



Northumberland
County Council

Local Impact Report

A1 in Northumberland



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1. Introduction

- 1.1 A Local Impact Report (LIR) is defined according to Section 60(3) of the Planning Act 2008 as *'a report in writing giving details of the likely impact of the proposed development on the authority's area.'* It should be used by Local Authorities as the means by which their existing body of knowledge and evidence of local issues can be fully and robustly reported to the Examining Authority. It should draw on existing local knowledge and experience.
- 1.2 This is a Local Impact Report relating to the application by Highways England to upgrade the A1 north of Morpeth to dual carriageway in two sections – Morpeth to Felton and Alnwick to Ellingham. This report has been produced in accordance with Version 2 of the Local Impact Report Guidance (the Advice Note) produced by The Planning Inspectorate dated April 2012 and considers the likely impacts of the proposed development on Northumberland, being the Local Authority within whose administrative area the works will take place.
- 1.3 The Advice Note states that when the Examining Authority decides to accept an application, it will ask the relevant local authorities to prepare a Local Impact Report and this should be prioritised whether or not the local authority considers that the development would have a positive, negative or neutral effect on the area. The Report may include any topics that they consider to be relevant to the impact of the development on their area as a means by which their existing body of knowledge and evidence on local issues can be fully and robustly reported to the Examining Authority.
- 1.4 The LIR may also comment on the development consent obligations and the requirements and also any relevant representations.
- 1.5 In producing the LIR the council has not sought the views of local interest groups as to any particular matters that should be reflected in the report because the parish councils and other local groups have the opportunity, through the consultation process, to make their observations direct to the National Infrastructure Planning Inspectorate
- 1.6 The LIR has been written so as to incorporate the topic areas suggested in the Advice Note (set out above), the subject areas in the Environmental Statement, and the obligations and proposed requirements submitted with the application for Development Consent Order (DCO).

2. Northumberland Context

- 2.1 Northumberland is England's northernmost County, stretching from the Scottish Border in the north and west to Tyneside and County Durham in the south. The County is flanked by Cumbria, the Cheviots and North Pennines to the west and by the North Sea to the east. As such it is part of the North East Region of England.
- 2.2 The County, the largest unitary authority by geographic coverage with the greatest area of Green Belt of any Local Planning Authority, is also the most sparsely populated in England with only 63 people per square kilometre. Home to around 316,000 people, Northumberland remains mostly rural, with its largest settlements having no more than 40,000 residents. It is nonetheless diverse and different parts of the County have distinct characteristics, functions and needs contrasting from urban to rural, coastal to upland and well connected to remote.
- 2.3 The south east of the County is the most densely populated, with the towns such as Blyth, Cramlington, Bedlington and Ashington. The market towns of the extensive rural part of the County are strung out along the main road arteries. Prudhoe, Hexham and Haltwhistle sit on the east-west A69 corridor, while Morpeth, Alnwick and Berwick-upon-Tweed, are on the north-south A1 corridor, which is the subject of the current application.
- 2.4 The A1 provides the main trunk road between London and Edinburgh and is characterised by dual carriageway all the way from London to Morpeth, (around 300 miles), much of which is motorway. North of Morpeth, there are only limited stretches of dual carriageway and it has long been an aspiration of the County Council and the people of north Northumberland in particular, to improve on this situation. At present, Morpeth has clear and strong links with the Tyneside conurbation, thanks to the dual carriageway, a frequent rail service and numerous bus services. North of Morpeth, the single carriageway nature of the A1 trunk road has contributed to Alnwick and places further north having a much more remote character with reduced opportunity to access work and metropolitan services offered by the Tyneside conurbation and, to the north, Edinburgh.
- 2.5 Also, within Northumberland, some key services that provide for the whole of the County are concentrated in the more densely populated south-east of the County. For example, Northumberland College, the only F.E. College serving the County provides the vast majority of its teaching on its main campus in Ashington. The only emergency hospital in the County is in Cramlington. The south-east of Northumberland is also home to major indoor leisure attractions including multiplex cinema and bowling alley provision. Poor transport linkage between these facilities and the rural population of north Northumberland places them at a disadvantage.
- 2.6 The rural north of Northumberland - especially its coastline - offers visitor attractions which, due to poor transport links, are not easily reachable for a significant proportion of Northumberland's residents or for the hundreds of thousands who live in Tyneside. Many of the tourist facilities that serve these attractions rely on a pool of employment from the more populated parts of the County. Again, due to the poor transport links, commuting on this north-south axis is difficult.

