit as opposed to an upgrade to existing lighting already present. This should be included in the descriptions within the LVA with an estimate as to the height of the columns. Further information is required for those viewpoints identified in Table 1.	located immediately adjacent to the A46 which is already lit in this location, and also at Brownhills Junction. In other locations lighting levels will remain as per the existing condition, with unlit sections remaining unlit and lit sections remaining lit albeit modification of existing lighting columns may be required. Lighting column heights have been minimized as far as possible in order to lessen potential adverse impacts upon Nocturnal species (for example bats); the existing landscape and visibility from nearby properties and dwellings after dark; and the setting of features associated with the historic environment (for example listed buildings). The landscape and visual impact assessment has accounted for changes in views associated with the lighting from the perspective of relevant viewpoints and where pertinent has included within the description of future views as set out in Appendix 7.2 (Visual Baseline and Impact Schedules) of the Environmental Statement Appendices [APP-137].
Mitigation		
7.27.	Mitigation proposals are shown on Figure 2.3 Environmental Masterplan where proposed indicative plant mixes for plant species mixes (e.g. LE2.1 Woodland Indicative mix etc.) have been set out on Sheet 1 of 7. The retention of existing roadside vegetation to the southern side of the road corridor along with its enhancement (so that it can continue to screen a large amount of the road corridor) is essential to minimise impacts to both landscape character and visual receptors within Newark and along the River Trent. The condition of existing trees has been discussed (paragraph 7.4.2 Chapter 7) in relation to the impact of proposed construction works. Gapping up of existing tree belts that are in decline should be incorporated into the detail design proposals.	The Applicant can confirm that the request to further gap up existing tree belts in decline will be reviewed during detailed design phase of the Scheme.
7.28.	Although the extent of mitigation provided is generally appropriate there is limited scope for any visual screening between the link road and between Friendly Farmer Roundabout and Winthorpe Roundabout to the north of Newark Showground. This is due to a proposed development (Nua/MU/1) A native hedge is proposed along this boundary. This would benefit from the inclusion of hedgerow trees to aid visual screening.	The Applicant can confirm that the environmental design as shown in Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026], in the area along the link road north of Newark Showground has included trees within the proposed hedgerow wherever space has allowed. However, in order to conform with highways design standard DMRB LD117, the length of hedgerow closest to Friendly Farmer roundabout cannot accommodate tree planting within the hedgerow due to limited distance from the edge of carriageway.
Landscape character.		
7.29.	To reflect the landscape character of this part of Nottinghamshire the plant mixes along the route corridor should contain those species found within the character area of NSDC Landscape Character Assessment within which the Scheme crosses. The majority of the Scheme is within the *Trent Washlands* character area which covers the Scheme as set out on Figure 2.3 Sheet 1 to 4 and Sheet 7 (covering the Kelham and Averham flood compensation area). The northeastern end of the Scheme (Sheets 5 and 6) lies within a different character area *East Nottinghamshire Sandlands* and therefore should be based on the native plant species typical to this area. At a finer grain Winthorpe has its own local landscape character with established shelter belts and parkland trees. These characteristics should be incorporated into the detail design of the mitigation planting.	The indicative planting mixes developed during the preliminary design included within the First Iteration Environmental Management Plan [APP-184] and shown on Figure 2.3 (Environmental Masterplan) of the ES Figures [AS-026] have been chosen to reflect the local landscape character, including those species listed in the Newark & Sherwood Landscape Character Assessment SPD. These are indicative mixes only, with the intention that these mixes would be developed during detailed design with sub-mixes created for various locations along the site in line with variations in landscape character and associated existing species. This mitigation is detailed in commitment L3 of Table 3-2 Register of Actions and Commitments in the First Iteration Environmental Management Plan. The First Iteration Environmental Management Plan [APP-184] will be developed into a Second Iteration Environmental Management Plan to be implemented during construction of the Scheme. Adherence with the Second Iteration Environmental Management Plan is secured by Requirement 3 of the draft Development Consent Order [REP1-001].
Visual Impact		
7.30.	Provision of additional planting to reduce visual effects for specific viewpoints is recommended in Table 1. The proposed planting to the north of the potential construction compound area south of Cattle Market junction should include a woodland mix to provide the density of overlapping branches to screen the retaining wall as much as possible in the winter months.	The Applicant refers the reader to reference 7.24 in respect to specific requests made in Table 1.
7.31.	Whilst the proposed acoustic barrier reduces the impact of noise to surrounding receptors this can be a visually intrusive element in the landscape particularly where this runs immediately adjacent to the carriageway. Providing some planting to break runs of acoustic barrier would be appropriate around Cattle Market Junction where it links to the Great North Road on the approach to Newark as well as on the northwest side of the A46 east of the Esso Service	The Applicant can confirm that the planting proposals around Cattle Market have been maximised as far as practicable in respect to breaking up the massing of the acoustic barrier, particularly from high sensitivity receptors such as nearby residential receptors. The acoustic barrier has been positioned to ensure effective acoustic mitigation in this area. In addition, site constraints associated with topographic levels, earthworks and drainage assets, prevent the relocation of the acoustic barrier. Consequently, space restrictions between the

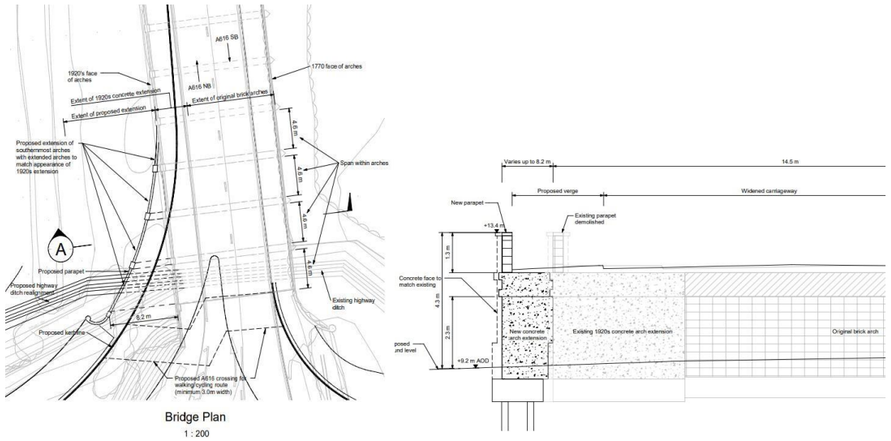
	station.	barrier and the highway prevent further planting in this area.
Summary		
7.32.	The landscape proposals shown on the Environmental Masterplan generally mitigate the majority of adverse impacts to surrounding receptors. Key points to note are:	No comment required from the Applicant.
7.33.	Existing mature vegetation (embedded mitigation) that filters the route corridor should be retained and enhanced so that it is still able to provide a visual screen beyond Year 15.	The Applicant has sought to minimise landscape and visual effects wherever feasible, maximising the retention of existing vegetation wherever practicable, as well as maximising potential opportunities for mitigation planting as set out within Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026]. During detailed design, any amendments to the broader scheme design that may subsequently enable further mitigation planting opportunities will be explored. Requirement 6 of the draft Development Consent Order [REP1-001] secures the provision of the planting proposals and mitigation measures presented within Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026].
7.34.	Where there is scope to provide additional planting that reinforces landscape character, and reduces visual impacts, particularly those viewpoints where there are still residual effects that are significant this should be re considered. Refer to Table 1.	Please see response to 7.24 above
Cumulative effects		
7.35.	Cumulative effects are considered in Chapter 15 (6.1 Environmental Statement Chapter 15 Combined and Cumulative Effects) for visual receptors experiencing a slight adverse effect or worse during construction and Year 1. A 1km Zone of Influence (ZOI) was established for landscape and visual impacts informed by the ZTV.	No comment required from the Applicant.
7.36.	There were six developments that were considered to have temporary moderate to large adverse cumulative landscape and visual effect on visual receptors during construction and Year 1 of operation. The applicant concluded "*that significant effects are due to the possible but unlikely overlap of unavoidable construction activities as well as temporary operational effects which will reduce to Not Significant by Year 15 between the above developments and the Scheme" Paragraph 15.5.6.*	No comment required from the Applicant.
Summary		
7.37.	As these significant effects are temporary no additional mitigation is deemed to be required other than that included in the first iteration Environmental Management Plan. We are satisfied that the cumulative effects have been assessed for landscape and visual receptors and agree with conclusions set out in Chapter 15.	No comment required from the Applicant.
8. Cultural Heritage		
8.1.	The Environmental Statement (ES) dated April 2024 (TR010065/APP/6.1) has been produced by National Highways (NH). Chapter 6 of the ES (DCO documents APP-050) refers to Cultural Heritage.	No comment required from the Applicant
8.2.	The methodology used for the assessment of the heritage assets in set out in section 6.5. The Council agrees with the methodology used, however, the methodology hasn't been followed correctly within the 'residual effect' assessment as set out in Table 6-7 Summary of Likely significant effects and mitigation requirements during construction of scheme. The residual effect for many of the heritage assets include 'not significant', which is not considered to be a sound assessment of the effect of the development.	The Applicant's methodology considers environmental impact assessments in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations (2017). The EIA assessment methodology aligns with DMRB LA104 Environmental Assessment and Monitoring and refers to "Significance of Effect". As detailed in paragraph 4.1.21 of Chapter 4 (Environmental Assessment Methodology) of the Environmental Statement [APP-048], effects that are Moderate (either Beneficial or Adverse) or above are considered

<table>
<tr><td></td><td></td><td>significant in EIA terms. Therefore, where effects are Slight or Neutral, these are 'not significant' and are reported in Table 6.7 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050].

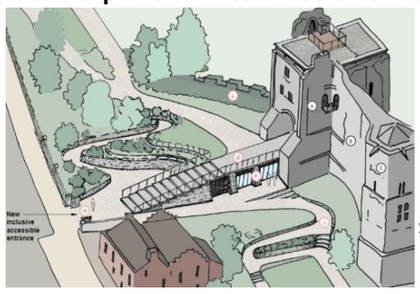
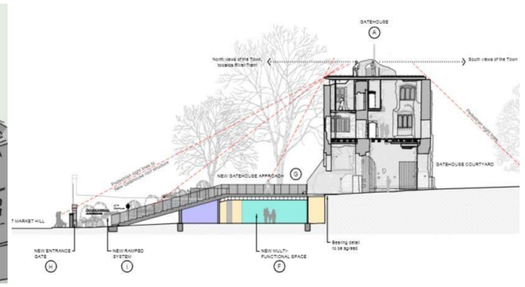
The methodology and approach to assessment of effects was also agreed in a consultation meeting with NSDC heritage stakeholders held on 3 May 2023 as referenced in paragraph 6.4.11 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050].</td></tr>
<tr><td>8.3.</td><td>The National Networks Planning Policy Statement (NNPPS) (2014)[5] which is applicable to this development over the latest publication from 24 May 2024 as the DCO was not accepted until 23 May 2024, states that the "construction and operation of national networks infrastructure has the potential to result in adverse impacts on the historic environment." (para 5.120)</td><td>No comment required from the Applicant</td></tr>
<tr><td colspan="3">Built Heritage</td></tr>
<tr><td>8.4.</td><td>The study areas for cultural heritage have been defined in accordance with Design Manual for Roads and Bridges LA 106 Cultural heritage assessment[6] which states that the assessment shall define a study area according to the sensitivity of the environment and the potential impacts of the Scheme. Where a new road or road improvement is proposed, the study area shall include the footprint of the Scheme plus any land outside that footprint which includes any heritage assets which could be physically affected. The study area should also include the settings of any designated or other heritage assets in the footprint of the Scheme or within the zone of visual influence. The study area has been consulted on by NH with Nottinghamshire County Council Senior Practitioner Archaeology and the District Council's Conservation Officer. This study area is shown within DCO reference AS-035 Figure 6.2 Heritage Survey Areas.[7]</td><td>No comment required from the Applicant</td></tr>
<tr><td>8.5.</td><td>There are 4 designated heritage assets located within the Order Limits
<table>
<tr><th>Grade</th><th>List Entry Number</th><th>Reference number</th><th>Name</th><th>Designation Date</th></tr>
<tr><td>Grade II*</td><td>1297721</td><td>MM038</td><td>Concrete Footbridge across River Trent</td><td>23rd October 1989</td></tr>
<tr><td>Grade II</td><td>1196289</td><td>MM141</td><td>Causeway Arches 650 metres Northwest of Level Crossing</td><td>designated 19th May 1971</td></tr>
<tr><td>Grade II</td><td>1228733</td><td>MM228</td><td>Causeway Arches 500 metres Northwest of Level Crossing</td><td>designated 19th May 1971</td></tr>
<tr><td>Grade II</td><td>1297727</td><td>MM389</td><td>Causeway Culvert 420 Metres Northwest of Level Crossing</td><td>designated 19th May 1971</td></tr>
</table></td><td>No comment required from the Applicant</td></tr>
<tr><td>8.6.</td><td>However, an additional study area of 1km buffer from the Order Limits of the Scheme has been defined to capture and assess potential changes to the setting of designated heritage assets including schedule monuments, listed building, registered parks and gardens and conservation area. This is important to the settlement of Newark as this then includes the setting of key landmark buildings in the Newark Conservation Area.</td><td>No comment required from the Applicant</td></tr>
<tr><td>8.7.</td><td>Within the 1km buffer study area there are:</td><td>No comment required from the Applicant</td></tr>
</table>

	Designation type / **Number** Schedule Monument 15 Grade I 7 Grade II* 15 Grade II 379 Conservation Area 5 Registered Park and Garden 1 Non-designated historic building 123 Non-designated historic landscape 5	
8.8.	Section 6.1 Environmental statement chapter 6 Cultural heritage identifies 37 of these designated heritage assets as having the potential to be impacted by the scheme. These heritage assets have been further assessed and it was concluded that 8 listed buildings and 1 conservation area would potentially experience **significant effects**.	No comment required from the Applicant
8.9.	The National Planning Policy Framework (NPPF) (2023) Chapter 16 (Conserving and enhancing the historic environment), sets the national framework for assessing developments which impact upon heritage assets and the historic environment. This is in addition to Legislation of Planning (Listed Buildings and Conservation Areas Act) 1990 and National Policy Statement for National Networks (2014) and the Council's local policies within the Amended Core Strategy Development Plan Document (2019) and Allocation and Development Management Development Plan Document which is currently under review with examination taking place in November 2024.	No comment required from the Applicant
8.10.	It is accepted and is a running theme through the policy documents above, that any harmful impact on the significance of a designated heritage asset should be weighed against the public benefit of development, recognising that the greater the harm to the significance of the heritage asset, the greater the justification that will be needed for any loss. The Secretary of State should refuse consent unless it can be demonstrated that the substantial harm/less than substantial harm or loss of significance is necessary in order to deliver substantial public benefits that outweigh that loss or harm. Opportunities to better reveal the significance of heritage assets and preserve those elements of the setting that make a positive contribution to, should be treated favourably.	No comment required from the Applicant
8.11.	The Council have identified additional heritage assets that have the potential of being impacted by the scheme. These include. • The Causeway Culvert 420m Northwest of level crossing (LEN 1297727) has not been included within this further assessment even though this designated heritage asset is within the Order limits. • Grade I Church of St. Mary Magdalene and attached railings (LEN 1279450), which is located within the 1km designated heritage asset study area has not been included. The spire of the church is a significant focal point along the Great North Road when travelling south towards Newark.	The Applicant confirms Causeway Culvert 420m northwest of level crossing (NHLE 1279450) was assessed and is recorded in Appendix 6.3 Assessment of Cultural Heritage Effects During Construction of the Scheme [APP-134], and Appendix 6.4 Assessment of Cultural Heritage Effects During Operation of the Scheme [APP-135] of the Environmental Statement Appendices. The assessment in both cases was that the asset would experience no change as a result of the Scheme and therefore the impact would be Neutral. It would therefore not have been included for further discussion in Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050]. The Church of St Mary Magdalene (NHLE: 1279450) was scoped out of 6.3 Appendix 6.1 Cultural Heritage Desk Based Assessment of the Environmental Statement Appendices [AS-099] in Table 0-1: Scoping exercise for designated assets within 1km of the Scheme. The reason given was that a neutral effect is predicted. The distance of the asset from the Scheme means that development within the Order Limits will not have an adverse impact on its heritage value. In addition, during a meeting with heritage stakeholders on 3 May 2023, as summarised in paragraph 6.4.11 in Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050] consultation was undertaken to identify assets with the potential to experience a significant effect. NCC and NSDC stakeholders agreed with the

		assets proposed by the Applicant, and the church was not raised as a possible receptor.
Cattle Market Roundabout		
Smeaton's Arches		
8.12.	Some of the heritage assets in the area of the Order have value in their group association, in particular the grade II listed Smeaton's causeway arches and viaduct. There is a total of 11 different designations, all of which are grade II listed however only 5 of these designations are located within or adjacent to the Order Limit. Part of the significance of these heritage assets is their alignment along a historic route into and out of Newark.	No comment required from the Applicant
8.13.	The Council would like it known that paragraph 6.11.9 outlines that the heritage asset 'Causeway Arches 650 metres Northwest of Level Crossing (MM141)' (also known as Smeaton's Arches) is located outside the Order Limits. Whereas it is stated that the heritage asset is located within the Order Limits in Table 6-7 (Summary of likely significant effects and mitigation requirements during construction of the Scheme) in Section 6.1 Environmental statement chapter 6 Cultural heritage document. The Council agree that the heritage asset **is** located within the Order Limits.	The Applicant confirms this will be corrected and has been noted in a Table of Errata [TR010065/APP-7.38] submitted at Deadline 2 of the Examination.
8.14.	The proposal includes permanent alterations to Causeway Arches 500 Metres Northwest of Level Crossing (LEN 1228733) (MM228). The arches have previously been altered during phases of road alterations; however, these proposed alterations will have an impact on the heritage asset. As part of the Statement of Common Ground, Nottinghamshire County Council and the District Council have been in discussions with NH on the proposed impact to this structure which has helped to secure an acceptable development and mitigation works for the structure. The alterations to Causeway Arches 500 metres Northwest of Level Crossing are permeant.	No comment required from the Applicant
8.15.	The extent of the works include some demolition to the structure on the southern side which was extended in the 1920s, to include the widening of the road and will result in the loss of historic (although not original) fabric and an alteration in its dimensions. This will affect the ability to appreciate its historic interest. Section 6.1 Environmental statement chapter 6 Cultural heritage concludes that the effect of the alterations will be 'Permanent large adverse' to the heritage assets. The realignment will have an effect on the associated heritage assets located along Great North Road, due change in alignment. The Council consider that the development will have a less than substantial harm on the heritage asset with of permanent large adverse residual effect.	No comment required from the Applicant