3. Details of the Proposal

- 3.1 As stated, the A1 north of Newcastle forms part of the main road connection between London and Edinburgh. It is therefore of national importance, The scheme proposes dualling the first two stretches of currently single carriageway road that are encountered travelling north from London - north of Morpeth ('part A') and north of Alnwick ('part B').
- 3.2 Apart from being single carriageway, with its inherent lower capacity and consequent lower average speeds, these sections of the A1 have additional disadvantages including poor carriageway and junction standards and layouts and a lack of alternative routes, should the road experience a blockage. The Highways Agency have summarised the objectives of the scheme as improving journey times (duration and reliability), making the network more resilient (e.g. to unforeseen blockages), separating local from strategic traffic while maintaining local access, facilitating economic growth and (arguably most importantly) safety.
- 3.3 While the two sections are separated by several miles of existing dual carriageway, and were subject to separate options assessments, they are now the subject of a single application to PINS. The application site takes in the existing and new roadlines (including space for new grade separated junctions), some linking side roads and various compound areas, most of which abut the construction works themselves but one of which is separately located in the Lionheart industrial estate area of Alnwick. Much of the proposed scheme closely follows the line of the existing road but between 2 and 3 kilometres of the central section of the southern (part A) element of the scheme takes the new road up to around 300m west of the current roadline.
- 3.4 The Environmental Statement and its numerous appendices cover the full range of environmental, economic, social and practical issues that arise as a result of the scheme including during construction. Throughout these assessments, planning issues are raised and these must be assessed against planning policies that are set out below. The provision of the scheme will meet a number of planning objectives, which will need to be weighed against conflicts with planning policy.
- 3.5 These will be wide-ranging. Probably the single biggest component of the scheme, in engineering terms, is a new viaduct over the River Coquet, parallel to the existing, which affects a tract of ancient woodland. Another obvious planning issue is the incursion into the Green Belt. However, it is not always these large scale issues that necessarily raise the greatest planning questions. This is why it is necessary to scrutinise the scheme against the full array of planning policies, as set out below.

4. Local and National Development Plans and Policy

Introduction

- 4.1 Both parts of the scheme lie entirely inside the Unitary Authority of Northumberland and are covered by a single Local Planning Authority - Northumberland.
- 4.2 However, prior to the formation of the Unitary Authority, different district councils had been responsible for preparing the development plan for their respective areas with the former (upper tier) Northumberland County responsible for minerals and waste local plans. More recently, since the Localism Act 2011, neighbourhood plans have been prepared covering certain areas. Two that cover the area have been 'made'. This means that the development plan, at the time of writing, continues to be a combination of relevant parts of former District Council adopted development plan documents and the former County Council minerals and waste plans and some more recent Neighbourhood Plans.
- 4.3. The Northumberland unitary County Council has prepared a Local Plan covering the whole of Northumberland Local Planning Authority area and hence taking in the whole route of the road. This was submitted to the Secretary of State in 2019 and is undergoing Examination. At present, its policies carry a certain amount of weight but will only carry full weight when the Northumberland Local Plan is adopted - currently expected to be during 2021. At that point it will supersede the existing development plan apart from the made Neighbourhood Plans.
- 4.4 Finally, other Neighbourhood Plans are at various stages of preparation, covering some other stretches of the route not currently covered by Neighbourhood Plans. Once 'made', these too will become part of the statutory development plan. However, no emerging neighbourhood plans that overlap the route have yet reached the stage at which they should be given any weight.

The Development Plan

- 4.5 Paragraph 47 of the National Planning Policy Framework (NPPF)¹ sets out that planning applications should be determined in accordance with the development plan, unless other material considerations indicate otherwise. The NPPF (February 2019) and Planning Practice Guidance (PPG)² are also material considerations in planning decisions.

¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf

² <https://www.gov.uk/guidance/plan-making>

4.6 Expanding on the above, extant development plan policy is provided by:

- Northumberland County and National Park Joint Structure Plan (February 2005) - the only saved policy from the Northumberland County and National Park Joint Structure Plan (February 2005) - Policy S5 - Green Belt Extension (covering about three-quarters of the length of Part A, from its southern end northwards).
- Castle Morpeth District Local Plan (February 2003) (saved policies), proposals map and insets (covering Part A excluding the northernmost section north of the River Coquet).
- Alnwick LDF Core Strategy (October 2007) and Alnwick District Wide Local Plan (April 1997), (saved policies), proposals map and insets (covering the northernmost section of Part A, north of the River Coquet, the compound area at Alnwick (Lionheart area) and the whole of Part B).
- Morpeth neighbourhood plan (May 2016) and its proposals map (covering the southernmost section of Part A - the full extent of the section that falls within Hebron Parish).
- Alnwick and Denwick neighbourhood plan (July 2017), and its proposals map (covering parts of the southernmost section of Part B - the full extent of the section that falls within Denwick Parish) (also covering the compound area at Alnwick (Lionheart area) - falling within Alnwick Parish).
- Northumberland Minerals Local Plan (March 2000) (saved policies) and its proposals map (covering the full length of the route).
- Northumberland Waste Local Plan (December 2001) (saved policies), its proposals map and insets. (covering the full length of the route).

4.7 Existing policies should not be considered out-of-date simply because they were adopted or made prior to the publication of the NPPF. Due weight should be given to them, according to their degree of consistency with the NPPF³ (the closer the policies in the plan to the policies in the NPPF, the greater the weight that may be given). 4.8 All of the above can be found in Annex B, Section A of the Northumberland Consolidated Planning Policy Framework (NCPPF).

4.8 All of the above can be found in Annex B, Section A of the Northumberland Consolidated Planning Policy Framework (NCPPF)

³ Paragraph 213 (plus footnote 7 to paragraph 11),

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf

Emerging Planning Policy

4.9 Emerging policy is contained in:

- Northumberland Local Plan, Publication Draft Plan (January 2019). (covering the full length of the route). This was submitted to the Secretary of State on 29 May 2019. It is currently undergoing an Examination in Public⁴ and carries some weight in the assessment of planning applications. Paragraph 48 of the NPPF sets out the weight that can be attributed to the relevant policies. This will vary inversely proportionate to the number of unresolved, outstanding objections.

4.10 As mentioned above, other neighbourhood plans are being prepared and cover parts of the route not covered by made neighbourhood plans. However, at the time of writing, they carry no weight in the determination of applications. The latest position can be found here. From the south, moving north, they are:

- Thirston
(covering the part of Part A, towards its northern end, immediately south of the River Coquet).
This is approaching, but has not yet reached, its Reg.14 'draft' consultation stage, meaning that no weight can be given to it. If a Reg.14 document is published, then a small amount of weight may be given to its policies. However the emerging policies of this neighbourhood plan have not been reviewed here.
- Felton
(covering the very northern end of Part A - everything north of the River Coquet).
This plan is at a very early, evidence gathering stage, preceding preparation of the Reg.14 'draft', meaning that no weight can be given to it.
- Eglingham
(covering approximately the northern third of Part B)
This plan is proceeding through its evidence gathering stage, preceding preparation of the Reg.14 'draft', meaning that no weight can be given to it.

Planning Policy Documents which do not (and will not) form part of the Development Plan

4.11 A full set of documents that are supplementary to the main set of planning policies in the development plan can be found in Annex B, Section B of the Northumberland Consolidated Planning Policy Framework (CPPF). These include documents such as

⁴ At time of writing.

Supplementary Planning Documents, (SPDs), informal supplementary planning guidance (spg) and design guidance documents. These documents will have been adopted by the current County Council at the time of the creation of the Unitary Authority or since. In the case of SPDs they will have been through a process of consultation.

4.12 Where these documents were originally adopted some time ago, it is likely that material considerations, in particular the emergence of new national and local policy, will have greater weight when planning applications are determined. In addition, there may also be new evidence which will also have greater weight when planning applications are determined.

4.13 The following documents listed in Annex B, Section B of the Northumberland CPPF are the most relevant to the consideration of the application, although this list should not be taken as exhaustive.