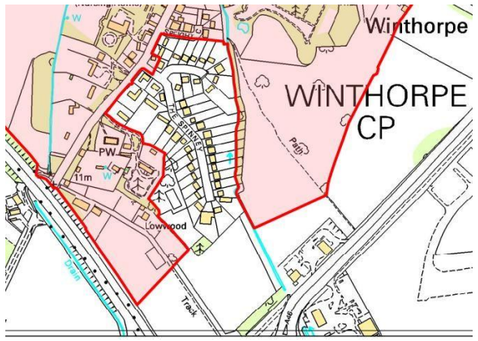
	 **(Extract from drawing no. HE551478 Rev C03 Structures general arrangements Sheet 6 of 12)**	
Church of St. Mary Magdalene		
8.16.	The 5 mile stretch along the A46 experiences views of various heritage assets with the most prominent heritage asset being the Church of St. Mary Magdalene and the Council is disappointed that this has not been given more consideration by NH in the development and assessment of the scheme with the production of visual information. This church and its prominence is an important visual consideration in part due to the height and elevated position provided by the C13th spire of the Church which is a prominent feature within the landscape.	The Applicant notes this comment is primarily a Landscape and Visual consideration, and the Landscape and Visual Effects assessments are distinct from those for Cultural Heritage. Consultation with the heritage stakeholders summarised in paragraph 7.4.3 in Chapter 7 (Landscape and Visual Effects) of the Environmental Statement [APP-051] states that 'on 21 July 2022 a meeting was held with the NSDC Senior Conservation Officer to discuss the proposed visual receptors. The inclusion of additional receptors was discussed, and agreement reached on the visual receptors to inform the assessment'. Key visual receptor locations have been chosen to show a representative sample of existing conditions and provide a visual representation of the scale of the Scheme within its setting, rather than an indication of the value of a specific receptor or how it may be affected by the Scheme. The Church of St Mary Magdalene (NHLE: 1279450) was scoped out in 6.3 Appendix 6.1 Cultural Heritage Desk Based Assessment of the Environmental Statement Appendices [AS-099] in Table 0-1: Scoping exercise for designated assets within 1km of the Scheme. The reason given was that a neutral effect is predicted. The distance of the asset from the Scheme means that development within the Order Limits will not have an adverse impact on its heritage value. In addition, during a heritage stakeholder meeting on 3 May 2023 as summarised in paragraph 6.4.11 in Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050] consultation was undertaken to identify assets with the potential to experience a significant effect. Heritage stakeholders agreed with the assets proposed by the Applicant, and the church was not raised as a possible receptor.
8.17.	As the parish church, the prominence of the spire is an intentional design feature meant to promote the siting and presence of the church within the vicinity. The church spire is also a significant landmark while travelling south along the Great North Road (A616) and can be seen on the approach to the Cattle Market roundabout. The Council considers that the submitted Key Visual Receptors shown on DCO ref. APP-138 and 139 do not adequately reflect the impact of the Cattle Market roundabout and the changes to the visual impact. Specifically, there is no representation of photographic montages or existing baseline data	The Applicant notes this comment is primarily a Landscape and Visual consideration. Heritage stakeholders consultation summarised in paragraph 7.4.3 in Chapter 7 (Landscape and Visual Effects) of the Environmental Statement [APP-051] states that 'on 21 July 2022 a meeting was held with the NSDC Senior Conservation Officer to discuss the proposed visual receptors. The inclusion of additional receptors was discussed, and agreement reached on the visual receptors to inform the assessment'. Appendix 7.3 Key Visual Receptor Photographs and Photomontages Part 1 of the Environmental Statement

	on the existing or proposed impact or relationship on the gateway in to Newark from this elevation.	Appendices [APP-138] states that key visual receptor locations have been chosen to show a representative sample of existing conditions and provide a visual representation of the scale of the Scheme within its setting, rather than an indication of the heritage value of a specific receptor or how it may be affected by the Scheme. Views from the Great North Road looking south towards the scheme have been assessed as part of the Landscape and Visual Effects assessment in Chapter 7 Landscape and Visual Effects of the Environmental Statement [APP-051]. All visual receptors assessed as part of this were agreed with heritage stakeholders prior to the assessment being made. The Applicant notes that an additional photomontage to capture views travelling south along the Great North Road has been prepared, following the request from the Examining Authority in the Rule 6 letter [PD-005]; to be submitted as Supporting Historic Environment and Visual Impact Assessment [TR010065/APP/7.36] at Deadline 2 of the Examination. Additional information on viewpoints (Figure 7.4 Visual Receptor Location Plan of the Environmental Statement Figures [AS-040]) have been assessed as part of the landscape and visual impact assessment contained in Chapter 7 (Landscape and Visual Effects) of the Environmental Statement [APP-051]. This has been prepared, following the request from the Examining Authority in the Rule 6 letter [PD-005]; submitted as Supporting Historic Environment and Visual Impact Assessment [APP-7.36] at Deadline 2 of the Examination. The Church of St Mary Magdalene (NHLE: 1279450) was scoped out in 6.3 Appendix 6.1 Cultural Heritage Desk Based Assessment of the Environmental Statement Appendices [AS-099] in Table 0-1: Scoping exercise for designated assets within 1km of the Scheme. The reason given was that a neutral effect is predicted. The distance of the asset from the Scheme means that development within the Order Limits will not have an adverse impact on its heritage value. In addition, during heritage stakeholders meeting held on 3 May 2023 as summarised in paragraph 6.4.11 in Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050] consultation was undertaken with NCC and NSDC heritage stakeholders to identify assets with the potential to experience a significant effect. Stakeholders agreed with the assets proposed by the Applicant, and the church was not raised as a possible receptor.
8.18.	The new flyover at the Cattle Market roundabout elevates the road infrastructure and from reviewing the only photomontage which has been provided at viewpoint 24 (Sandhills Park), the design of the elevated sections would be harsh infrastructure which is expected to continue on both sides of the roundabout (see below). This infrastructure has the potential of disrupting and dominating views of the Church of St. Mary Magdalene when travelling along the Great North Road (A616) into Newark.	Please refer to response 8.17 above

	  **VP24 Year 1** **VP24 Year 15**	
Newark Castle		
8.19.	Other significant heritage assets within Newark, includes Newark Castle (MM001). Developed from an original timber episcopal fortress built 1135-39. The Castle is large in scale, however there are only limited glimpses of the structure as you enter Newark along the Great North Road. However, there are long ranging views northwards from the Castle. Recent planning permission approved (21/02690/FUL[8] and 24/01268/S73) at the castle to provide a larger viewing platform on the gatehouse will retain and likely enhance these views as visitors will be able to stand at the top of the currently inaccessible castle **Extract of plans from submission of 21/02690/FUL, Newark Castle**  	No comment required from the Applicant
8.20.	The existing A46 is currently largely screened with mature trees, however with the approach along Great North Road and the Newark Lorry Park being opened up with the felling of trees (see DCO ref.AS-088 Sheet 7 and 8), this aspect will open up, making the presence of the A46 more apparent and dominating in the locale, especially given the committed development allowing an elevated public vantage from the Castle.	The Applicant confirms Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures [AS-026] shows replacement planting along the Great North Road on approach to Cattle Market junction in the form of a hedgerow with trees adjacent to the north bound carriageway. Along the A46 itself, the embankments adjacent to Newark Lorry Park and adjacent to the slip road on the western side of Cattle Market junction will be planted with linear belts of shrubs and trees, seeking to reinstate screening vegetation lost as a result of the Scheme. The replacement planting is intended to mitigate against any harm caused by the necessary removal of mature vegetation.
8.21.	DCO ref. AS-041 categorises the harm around the Cattle Market as neutral to slight adverse and the impact on both Newark Castle and Church of St. Mary Magdalene have not been considered in Table 6-7 Summary of likely significant effects, which the Council considers they should. Without photographic evidence on this proposal to show this relationship and	The Applicant notes this comment is primarily a Landscape and Visual consideration, and the Landscape and Visual Effects assessments are distinct from those for Cultural Heritage. The Applicant notes that Figure 7.5 (Visual Effects Plan) of the Environmental Statement Figures [AS-041] presents the impacts displayed on visual receptors as assessed in Chapter 7 (Landscape and Visual Effects) of

	how the spire of the church and the presence of the Newark Castle is impacted upon, the Council reserves the right to disagree with this conclusion. It is acknowledged that the Examining Authority have requested additional viewpoints from NH which are unfortunately not due until Deadline 1 (22 October 2024), which is the same deadline as the LIR is required. Therefore, this may impact the position the Council has taken in this section.	the Environmental Statement [APP-051] and not Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050]. The Applicant also notes that Figure 7.5 (Visual Effects Plan) of the Environmental Statement Figures [AS-041] does not categorise harm, rather it categorises the significance of effect for the landscape and visual effects topic, as assessed in Chapter 7 (Landscape and Visual Effects) of the Environmental Statement [APP-051]. The Applicant confirms descriptions of the existing and proposed views and associated magnitude of change and significance of effect is described in Appendix 7.2 (Visual Baseline and Impact Schedules) of the Environmental Statement Appendices (APP-137). The effects have not been considered in Table 6-7 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050] as this only refers to significant effects of moderate or higher. Newark Castle is reported in Table 1-1 of Appendix 6.3 (Assessment of Cultural Heritage Effects During Construction of the Scheme) of the Environmental Statement Appendices [APP-134], as experiencing Slight Adverse effects as a result of the permanent construction of the Scheme. It was noted that the new road infrastructure will slightly detract from appreciating views from the asset, which will have an adverse impact on the heritage value of the asset. However, road infrastructure already exists within the wider townscape and it will not alter the ability to understand the asset's relationship within the surrounding town. Consultation with NSDC heritage stakeholders, as detailed in paragraph 6.4.9 in Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050] states that in February 2023 telephone conversations were had with the NSDC Senior Conservation Officer to understand the potential impacts of the Scheme on Newark Castle. It was the opinion of the NSDC Senior Conservation Officer that better connectivity to Newark-on-Trent could improve the economic resilience of the area, and lead to regeneration for historic sites. This asset was not assessed as having significant effects as a result of the current Scheme. The Church of St Mary Magdalene (NHLE: 1279450) was scoped out of further assessment, as detailed in Table 0-1: Scoping exercise for designated assets within 1km of the Scheme contained in Appendix 6.1 (Cultural Heritage Desk Based Assessment) of the Environmental Statement [AS-099]. In addition, during NSDC heritage stakeholders meeting held on 3 May 2023 as summarised in paragraph 6.4.11 in Chapter 6 (Cultural Heritage) of the ES [APP-050] consultation was undertaken with stakeholders to identify assets with the potential to experience a significant effect. Stakeholders agreed with the assets proposed by the Applicant, and the church was not raised as a possible receptor. NSDC heritage stakeholder consultation, as detailed in paragraph 7.4.3 of Chapter 7 (Landscape and Visual Effects) of the ES [APP-051] states that 'on 21 July 2022 a meeting was held with the NSDC Senior Conservation Officer to discuss the proposed visual receptors. The inclusion of additional receptors was discussed, and agreement reached on the visual receptors to inform the assessment'. Key visual receptor locations have been chosen to show a representative sample of existing conditions and provide a visual representation of the scale of the Scheme within its setting, rather than an indication of the heritage value of a specific receptor or how it may be affected by the Scheme. Views from the Great North Road looking south towards the Scheme have been assessed as part of the landscape and visual impact assessment contained in Chapter 7 (Landscape and Visual Effects) of the Environmental Statement [APP-051]. The Applicant notes that an additional photomontage to capture views travelling south along the Great North Road has been prepared, following the request from the Examining Authority in the Rule 6 letter [PD-005]; submitted as Supporting Historic Environment and Visual Impact Assessment [APP-7.36] at Deadline 2 of the Examination.

Concrete footbridge		
8.22.	During the construction phase of the A46, the Grade II* Concrete Footbridge across the River Trent (MM038) (Elbow Bridge) will be closed to the public and have a temporary works area	No comment required from the Applicant
8.23.	The bridge is of concrete construction from around 1915 and restored in the C20. The single span bridge is an early example of the structural use of reinforced concrete which makes it of high significance.	No comment required from the Applicant
8.24.	The bridge is located along an existing network of footpaths (Newark FP66 and Newark BW5 & 6) that takes walkers along the west side of the river Trent. This will affect the accessibility and appreciation of the heritage asset during this phase although accepted it is temporary. The other pedestrian crossing point over the Trent is approximately 600m south (off Cow Lane). 	No comment required from the Applicant
8.25.	In addition, with the asset being located within the Order Limits, during the construction phase, the presence of construction machinery, traffic, lighting, noise and vibration will have a negative impact on the setting of the heritage asset. Section 6.1 Environmental statement chapter 6 Cultural heritage concludes that the effect of the construction will have 'Temporary Moderate adverse' effect on the heritage assets. The potential structural impacts during the construction phase has the potential of causing some permanent adverse effects that may require significant repairs to the structure.	The Applicant confirms Commitment CH2 of Table 3-2 (Register of Environmental Actions and Commitments) contained in the First Iteration Environmental Management Plan [APP-182] states the monitoring requirements of the Concrete Footbridge. The First Iteration Environmental Management Plan [APP-184] will be developed into a Second Iteration Environmental Management Plan to be implemented during construction of the Scheme. Adherence with the Second Iteration Environmental Management Plan is secured by Requirement 3 of the draft Development Consent Order [REP1-001]. The monitoring requirements are further detailed within Chapter 6 (Archaeological Mitigation Strategy) of the updated Archaeological Management Plan [APP-187] to be submitted at Deadline 2 of the Examination. Requirement 9 of the draft Development Consent Order [REP1-001] secures the commitments made in the Archaeological Management Plan [APP-187].
8.26.	The setting of the Concrete Footbridge is already dominated by the existing A46 and with the new carriageway for the A46 located to the west of the existing carriage way, the Council considers therefore it will have a neutral effect.	No comment required from the Applicant
Brownhills Roundabout and Friendly Farmers Roundabout		

8.27.	Winthorpe Conservation Area (CA) (MM432) was first designated in 1974 with a subsequent review and extension in 2007[9] and extends up to the A1 to the southwest.  ***Extract of the Winthorpe CA 2007***	No comment required from the Applicant
8.28.	Historically the Grade II listed high-status dwellings, such as Lowwood (MM053) and the Grove (MM062), and orientated with a view to the south. This view today and the southern boundary of the CA along the A1 is now largely screened behind a mature treeline. Many of the individual listed buildings located in Winthorpe are screened from wider views, however the spire of the Church of All Saints (MM063) is a key landscape feature from both the A46 when travelling north and A1 when travelling south. The prominence of the spire is due to the height of the building. The broach spire is unusual in the landscape with its tiled roof. There is potential that the Brownhills Junction flyover and A1 flyover, due to its more elevated positions could affect these wider views and the dominate the existing views of the spire of The Church of All Saints.	The Applicant confirms that discussions were held with NSDC heritage stakeholder regarding visual receptors, during consultation. This is detailed in paragraph 7.4.3 in Chapter 7 (Landscape and Visual Effects) of the Environmental Statement [APP-051] states that 'on 21 July 2022 a meeting was held with the NSDC Senior Conservation Officer to discuss the proposed visual receptors. The inclusion of additional receptors was discussed, and agreement reached on the visual receptors to inform the assessment'. Paragraph 6.8.94 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050] states that the Church of All Saints is 'surrounded by a low wall and trees. The village setting is key to understanding the historic interest and together these (the screened churchyard and village) provide the setting to the church'. This setting assessment highlights that the key elements of the church's setting which most contributed to its heritage value, were its immediate churchyard setting and location at the edge of the village. The Applicant acknowledges that glimpses of the church spire do contribute to the personal value that a person driving on the A46 may have for the church - which is captured within the assessment of Viewpoint 25 in Chapter 7 (Landscape and Visual Effects) of the Environmental Statement [APP-051]. The Applicant acknowledges these views also form part of the setting as the intention of church spires generally is to be seen within a landscape. Therefore, these views also contribute to the heritage value of the church (for cultural heritage, the church is the receptor not the person), but only to a slight degree. The minor alteration of these views will not change the setting of the church to the extent that it cannot still be appreciated as a place of worship within the community of Winthorpe, or to the extent that its special historic or architectural interest is harmed. The assessment of effects therefore of 'Slight Adverse' as stated in Table 6.7 of Chapter 6 Cultural Heritage of the Environmental Statement [APP-050] remains unchanged and the impact will result in less than substantial harm. This is not a Significant Effect in accordance with the agreed methodology for assessment.
8.29.	The viewpoint from Bridge Farm (VP41) shows the only photomontage of the intended structure with a sloped green embankment as opposed to the harsh flyover at the Cattle Market. Whilst this is appreciated it is not representative of the experience from within the CA.	A new photomontage has been produced from the southerly tip of the conservation area looking west towards the A1. The location and angle of view captured within the photomontage have been agreed with NSDC. This additional photomontage has been submitted in line with Rule 6 Requests – Landscape and Visual Effects [APP-7.36] at Deadline 2 of the Examination, and illustrates the proposed landscape bunds and associated planting which aid screening of views to the A46 and A1 in this location.
8.30.	The eastern boundary of Winthorpe Conservation Area is more open, due to the historic parkland associated with Winthorpe House (LEN 1302281), with views that extends towards the A46. The setting and wider views from the eastern boundary of the CA is impacted by the existing A46 network at the Friendly Farmer roundabout and the industrial buildings beyond. However, the proposed A46 works brings the road network closer to the CA.	The Applicant acknowledges that the A46 will be closer to the Conservation Area by 8.6m, However as shown in Photomontage 43, within Appendix 7.3 Visual Receptor Photographs and Photomontages of the Environmental Statement Appendices [APP-139], the implementation of landscape bunds and associated planting aids screening of the A46 from this location. The additional photomontage representing views from the southern most tip of the Conservation Area, submitted at Deadline 2 of the Examination in line with Rule 6

		Requests – Supporting Historic Environment and Visual Impact Assessment [APP-7.36] further illustrates the proposed landscape bunds and associated planting which aid screening of views to the A46 and A1 in this location.
8.31.	The photomontage from VP43 along the footpath (Winthorpe FP2), in the Council's opinion does not include a sufficient representation of the experience around this area and the photo should be angled towards the flyover which is likely to result in the greatest harm to the setting of the CA.	The Applicant confirms a new photomontage has been produced from the southerly tip of the conservation area looking west towards the A1. The location and angle of view captured within the photomontage have been agreed with NSDC. This additional photomontage has been submitted at Deadline 2 of the Examination in line with Rule 6 Requests – Supporting Historic Environment and Visual Impact Assessment [APP-7.36] and illustrates the proposed landscape bunds and associated planting which aid screening of views towards the A1 and newly aligned A46 and associated flyover in this location.
8.32.	Section 6.1 Environmental statement chapter 6 Cultural heritage concludes that the effect of the alterations to the infrastructure will have 'Permanent slight adverse (not significant)' to the heritage assets. The use of the term 'not significant' isn't clear and doesn't follow the criteria. The council consider the works will have a less than substantial harm to Winthorpe Conservation Area, Lowwood and Church of All Saints. The full extent of the effect is unknown due to the limited visuals of the A1 flyover and the Council therefore requests that additional information by way of photomontages is submitted by National Highways to cover this matter.	The Applicant agrees that Winthorpe Conservation Area, Lowwood and Church of All Saints will experience less than substantial harm. The Applicant's methodology considers environmental impact assessments in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations (2017). The EIA assessment methodology aligns with DMRB LA104 Environmental Assessment and Monitoring and refers to "Significance of Effect". As detailed in paragraph 4.1.21 of Chapter 4 (Environmental Assessment Methodology) of the Environmental Statement [APP-048], effects that are Moderate (either Beneficial or Adverse) or above are considered significant in EIA terms. Therefore, where effects are Slight or Neutral, these are 'not significant' and are reported in Table 6.7 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050]. The methodology and approach to assessment of effects was also agreed in a consultation meeting with NSDC heritage stakeholders held on 3 May 2023 as referenced in paragraph 6.4.11 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050]. Paragraph 6.5.22 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050] states that the assessment criteria consider the significance of effect caused by an impact to a heritage asset. A significant effect to a designated heritage asset may not always result in substantial harm and there is not a direct correlation between the two assessments. Where Significant Effects have been assessed, these have been clarified in terms of 'less than substantial harm' throughout section 6.11 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050]. Where assessments have been assessed as Slight or Neutral, these have been recorded in Table 6.7 and clarified as 'not significant' in EIA terms. This assessment would also accord with an assessment of 'less than substantial harm' in the language of the NSPNN and the NPPF. A new photomontage has been produced from the southerly tip of the conservation area looking west towards the A1. The location and angle of view captured within the photomontage have been agreed with NSDC. This additional photomontage has been submitted at Deadline 2 of the Examination and illustrates the proposed landscape bunds and associated planting which aid screening of views to the A46 and A1 and associated flyover in this location.
Winthorpe Roundabout		
8.33.	Langford Hall (MM026) is a Grade II* listed country house C1780/90 by John Carr of York. Within the grounds there are also Grade II stables and Grade II Coach House. The house enjoys a rural setting located within its own parkland that extends eastwards toward the A46. The alterations to the Winthorpe roundabout, including embankments and traffic lights will increase the prominence of the road infrastructure, moving it slightly closer to the listed building and its parkland setting.	No comment required from the Applicant

8.34.	The historic driveway for Langford Hall is currently accessed from the A46, north of the current Winthorpe roundabout, continuing west through the parkland. It is proposed to alter this creating a new access to the south from the A1133, through land which isn't associated with the Hall and detaches Langford Hall from its original lodge and entrance. The harm to which is considered Less than substantial permanent slight adverse.	No comment required from the Applicant
8.35.	During the construction phase it is proposed to have a temporary works area which will also alter the setting of the heritage assets during this period. But it is accepted that this is only temporary and thus as a result the harm would be transient.	No comment required from the Applicant
8.36.	Section 6.1 Environmental statement chapter 6 Cultural heritage concludes that the effect of the alterations to the driveway will have 'Permanent slight adverse (not significant)' to the heritage assets. The use of the term 'not significant' isn't clear and doesn't follow the criteria. The council considers that the development will have a Less than substantial harm on the heritage asset of permanent slight adverse residual effect.	The Applicant agrees with the NSDC assessment of permanent slight adverse residual effect, as stated in Table 6.7 and as less than substantial harm, as stated in paragraph 6.11.4 of Chapter 6 (Cultural Heritage) of the ES [APP-050]. The Applicant's methodology considers environmental impact assessments in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations (2017). The EIA assessment methodology aligns with DMRB LA104 Environmental Assessment and Monitoring and refers to "Significance of Effect". As detailed in paragraph 4.1.21 of Chapter 4 (Environmental Assessment Methodology) of the Environmental Statement [APP-048], effects that are Moderate (either Beneficial or Adverse) or above are considered significant in EIA terms. Therefore, where effects are Slight or Neutral, these are 'not significant' and are reported in Table 6.7 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050]. The methodology and approach to assessment of effects was also agreed in a consultation meeting with NSDC heritage stakeholders held on 3 May 2023 as referenced in paragraph 6.4.11 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050] Paragraph 6.5.22 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050] states that the assessment criteria consider the significance of effect caused by an impact to a heritage asset. A significant effect to a designated heritage asset may not always result in substantial harm and there is not a direct correlation between the two assessments. Where Significant Effects have been assessed, these have been clarified in terms of 'less than substantial harm' throughout section 6.11 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050]. Where assessments have been assessed as Slight or Neutral, these have been recorded in Table 6.7 and clarified as 'not significant' in EIA terms. This assessment would also accord with an assessment of 'less than substantial harm' in the language of the NSPNN and the NPPF.
Farndon Roundabout		
8.37.	Over the last couple of years, the river Trent has experienced higher water levels than normal and especially during the storms in late 2023. Listed buildings, such as Farndon Windmill (Grade II Listed) have suffered from damage from the flooding from the River Trent. This needs to be taken into account when carrying out structural assessments of relevant heritage assets and potential impact of vibrations during the construction.	No comment required from the Applicant
8.38.	During the construction phase, the presence of construction machinery, traffic, lighting, noise, and vibration will have a negative impact on the setting of the heritage asset. Section 6.1 Environmental statement chapter 6 Cultural heritage concludes that the effect of the alterations will have 'Permanent slight adverse (not significant)' to the heritage assets. The use of the term 'not significant' again isn't clear and doesn't follow the criteria. Due to the	The Applicant's methodology considers environmental impact assessments in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations (2017). The EIA assessment methodology aligns with DMRB LA104 Environmental Assessment and Monitoring and refers to "Significance of Effect".

	potential structural impacts during the construction phase, has the potential of causing some permeant adverse effects that require significant repairs to the structure.	As detailed in paragraph 4.1.21 of Chapter 4 (Environmental Assessment Methodology) of the Environmental Statement [APP-048], effects that are Moderate (either Beneficial or Adverse) or above are considered significant in EIA terms. Therefore, where effects are Slight or Neutral, these are 'not significant' and are reported in Table 6.7 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050]. The methodology and approach to assessment of effects was also agreed in a consultation meeting with NSDC heritage stakeholders held on 3 May 2023 as referenced in paragraph 6.4.11 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050]. Paragraph 6.5.22 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050] states that the assessment criteria consider the significance of effect caused by an impact to a heritage asset. A significant effect to a designated heritage asset may not always result in substantial harm and there is not a direct correlation between the two assessments. Where Significant Effects have been assessed, these have been clarified in terms of 'less than substantial harm' throughout section 6.11 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050]. Where assessments have been assessed as Slight or Neutral, these have been recorded in Table 6.7 and clarified as 'not significant' in EIA terms. This assessment would also accord with an assessment of 'less than substantial harm' in the language of the NSPNN and the NPPF. Commitment CH2 of Table 3-2 (Register of Environmental Actions and Commitments) contained in the First Iteration Environmental Management Plan [APP-182] states and secures the monitoring requirements of Farndon Windmill. The First Iteration Environmental Management Plan [APP-184] will be developed into a Second Iteration Environmental Management Plan to be implemented during construction of the Scheme. Adherence with the Second Iteration Environmental Management Plan is secured by Requirement 3 of the draft Development Consent Order [REP1-001]. The monitoring requirements are further detailed within Chapter 6 (Archaeological Mitigation Strategy) of the updated Archaeological Management Plan [APP-187] submitted at Deadline 2 of the Examination. Requirement 9 of the draft Development Consent Order [REP1-001] has been updated and secures the commitments made in the Archaeological Management Plan [APP-187]. The updated draft Development Consent Order [REP1-001] was also submitted at Deadline 2 of the Examination.
8.39.	The new A46 carriageway will be at the same height as the existing and the Council considers the development will have Less than substantial harm on the heritage asset of permanent slight adverse residual effect.	No comment required from the Applicant
Mitigation measures		
8.40.	In terms of mitigation, measures that ensure the appropriate recording of the structure at Smeaton's Arches should be included in the Construction Environmental Management Plan (CEMP) and that appropriate mitigation is sought for surveying the buildings which could be impacted by vibration. The council would encourage their involvement agreeing recording methodology for Smeaton's Arches and the surveying and repair methods for those buildings affected.	The Applicant confirms Commitment CH2 of Table 3-2 (Register of Environmental Actions and Commitments) contained in the First Iteration Environmental Management Plan [APP-184] states the monitoring requirements of the Concrete Footbridge, Farndon Windmill and Causeway Arches 500m northwest of level crossing. It also ensures a condition survey and Historic England Level 3 building recording of the Causeway Arches 500m northwest of level crossing prior to the commencement of works. The First Iteration Environmental Management Plan [APP-184] will be developed into a Second Iteration Environmental Management Plan to be implemented during construction of the Scheme. Adherence with the Second Iteration Environmental Management Plan is secured by Requirement 3 of the draft Development Consent Order [REP1-001]. The monitoring requirements are further detailed within Chapter 6 (Archaeological Mitigation Strategy) of the updated Archaeological Management Plan [APP-187] submitted at Deadline 2 of the Examination. The work detailed within this Strategy will be undertaken in consultation with NSDC and NCC stakeholders. Requirement 9 of the draft Development Consent Order [REP1-001] has been updated and secures the commitments made in

		the Archaeological Management Plan [APP-187]. The updated draft Development Consent Order [REP1-001] has also been submitted at Deadline 2 of the Examination.
8.41.	As part of the noise assessment within the ES Volume 6.1 Chapter 11 this identifies various areas within the study area which would be impacted by either operation or construction noise as a result of the development. As part of that, additional mitigation measures have been embedded in the Scheme which is stated at paragraph 11.10.3 and 11.10.4 and reiterated below, which include: • three landscape bunds at a height of 2.0-2.5 metres would be included north of the A46 section between the A1 and Winthorpe Roundabout which will also provide noise screening; • Six noise barriers at a height of 2 metres from the road surface (or from local ground, if not positioned along the A46) would be included along the Scheme, including: ○ Two located along the southbound entry slip from Cattle Market Roundabout extending part way down the west side of the Great North Road south of Cattle Market Roundabout; ○ One located at the southbound entry slip road at Brownhills Junction; ○ One along the northbound carriageway from the Brownhills Junction to the Esso Service Station; ○ Two located from the Esso Service Station to the Winthorpe Roundabout at the northern extreme of the Scheme, transitioning at the midpoint from barrier at the roadside to barrier on the crest of the adjacent bund.	No comment required from the Applicant
8.42.	The Council is mainly concerned with regards to the impact of the acoustic barriers at the Cattle Market roundabout. No design details are shown of how this will interact with the roundabout and the Council raise concerns that a potential 2.5m high close boarded fence around the roundabout, which is an existing verdant and rural character would result in harm to this key gateway into Newark. Figure 2.3 Environmental Masterplan of Chapter 6.2 ES illustrates the siting of the acoustic fence and the Council request that although trees are proposed to the south of the fence this does not mitigate for the visual harm caused to the setting of the heritage assets. A balanced judgement on this matter would be required however a solution could be sought which softens this aspect but still able to achieve the same outcome, however the Council currently considers this to be harmful.	The Applicant confirms Figure 2.3 Environmental Masterplan of the Environmental Statement Figures [AS-026] illustrates that the acoustic fencing will be hidden by trees as planting matures and are screened from key heritage assets and the gateway to the town, by intervening planting and existing development. The position of the acoustic fence in this location is fixed due to engineering design constraints on site. The nearest heritage asset is Causeway Culvert 420m northwest of level crossing (NHLE 1279450). This asset was assessed and is recorded in Appendix 6.3 Assessment of Cultural Heritage Effects During Construction of the Scheme [APP-134], and Appendix 6.4 Assessment of Cultural Heritage Effects During Operation of the Scheme [APP-135] of the Environmental Statement Appendices. The assessment in both cases concluded that the asset would experience no change as a result of the Scheme and therefore the impact would be Neutral.
8.43.	The construction of the bunds around Winthorpe to the east of the CA will alter the rural/parkland setting of the CA and will erode into this relationship whilst still maintaining a verdant character.	No comment required from the Applicant
Built Heritage Conclusion		
8.44.	The A46 development will have an impact on a wide range of different heritage assets of various significance. The magnitude of harm on some of the heritage assets cannot be concluded due to the limited information and therefore at present the Council must conclude that the proposal fails to accord with local policy and objectives of National Policy. Should further information such as mitigation and a demonstration of visual impact in the form of additional montages be submitted then the Council's position on this matter may change. However, the Council considers the works will cause less than substantial harm, with some areas being of permeant large adverse effect.	The Applicant's methodology considers environmental impact assessments in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations (2017). The EIA assessment methodology aligns with DMRB LA104 Environmental Assessment and Monitoring and refers to "Significance of Effect". As detailed in paragraph 4.1.21 of Chapter 4 (Environmental Assessment Methodology) of the Environmental Statement [APP-048], effects that are Moderate (either Beneficial or Adverse) or above are considered significant in EIA terms. Therefore, where effects are Slight or Neutral, these are 'not significant' and are reported in Table 6.7 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050].

		The methodology and approach to assessment of effects was also agreed in a consultation meeting with NSDC heritage stakeholders held on 3 May 2023 as referenced in paragraph 6.4.11 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050]. Paragraph 6.5.22 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050] states that the assessment criteria consider the significance of effect caused by an impact to a heritage asset. A significant effect to a designated heritage asset may not always result in substantial harm and there is not a direct correlation between the two assessments. Where Significant Effects have been assessed, these have been clarified in terms of 'less than substantial harm' throughout section 6.11 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050]. Where assessments have been assessed as Slight or Neutral, these have been recorded in Table 6.7 and clarified as 'not significant' in EIA terms. This assessment would also accord with an assessment of 'less than substantial harm' in the language of the NSPNN and the NPPF. Therefore, the Applicant proposes that NCC has sufficient information to conclude their assessment and that the Scheme does accord with local policy and objectives of National policy. Stakeholder consultation summarised in paragraph 7.4.3 in Chapter 7 (Landscape and Visual Effects) of the Environmental Statement [APP-051] states that 'on 21 July 2022 a meeting was held with heritage stakeholders to discuss the proposed visual receptors. The inclusion of additional receptors was discussed, and agreement reached on the visual receptors to inform the assessment'. Additional information on viewpoints 18 and 25 (Figure 7.4 Visual Receptor Location Plan of the Environmental Statement Figures [AS-040]) have been assessed as part of the landscape and visual impact assessment contained in Chapter 7 (Landscape and Visual Effects) of the Environmental Statement [APP-051]. This has been prepared, following the request from the Examining Authority in the Rule 6 letter [PD-005]; submitted as Supporting Historic Environment and Visual Impact Assessment [APP-7.36] at Deadline 2 of the Examination. The Applicant agrees with the NCC's conclusion that over all the works will cause less than substantial harm, with some areas being of permeant large adverse effect.
9. Archaeology		
National and Local Policy		
Key Local Policy		
Newark and Sherwood District Council		
9.1.	Core Policy 14: Historic Environment (Local Development Framework, Amended Core Strategy 2019) – Protection of potential archaeological sites;	No comment required from the Applicant
National Policy		
National Networks National Policy Statement, 2024		
9.2.	Section 5.204 acknowledges that the construction of national networks infrastructure has the potential to result in adverse impacts on the historic environment.	No comment required from the Applicant

9.3.	Sections 5.210 to 5.211 lay out requirements to provide an assessment of the significance of heritage impacts from the development and also to describe the significance of the affected heritage assets;	No comment required from the Applicant
9.4.	Sections 5.212 to 5.215 present requirements for mitigation of development impacts on archaeology identified within the order limits, stating '*Where the loss of the whole or part of a heritage asset's significance is justified, the Secretary of State should require the applicant to record and advance understanding of the significance of the heritage asset before it is lost*'.	No comment required from the Applicant
National Planning Policy Framework, 2023:		
9.5.	Chapter 16 (paragraphs 195-214) of the NPPF sets out a framework for the management of the historic environment and provides guidance for proposals affecting heritage assets;	No comment required from the Applicant
9.6.	Paragraph 200 sets out a requirement for assessment of impact on heritage assets during the application process '*In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting.'*	No comment required from the Applicant
9.7.	Paragraphs 205, 206 and 208 provide guidance on impact to designated heritage assets;	No comment required from the Applicant
9.8.	Paragraph 211 makes provision for mitigation of development impacts '*Local planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly orin part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible'*.	No comment required from the Applicant
9.9.	It is the Council's position that the applicant must provide sufficient desk-based research, non-intrusive survey and intrusive field evaluation to adequately assess the archaeological potential of this scheme and provide an agreeable Outline Archaeological Mitigation Strategy (OAMS) for Examination. The Environmental Statement (ES) must present the full range of findings from this archaeological work to provide the evidential basis for the OAMS	The Applicant has to date undertaken multiple stages of heritage investigations to inform the cultural heritage assessment. These investigations include: • Preliminary surveys comprising fieldwalking, metal detecting, geophysical survey and geoarchaeological coring and monitoring; and • Archaeological evaluation comprising archaeological trial trenching and geoarchaeological test pitting and palaeoenvironmental analysis. The results of the preliminary surveys have informed Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050] and the detailed reports for these surveys are appended to Appendix 6.1 Cultural Heritage Desk Based Assessment of the Environmental Statement Appendices [AS-099]. The results of the archaeological evaluation comprising archaeological trial trenching and geoarchaeological test pitting and palaeoenvironmental analysis were not available prior to submission of the Environmental Statement. As such the assessment of the potential for unknown archaeology within Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050] was based on available information and the assessment of effects on unknown archaeological remains present the most likely worst-case scenario in the event that buried archaeology is unearthed. In agreement with NSDC and NCC heritage stakeholders the results of the archaeological evaluation have formed part of the preparation of Chapter 6 (Archaeological Mitigation Strategy) of the updated Archaeological Management Plan [APP-187], submitted at Deadline 2 of the Examination.