- The Northumberland Statement of Community Involvement, 2015.
- Alnwick Local Development Framework, Alnwick Landscape Character Assessment Supplementary Planning Document, May 2010
- Felton Village Design Statement, May 2001
- Felton Conservation Area Character Appraisal, 2006

Other local policy and evidence as material considerations

4.14 Development proposals should be considered in the context of other policies, strategies and evidence, which while not statutory planning documents, may be material to the determination of applications. The list below is not exhaustive.⁵

- The Northumberland Economic Strategy 2019-2024 (January 2019)
- NELEP - The North East Strategic Economic Plan - Creating More and Better Jobs (January 2019)
- The Borderlands Inclusive Growth Deal
- The North of Tyne Devolution Deal (November 2018)
- Northumberland Local Plan Transport Assessment Report (December 2018)
- Northumberland County Council Transport Assessment Mitigation Report (January 2019)
- The Northumberland Local Transport Plan (2011-2026)

⁵ N.B. The list omits documents produced by the Government or its agencies (e.g. the E.A. and Transport for the North and Highways England themselves) as well as those relating directly to the A1 improvements - although of course these documents also informed the emerging Local Plan.

- Northumberland LTP3 Evidence Base (2010)
- Northumberland Joint Health and Wellbeing Strategy (2018-2028)
- Northumberland Climate Commitment Action Plan
- Northumberland Local Plan Growth Strategy Technical Paper (December 2018)
- Northumberland Green Belt Review (2015) and Addendum (2018)
- Northumberland Green Belt Review Technical Paper (December 2018)
- Morpeth Outer Green Belt Boundary Report (October 2013)
- Northumberland Green Infrastructure Strategy (October 2011)
- Northumberland Landscape Character Assessment - Part A: Landscape Classification (August 2010) Figure 1: Study Area; Figure 2: National Character Areas; Figure 3: Existing Landscape Character Assessment; Figure 4: Topography; Figure 5: Natural Heritage Designations; Figure 6: Cultural Heritage Designations; Figure 7: Historic Landscape Characterisation; Figure 8: MAIN MAP - The Landscape Classification Annex A - Landscape Characteristics (August 2010)
- Northumberland Landscape Character Assessment - Part B: The Changing Landscape (August 2010) and Figures
- Northumberland Key Landscape Impact Study, Part A - Landscape Sensitivity at Settlement Edges (September 2010)
- Northumberland Key Landscape Impact Study, Part B - Proposed Extension of the Green Belt Around Morpeth (September 2010)
- Northumberland Key Landscape Impact Study, Part C - Landscape Sensitivity to Key Land Uses (September 2010)
- Northumberland Key Landscape Impact Study, Part D - Landscapes Potentially Requiring Additional Protection (September 2010)
- Northumberland Historic Landscape Characterisation interactive map (2008)
- Northumberland Outline Water Cycle Study Report (May 2012)
- Northumberland Detailed Water Cycle Study - Main Report (October 2015) – plus Maps and Addendum
- Level 1 Strategic Flood Risk Assessment (SFRA) - Main Report (September 2010) and Appendices
- Northumberland Level 2 Strategic Flood Risk Assessment Report (October 2015)
- Northumberland Local Flood Risk Management Strategy (November 2015) and associated Maps and Figures
- Northumberland Mineral Resource Safeguarding Technical Paper (May 2019)
- Northumberland Environmental Considerations and Mineral Resources Study (November 2011)

5. Assessing the A1 Dualling proposal in the Northumberland planning policy context

How plans and strategies support the upgrade

Broad strategies

- 5.1 The main regional and sub-regional documents listed above - i.e. the North East Strategic Economic Plan, the 'Borderlands' growth deal and the North of Tyne Devolution Deal - all aim to bring investment and improve economic and cultural prosperity over different geographies. They promote better connectivity to help business success, educational attainment and social cohesion. They amount to a 'levelling up' agenda, whether in terms of broadening opportunity - better quality jobs, access to further and higher education - or through reducing isolation and greatly improved communications.
- 5.2 Therefore, even though these strategies do not specifically provide for the upgrading of the A1 north of Morpeth and Alnwick, the scheme will undoubtedly contribute to the achievement of many of their aims, whether it be through reducing rural isolation, opening up a wider pool of labour for local employers, bringing more and better jobs and education within reach of rural communities or making Northumberland more accessible to visitors.