		It should be noted that the results of the archaeological evaluation have not negatively altered the effects predicted within Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050].
9.10.	The scheme runs through areas of known archaeological potential dating from the late Palaeolithic to post-medieval period and all archaeological periods in between are represented on the Nottinghamshire HER. Of particular note is the internationally significant late Upper Palaeolithic site at the north end of Farndon and southern end of the scheme. Known and notable Roman and Anglo-Saxon sites are also present within the order limits and there is a high potential for additional, currently unknow sites dating to these periods and further Civil War activity associated with the sieges of Newark in the 17th century.	No comment required from the Applicant
Baseline		
9.11.	The applicant has submitted an Environmental Statement in support of the application and considers Cultural Heritage at Chapter 6 (APP-050). Supporting appendices have also been submitted and comprise: • 6.1 (Desk-based Assessment (DBA) APP-132), • 6.2 (Assessment of Heritage Value APP-133), • 6.3 (Assessment of Cultural Heritage Effects During Construction of the Scheme APP- 134), and • 6.4 (Assessment of Cultural Heritage Effects During Operation of the Scheme APP-135).	No comment required from the Applicant
9.12.	Chapter 6 and the DBA make reference to several surveys and field evaluations including geoarchaeological evaluation, metal detector surveys, field walking, monitoring of GI and trial trench evaluation. It is essential that the full reports for these should be included as appendices so that a proper assessment of the data can be scrutinised and allow for a formal position on the extent to which the scheme has been sufficiently evaluated.	The Applicant confirms the full reports for the preliminary surveys within D to K of Appendices Appendix 6.1 Cultural Heritage Desk Based Assessment of the Environmental Statement Appendices [AS-099]. The full report for the archaeological evaluation is contained within Appendix H of the updated Archaeological Management Plan [APP-187], submitted at Deadline 2 of the Examination.
9.13.	The applicant's archaeological consultants have engaged well with the County and other stakeholders with regard to archaeology, as detailed in Section 6.4.	No comment required from the Applicant
9.14.	Chapter 6 incorporates the data derived from the DBA, metal detector and fieldwalking surveys, geoarchaeological investigation and geophysical survey. Crucially, it has not included the data from the trial trench evaluation work which was undertaken in 2023/24, which the report acknowledges at Section 6.8.116. The inclusion of this data in the assessment in Chapter 6 is essential to understanding the development impacts and the assessment will not have been completed to a satisfactory standard until it has been. However, the applicant has provided draft copies of these reports which will be submitted for Deadline 1 which is welcomed and will resolve the above issue.	The Applicant has to date completed a thorough programme of archaeological fieldwork including preliminary surveys and archaeological evaluation as detailed in response to 9.9 above. The scope of these works was developed in consultation with NCC, NSDC and Historic England heritage stakeholders and the approved Written Schemes of Investigation (WSI) for these works are appended to the Archaeological Management Plan [APP-187]. The results of the preliminary surveys have informed Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050] and the detailed reports for these surveys are appended to Appendix 6.1 Cultural Heritage Desk Based Assessment of the Environmental Statement Appendices [AS-099]. The results of the archaeological evaluation were not available prior to submission of the Environmental Statement and as such the assessment of the potential for unknown archaeology based on available information has been undertaken as part of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050] and the

		conclusions present the most likely worst-case scenario in the event that buried archaeology is unearthed. In agreement with NCC, NSDC and Historic England heritage stakeholders the results of the archaeological evaluation have formed part of the preparation of Chapter 6 (Archaeological Mitigation Strategy) of the updated Archaeological Management Plan [APP-187], submitted at Deadline 2 of the Examination. A copy of the updated Archaeological Management Plan and archaeological evaluation report was shared with heritage stakeholders including; Historic England, NCC and NSDC for comment on 03/09/2024. Comments were received from the heritage stakeholders on 25/09/2024, which have been taken on board as part of the finalisation of the updated Archaeological Management Plan [APP-187].
9.15.	Section 6.9 details potential impacts which include the removal or truncation of heritage assets as a result of excavation, ground disturbance, de-watering and compaction associated with the construction of the Scheme and associated works (Section 6.9.3). Where archaeology is present this would be a **significant, adverse, negative impact**	The Applicant agrees that the removal or truncation of heritage assets as a result of excavation, ground disturbance, de-watering and compaction associated with the construction of the Scheme and associated works would result in an impact. The Applicant does not consider impacts to be significant or negative. The Applicants methodology aligns with DMRB LA104 Environmental Assessment and Monitoring for the purposes of EIA and considers "Significance of Effect". The impact due to removal or truncation of heritage assets would be considered a major, moderate or occasionally minor adverse impact. This methodology is outlined in Paragraph, 6.5.16 and Table 6-3 of Chapter 6 (Cultural Heritage of the Environmental Statement [APP-050].
9.16.	It also identifies operational impacts, particularly the depreciation in value of below ground heritage assets as a result of damage caused by compaction, vibration, dewatering and changes in hydrology for the Scheme and associated floodplain compensation works. It should also include potential impacts from maintenance and other works. Where archaeology is present this would be a **significant, adverse, negative impact**.	The Applicant agrees that the damage caused by compaction, vibration, dewatering and changes in hydrology for the Scheme and associated floodplain compensation works would result in an impact to below ground heritage assets. The Applicant agrees that some maintenance work may result in impacts to below ground heritage assets but most conducted in the roadway would not result in any impacts to below ground heritage assets. The Applicant does not consider impacts to be significant or negative. The Applicants methodology aligns with DMRB LA104 Environmental Assessment and Monitoring for the purposes of EIA and considers "Significance of Effect". The impact due to removal or truncation of heritage assets would be considered a major, moderate or occasionally minor adverse impact. This methodology is outlined in Paragraph, 6.5.16 and Table 6-3 of Chapter 6 (Cultural Heritage of the Environmental Statement [APP-050].
9.17.	Section 6.10 provides a very broad mitigation proposal based on the evidence presented, although there is some detail of design alterations, which is welcomed. However, this is necessarily lacking crucial information from the evaluation trenching and other reports that have not been included with the DCO submission.	The Applicant confirms as recorded within Section 6.4 of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050], thorough consultation with heritage stakeholders including NCC, NSDC and Historic England has been undertaken to discuss the assessed impacts and effects of the Scheme upon archaeological remains and the measures required to reduce and avoid these impacts where possible. To date the Scheme has been subject to two phases of archaeological investigation, the scope of which has been agreed by heritage stakeholders. These phases include a programme of preliminary survey (field walking, metal detector, geophysical survey and geoarchaeological desk-based assessment) and a programme of archaeological evaluation (trial trenching and test pitting, geoarchaeological coring and archaeological monitoring of ground investigation works). The agreed scope for these works is detailed within Chapters 4 and 5 of the Archaeological Management Plan [APP-187] and the results of these surveys are detailed within Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050] and Appendix 6.1 (Cultural Heritage Desk Based Assessment) of the Environmental Statement Appendices [AS-099]. Where areas of significant archaeology have been identified through preliminary survey and archaeological evaluation, discussions with heritage stakeholders have enabled the reduction of the construction areas to preserve as much of these sensitive areas in situ. Examples include the avoidance of impacts to internationally important Late Upper Palaeolithic remains at Farndon and the reduction of impacts to late Prehistoric, Roman and Anglo-Saxon settlement remains identified south-west of Winthorpe, detailed further in Chapter 3 (Assessment of Alternatives) of the Environmental Statement [APP-047] and Chapter 6 (Cultural Heritage) of the

		Environmental Statement [APP-050]. Where avoidance is not possible a robust Archaeological Mitigation Strategy for the pre-commencement and construction stages of the Scheme has been developed in accordance with Requirement 9 of the draft Development Consent Order DCO [REP1-001]. This strategy has been developed in consultation with NCC, NSDC and Historic England heritage stakeholders, and is detailed within Chapter 6 of the updated Archaeological Management Plan [APP-187], submitted at Deadline 2 of the Examination.
9.18.	The mitigation proposals in Section 6.10 that relate to archaeology, comprise avoidance and excavation/surveys to understand and record the heritage encountered along the route creating a greater knowledge of the area's heritage. While this high-level approach would be broadly agreeable (as with any scheme), it is essential that a detailed OAMS be presented for Examination, and this be based on the full range of reports rather than the limited submission to date. The applicant has recently consulted the Council's advisors on a detailed, draft OAMS which will be submitted at Deadline 1. This broadly addresses the concerns above, but further comments and revisions may be necessary for Examination.	The results of preliminary surveys and archaeological evaluation alongside consultation with heritage stakeholders from NCC, NSDC and Historic England has informed the preparation of a detailed Archaeological Mitigation Strategy, which forms Chapter 6 of the updated Archaeological Management Plan [APP-187], submitted at Deadline 2 of the Examination. A copy of the updated AMP was shared with heritage stakeholders for comment on 03/09/2024. Comments were received from the heritage stakeholders on 25/09/2024, which have been taken on board as part of the finalisation of the updated Archaeological Management Plan [APP-187].
9.19.	The OAMS must identify each archaeologically sensitive area, the impacts from the proposed development and a detailed programme of archaeological works for each that will offset the impacts. This will include excavation, monitoring, preservation in-situ (archaeological exclusion zones) and design solutions. The currently submitted proposals are insufficient and limited and the impact from development remains **adverse and negative**, however this will be largely addressed with the applicant's submission at Deadline 1 and following any alterations required.	Chapter 6 (Archaeological Mitigation Strategy) of the updated Archaeological Management Plan [APP-187] to be submitted at Deadline 2, details the scope of archaeological investigations and protection measures required during the pre-commencement and construction stages of the Scheme. These investigations include: historic building recording, vibration monitoring, further archaeological evaluation, archaeological excavation, archaeological monitoring and recording and geoarchaeological investigation. In accordance with Requirement 9 of the draft Development Consent Order (REP1-001), this Strategy has been developed in consultation with the NCC, NSDC and Historic England Stakeholders, following completion of the Phase 1 preliminary surveys and Phase 2 archaeological evaluation, described in Chapters 4 and 5 of the Archaeological Management Plan [APP-187]. A copy of the updated AMP was shared with heritage stakeholders including NCC, NSDC and Historic England for comment on 03/09/2024. Comments were received from the heritage stakeholders on 25/09/2024, which have been taken on board as part of the finalisation of the updated Archaeological Management Plan [APP-187].
Summary		
9.20.	This office is aware of the level of archaeological work that has been undertaken by the applicant and has monitored much of it. We can advise that the archaeological work to date is of a sufficient level to appropriately inform the ES Chapter, however it has not yet been presented in full and consequently the ES Chapter lacks sufficient detail on the proposed impacts for Examination.	The Applicant confirms the full reports for the preliminary surveys within D to K of Appendices Appendix 6.1 Cultural Heritage Desk Based Assessment [AS-099]. The full report for the archaeological evaluation is contained within Appendix H of the updated Archaeological Management Plan [APP-187], submitted at Deadline 2 of the Examination.
9.21.	The evidence presented to date indicates the presence of significant archaeology but does not yet provide sufficient site-specific detail on the development impacts or an agreeable programme of mitigation work to offset those impacts. Therefore, the Council's position must be that the development will have a **significant, adverse and negative impact** on the archaeological resource encountered in the Order Limits	The Applicant confirms the results of the preliminary surveys comprising fieldwalking, metal detecting, geophysical survey and geoarchaeological coring and monitoring have informed Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050] and the detailed reports for these surveys are appended to Appendix 6.1 Cultural Heritage Desk Based Assessment of the Environmental Statement Appendices [AS-099]. The results of the archaeological evaluation comprising archaeological trial trenching and geoarchaeological test pitting and palaeoenvironmental analysis were not available prior to submission of the Environmental Statement and as such the assessment of the potential for unknown archaeology, based on available information has been undertaken as part of Chapter 6 (Cultural Heritage) of the Environmental Statement [APP-050] and the conclusions present the most likely worst-case scenario in the event that buried archaeology is unearthed. This

10. Noise and Vibration		
Baseline		
10.1.	Existing road and rail noise sources are identified in the ES as the dominant noise sources in the vicinity of the scheme, in particular the existing A46 and A1. With some additional contributions from aircraft and natural sounds such as birdsong.	No comment needed from the Applicant.
10.2.	Baseline noise monitoring was undertaken in 2022 at seven long term sites and two short term sites along the scheme. As stated in Appendix 11.2 of the Environmental Statement (ES) Nottinghamshire County Council (NCC) was consulted on the proposed locations and methodology in February 2022.	No comment needed from the Applicant.
10.3.	Further detail on meteorological conditions during the survey, in particular information on the wind direction and any periods excluded due to adverse weather, which are not provided, would be beneficial. However, overall the baseline monitoring is considered to be suitable and sufficient for the purposes of the noise impact assessment.	No comment needed from the Applicant.
10.4.	The identification of noise sensitive receptors along the scheme, in particular residential dwellings and noise important areas (NIAs), is set out in the ES and captures the main areas of receptors with the potential to be impacted. No information is provided on other noise sensitive receptors in the study area such as educational, medical and community facilities. Based on section 11.11 'Assessment of likely significant effects' a large number of other sensitive receptors have been included in the assessment. It is assumed educational, medical, and community facilities are included in these other sensitive receptors. Section 11.11 identifies potentially significant effects at a number of commercial properties, although such properties would not normally be considered as potentially noise sensitive.	The Applicant confirms all relevant address base points have been included in the assessment to establish potential impacts from the Scheme, including noise sensitive receptors such as educational, medical and community facilities. Assessment locations that were not flagged by the assessment as potentially subject to a significant effect did not require consideration of particular sensitivities and therefore are not explicitly referred to in the assessment results.
10.5.	Overall the baseline set out in the ES is considered to be proportionate and adequately derived.	No comment needed from the Applicant.
National and Local Policy		
National Policy		
10.6.	The National Policy Statement for National Networks (NPSNN) is the key policy the scheme must comply with. The ES is based on the 2014 version which was current at the time of the assessment and the draft revision which was published in March 2023. A revised version was issued in May 2024. With regard to noise, there are no material differences between the various versions of the NPSNN.	No comment needed from the Applicant.
10.7.	The DCO application includes the document 'National Policy Statement for National Networks Accordance Tables', which sets out how the scheme complies with each section of the NPSNN, mainly through reference to the relevant sections of Chapter 11: Noise and Vibration of the ES.	No comment needed from the Applicant.
10.8.	The noise/vibration prediction/assessment methodologies are stated as being in accordance with the relevant UK guidance for assessing road schemes: the Design Manual for Roads and Bridges (DMRB) LA 111: Noise and Vibration.	No comment needed from the Applicant.

Construction		
10.9.	No significant adverse noise effects due to construction traffic on local roads during the day are identified, as the magnitude of the predicted change in traffic noise levels along affected roads is only negligible or minor. No construction traffic is anticipated at night	No comment needed from the Applicant.
10.10.	No significant adverse effects due to the various temporary night-time road diversions are identified as it is assumed that the duration of each diversion can be managed to not exceed the duration significance criteria set out in DMRB of 10 days in 15 consecutive days or 40 days in 6 consecutive months. However, this assumption is not secured by a commitment in the First Iteration Environmental Management Plan (FIEMP). **NCC request that a commitment is made in the FIEMP to night-time diversions not exceeding the duration significance criteria set out in DMRB LA 111, i.e. 10 days in 15 consecutive days or 40 days in 6 consecutive months.**	The Applicant confirms the extent of usage of any particular diversion route would be managed to fewer than 10 days in any 15 consecutive days and a total number of days fewer than 40 in any 6 consecutive months to avoid the introduction of a significant adverse effect. This measure will be secured by adding it to the First Iteration Environmental Management Plan [APP-184].
10.11.	As would be expected, exceedances of the levels at which a potentially significant adverse construction noise/vibration effect occurs are predicted at the closest receptors to some of the construction activities.	No comment needed from the Applicant.
10.12.	Each construction activity has been assessed individually. **While it is potentially reasonable to assume the worst-case impacts of multiple activities will not coincide at individual receptors, without specific information on the timing and duration of activities it is not possible to determine if multiple activities could coincide resulting in additional significant adverse effects**. For example, the use of the haul routes within the site and the site compounds at the same time as other construction activities would not be unexpected	The Applicant confirms Chapter 11 (Noise and Vibration) of the Environmental Statement [APP-055] presents the outcomes of the construction noise and vibration assessment on the basis of preliminary (as the details of construction activities are dependent on the final design, programme, and chosen methodology) construction information available at the time of the assessment. Appendix 11.1 (Construction Activities and Plant for Noise Assessment) of the Environmental Statement Appendices [APP-172] presents the construction information assumptions used in the assessment to represent a reasonable worst case for activities occurring in sequence. However, details of construction activities and relevant timings are to be reviewed, once known, in advance of any construction activity taking place. As per Appendix A of the Consents and Agreements Position Statement [APP-023], construction activities may be subject to an application under Section 61 of the Control of Pollution Act 1974 by the Principal Contractor to ensure potential impacts from construction related noise and vibration are suitably controlled.
10.13.	The ES concludes that all the identified potentially significant adverse construction noise and vibration effects can be mitigated to either reduce the levels at the receptors to below the relevant noise/vibration level or to reduce the duration of the exceedance to below the duration criteria set out in DMRB. Therefore, no residual significant adverse noise or vibration effects during construction are identified. The FIEMP includes the majority of the specific commitments set out in the ES. **However, implementing such measures, in particular, limiting the operating times of specific plant and the duration of works in specific locations may not be practical. There is therefore a risk of significant adverse construction noise/vibration effects at the closest receptors to the works.**	The Applicant confirms the Principal Contractor will implement a Noise and Vibration Management Plan (NVMP) based upon the Register of Environmental Actions and Commitments contained within the First Iteration Environmental Management Plan [APP-184]. This will detail the management and monitoring processes to be introduced across all construction sites and compounds. Details of construction activities and relevant timings are to be reviewed, once known, in advance of any construction activity taking place. As per Appendix A of the Consents and Agreements Position Statement [APP-023], construction activities may be subject to an application under Section 61 of the Control of Pollution Act 1974 by the Principal Contractor to ensure potential impacts from construction related noise and vibration are suitably controlled.
10.14.	However, some residual significant adverse effects would not necessarily indicate non-compliance with the NPSNN, as the avoidance of significant adverse effects and the requirement to mitigate and minimise adverse effects is within the context of government policy on sustainable development.	No comment needed from the Applicant.
10.15.	To identify sustainable noise mitigation measures, various factors must be considered, including the nature/source of the adverse effect to be mitigated, the circumstances of the receptor, the cost versus the benefit, engineering practicality, safety considerations,	No comment needed from the Applicant.

	generation of knock-on impacts (such as access issues, ecological impacts, landscape and visual impacts), and consultation and stakeholder engagement responses.	
10.16.	The ES and FIEMP contain industry standard mitigation measures, such as the requirement to implement Best Practicable Means (BPM), and specific mitigation measures such as temporary barriers in specific locations. Therefore, all sustainable mitigation measures have been identified.	No comment needed from the Applicant.
10.17.	To conclude, whilst the conclusion of the ES that all significant adverse construction effects can be avoided is not completely certain, the assessment is considered to comply with the policy requirements of the NPSNN. In addition, powers are available to the Local Authority to control construction noise/vibration during the works.	No comment needed from the Applicant.
Operation		
10.18.	Traffic noise impacts on the NIAs in the vicinity are identified in the ES as negligible or minor beneficial. The impact at the two NIAs for which NCC are responsible on the A617 is minor beneficial.	No comment needed from the Applicant.
10.19.	Potentially significant operational traffic noise effects, based on the DMRB noise change criteria, are identified in the ES at the following number of sensitive receptors in the opening year: • Moderate increase (3.0 to 4.9 dB) - 23 (15 residential) daytime and 66 (54 residential) night-time. • Major increase (≥ 5 dB) – 67 (59 residential) daytime and 22 (18 residential) night-time. • Minor increase (1.0 to 2.9 dB) combined with existing 'high' noise levels (at or above the Significant Observed Adverse Effect Level (SOAEL)) – 13 (3 residential) daytime and 12 (3 residential in the night-time); • Moderate decrease (3.0 to 4.9 dB) – 244 (226 residential) and 170 (154 residential) night-time; and • Major decrease (≥ 5 dB) – 4 (4 residential)) and 2 (2 residential) night-time.	No comment needed from the Applicant.
10.20.	In the long term (comparing the opening year without the scheme to 15 years after opening with the scheme) the number of moderate (5.0 to 9.9 dB) and major (≥ 10 dB) increases and decreases is reduced. This is primarily because the DMRB criteria are larger to allow for changes in traffic that would have occurred even without the scheme over the 15 years.	No comment needed from the Applicant.
10.21.	DMRB requires that the effects that are initially identified as significant based on the impact in the opening year are considered in light of a range of other factors including: how close the change is to the noise change category boundary, the long-term change, the absolute level, the location of sensitive parts of a receptors, the acoustic character of the area and the likely perception of the change by occupiers.	No comment needed from the Applicant.
10.22.	Applying these additional factors the ES concludes that all the initially identified potentially significant adverse effects are not significant. No discussion of the potentially significant decreases in traffic noise is provided in the ES.	The Applicant acknowledges Chapter 11 (Noise and Vibration) of the Environmental Statement [APP-055] does not include extensive discussion on areas where noise decreases are predicted. To aid in identifying areas that are subject to noise decreases, Figure 11.9 (Short-term Noise Change) [AS-063] and Figure 11.10 (Long-term Noise Change) of the Environmental Statement Figures [AS-064] present noise level changes throughout the study area in the short-term and long-term respectively to aid understanding of the Scheme's impact.
10.23.	Whilst some of the locations identified in the ES as potentially experiencing a significant adverse effect are concluded to be not significant as they are commercial non-sensitive receptors, some are residential. In particular, the 74 residential properties on Pelham Street	The Applicant confirms DMRB LA111 sets out the requirements for assessing and reporting the effects of highways noise and vibration from construction, operation and maintenance schemes. For operational noise an initial assessment of likely significant effect on noise sensitive buildings is determined by reference to

	and Victoria Street/Portland Street/Clinton Street/Albert Street in Newark, are predicted to experience a moderate or major increase in traffic noise in the opening year. At these locations, an argument can be made that a significant adverse effect would occur.	classification of short-term change which is that moderate and major changes are significant whereas negligible and minor changes are not significant. However, where the change in the short-term is minor, moderate or major, Table 3.60 of LA 111 is then used to determine 'final' significance. For Pelham Street and Victoria Street/Portland Street/Clinton Street/Albert Street, the interpretation of the contextual factors showed, among other things, that: • The long-term impact is generally less than the short-term in that major impacts become moderate and moderate impacts become minor. This local circumstance indicates the effect is likely not significant, although some moderate impacts remain in the long-term from the short-term. • Noise level changes are within 1dB of the bottom of the moderate range in the long-term for receptors that have a moderate impact in the short-term which remains moderate in the long-term, indicating that this local circumstance indicates the effect is likely not significant. • Noise levels are below SOAEL so no modification to the assessment is needed for this local circumstance. • No change in acoustics character is expected so no modification to the assessment is needed for this local circumstance. A summary of the influence of these factors is provided in Table 11-36 of Chapter 11 (Noise and Vibration) of the Environmental Statement [APP-055].
10.24.	However, some residual significant adverse effects do not indicate non-compliance with the NPSNN as the avoidance of significant adverse effects and the requirement to mitigate and minimise adverse effects is within the context of government policy on sustainable development.	No comment needed from the Applicant.
10.25.	As stated above with regard to construction effects, to identify sustainable noise mitigation measures, various factors must be considered, including the nature/source of the adverse effect to be mitigated, the circumstances of the receptor, the cost versus the benefit, engineering practicality, safety considerations, generation of knock-on impacts (such as access issues, ecological impacts, landscape and visual impacts), and consultation and stakeholder engagement responses.	No comment needed from the Applicant.
10.26.	There are unlikely to be any additional locations where sustainable mitigation would be effective and feasible. The minor roads in Newark which experience a moderate or major increase in traffic noise are not adjacent to the scheme, and the impact is due to traffic re-routing on surrounding roads. It is possible the predicted moderate and major impacts are due to a simplification of the traffic model if not all the local roads are incorporated. In any case, mitigation, such as noise barriers on an existing road with many properties fronting onto the road, would not be practicable and would not constitute sustainable mitigation	No comment needed from the Applicant.
10.27.	Therefore, the operational noise mitigation measures set out in the ES are in accordance with the NPSNN requirement to demonstrate good design.	No comment needed from the Applicant.
10.28.	To conclude, whilst the conclusion of the ES that none of the operational adverse effects are significant could be open to debate, the operational noise assessment is considered to comply with the policy requirements of the NPSNN.	No comment needed from the Applicant.
Local Policy		
10.29.	The Nottinghamshire Local Transport Plan 2011-2026 identifies addressing noise issues as a means to improve health, wellbeing and quality of life. It therefore states, 'priority will be given to highway measures that reduce noise in areas where there are high levels of road traffic and significant noise sensitive properties affecting a high number of people'.	No comment needed from the Applicant.

10.30.	As illustrated in Figure 11.9 of the ES, which displays the change in traffic noise levels in the opening year due to the scheme, there are areas where the scheme provides a reduction in traffic noise levels. Areas of predicted increases in traffic noise levels are generally negligible or minor in magnitude.	No comment needed from the Applicant.
10.31.	Whilst the noise section of the Local Transport Plan does not explicitly state that noise impacts should be considered in the context of sustainable development the over-arching principle of sustainability is inherent within the plan.	No comment needed from the Applicant.
10.32.	With the inclusion of the embedded mitigation, the scheme is considered to comply with local policy.	No comment needed from the Applicant.
Potential conflicts		
10.33.	Whilst the conclusions of the ES that none of the construction or operational adverse effects are significant could be open to debate, the assessment is considered to comply with the policy requirements of the NPSNN.	No comment needed from the Applicant.
10.34.	No significant adverse effects due to the various temporary night-time road diversions are identified as it is assumed that the duration of each diversion can be managed to not exceed the duration significance criteria set out in DMRB of 10 days in 15 consecutive days or 40 days in 6 consecutive months. **NCC request that a commitment be made in the FIEMP to night-time diversions not exceeding the duration significance criteria set out in DMRB LA 111, i.e. 10 days in 15 consecutive days or 40 days in 6 consecutive months**.	The Applicant confirms the extent of usage of any particular diversion route would be managed to fewer than 10 days in any 15 consecutive days and a total number of days fewer than 40 in any 6 consecutive months to avoid the introduction of a significant adverse effect. This measure will be secured by adding it to the First Iteration Environmental Management Plan [APP-184].
10.35.	The initial assessment as part of the ES indicates no residential properties are likely to qualify under the Noise Insulation Regulations 1975 (as amended 1988). However, if the scheme goes ahead National Highways have a statutory obligation to complete a final assessment within six months of the scheme opening, using the final scheme design and traffic data.	The Applicant confirms that Regulation 6(3) of the Noise Insulation Regulations states that a map or list setting out whether a duty arises under Regulation 3 (duty to carry out insulation work or to make grants) or a power under Regulation 4 (power to carry out insulation work or to make grants) needs to be produced and made available for public inspection not later than six months after the "relevant date" (when the altered highway was opened) and that the noise levels that are needed for such a map or list must be calculated in accordance with the Calculation of Road Traffic Noise.
11. Air Quality		
Baseline		
11.1.	The Applicant describes the air quality baseline conditions in Section 5.8 of the Environmental Statement (ES) Chapter 5: Air Quality (Ref: TR010065/APP/6.1). The information presented in the ES regarding baseline air quality has been derived from information held by Newark and Sherwood District Council (NSDC), National Highways and The Department for Environment, Food and Rural Affairs (Defra).	No comment required from the Applicant.
11.2.	The air quality assessment has been undertaken in accordance with the Design Manual for Roads and Bridges (DMRB) LA 105 Air Quality. The assessment uses the most recent (at the time of undertaking the assessment) air quality tools and spreadsheets provided by National Highways and Defra.	No comment required from the Applicant.
11.3.	Within Section 5.8 of the ES, annual mean nitrogen dioxide (NO_2) monitoring data from NSDC has been provided for 2018 to 2022 for the 12 monitoring locations within 0.6 km of the	No comment required from the Applicant.

	Scheme or affected road network ((ARN) i.e. air quality study area). Paragraph 5.8.10 states that there were no exceedances of the annual mean NO_2 objective in 2022, with the highest annual mean NO_2 concentration of 26.6 µg/m^3 monitored at 16N, located less than 10 m from the Scheme. The ES notes that there are no air quality management areas (AQMAs) declared by NSDC.	
11.4.	Paragraph 5.8.9 discusses the effect of the national lockdowns during the COVID-19 pandemic on air quality concentrations in 2020 and 2021; however, by 2022 concentrations are considered to be representative of 'normal' conditions post-COVID-19 lockdowns.	No comment required from the Applicant**.**
11.5.	Paragraph 5.8.7 confirms that NSDC undertakes no automatic monitoring and therefore no monitoring of particulate matter (PM_{10} or $PM_{2.5}$) is undertaken within the study area.	No comment required from the Applicant**.**
11.6.	Paragraphs 5.8.11 to 5.8.14 provide details of Scheme specific monitoring undertaken in 2022 to support the assessment and to update the Applicant's monitoring survey previously undertaken in 2016. Monitoring was undertaken at 27 locations between May 2022 and November 2022. The monitored concentrations were bias adjusted and annualised as described in Appendix 5.3 Air Quality Monitoring Report (Ref: TR010065/APP/6.3). The results indicated that there were no exceedances of the NO_2 annual mean objective. The highest NO_2 annual mean concentration of 33.0 µg/m^3 was recorded at a site on the A113 adjacent to Winthorpe Roundabout.	No comment required from the Applicant**.**
11.7.	Consultation with the NSDC Environmental Health Officer (EHO) was held on 14th September 2022, with agreement on the location of the monitoring sites for the Scheme specific survey.	No comment required from the Applicant**.**
11.8.	Paragraphs 5.5.55 to 5.5.59 describe the comparison exercise which has been undertaken between the Defra modelled background NO_x and NO_2 concentrations and two NSDC and nine Scheme specific background sites which are considered representative of air quality conditions across the study area. The comparison indicated that the Defra modelled background concentrations were lower than the monitored concentrations in 2022. Therefore, the Defra modelled NO_x, NO_2 and PM_{10} background concentrations applied to the assessment have been uplifted by an average factor of 1.46.	No comment required from the Applicant**.**
11.9.	The Applicant has referred to the Defra Pollution Climate Mapping (PCM) model to confirm that there are no PCM links which intersect the ARN.	No comment required from the Applicant**.**
11.10.	Baseline information for habitat type, critical loads and background nitrogen deposition rates for designated sites sensitive to nitrogen have been derived using data on the Air Pollution Information System (APIS) website.	No comment required from the Applicant**.**
11.11.	Overall the baseline set out in the ES is considered to be proportionate and adequately derived.	No comment required from the Applicant**.**
Wider ES Review		
11.12.	Construction phase dust mitigation measures are discussed in Chapter 5: Air Quality paragraphs 5.10.1 and listed in paragraph 5.10.2. Paragraph 5.10.1 states that an air quality and dust management plan will also be prepared in full prior to construction commencing. These dust mitigation measures are included in the First Iteration of the Environment Management Plan (EMP) (Ref: TR010065/APP/6.5) which will be developed into a Second	The Applicant confirms an Outline Air Quality and Dust Management Plan as an Appendix to the First Iteration Environmental Management Plan [APP-184] will be submitted at Deadline 3 of the Examination.

	Iteration EMP. As stated in the First Iteration EMP the air quality and dust management plan will include measures to monitor the effectiveness of mitigation as part of the Second Iteration EMP. Measures include daily on site and off-site inspections and a record of complaints/exceptions of dust events to be included in the EMP. **It would be beneficial for an outline air quality and dust management plan to be submitted as part of the DCO Examination to enable Nottinghamshire County Council (NCC) and relevant parties to undertake a review and provide comments if necessary.**	
11.13.	Paragraph 5.4.2 states that consultation was undertaken on 21st June 2023 with EHO from NSDC to discuss and agree on the assessment findings and proposed mitigation for air quality.	No comment required from the Applicant.
11.14.	It is noted that there is no consideration of the potential combined air quality effects associated with construction vehicle flows and traffic management measures during the construction phase. **Further information is required to understand the combined effects associated with the Scheme during the construction phase for air quality.**	The Applicant confirms as per paragraph 5.5.16 of Chapter 5 (Air Quality) of the Environmental Statement [AS-021]), changes in air quality as a result of construction traffic are not expected to be significant given that there are no areas at risk of exceeding air quality objectives and changes in construction traffic are temporary and not programmed to last more than two years. On this basis, assessment of construction traffic was scoped out of the assessment as potential effects are not considered to be significant. Temporary road closures, diversions and speed limit reductions are discussed in paragraph 5.11.14 to 5.11.17 of Chapter 5 (Air Quality) of the Environmental Statement [AS-021]). The temporary road closures and diversions would have a very limited effect on annual NO_2 and PM_{10} concentrations given their limited overnight durations across the three-year construction phase. Speed limit reductions from 70 and 60 miles per hour to 50 miles per hour would likely result in lower vehicle emissions than during normal operation based on emission factors from Defra's Emission Factor Toolkit. On this basis, traffic management is considered to be not significant. Based on the above, the combined effects from the construction phase were not specifically addressed within the ES. Given that the existing and modelled pollutant concentrations in the study area are well below the air quality thresholds, there is no risk of the combined traffic management measures and construction traffic causing an exceedance of the air quality objectives and potential combined effects are not considered to be significant.
11.15.	The operational phase air quality assessment set out in the ES is considered to be proportionate and adequately derived. **Further information is requested regarding the combined effects of construction vehicle flows and traffic management measures during the construction phase**. In addition, the First Iteration Environmental Management Plan (FIEMP) (Ref: TR010065/APP/6.5) states that an Air Quality and Dust Management Plan will be created and submitted with the Second Iteration Environmental Management Plan (SIEMP). **It is requested that NCC be consulted on the contents of this management plan.**	The Applicant confirms an Outline Air quality and Dust Management Plan as an Appendix to the Outline First Iteration Environmental Management Plan [APP-184] will be submitted at Deadline 3 of the Examination, which will enable all parties to comment on its provisions. The Applicant can confirm that NSDC and NCC will be consulted on the Second Iteration Environmental Management Plan, including the detailed Air Quality and Dust Management Plan as secured through Requirement 3 of the draft Development Consent Order [REP1-001]. As per paragraph 5.5.16 of Chapter 5 (Air Quality) of the Environmental Statement [AS-021]), changes in air quality as a result of construction traffic are not expected to be significant given that there are no areas at risk of exceeding air quality objectives and changes in construction traffic are temporary and not programmed to last more than two years. On this basis, assessment of construction traffic was scoped out of the assessment as potential effects are not considered to be significant. Temporary road closures, diversions and speed limit reductions are discussed in paragraph 5.11.14 to 5.11.17 of Chapter 5 (Air Quality) of the Environmental Statement [AS-021]). The temporary road closures and diversions would have a very limited effect on annual NO_2 and PM_{10} concentrations given their limited overnight durations across the three-year construction phase. Speed limit reductions from 70 and 60 miles per hour to 50 miles per hour would likely result in lower vehicle emissions than during normal operation based on emission factors from Defra's Emission Factor Toolkit. On this basis, traffic management is considered to be not significant. Based on the above, the combined effects from the construction phase were not specifically addressed within the ES. Given that the existing and modelled pollutant concentrations in the study area are well below the air quality thresholds, there is no risk of the combined traffic management measures and construction traffic causing an exceedance of the air quality objectives and potential combined effects are not considered to be significant.
Summary of Legislative and Policy Framework Review		

<table>
<tr><td colspan="3">National Policy</td></tr>
<tr><td>11.16.</td><td>The National Policy Statement for National Networks (NPSNN) sets out the policy which the Scheme should comply with and forms the basis for informing the judgement on the impacts of the Scheme. The ES is based on the 2014 version which was current at the time of the assessment and the draft revision was published in March 2023. A revised version was issued in May 2024.</td><td>No comment required from the Applicant</td></tr>
<tr><td>11.17.</td><td>The DCO application includes the document 'National Policy Statement for National Networks Accordance Tables', which sets out how the Scheme complies with each section of the NPSNN published in 2014, mainly through reference to the relevant sections of Chapter 5: Air Quality of the ES. It also includes the document 'draft National Policy Statement for National Networks Accordance Tables' which sets out how the Scheme complies with each section of the draft NPSNN published in March 2023.</td><td>No comment required from the Applicant</td></tr>
<tr><td>11.18.</td><td>Table 1 below outlines the requirements of the NPSNN (version 2014) for air quality and following the review of the DCO application, whether the requirement is adequately met. Based on the number of requirements for the Air Quality discipline included in the NPSNN, these are presented in a tabulated format.
Table 1: Compliance with NPSNN for air quality
<table>
<tr><th>Paragraph of NPSNN</th><th>Requirement of the NPSNN</th><th>Does the ES comply with the requirement</th></tr>
<tr><td>5.3</td><td>Increases in emissions of pollutants during the construction or operation phases of projects on the national networks can result in the worsening of local air quality (though they can also have beneficial effects on air quality, for example through reduced congestion).
Increased emissions can contribute to adverse impacts on human health and protected species and habitats.</td><td>Yes. ES Chapter 5: Air Quality, Section 5.9, describes the results of the assessment of the impacts of the Scheme during the construction and operational phases.
Further information is needed on the construction phase, as set out above.</td></tr>
<tr><td>5.4</td><td>Current UK legislation sets out health-based ambient air quality objectives. In addition, the European Union has established common, health-based and eco-system based ambient concentration limit values (LVs) for the main pollutants in the Ambient Air Quality Directive (2008/50/EU) ('the Air Quality Directive'), which Member States are required to meet by various dates.</td><td>Yes. Relevant air quality standards and objectives are outlined in the ES Chapter 5: Air Quality, Section 5.3.</td></tr>
<tr><td>5.6</td><td>Where the impacts of the Scheme (both on- and off- Scheme) are likely to have significant air quality effects in relation to meeting EIA requirements and/or affect the UK's ability to comply with the Air Quality Directive, the applicant should assess the</td><td>This requirement has been addressed in Chapter 5: Air Quality in Sections 5.9 and 5.11, where the assessment of the impacts of the Scheme has been presented. This is in line</td></tr>
</table></td><td>The Applicant confirms no responses are required to NPSNN paragraphs 5.3, 5.4 and 5.6. With respect to NPSNN paragraph 5.7 the Applicant confirms an Outline Air Quality and Dust Management Plan as an Appendix to the First Iteration Environmental Management Plan [APP-184] will be submitted at Deadline 3 of the Examination.</td></tr>
</table>

		impacts of the Scheme as part of the ES.	with DMRB LA105, which meets the requirements of the NPSNN.
	5.7	The environmental statement should describe: • existing air quality levels; • forecasts of air quality at the time of opening, assuming that the Scheme is not built (the future baseline) and taking account of the impact of the Scheme; and • any significant air quality effects, their mitigation and any residual effects distinguishing between the construction and operation stages and taking account of the impact of road traffic generated by the project.	Yes Baseline air quality concentrations are adequately described in Section 5.8 of the ES Chapter 5: Air Quality. Modelled air quality concentrations have been predicted for the DM and DS scenarios in the Scheme's opening year. Concentrations are presented and discussed in Section 5.9 of the ES Chapter 5: Air Quality. The significance of the air quality effects is described in the ES Chapter 5: Air Quality, Section 5.11. Appropriate mitigation is discussed in Section 5.10 of the ES Chapter 5: Air Quality and secured in the First Iteration EMP. **Noting, further information on the management of dust is requested, as described above.**
11.19.	Overall, the requirements of the NPSNN for air quality are adequately met in the DCO application documents, with limited additional information requested for the construction phase.		No comment required from the Applicant
11.20.	In May 2024, the NPSNN was updated and includes additional requirements for air quality, as described in Table 2. **Table 2: Compliance with NP SNN (May 2024) for air quality**		No comment required from the Applicant

Paragraph of NPSNN	Requirement of the NPSNN	Does the ES comply with the requirement
5.9	The government has legally binding targets to reduce emissions of five key air pollutants (PM2.5,	Paragraphs 5.3.2 to 5.3.14 of the ES Chapter 5: Air Quality describes the relevant air quality objectives. More specifically

			nitrogen oxides, sulphur dioxide, ammonia and non- methane volatile organic compounds) by 2030. In addition, 2 new air quality targets for 2040 – one for annual mean concentrations of PM2.5 and a population exposure reduction target for PM2.5 – have been set under the Environment Act 2021. These targets are in addition to the maximum permissible levels for pollutants in ambient air as set out in the Air Quality Standards Regulations (2010) and reiterated in the Air Quality Strategy. Local authorities and relevant public authorities must also meet local air quality objectives under the Environment Act 1995.	paragraphs 5.3.10 to 5.3.13 describe the PM2.5 targets and include the two new PM2.5 targets: • an annual mean concentration target for PM2.5 of 10 µg/m^3 at any monitoring station by 2040. • A population exposure reduction target of 35% by 2040 compared to a 2018 baseline.	