Development Plan

- 5.3 The Castle Morpeth Local Plan (2003), which covers all but the northernmost end of the 'part A' section, set out the former council's support for "the dualling of the A1 north of Morpeth and junction improvements throughout the length of the A1 within the Borough." This reflected evidence that had been assembled at the time and a history of accidents along the road that would, in its estimation, only be partially addressed through safety improvements to the existing carriageway. As the route of any dualling had not been fixed, no safeguarding line could be shown on the proposals map.
- 5.4 The southern end of Part A falls within the area of the made Morpeth Neighbourhood Plan (2016). However, while the plan recognises the importance of the A1 as a route the upgrades that it promotes, as part of Community Action CATra1, are focussed towards the south of the town - seeking new or improved junctions at Whalton Road or Clifton.
- 5.5 The Alnwick Core Strategy, which covers the 'part B' section and the northernmost end of the 'part A' section, reflects the then district council's strategy for transport, which sought to support and strengthen "the core elements of the transport system to promote economic regeneration in particular through support of A1 dualling, development of

ECML services and development of Alnmouth station and local upgrading on the primary route network of A1068, A697 and A696.” The Alnwick District Local Plan (1997) had already made explicit, in its aim “TT6” - i.e. that it would encourage the upgrading of the A1 to dual carriageway standard at the earliest opportunity. This is supported by the (still saved) Policy TT2, which opposes any developments that could prejudice the line of such upgrading. As such, the District Local Plan Proposals Map shows an indicative dotted line covering all non-dualled sections, including all those parts of the current proposal that fall within the former Alnwick District.

- 5.6 The Alnwick and Denwick Neighbourhood Plan (2017) area takes in parts of the southernmost end of the ‘part B’ section and the separate compound area that will be created in the Lionheart employment area in Alnwick. While the Neighbourhood Plan recognises the importance of the A1 in connecting the town with other areas, there is no policy or community action that specifically promotes the upgrades north or south of the town - unsurprising given that only a very minor section of the new carriageway would lie within the neighbourhood plan area.

Emerging Local Plan

- 5.7 When the Northumberland Local Plan was drafted, (prior to submission to the Secretary of State in May 2019, it was known that (in late 2014) the Government had announced its proposals to dual the road as far north as Ellingham. Its delivery well within the Local Plan period has therefore been built into the strategy and some of the intended outcomes of the Plan as a whole - relating to improved communications for work, commerce and tourism - are, at least partly, dependent on the upgrade going ahead.
- 5.8 In terms of a specific draft Policy promoting the scheme, Northumberland Local Plan Policy TRA 3 deals with all proposed improvements to Northumberland's core road network. Part 1(b) states that this will be helped by:
- “supporting and identifying acceptable lines and areas of improvements through the plan period including for the: (i). Full dualling of the A1 through Northumberland and improved local links/junctions to the A1.”
- 5.9 As with many policies in the Plan, there are outstanding objections to be resolved through the Examination process and only limited weight can therefore be given to the policy. Nevertheless, the long-term ambition is clear, and the proposed scheme will go a long way towards meeting it.

The Development Plan status of the land covered by the scheme

Part A

- 5.10 Beginning at the southern end of part A, covered by the Morpeth Neighbourhood Plan, there is no allocation, designation or land-specific proposal covering the red line area of the application. The Neighbourhood Plan shows the extent of the housing commitment on the Northgate Hospital site which abuts the very southern end of the red line area. However, it makes no particular proposal. The Castle Morpeth Local Plan does not show any allocation or designation within the roadline insofar as it lies within the Morpeth Neighbourhood Plan area.
- 5.11 However saved Policy S5 of the Northumberland and National Park Joint Structure Plan First Alteration (February 2005) states:
- “An extension to the Green Belt will extend from the existing boundary northwards to lie:
- to the west of Netherwitton, Hartburn and Belsay;
 - north of Longhorsley and west of Widdrington Station, excluding the Stobswood Opencast site;
 - east of Pegswood;
 - west of Ashington, Guide Post, Bedlington and the A1068; and
 - east of Bothal, Hepscott, Nedderton and Hartford Bridge.
- 5.12 Precise boundaries, including those around settlements, should be defined in Local Plans having particular regard to the maintenance of the role of Morpeth as defined in Policy S7 and to the sequential approach in Policy S11.”
- 5.13 This makes clear that the whole of this southern area of Part A, as covered by the made Morpeth Neighbourhood Plan, lies within the general extent of the Green Belt. There is now a considerable history of case law that confirms this status for various sites within the overall area described in the saved policy, including, most notably, a decision relating to a wind farm proposal north of Fenrother Lane (APP/P2935/A/13/2194915), well north of the Morpeth Neighbourhood Plan area. The defining of the Green Belt inset and outer boundaries in the emerging Local Plan is covered below.
- 5.14 Moving north, beyond the outer edge of the Morpeth Neighbourhood Plan area, the Castle Morpeth Local Plan is the only statutory development plan document that covers ‘part A’ north to the River Coquet:

- The stretch north of the edge of the Neighbourhood Plan area has no designation in the Castle Morpeth Local Plan up to and beyond the existing road junction for West Thirston.
- The only designation that does cross the path of the road in this stretch is a wildlife corridor that follows the River Lyne.
- Just north of the West Thirston turn-off, the Castle Morpeth Local Plan defines an Area of High Landscape Value, but this policy carries little weight given the preference for a landscape character approach to be employed.
- The area immediately south of the River Coquet - effectively the valley slopes - are shown on the proposals map as having SSSI designation. While the Castle Morpeth policy is not saved, the designation remains correct and is subject to national protection.
- In addition to the above, the emerging Local Plan for Northumberland shows that the southern bank of the River Coquet, where it will be crossed by the new bridge and coinciding with the landward section of the SSSI, is ancient woodland.

5.15 The description of the Green Belt extension in saved Structure Plan Policy S5 makes clear that this designation covers a considerable part of the stretch of the part A roadline north of Morpeth. The description (in S5) “north of Longhorsley and west of Widdrington Station” implies that the extent would be at least as far north as Causey Park Bridge but probably north of that. The defining of the Green Belt outer boundary in the emerging Local Plan is covered below.

5.16 The northern extremity of Part A of the road scheme falls within the former Alnwick District and is covered by the Alnwick Core Strategy (2007) and saved policies from the Alnwick District Local Plan (1997). The Proposals Map from Local Plan shows that the southern section, immediately north of the Coquet crossing, was designated an AHLV under saved Policy RE17, although the policy is somewhat outdated and Government guidance gives preference to a landscape character approach, as set out in the Alnwick Landscape Character Assessment Supplementary Planning Document (2010). As such, the designation of AHLV carries little weight in its own right - see below for landscape considerations.

5.17 NLP Policy MIN 4 seeks to safeguard a range of mineral resources from development that may unnecessarily sterilise them from future exploitation. Various such areas are shown along the route. The issue of mineral resources is covered later.

5.18 To summarise the development plan status of the land covered by Part A of the A1 upgrade application, (including all works, construction compounds etc.):

- The southern (approximately) half of the length falls within the general extent of the Green Belt, albeit that the precise outer and inset boundaries have not been finalised.
- Much of the remaining length of the route is not covered by any designation, with the main exception being the natural and landscape value clearly attributed to the areas on either side of the Coquet crossing.
- Finally of note is the wildlife corridor that follows the River Lyne.

Part B

- 5.19 The whole of the length of Part B of the scheme falls within the former Alnwick District, meaning that by the Alnwick Core Strategy (2007) and saved policies from the Alnwick District Local Plan (1997) apply throughout. In addition, the southern end of the route is within the area of the made Alnwick and Denwick Neighbourhood Plan.
- 5.20 The only area specific designation, shown on the Alnwick Local Plan proposals map is another of the AHLVs, which abuts the west side of the A1, towards the northern end of part B. As stated, the policy the guidance nowadays gives preference to a landscape character approach, as set out in the Alnwick Landscape Character Assessment Supplementary Planning Document (2010). As such, the designation of AHLV carries little weight in its own right - see below for landscape considerations.
- 5.21 Turning to the Alnwick and Denwick Neighbourhood Plan, part of the southern end of the part B section of the road improvement falls within the designated area of the Plan. However, there is no allocation overlapping the redline area of the A1 improvement.
- 5.22 The emerging Northumberland Local Plan (NLP) has no proposed allocations or designations that encroach onto the road apart from a small section of the route coinciding with the eastern edge of an area identified as potentially suitable for wind energy development under emerging Policy REN 2. This issue is dealt with in a separate section below.
- 5.23 NLP Policy MIN 4 seeks to safeguard a range of mineral resources from development that may unnecessarily sterilise them from future exploitation. Various such areas are shown along the route. The issue of mineral resources is covered later.
- 5.24 In summary, for Part B, the roadline for part B has no allocations or designations that would be 'showstoppers'. Some minor issues relating to mineral safeguarding and renewables are covered below.