		5.13	The assessment should describe: • the predicted emissions, concentration change and absolute concentrations of the proposed project after mitigation methods have been applied. • any potential impacts on nearby designated habitats from air pollutants • the proximity and nature of nearby receptors which could be impacted, including those more sensitive to poor air quality	Yes. The operational phase concluded that the air quality effects associated with the Scheme were not significant and therefore no mitigation is required. As such, an assessment of a 'with mitigation' scenario is not required. Potential impacts on designated habitats are included in the air quality assessment. The results are described in the ES 5, paragraphs 5.11.33 to 5.11.35. Figure 5.1 Air Quality Receptors clearly illustrates the location of each receptor and the proximity of the receptors to the affected road network. Paragraph 5.5.40 describes how worse case receptors were selected and includes residential properties, schools and hospitals; however, the receptor list in Appendix 5.1: Air Quality Receptor Results does not distinguish between the type of receptor selected e.g. whether it was a school or residential property.	
		5.14	In addition, applicants should consider The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 by following available Defra guidance, including interim guidance.	The PM2.5 targets are discussed in paragraphs 5.3.10 to 5.3.13 of the ES Chapter 5: Air Quality.	
		5.20	With respect to The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023, the applicant should take all reasonable steps to reduce emissions of	The assessment does provide an assessment of potential PM2.5 impacts and states that the reason for not including this pollutant is in accordance with DMRB LA 105. The DMRB LA	

			PM2.5 and its precursor pollutants in the construction and operational stage of the development by following available Defra guidance.	105 states that "*there should be no need to model PM2.5 as the UK currently meets its legal requirements for the achievement of the PM2.5 air quality thresholds and the modelling of PM10 can be used to demonstrate that the Scheme does not impact on the PM2.5 air quality threshold"*, In paragraph 5.5.21 of the ES Chapter 5: Air Quality, the results of the PM10 modelling have been used to indicate that the current and future PM2.5 concentrations are lower than the target value of 20 µg/m^3 and the Scheme will not impact the PM2.5 air quality threshold at any of the human health receptors considered.	
Local Policy					
11.21.	Newark and Sherwood Amended Core Strategy Development Plan sets out policy up until 2023 and presents the objectives for development in the area. The policy of relevance to this assessment is Core Policy 12, Biodiversity and Green Infrastructure				No comment required from the Applicant.
11.22.	This policy states that the council will: "*work with partners to develop a strategic approach to managing air quality in the Sherwood Area, including through the development of a Supplementary Planning Document*".				No comment required from the Applicant.
11.23.	The Scheme does not adversely affect the above local air quality policy.				No comment required from the Applicant.
11.24.	The ES Chapter 5: Air Quality states that the air quality supplementary planning document (SPD) is currently under review and is yet to be adopted as either policy or guidance. This document, 'Air Quality and Emissions Mitigation, Guidance for Developers' is now available on the NSDC website.				No comment required from the Applicant.
11.25.	The guidance describes the air quality assessment methodology and appropriate mitigation measures for new developments. For 'large' developments, Type 1, 2 and 3 mitigation are required and the calculation of damage costs.				No comment required from the Applicant.
11.26.	As described in ES Chapter 5: Air Quality an air quality assessment has been undertaken following an appropriate methodology (DMRB LA 105). Construction phase dust mitigation measures are discussed in Chapter 5: Air Quality paragraphs 5.10.1 and listed in paragraph 5.10.2 as well as within the FIEMP. Operational air quality costs have been calculated and are included in the Transport Assessment (Ref TR010065/APP/7.4). According to the Transport Assessment, the local air quality valuation, based on the Department for Transport				No comment required from the Applicant.

	(DfT) guidance is £1,747,000. This approach, based on national guidance, is more appropriate for Development Consent Order schemes, than following the SPD.	
Conflicts		
11.27.	In summary, the baseline and operational phase air quality assessment set out in the ES Chapter 5: Air Quality, is considered to be proportionate and adequately derived. **Further information is requested regarding the combined effects during the construction phase of construction vehicle flows and traffic management measures. In addition, NCC requests to be consulted with regard to a draft version of the air quality and dust management plan.**	The Applicant confirms an Outline Air quality and Dust Management Plan as an Appendix to the Outline First Iteration Environmental Management Plan [APP-184] will be submitted at Deadline 3 of the Examination. The Applicant can confirm that NSDC and NCC will be consulted on the Second Iteration Environmental Management Plan, including the detailed Air Quality and Dust Management Plan as secured through Requirement 3 of the draft Development Consent Order [REP1-001]. As per paragraph 5.5.16 of Chapter 5 (Air Quality) of the Environmental Statement [AS-021]), changes in air quality as a result of construction traffic are not expected to be significant given that there are no areas at risk of exceeding air quality objectives and changes in construction traffic are temporary and not programmed to last more than two years. On this basis, assessment of construction traffic was scoped out of the assessment as potential effects are not considered to be significant. Temporary road closures, diversions and speed limit reductions are discussed in paragraph 5.11.14 to 5.11.17 of Chapter 5 (Air Quality) of the Environmental Statement [AS-021]). The temporary road closures and diversions would have a very limited effect on annual NO_2 and PM_{10} concentrations given their limited overnight durations across the three-year construction phase. Speed limit reductions from 70 and 60 miles per hour to 50 miles per hour would likely result in lower vehicle emissions than during normal operation based on emission factors from Defra's Emission Factor Toolkit. On this basis, traffic management is considered to be not significant. Based on the above, the combined effects from the construction phase were not specifically addressed within the ES. Given that the existing and modelled pollutant concentrations in the study area are well below the air quality thresholds, there is no risk of the combined traffic management measures and construction traffic causing an exceedance of the air quality objectives and potential combined effects are not considered to be significant.
11.28.	The air quality assessment is considered to overall comply with the policy requirements of the 2014 version of the NPSNN. The updated version published in 2023 includes additional requirements such as the inclusion of potential air quality impacts at designated habitats and potential $PM_{2.5}$ impacts associated with the Scheme. The ES Chapter 5: Air Quality meets the overall requirements of the 2023 version of the NPSNN.	No comment required from the Applicant.
12. Geology and Soils		
Baseline		
12.1.	The Applicant has assessed the likely significant effects on Geology and Soils for the A46 Newark Bypass Scheme as part of the Environmental Statement (ES).	No comment needed from the Applicant
Preliminary Sources Study Report		
12.2.	The Preliminary Sources Study Report (PSSR) includes baseline information summarised from a Landmark Envirocheck report (dated July 2018) which includes historical mapping, a geo-insight report and an enviro-insight report. The historical mapping of the site is dated up until 2018 with the most recent walkover undertaken in January 2021. The Applicant has reviewed additional reports on the existing available information on the Scheme from the Highways Agency (now known as National Highways) which include Geotechnical Data Management System Documents which are dated between 1978 and 2023.	No comment needed from the Applicant

12.3.	A number of online sources have been used to establish the baseline conditions at the Scheme and are referenced within Section 9 of the PSSR. These sources have been used to identify the geology, coal mining history, hydrogeology, designated sites, history, agricultural land classification and unexploded ordnance. Using this data, the Applicant has identified potential sources, pathways and receptors of contamination from this data which is considered to be an appropriate and proportionate assessment of the Scheme.	No comment needed from the Applicant
12.4.	An assessment of more recent mapping and a walkover to assess any changes at the Scheme within the past three years would identify any changes to the site and ensure that the most up to date information to inform the CSM contamination sources, pathways and receptors that have been assessed in the risk assessment.	Following completion of the Scheme wide ground investigation works in 2023, the Applicant and their appointed ground investigation contractor have been visiting the site to conduct groundwater monitoring of the exploratory hole installations. No significant changes at the Scheme within the past three years have been identified and the Applicant considers that the conceptual site model contamination sources, pathways and receptors that have been assessed in the risk assessment, included within the CLRA (Appendix 9.2 (Contaminated Land Risk Assessment) of the Environmental Statement Appendices [APP- 164 to APP-169] are based on the most up to date information.
12.5.	It is that further ground investigation at the Scheme is undertaken to delineate point sources of contamination and produce an updated risk assessment for identified receptors and to determine possible geo-environmental constraints of the proposed route options and inform any required remediation.	No comment required from the Applicant.
Contamination Assessment		
12.6.	The PSSR included as Appendix 9.1 identifies the potential sources of contamination that may affect the Scheme and Section 7 includes a Preliminary Land Contamination Assessment conceptual site model. This assesses the risks to human health, controlled waters and property receptors from potential contamination associated with the previous development on-site including Made Ground highway infrastructure and a Chemical Manure manufacturing & malthouse. As well as off-site including Made Ground associated with previous developments and historical and present-day contaminative land uses.	No comment required from the Applicant.
12.7.	Appendix 9.2 includes a Contaminated Land Risk Assessment which includes the same preliminary CSM as Appendix 9.1. Following a review of ground investigation data, a revised CSM is included as part of the assessment. The sources, pathways and receptors which have been identified within the CSM are reasonable given the nature of the site and given the baseline information identified by the Applicant. The CSM could account for unknown contamination and hotspots in unexplored areas of the site and the potential for construction workers to come into contact with these. The assessment could include consideration for other sources of ground gases, although given the nature of the site, the risk is likely to be negligible, the probability and risk should still be assessed. On-site sources of ground gases could include the Made Ground and other sources could include consideration for alluvial deposits comprising organic layers such as peat that may be present beneath the site or in backfilled areas such as borrow pits. The impacts and risk ratings are proportionate to the severity and risk of the sources.	Please refer to the 'Applicant's Response to the Examining Authority's written l question Q7.0.10' *arising from the draft DCO in respect of potential ground gas risk*. (TR010065/APP/7.33) submitted at Deadline 2 of the Examination In the event that unknown contamination is found at any time when carrying out the authorised development, which was not previously identified in the Environmental Statement, Requirement 8 of the draft Development Consent Order (REP1-001) should be referred to.
Agricultural Land Classification Report		
12.8.	Desk-based studies and fieldwork at the Scheme have been undertaken to establish the agricultural land classification (ALC) and anticipated geology at the Scheme. The spread of survey boreholes across the Scheme where reasonably practicable has been undertaken to provide an accurate classification of the land areas. Where data gaps are missing from the assessment and could not be surveyed, the Applicant has used Soil Survey England and	No comment needed from the Applicant.

	Wales (SSEW) soils data to ensure a comprehensive assessment of the entire Scheme area has been undertaken. NCC has assessed the application and is of the opinion that the level of survey effort, methodology and desk-based research to categorise the ALC at the Scheme is proportionate and adequate for the current stage of the application.	
Soil Nutrient Survey		
12.9.	A Soil Nutrient Survey has been undertaken to establish the baseline soil conditions at the Scheme as included in Appendix 9.4 to the ES. The analysis undertaken of soils at the Scheme identifies the pH, concentrations of available phosphorous, potassium, magnesium and soil organic matter (SOM). This data was used to identify areas of low fertility Topsoil, multipurpose Topsoil, and atypical nutrient profiles which informs the Soils Management Plan (SMP) to allow for appropriate soil management during the construction stage of the Scheme. A reasonable assessment has been undertaken by the Applicant and the report is in accordance with the Specification for Topsoil (British Standard BS3992) and Soils and Agri-environment Schemes: Interpretation of soils analysis (Natural England TIN036 guidance).	No comment needed from the Applicant.
12.10.	Overall, it is considered that the baseline is proportionate and adequate for the current stage of the application.	No comment needed from the Applicant.
Environmental Statement		
12.11.	*Chapter 9: Geology and Soils encompasses the three subtopics of soils, geology and contamination within the Scheme area. The review of baseline information has included site reconnaissance, topography, geological mapping, an Envirocheck insight report with historical mapping, designated sites review, geology, ground stability, hydrogeology, hydrology and assessment of previous ground investigations. This information is considered relevant to the assessment to provide an accurate ground model and to inform the risk assessment*	No comment required from the Applicant.
12.12.	The Study Area used for Contaminated Land sources and sensitive receptors (including groundwater and surface waters) is 500m from the Order Limits. The Study Area for Geology and Soils is the Order Limits as these receptors are only likely to be impacted where the Scheme directly crosses them. The Study Area is considered suitable.	No comment required from the Applicant.
12.13.	It is considered that the baseline assessment undertaken within Chapter: 9 Geology and Soils provides a proportionate and reasonably adequate estimate of the geology and soils that may be affected by the Scheme. However, some of the information is considered outdated and more up to date information would be required for the historical mapping and site reconnaissance to ensure an accurate conceptual site model for the Scheme in its current state.	Refer to the Applicant's response to reference 12.4 of this document
12.14.	A Risk Assessment of the likely significant effects of the construction stage of the scheme has been undertaken whereby the sensitivity (value) of receptors has been determined in accordance with the Design Manual for Roads and Bridges (DMRB) (LA 109 guidance) by National Highways. Section 9.5 of Chapter 9: Geology and Soils follows the framework for assessing and managing the effects associated with geology and soils that the Scheme may have by identifying the magnitude of impact on receptors. The significance of effect from the receptor value and magnitude of impact has been assessed in line with DMRB LA 104 Environmental Assessment and Monitoring. The assessment has adopted a worst-case scenario approach to adequately account for all possible impacts. This assessment is considered appropriate for the nature of the Scheme and the DCO submission.	No comment required from the Applicant.

National and Local Policy

National Policy

12.15.	Within Chapter 9: Geology and Soils, an assessment of compliance with the National Policy Statement for National Networks (NPSNN) that was current at the time of writing, published for consultation in March 2023, has been undertaken. NCC has assessed the compliance of the Scheme and its assessments in accordance with the latest NPSNN published in March 2024, as there have not been any substantive changes to policy relating Geology and Soils. Table 1 below sets out relevant paragraphs of the NPSNN (2024) and a statement setting out Nottinghamshire County Council's opinion as to whether the policy has been met or not. Based on the number of requirements relating to Geology and Soils within in the NPSNN, these are presented in a tabulated format.	No comment required from the Applicant.
12.16.	*The requirements of NPSNN 2014 are generally the same as those set out in NPSNN 2024 and therefore, a review against NPSNN 2014 has not be undertaken.* **Table 1: Review of NPSNN 2024 policy in respect of Geology and Soils**	No comments required from the Applicant except for: • Paragraph 5.43, 5.45, 5.47 – There are no designated or non-designated geological sites or features of interest within 500 m of the Scheme. Section 8.3 (Legislative and policy framework) of Chapter 8 (Biodiversity) of the Environmental Statement (APP-52) inherently incorporates the principles of the Natural Environment Planning Practice Guidance (NEPPG).

NPSNN (2024)	Nottinghamshire County Council Review
Paragraph 4.45 sets out that planning systems and pollution control must both be considered within applications to ensure that developments protect and improve the natural environment as well as controlling the development and use of land in the public interest. This allows pollution prevention measures which limit the release of substances into the environment to the lowest practicable level and that environmental quality standards are met.	The Applicant has provided the baseline conditions and initial assessment of the Scheme in accordance with guidance and legislation to ensure appropriate control measures are in place to protect and improve the local environment.
Paragraph 4.46 states the following: *"Issues relating to discharges, emissions or abstractions from a proposed project which lead to other direct and indirect impacts on air quality, water quality and land quality, or which include noise, light and vibration, may be subject to separate regulation under the pollution control framework or other consenting and licensing regimes. Relevant permissions will need to be obtained for any activities within the development that are regulated under those regimes before the activities can be operated."*	The Applicant has identified any possible relevant discharge consents and abstractions on and within the Order Limits of the Scheme which may be impacted by the development. The potential impacts to water and land quality are discussed within Chapter 9: Geology and Soils in line with the appropriate guidance and legislation.