Lionheart Enterprise Park Compound

- 5.25 As discussed above, a very large compound area, known as the Lionheart Enterprise Park Compound, is proposed at the eastern edge of the built-up area of Alnwick. This takes up, albeit on a temporary basis, all the remaining available or undeveloped land of the Lionheart phase 3 area, which was newly allocated through the Alnwick and Denwick Neighbourhood Plan. Indeed, the compound will encroach onto open fields south-east of the allocated area.
- 5.26 While the Alnwick Neighbourhood Plan makes the allocation, the emerging Northumberland Local Plan proposes to limit the range of uses allowed on the site to main industrial, warehouse or office employment uses. The section of the compound that extends beyond the allocated employment area is also beyond Alnwick's settlement boundary, as proposed in the emerging Local Plan.
- 5.27 The encroachment of the compound beyond the intended settlement boundary is not an issue, as the emerging policy, in line with Government policy, makes clear that provision for essential transport infrastructure is a permissible use in the open countryside, albeit in accordance with other environmental policies. The employment land issue is discussed next.

Employment Land Considerations

- 5.28 Paragraph 8 of the NPPF sets out an economic objective of planning that includes "ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure".
- 5.29 The Council must therefore make sure that the supply of employment land will meet objectively assessed needs.
- 5.30 The Alnwick Core Strategy, in Policy S9, allocates a quota of employment land for the town and former district to cover its plan period and this has been eclipsed by evidence used for the Neighbourhood Plan and the emerging Northumberland Local Plan – see below. However, Core Strategy Policy E9 goes on to state: "Existing employment sites will be safeguarded for employment uses unless it can be demonstrated that there is no shortage of suitable employment sites, which are sequentially more preferable, or the site is no longer appropriate for employment uses." This policy remains valid and can be applied using the current evidence.

- 5.31 The most recent published evidence on the employment land supply in the town of Alnwick can be found in additional evidence submitted to the Northumberland Local Plan Examination.⁶
- 5.32 The available employment land to serve Alnwick and its surroundings during the Plan period is entirely on the eastern side of the A1 Alnwick bypass and includes two large areas newly allocated through Policy E2 of the Alnwick and Denwick Neighbourhood Plan (ADNP). One of these sites will be occupied in its entirety by the Lionheart Enterprise Park Compound. (As stated, the compound will also encroach into agricultural land to the SE). ADNP Policy E2 states that this land should “meet employment needs in the period to 2031 and will be retained thereafter for employment-generating uses.”
- 5.33 The evidence document shows that, at the time of the survey 20.2 hectares of employment land was available at Alnwick, although this included 2.9 hectares at West Cawledge that is not serviced or immediately available.
- 5.34 The Lionheart Enterprise Park Compound will take up the whole of the area known as Lionheart Phase 3, meaning that around 8.9 hectares of the land deemed to be available will be taken up by the compound, representing about 45% of the total available and almost exactly half of the immediately available land.
- 5.35 It can be stated that the supply of employment land at Alnwick is somewhat more generous – or at least more secure – than in many of Northumberland’s market towns and it is considered that the removal of half of the immediately available land from the its possible use by other occupiers can be accepted in principle for the following reasons:
- While the land supply in the town will be halved, there will remain, available within Alnwick, other large sites that could be taken up should they be required.
 - The occupancy of the site by the compound will be for well under half of the plan period – probably less than a quarter, meaning that there should be an adequate supply elsewhere in the town, based on anticipated demand.
 - The site will provide construction-related employment for the period of the road’s construction
- 5.36 It is therefore considered that Alnwick Core Strategy Policy S9 will be met insofar as it can be demonstrated that there will be no shortage of suitable employment sites as a result. The overarching economic aims of the both the Core Strategy (in Policy S8) and the

⁶ See Examination document EX/NCC/041 1. Housing Site Allocations Factsheets at <https://northumberland-consult.objective.co.uk/file/5496219>

Neighbourhood Plan (in Policy E1) should also be met given that the compound should provide local job opportunities, during its presence in the town.