	Paragraph 4.47 details that pollution from industrial installations will be controlled by the Environmental Permitting (England and Wales) Regulations 2016 (the Environmental Permitting Regulations). The Applicant is required to demonstrate that processes are in place to meet all relevant Environmental Permit requirements.	The Applicant has identified the existing Environmental Permit data relating to the Scheme within the Enviro Insights report. During the construction phase of the Scheme, the Applicant has identified that during excavations there is a risk from sediment run-off to controlled water receptors and dewatering activities which will require appropriate discharges. The Outline Materials Management Plan (MMP) identifies where environmental permits may be required for re-use of waste. The First Iteration Environmental Management Plan (FIEMP) details where discharges from the Scheme are required, appropriate environmental permits and consents would be obtained and followed. The Consents and Agreements Position Statement included in Appendix 3.3 details the consents are permits for the Scheme.	
	Paragraph 5.190 details that field surveys should be undertaken, if necessary, to establish the Agricultural Land Classification grades (ALC) to the current criteria at the time to identify soil types to inform soil management at the construction, operation and decommissioning phases in line with the Defra Construction Code. Applicants are encouraged to develop and implement a Soil Resources and Management Plan which could help to use and manage soils sustainably and to minimise adverse impacts on soil health and land contamination.	This should be in-line with the ambition set out in the FIEMP for sustainable management of agricultural soils. An Outline SMP (Appendix 3.B to the FIEMP) has been produced by the Applicant. ALC surveys were undertaken at the site on behalf of the Applicant in 2021 and further surveys were undertaken in 2023 to fill data gaps. The area south of Farndon was unable to be surveyed on both occasions due to access constraints and SSEW soils data was used to determine suitable soil management guidance for the Outline SMP. The ALC Report is included as Appendix 9.3. The Applicant has assessed the ALC of the land and identified the potential impacts to the soils within the construction and operation phases and the decommissioning phase is not required given the Scheme is to be a road.	
	Paragraph 5.43 states that – *"Biodiversity is the variety of life in all its forms and encompasses all species of plants and animals, the genetic diversity they contain and the complex ecosystems of which they are a part. Geological conservation relates to the sites that are designated for their geology and/or their geomorphological*	Within the assessment, the Applicant has reviewed sites of geological interest under European or UK Legislation. There are no sites located within the Scheme or the Order Limits. The Applicant is recommended to reference the NEPPG document to ensure that good practice is	

	importance. The policy set out in the following sections recognises the need to protect and enhance biodiversity and geological conservation interests." **Paragraph 5.45 states that** – *"The wide range of international and national legislative provisions impacting planning decisions affecting biodiversity and nature conservation issues are set out in the National Planning Policy Framework. The Natural Environment Planning Practice Guidance (NEPPG) document sets out good practice in England in relation to planning for biodiversity and geological conservation".* **Paragraph 5.47** – the applicant should show how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests.	followed in relation to planning for biodiversity and geological conservation.	
	Paragraph 5.55 sets out that as a general principle and subject to specific policies, the development should first avoid significant harm to biodiversity and geological conservation interests including through mitigation and reasonable alternatives. Where harm cannot be avoided or mitigated, it should be compensated on-site before consideration is given to off-site.	Within Chapter 9: Geology and Soils, the Applicant describes the impacts required during the construction phase of the Scheme. Impacts include loss of BMV land, temporary removal of land from agriculture, deterioration of ALC from flooding due to soil reprofiling and deterioration of soil resources during construction and stockpiling, as well as impacts from contamination have been identified for groundwater and surface waters. There are not considered to be any effects of loss of agricultural land during the operational phase. The Outline SMP details the mitigation measures to minimise land loss to ALC graded land. A decommissioning phase is unlikely to be required due to the nature of the Scheme as a road. There are no designated or non-designated geological sites or features of interest within 500 m of the scheme.	
	Paragraph 5.51 states that – *"The applicant should not just look to mitigate direct harms but should show how the project has taken advantage of opportunities to conserve and enhance biodiversity, having due regard to any relevant local nature recovery strategies and species conservation strategies. Opportunities will be taken to enhance,*	The Applicant identified the principal receptors of the Scheme within Table 9-8 of Chapter 9: Geology and Souls and statutory designations within Appendix 9.1. The current NSPNN includes the provision for irreplaceable habitats and areas prioritised for natures recovery in the relevant local nature recovery strategies to minimise the impact on the local area. The	

	expand or connect existing habitats and create new habitats in accordance with biodiversity net gain requirements. Habitat creation, enhancement and management proposals should include measures for climate resilience, including appropriate species selection. Maintaining and improving habitat connectivity is important for climate resilience and the biodiversity of ecological networks." **Paragraph 5.56** sets out that the appropriate weight should be attached to designated sites of international, national, and local importance; irreplaceable habitats; protected species and habitats; other species of principal importance for the conservation of biodiversity; biodiversity and geological interests within the wider environment and to areas prioritised for natures recovery in the relevant local nature recovery strategies.	Applicant has identified that the construction works would result in the loss of ALC grade of 2 (very high sensitivity) land of 5.9 hectares. The Applicant highlights that this would be only a temporary loss and mitigation for this is highlighted in the Outline SMP, included as Appendix 3.B of the FIEMP (Ref. TR010065/APP/6.5).	
	Paragraph 5.57 sets out that advice must be sought from Natural England and/or the Marine Management Organisation and/or the Environment Agency as regards to any mitigation measures and whether these organisations will grant or refuse any relevant licenses or permits including protected species mitigation licenses.	The Applicant is encouraged to engage with Natural England and use their Letter of No Impediment (LONI) approach. The Applicant has stated that for the protection of surface waters '*Necessary consents and permits for activities such as discharging into surface water will be sought and details regarding these consents are detailed in the Scheme Consents and Agreements Position Statement (TR010065/APP/3.3). There is to be no uncontrolled discharges to surface water and/or groundwater*.' Natural England was consulted and gave their approval on the methodology for ALC surveys in March 2023. Consultation is currently being undertaken with the EA's Groundwater and Contaminated Land (GWCL) Officer as discussed within Section 9.4 of Chapter 9: Geology and Soils, it is understood the GWCL Officer will provide further comment regarding the known contamination hotspot and the risk to controlled waters once they have received the contaminated land risk assessment report. It is understood that this will be provided at a later date.	

	Paragraph 5.65 summarises that sites of regional and local biodiversity and geological interest include Local Geological Sites, Local Nature Reserves and Local Wildlife Sites, and Nature Improvement Areas. These are important for conservation, ecological networks and nature recovery. Development should not be refused based on harm to biodiversity and geological features of regional or local importance given the need for new infrastructure and the mitigation hierarchy shall apply.	The Applicant has identified that these sites of importance are not located on the Scheme or within the Order Limits.	
	Paragraphs 5.152 to 5.159 summarise the importance of considering land contamination and instability effects on the development and in the context of the surrounding area. The section also states that where possible, remediation should be undertaken to prevent issues to human health and controlled water receptors. To prevent the land being determined as contaminated land under Part IIA of the Environmental Protection Act 1990. The Applicant is required to consider land contamination and instability as part of the development proposal and prevent unacceptable risks. Advice should be sought and consultation undertaken if necessary to carry out appropriate assessment. Applicants are also required to carry out investigations in accordance with LCRM guidance to identify the risk to the site and identify sensitive receptors.	The Applicant has identified the potential sources of contamination and ground instability at the site and within the Order Limits and conducted risk assessments in accordance with LCRM guidance to identify the risks to the site and receptors. The Applicant states within Section 9.6.2 that if any previously unidentified contamination or unforeseen ground conditions are encountered then any required remediation will take place.	
	Paragraph 5.155 sets out that applicants should ensure and demonstrate that they have considered the risks posed by land contamination in accordance with the Land Contamination Risk Management (LCRM) Guidance. The Applicant should carry out a preliminary assessment of land contamination and/or ground instability at the earliest possible stage before a detailed DCO application is produced.	Appendices 9.1 and 9.2 to the ES include a Preliminary Sources Study Report and a Contaminated Land Risk Assessment in accordance with the LCRM assessment framework and guidance.	
	Paragraph 5.189 states that – *"Applicants should take into account the economic and other benefits of the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification). Where significant development of agricultural land is demonstrated to be necessary, applicants*	The recent NSPNN update highlights the importance of soil as a natural capital resource and to improve soils as well as minimising impacts and utilising mitigation and using Defra's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. As the first principle, the	

	should seek to use areas of poorer quality land in preference to that of a higher quality. Applicants should also identify any effects, and seek to minimise impacts, on soil health and protect and improve soils, taking into account any mitigation measures proposed. Soil is an important natural capital resource, providing many essential services such as storing carbon (also known as a carbon sink), reducing the risk of flooding, providing wildlife habitats and delivering global food supplies. Guidance on sustainable soil management can be found in Defra's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. As a first principle, developments should be on previously developed (brownfield) sites provided that it is not of high environmental value (see paragraphs 5.152 to 5.159)."	proposal should be on previously developed (brownfield) sites provided that it is not of high environmental value. The Applicant has highlighted that the total area of BMV land identified within the Order Limits (grades 2 and 3a) is 24.1 hectares, with 89.3 hectares of non-BMV land (grades 3b and 4 and other land). The Applicant has undertaken ALC surveys where reasonably practicable and has used reliable data sources to fill data gaps where required to grade the site in accordance with the ALC grading system. The Applicant has adopted the worst-case scenario for areas where the ALC is not available. The ALC Report is included as Appendix 9.3. The Outline SMP (Appendix 3.B to the FIEMP) is written in accordance with Defra's Construction Code of Practice.	
	Paragraph 5.196 states that – *"Where a proposed development has an impact on a Mineral Safeguarding Area, the Secretary of State should ensure that the applicant has put forward appropriate mitigation measures to safeguard mineral resources."*	The Applicant has undertaken appropriate research into available mining records within the PSSR and has identified that there are no known records of coal mining directly on the site. Non-coal mining activity was identified to the north-west of the Nottingham-Lincoln railway line and was determined to not be directly adjacent to the Scheme. Mineral Safeguarding areas are identified within Chapter 10: Material Assets and Waste.	
	Paragraph 5.192 states that – "*Applicants can avoid, or minimise, the direct effects of a project on the existing use of the proposed site or proposed uses near the site, by the application of good design principles, including the layout of the project and the protection of soils during construction"*. **Paragraph 5.202** details that economic and other benefits of the best and most versatile land should be accounted for and where significant development of agricultural land is necessary, areas of poorer quality should be preferred to those of higher quality.	The SMP, to be produced by the Applicant, will detail the protection of soils during construction and is considered appropriate mitigation to minimise impacts to soils or soil resources.	
Local Policy			

<table>
<tr>
<td>12.17.</td>
<td>The local policies assessed which are pertinent to Chapter 9: Geology and Soils are as follows:
• Nottinghamshire County Council Nottinghamshire Minerals Local Plan (Adopted 2021);
• Nottinghamshire County Council (2013) Waste Core Strategy 2020;
• The Newark & Sherwood Local Development Framework Core Strategy (adopted 2019) Spatial Policy 3 – Rural Areas deals with agriculture, stressing the need to protect agriculture in developments within a rural setting; and
• Newark & Sherwood District Council's contaminated land strategy is in the process of being updated at the time of writing. The Newark & Sherwood District Council's website states that a link to the new contaminated land strategy will be provided once it is complete.</td>
<td>No comment required from the Applicant.</td>
</tr>
<tr>
<td>12.18.</td>
<td>Table 2 provides a review of these local policies in respect of the Geology and Soils assessment and information provided as part of the Applicant's DCO application.
Table 2: Review of local planning policy in respect of Geology and Soils
<table>
<tr><th>Local Policy</th><th>Nottinghamshire County Council Review</th></tr>
<tr><td>Nottinghamshire County Council's Minerals Local Plan</td><td></td></tr>
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</td>
<td>No comment required from the Applicant.</td>
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	Development Management (DM) Policy 15 – Borrow Pits – The policy states that proposals for borrow pits will be supported where: *"a) They are adjacent to or close to the project/s they are intended to serve;* *b) They are time limited to the life of the project and material is to be used only for the specified project;* *c) They can be worked and reclaimed without any unacceptable environmental impacts;* *d) There are overriding environmental or other benefits compared to obtaining materials from alternative sources;* *e) Proposals provide for appropriate restoration measures which include full use of surplus spoil from the project."*	Within paragraph 9.11.2 of Chapter 9: Geology and Soils the Applicant details that borrow pits will be required during the construction phase of the Scheme. The Applicant has identified Borrow Pits within initial desk- top studies of the main Scheme area from provisional ALC mapping. The mapping similarly indicated that the main portion of the Farndon East and West Borrow Pits FCA consists of grade 3 land, with an area of grade 2 ('very good') in the northern extent. ALC surveys were undertaken throughout the main Scheme alignment and in both the Farndon East and West Borrow Pits FCA. The 2021 ALC survey was conducted by Atkins along the main Scheme alignment, with only minor coverage of the Farndon East and West Borrow Pits. The ALC survey conducted in 2023 (undertaken by Skanska Mott MacDonald) found the Farndon East and West Borrow Pits FCA to consist of grade 3b (35.9 hectares, 84%), 4 (6.0 hectares, 14%) and non-agricultural (0.7 hectares, 2%).	

	DM3: Agricultural Land and Soil Quality – The policy states that proposals that where alternative options are limited to varying grades of best and most versatile land (BMV), the development should be located within the lowest grade. The policy also states that measures will be taken to ensure that soil quality will be adequately protected and maintained throughout the life of the development and in particular during stripping, storage, management and final placement of soils, subsoils and overburden arising's as a result of site operations.	The Applicant has identified the ALC of the Scheme and the effects on BMV land which would arise from the Scheme construction. Mitigation measures within the Outline SMP (included as Appendix 3.B to the FIEMP) include design to minimise the area of land lost and to minimise loss of soil function as a resource. The Applicant has identified how the soil quality will be maintained and is detailed within the Outline SMP (included as Appendix 3.B to the FIEMP). This report accounts for pre-construction planning, soil handling constraints, appropriate weather and ground conditions, soil stripping for topsoil and sub-soil, stockpiling including formation and maintenance, soil reinstatement and reuse, soil placement and aftercare and monitoring. The consideration to ensure that soil quality will be adequately protected and maintained is considered to be adequate.	
	DM4 - Protection and Enhancement of Biodiversity and Geodiversity – The policy states that where impacts on designated sites of priority habitats or species cannot be avoided, the following applies: " a) In the case of European sites, mitigation must be secured which will ensure that there would be no adverse effect on the integrity of the site(s). Where mitigation is not possible and the applicant relies upon imperative reasons of overriding public interest, the Council will need to be satisfied that any necessary compensatory measures can be secured. b) In all other cases, adequate mitigation relative to the scale of the impact and the importance of the resource must be put in place, with compensation measures secured as a last resort."	The Applicant has identified designated and non-designated sites which are of geological and biological interest such as Special Areas of Conservation, Special Protection Areas and RAMSAR sites. The Applicant has assessed the impact to designated sites and receptors within the PSSR and CSMs where necessary and identified where mitigation measures are required if appropriate.	
	Waste Core Strategy **SO2 Care for our environment** – protect our landscape, countryside, wildlife and valuable habitats from harmful development and make the most of opportunities to enhance existing open space and provide new habitats. Protect water, soil, and air	The Applicant has assessed the proximity to sites of importance for nature conservation, landscape, open space and cultural heritage within the local area to assess the impacts that the Scheme may have on these within the ES. The Scheme involves widening the current A46 road and so utilises existing infrastructure.	

	quality across the county. Protect our heritage assets and their settings, including archaeological remains and protect the character of our townscapes.			
	Newark & Sherwood Local Development Framework Core Strategy (adopted 2019)			
	Paragraph 5.63 highlights the Natural England designated sites which the District Council is required to protect for nature and geological conservation on local, national and international scales.	The Applicant identifies the designated sites which are on or within the vicinity of the Scheme within Appendix 9.1. The Applicant did assess the impacts to Local Nature Reserves (LNRs), Sites of Interest in Nature Conservation and Conservation Areas within the Order Limits of the Scheme as shown on the Policies Map as part of the Newark and Sherwood Local Plan. The Farndon Ponds and Devon Park Pastures LNRs and Conservation Areas are present at Farndon and Newark within the 500 m buffer of the Order Limits. This ensures that the application protects nature and geological conservation on a local level.		
	Policy 12 for Biodiversity Infrastructure states that the District Council will expect proposals to take into account the need for the continued protection of ecological, biological and geological assets of the District with particular regard to sites of international, national and local significance. The District will also seek to secure development that maximises the opportunities to conserve, enhance and restore biodiversity and geological diversity. Provide Suitable Alternative Natural Green Space to reduce visitor pressure on the District's ecological, biological and geological assets, particularly in the Newark area.	Continued protection of geological assets by using the existing road and brownfield land and lower ALC grades where possible should be undertaken. No Regionally Important Geological Sites (RIGS) have been identified as part of the assessment within 500m of the Scheme		
	Newark & Sherwood District Council's contaminated land strategy – Development on land Affected by Contamination (July 2023)			
	The Development of Land Affected by Contamination guidance by the Yorkshire and Lincolnshire Pollution Advisory Group specifies what information should be submitted to the Local Planning Authority in accordance with LCRM best practice.	The Applicant has provided the Preliminary Risk Assessment as the Preliminary Sources Study Report and the Contaminated Land Risk Assessment included as Appendix 9.1 and 9.2 in line with LCRM guidance. Chapter 9: Geology		

	The guidance explains the requirement for a Preliminary Risk Assessment, Site Investigation and Risk Assessment, Remediation Strategy if required and subsequent Verification reporting.	and Soils states in Section 9.12.4 that if contaminated land or groundwaters are encountered which have not been previously identified within the ES if required, a remediation strategy including a programme for the remedial measures will be provided and carried out once approved by the EA and relevant planning authority.	
Potential Conflicts			
12.19.	Based on the review of Chapter 9: Geology and Soils and associated appendices, Nottinghamshire County Council note that baseline data has been relied upon from the Envirocheck Report that was obtained in 2018 and a site reconnaissance was undertaken in 2021. The data used in the baseline is generally old and it may be worthwhile updating this data. However, it is not anticipated to have changed significantly based on the rural nature of the site area.		The Applicant has undertaken Scheme wide ground investigation on site since the site reconnaissance was undertaken in 2021. Furthermore, the Applicant has been undertaking post ground investigation monitoring since 2023 and has identified that no significant changes to the site have taken place since 2021. The Applicant has also liaised with the Environment Agency during the Relevant Representation process, regarding permitted waste landfill sites within influencing distance of the Order Limits. Please refer to the 'Applicant's Response to Relevant Representation [REP1-010] and the response to Relevant Representation [RR-020]. The Applicant therefore considers that the conceptual site model contamination sources, pathways and receptors that have been assessed in the risk assessment, included within the CLRA (Appendix 9.2 (Contaminated Land Risk Assessment) of the Environmental Statement Appendices [APP-164 to APP-169] are based on the most up to date information.

Written Representations

13. Climate Change

BASELINE

Summary of Scheme derived Greenhouse Gas emissions

Written Representations		
13.1.	The construction stage of the Scheme would have an adverse effect on the climate as it would give rise to emissions from material production, transportation to the site and onsite construction activities. This would have the effect of releasing an additional 143,887 tCO_2e into the atmosphere: • Product stage (A1-A3): 95,176 tCO_2e; • Construction processes - transport to the site (A4): 30,001 tCO_2e; and • Construction processes – construction and installation (A5): 18,710 tCO_2e.	The Applicant confirms the figures referenced are correct and the construction emissions are estimated at 143,887 tCO2e, which is a 44% reduction in emissions compared to the initial baseline assessment (254,536 tCO2e) as presented in Section 14.8 of the Chapter 14 (Climate) of the Environmental Statement [**APP-058**]. This reduction is the result of significant efforts to minimise the greenhouse gas emissions associated with the Scheme design and identifying opportunities to improve resource efficiency and reduce carbon, such as reuse of existing carriageway infrastructure, use of precast materials where possible and provision of renewable energy for the site compound. The carbon management and mitigation approach for the Scheme aligns with PAS 2080 best practice, via an iterative system which repeatedly evaluates the Scheme, for example, the use of low carbon solutions or techniques that reduce resource consumption. The output is a Scheme which is optimised as far as reasonably practicable. Whilst there will be residual emissions from the Scheme, the greenhouse gas emissions assessment, reported in Chapter 14 (Climate) of the Environmental Statement [**APP-058**], concludes no likely significant effect. This assessment is based on National Highways' Design Manual for Roads and Bridges LA 114 – Climate which states: 'assessment of projects on climate shall only report significant effects where increases in greenhouse gas emissions will have a material impact on the ability of Government to meet its carbon reduction targets'. This also aligns with paragraph 5.17 of the 2015 NPSNN, which states that *"It is very unlikely that the impact of a road project will, in isolation, affect the ability of Government to meet its carbon reduction plan targets. However, for road projects applicants should provide evidence of the carbon impact of the project and an assessment against the Government's carbon budgets".*
13.2.	The operational stage of the Scheme would give rise to emissions from road users and operational energy use. During the opening and design years, the Scheme will cause an increase in road user emissions of 7,995 tCO_2e and 8,828 tCO_2e respectively.	No response required.
13.3.	Overall, the Scheme is likely to contribute 226,479 tCO_2e to the UK's Carbon Budgets across the period 2023-37, compared with the Do-Minimum scenario. The assessment has identified that the emissions arising as a result of the Scheme represent less than 0.007% of the total emissions in any 5-year UK legally binding carbon budget during which they would arise.	No response required.
13.4.	Nottinghamshire County Council has set internal carbon reduction targets, but these do not apply to road transport emissions emitted by users of the County's highway network; they apply to the Council's daily activities only. In addition, Nottinghamshire County Council does not have its own carbon budget.	No response required.
Vulnerability of the Scheme to Climate Change		
13.5.	Chapter 14 outlines that there are a number of climatic variables (i.e. severe weather events, increased frequency of dry spells and heavy precipitation, increased average temperature and heatwaves) that may cause the Scheme to be vulnerable to climate change.	No response required.
Summary of Legislative and Policy Framework Review		
13.6.	In Chapter 14, Section 14.3 Legislative and Policy Framework, the following policies and legislations were reviewed and summarised: United Nations Framework Convention on Climate Change (UNFCCC). Kyoto Protocol (1997). Paris Agreement (2015). Climate Change Act (2008).	No response required.

Written Representations		
	National Policy Statement for National Networks (NPSNN) (2023 draft for consultation). Department for Transport: Decarbonising Transport – setting the challenge (2020). Department for Transport: Highways England (now National Highways): Licence – Secretary of State for Transport statutory directions and guidance to the strategic highways company (2015). Ten Point Plan for a Green Industrial Revolution. Net Zero Strategy: Build Back Greener. 25 Year Environment Plan. Newark-on-Trent and Sherwood Local Development Framework Core Strategy Development Plan (amended 2019). National Highways Net Zero (2021). National Highways: Preparing for climate change on the strategic road network – third adaptation report under the Climate Change Act (2022). National Highways: Strategic Business Plan 2020-2025 (2020).	
Guidance		
13.7.	The assessment was conducted in line with the following guidance: Design Manual for Roads and Bridges (DMRB) LA114 Climate. British Standards Institution (BSI) Publicly Available Specification (PAS) 2080 – Carbon management in infrastructure in 2016. Institute of Environmental Management & Assessment (IEMA) Guide: Assessing Greenhouse Gas Emissions and Evaluating their Significance 2nd Edition (2022). IEMA Environmental Impact Assessment Guide to: Climate Change Resilience & Adaptation (2020).	No response required.
Mitigation and Enhancement		
13.8.	Paragraph 5.34 of the NPSNN (2024) states "Applicants should look for opportunities within the design of the proposed development to embed nature-based or technological solutions to mitigate, capture or offset the emissions of construction" To effectively manage and mitigate the effects that the development will have on climate change, paragraph 14.10.3 (of Chapter14: Climate) states that a carbon management process (aligned to PAS2080) was followed for the design (as referred to in paragraph 5.34 of the NPSNN), and paragraph 14.10.10 states that a construction carbon management system will be developed by the contractor. These are deemed adequate and fulfil the requirements of the National Highways Net Zero Plan and the NPSNN, which requires that an accredited carbon management system be in place.	No response required.
13.9.	Mitigation measures have been set in place to support the resilience of the Scheme to climate change. These are described in Paragraphs 14.10.14 to 14.10.22 and follow the design principles and mitigation hierarchy outlined in DMRB LA 114 Climate.	No response required.
13.10.	Details on how the mitigation measures will be secured within the draft DCO are provided in Chapter 4: Environmental Assessment Methodology of the ES.	No response required.
13.11.	No enhancement measures have been identified for the effects of the Scheme on the climate, or the vulnerability of the Scheme to climate change. As detailed above, mitigation measures have been considered to minimise the effects of the Scheme on the climate, and enhancement measures for the resilience of the Scheme to climate change will be considered further as part of the detailed design of the Scheme.	No response required.

Written Representations		
Conflicts		
Policy related Concerns		
13.12.	Chapter: 14 Climate assessed the impacts of the Scheme in compliance with the NPSNN that was current at the time of writing and published for consultation in March 2023. Noting that the updated NPSNN is now published, the assessment should be updated to reflect the updated 2024 NPSNN, such as: Paragraphs 14.3.12 to 14.3.21 of Chapter: 14 Climate are part of the National Policy Review Section and provide a summary review of the 2014 NPSNN; this should be updated to reflect the 2024 NPSNN update. Paragraph 14.11.10 of Chapter: 14 Climate states that in line with the NPSNN, an assessment of the Scheme's GHG emissions impact should be undertaken against the UK carbon budgets, even though it is very unlikely that a road project, in isolation, would affect the ability of the government to meet its carbon reduction plans. This vision is no longer supported by the 2024 updated version of the NPSNN, and therefore it should be updated. The 2024 update to the NPSNN emphasises the need for a robust mitigation strategy, to support carbon reduction where possible, and offset or remove any residual carbon emissions, stating that the applicant should take all reasonable steps to reduce the total carbon emissions at all stages of development. Chapter: 14 Climate does not currently mention whether or not offsets or removals were considered as part of the mitigation strategy.	The Applicant confirms the 2015 NPSNN is the NPS against which the Secretary of State will make their decision whether to consent the application for development consent. Although an updated version of the NPSNN was designated on 24 May 2024, it confirmed that "*The 2015 NNNPS has effect for any applications for development consent accepted for examination prior to 24 May 2024*." As the Scheme was accepted for examination on 23 May 2024, before the designation date, it will be assessed and decided against the 2015 NPSNN. However, as the 2024 NPSNN may be an important and relevant consideration for the Secretary of State in making their decision the Applicant undertook an assessment against what was the draft NPSNN at the time. This assessment can be found in the Draft NPSNN Accordance Tables [APP-192]. The 2024 NPSNN includes additional paragraphs and changes aspects of the existing 2015 NPSNN with regard to Greenhouse Gas Emissions. The changes, however, do not materially affect the decision making. Instead, further detail is provided on the requirements for assessment and the mitigation to be provided. The 2024 NPSNN gives further weight to undertaking a full assessment and minimising emissions, Paragraph 5.40 notes "*The Secretary of State should be content that the applicant has taken all reasonable steps to reduce the total carbon emissions at all stages of development",* whilst clearly noting that "the Secretary of State accepts that there are likely to be some residual emissions from construction of national network infrastructure." In addition, Paragraph 5.40 of the 2024 NPSNN, notes *"a net increase in operational carbon emissions is not, of itself, reason to prohibit the consenting of national network projects"*. However, the ultimate decision remains based upon the impact a project would have upon the government in meeting its carbon budgets. As such, whilst there are changes to the NPSNN, it does not materially change the criteria with which an application for development consent must apply, and therefore does not materially change the basis for decision-making on whether to grant development consent, as it continues to be based on the impact a scheme would have upon the government achieving its carbon targets. Therefore, the assessment and reference to the NPSNN 2015 will not be updated within the Environmental Statement. However, an assessment of the Scheme against the designated 2024 NPSNN is detailed in the NPSNN 2024 Accordance Tables [TR010065/APP/7.39], submitted at Deadline 2 of the Examination. To note, the Applicant is not proposing to engage in offsetting measures to balance the emissions expected from the Scheme, instead the focus has been on avoiding emissions associated with the Scheme as much as possible. As such a 44% reduction in emissions compared to the initial baseline assessment as presented in Section 14.8 of the Chapter 14 (Climate) of the Environmental Statement [APP-058] has been achieved. This reduction is the result of significant efforts to minimise the greenhouse gas emissions associated with the Scheme design and identifying opportunities to improve resource efficiency and reduce carbon, such as reuse of existing carriageway infrastructure, use of precast materials where possible and provision of renewable energy for the site compound.
13.13.	As per the recommended best practice, Chapter: 14 Climate conducted the assessment in line with PAS2080. However, Chapter: 14 Climate references the 2016 revision of the guidance, which was superseded last year with the launch of PAS 2080:2023. The assessment should be updated and reference the current version of PAS2080.	The Applicant confirms that at the time that the Environmental Statement for the Scheme was prepared and the mitigation strategy for the Environmental Impact Assessment was developed, PAS 2080:2023 was not published. As such, the basis for the strategy and assessment throughout design progression was PAS 2080:2016. However, the approach to the assessment and mitigation strategy detailed in the Chapter 14 (Climate) of the Environmental Statement **[APP-058]** would not be materially affected by the updates to PAS 2080:2023, beyond specific terminology being inconsistent, such as the carbon reduction hierarchy and the lifecycle stage references.
13.14.	Chapter: 14 Climate references that Leicester City Council, Leicestershire County Council and Nottingham City Council have pledged to bring their council emissions to net zero by 2030.	The Nottinghamshire County Council (NCC) Net Zero Framework was launched post the completion of Chapter 14 (Climate) of the Environmental Statement **[APP-058].** Nottinghamshire County Council published the Net

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	However, **there is no mention of the Nottinghamshire County Council Net Zero Framework, which states that they aligned with the national government's 2050 net zero target. The Framework also states that NCC is committed to decarbonising transport and its infrastructure and supporting low carbon mobility, which Chapter: 14 Climate should acknowledge**.	Zero Framework in 2024 to present their approach to emissions reduction and adaption to climate change, to align with the UK net zero target for 2050. Transport networks and mobility is an area of focus within the NCC Net Zero Framework, which includes intentions to expand Electric Vehicle (EV) infrastructure, improvements to transport infrastructure, connections to encourage public transport and development of a Local Transport Plan to promote low emission and active transport solutions across the region. The assessment and mitigation for the Scheme presented in Chapter 14 (Climate) of the Environmental Statement **[APP-058]** has been reviewed against the NCC Net Zero Framework. The mitigation developed in the Framework considered the introduction of EV infrastructure, promotion of active travel and linkage with public transport. Where appropriate these measures have been considered within the development of the Scheme design, as noted in the 'Public rights of way and other routes' paragraphs of Section 2.5 of Chapter 2 (The Scheme) of the Environmental Statement [APP-046] where the active travel improvements are described.
13.15.	There is a lack of reference to, and acknowledgement of, the Government's strategic priorities of reducing emissions, and increasing modal shift to active travel. Segregated cycling routes along the stretch of the Scheme, would contribute to creating a network of cycleways and footways that would encourage active travel and reduce the reliance on vehicle use.	The Applicant confirms that whilst there is no specific reference within Chapter 14 (Climate) of the Environmental Statement **[APP-058]** as part of the mitigation development, the opportunities for supporting modal shift to both active travel and public transport were raised and investigated. An alternative modes assessment was undertaken by the Applicant in 2021, described in Paragraph 3.3.75 of Chapter 3 (Assessment of Alternatives) of the Environmental Statement **[APP-047],** which *"suggested that the existing public transport network does not generally offer comparable alternatives to car for most movements".* The included mitigation within Chapter 14 (Climate) of the Environmental Statement **[APP-058]** is not an exhaustive list of all opportunities investigated, but a summary of those taken forward or to be considered further. However, as detailed in Paragraph 12.7 of Chapter 12 (Population and Human Health) of the Environmental Statement **[APP-056]**, enhancement measures for active travel routes have been included within the design. Details of the improvements embedded within the design can be found in the 'Public rights of way and other routes' paragraphs of Section 2.5 of Chapter 2 (The Scheme) of the Environmental Statement **[APP-046].** Improvements include: new and improved cycle track facilities (available for use by pedestrians) around the east side of Cattle Market Roundabout provision of a signalised crossing for the A616 arm of Cattle Market and to cross the eastern A46 arms new signalised crossing between Friendly Farmer Roundabout and the A1 crossing
13.16.	The National Highways Net Zero Plan states that to enable them to reach their net zero target by 2040, they have set interim targets, including a trajectory to reduce their construction emissions of 0-10% by 2025 and 40-50% by 2030. The Scheme will directly affect the maintenance and construction emissions of National Highways, and it is not clear how the Scheme will align with it.	The Applicant confirms the targets as outlined in Paragraph 14.3.42 Chapter 14 (Climate) of the Environmental Statement **[APP-058]** are interim targets which are set for, and by, National Highways for delivery of their entire Construction and Maintenance programme. These interim targets are not set at a Scheme level. As such, they do not directly apply to this Scheme. The construction of the Scheme falls within the 40-50% reduction by 2030 category for context, however, as noted this is not set as a target for the Scheme. A 44% reduction in emissions compared to the initial baseline assessment is presented in Section 14.8 Chapter 14 (Climate) of the Environmental Statement **[APP-058]**. This reduction is the result of significant efforts to minimise the greenhouse gas emissions associated with the Scheme design and identifying opportunities to improve resource efficiency and reduce carbon, such as reuse of existing carriageway infrastructure, use of precast materials where possible and provision of renewable energy for the site compound. The carbon management and mitigation approach for the Scheme aligns with PAS 2080 best practice, via an iterative system which repeatedly evaluates the Scheme for example, the use of low carbon solutions or techniques that reduce resource consumption. The output is a Scheme which is optimised as far as reasonably practicable.
Assessment related Concerns		
13.17.	The extent of the projected uptake of lower carbon fuels, electric vehicles (EVs) and improved vehicle technology since the UK Government announced the move to end the sale of new	The Applicant confirms the road user assessment is considered a worst-case scenario, as noted in Paragraph 14.6.11 Chapter 14 (Climate) of the Environmental Statement **[APP-058].** This is considered the appropriate

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	petrol and diesel cars by 2030 is not currently fully captured in the modelling scenarios of future road traffic emissions. This means that the assessment is likely to lead to an overestimation of operational emissions and not provide a true picture of the likely impact	approach to provide a reasonable worst-case scenario applicable for the assessment.
13.18.	The assessment does not appear to mention electric vehicle charging infrastructure, which seems like a missed opportunity. **Every opportunity should be explored to see if there is any possibility to support additional EV infrastructure along the corridor, to actively seek to address the increase in road user carbon that is predicted.**	The Applicant confirms that whilst there is no specific reference within the Chapter 14 (Climate) of the Environmental Statement **[APP-058]** as part of the mitigation for the Scheme, the opportunities for provision of electric vehicle charging infrastructure were raised and investigated. The included mitigation within the Chapter 14 (Climate) of the Environmental Statement **[APP-058]** is not an exhaustive list of all opportunities investigated, but a summary of those taken forward or to be further considered. Opportunities for implementation of EV charging have been discussed as part of the design development of the Scheme, but ultimately there were no appropriate areas for inclusion of charging within the boundary of the Scheme. However, provision of EV charging for construction is to be actively investigated further at the detailed design stage. This is captured within the Carbon Opportunities Log, noted in paragraphs 14.10.6 Chapter 14 (Climate) of the Environmental Statement **[APP-058]**, which is captured by commitment reference C2 within the Register of Environmental Actions and Commitments within the First Iteration Environmental Management Plan, **[APP-184]**.
13.19.	Chapter: 14 Climate references the fact that measures around habitat creation for carbon sequestration will be included as part of the detailed design where feasible. **It would be beneficial if these measures were secured at this stage to guarantee their implementation and allow for the estimation of the associated carbon benefits**.	The Applicant confirms that the habitats considered within the assessment of the benefits through additional sequestration are secured by reference B12 within the Register of Environmental Actions and Commitments within the First Iteration Environmental Management Plan **[APP-184]**. This notes *"Habitats will be created and managed as set out in Figure 2.3 (Environmental Masterplan) of the Environmental Statement Figures **[AS-026]** and Landscape and Ecology Management Plan that will reach conditions in timescales as ass*essed in Appendix 8.14 (Biodiversity Net Gain Report) of the Environmental Statement Appendices **[APP-159]**." The First Iteration Environmental Management Plan will be developed into a Second Iteration Environmental Management Plan, which is secured by Requirement 3 of the draft Development Consent Order [REP1-001].
13.20.	The in-combination assessment does not include an analysis of the impact of climate change on air quality. Vehicle emissions will be intensified as hotter summers will increase the formation of ground-level ozone, which is a dangerous air pollutant.	Whilst it is possible that future climate conditions may impact air quality, given the uncertainty around climate change and future technologies, such as types of transportation fuels changing vehicle exhaust emissions, it is not possible to robustly quantify or reasonably assess the impact of climate change on air quality. Therefore, no proportionate mitigation for climate change can be applied to the Scheme to ameliorate the undefined risk of future impacts. As such, the effectiveness of impacts of climate change on proposed mitigation measures can also not be determined. In addition, the air quality assessment does not include ozone as a pollutant considered. As outlined in Section 5.5 of Chapter 5 Air Quality of the Environmental Statement **[APP-059],** the pollutants included are construction dust, nitrous oxide and ammonia, in accordance with Design Manual for Roads and Bridges LA 105: Air Quality.
13.21.	Chapter: 14 Climate mentions that a "carbon management process" was followed during the design, however, **it is unclear if this means that a carbon management plan was developed and implemented for the design phase of the project**. NPSNN 2024 states at paragraph 5.35 that *"a carbon management plan should be produced as part of the Development Consent Order submission"*, with emphasis on this being provided as part of the DCO submission. It is noted that the Applicant has committed to construction Carbon Management Plan being provided as part of the Second Iteration Environmental Management Plan (paragraph 14.10.10 of Chapter 14).	The Applicant confirms he 2015 NPSNN is the NPS against which the Secretary of State will make their decision. The production of a Carbon Management Plan for submission with the application is therefore not a requirement that applies to the Scheme. However, a Carbon Management Plan will be produced as part of the Second Iteration Environmental Management Plan , and is secured by Requirement 3(2) of the draft Development Consent Order DCO [REP1-001APP-021]. The relevant aspects of a carbon management plan as described in Paragraph 5.35 of the 2024 NPSNN, have been included within Chapter 14 (Climate) of the Environmental Statement **[APP-058]**. Further detail of the assessment against the NPSNN 2024, is detailed in the NPSNN 2024 Accordance Table [TR010065/APP/7.39], submitted at Deadline 2 of the Examination. The following paragraph summarises the alignment with the requirements for the carbon management plan. In line with National Highways Carbon Management System, throughout the development of the Scheme there have been efforts to fully assess and reduce carbon emissions. Mitigation measures and the assessment which includes the assessment of significance of the residual emissions by comparing these against the UK Carbon Budgets are detailed in Chapter 14 (Climate) of the Environmental Statement **[APP-058]**.

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Summary		
13.22.	In summary, the baseline and assessment set out in Chapter 14: Climate, is considered to be proportionate and adequately derived. However, a few matters require further clarification: There is no mention of the NCC Net Zero Framework, Chapter 14: Climate should acknowledge the Framework. It would be beneficial if carbon sequestration measures, such as habitat creation, were secured at this stage to guarantee their implementation and allow for estimation of the associated carbon benefits. It is unclear if a Carbon Management Plan was developed and implemented for the design phase of the project, noting that NPSNN 2024 requires this to be provided as part of the DCO submission. Nottinghamshire County Council request that the Carbon Management Plan is provided for review.	The Applicant confirms the three aspects noted in this summary have been captured by the responses above. However, in summary: The assessment and mitigation has been reviewed against the subsequently published NCC Net Zero Framework. The mitigation developed considered the introduction of EV infrastructure, promotion of active travel and linkage with public transport. Where appropriate these measures have been considered within the development of the Scheme design, as noted in the 'Public rights of way and other routes' paragraphs of Section 2.5 of Chapter 2 (The Scheme) of the Environmental Statement [APP-046] where the active travel improvements are described. The habitat creation is secured through Requirement 3 of the draft Development Consent Order [REP1-001] as part of the First Iteration Environmental Management Plan, **[APP-184].** The Carbon Management Plan will be produced as part of the Second Iteration Environmental Management Plan, secured by Requirement 3 of the draft Development Consent Order [REP1-001].