Sustainability criteria

- 5.37 The NPPF promotes sustainable development by presuming in favour of development that three overarching sustainability objectives, as set out in paragraph 8 – i.e. the economic, social and environmental objectives.
- 5.38 In promoting the dualling through past and emerging plans, the Council has been satisfied for a long period that the principle of building the road meets those Plans' sustainability criteria. The general benefits for the economy and communities of reducing remoteness and the relative absence of significant environmental constraints have been key factors in the Council's confidence regarding the sustainability of the scheme strategically speaking.
- 5.39 Policy RE1 of the Castle Morpeth Local Plan sets out a basic principle that proposals should be located to minimise car use and permit the choice of more energy-efficient public transport so as to conserve energy, minimise the consumption of non-renewable resources and limit emissions of greenhouse gases. In similar vein, Policy S3 of the Alnwick Core Strategy promotes development that is accessible to homes, jobs, shops, services, the transport network and modes of transport other than the private car. As a road scheme it may be argued that the A1 dualling will have the opposite effect – encouraging greater car use. However, the decision to support the new road recognises that the scheme sits alongside policies and proposals for non-car modes and for the wider economy and social cohesion of the County.
- 5.40 In commenting now, the Council is examining the sustainability of more detailed aspects of the proposal. Wider sets of sustainability criteria are set out in Policy S3 of the Alnwick Core Strategy (ACS), Policy Sus1 of the Morpeth Neighbourhood Plan (MNP) and Policy STP 3 of the emerging Northumberland Local Plan (NLP). In addition, Alnwick and Denwick Neighbourhood Plan (ADNP) contains a multi-pronged sustainability strategy.
- 5.41 The principles set out in these policies follow various themes. In general, from a planning policy point of view, where not addressed separately elsewhere in this paper, the Council considers that these themes are adequately addressed in the numerous and varied documents submitted with the Environmental Statement. A few of the themes are responded to briefly here.

Sustainable economy

- 5.42 It is sought that development contributes to building a strong, responsive and competitive economy (NLP Policy STP 3, MNP Policy Sus1). It is considered that the scheme will do this, not just through its reduction in travel time helping to bring businesses, residents and employees closer together across the County but also in its detailed design. The inclusion of new grade-separated junctions, the use of stretches of the existing carriageway as service roads and of bridges to link otherwise severed rural areas will all greatly help areas of the rural economy.

Health, social and cultural wellbeing

- 5.43 Health-related issues are regarded as part of planning sustainably (NLP Policy STP_3). Many aspects are tested as part of the Environmental Report, including air and water quality, driver stress and the likely reduction in road accidents. There are also detailed “Population and Human Health” reports for each part of the scheme, which fits well with emerging requirements for Health Impact Assessments for all major developments (NLP Policy STP_5). The inclusion of features such as new junctions and linkages between severed rural areas will contribute to community, as well as economic, wellbeing.

Natural environment

- 5.44 The sustainability of development vis-à-vis its effects on the natural environment is picked up in the sustainability principles (ACS Policy S3, NLP Policy STP_3 and ADNP sustainable development strategy). The development plan and emerging documents also include many relevant criteria-based policies. The Environment Report and papers that accompany it examine the scheme’s wildlife impacts and how these will be mitigated. Other sections of this paper comment on aspects of the natural environment impact and on the papers that seek to address them from the point of view of the Council’s in-house experts.
- 5.45 As mentioned above, the only key natural features and habitat designations on the line of the road or its associated junctions, compounds etc., lie along the Coquet Valley, where the river gorge is to be crossed by a new bridge towards the northern end of part A. The southern bank of the river at this point is ancient woodland. This along with adjacent stretch of the river form the ‘River Coquet & Coquet Valley Woodlands’ Site of Special Scientific Interest (SSSI). Finally, the north bank is part of the ‘Coquet River - Felton Park’ Local Wildlife and Geological Site (LWGS).
- 5.46 The emerging approach set out in Northumberland Local Plan Policy ENV 1 part 2 puts great weight on avoiding the loss of irreplaceable natural assets, even where they are not designated. Ancient woodlands are recorded, and the resulting inventory is now depicted

on the emerging Policies Map; but the woodlands are not themselves a designation in the same way as an SSSI, for example. The fact that the combined area of the ancient woodland and the river is also an SSSI, in this case, adds emphasis to this irreplaceability of the ancient trees, even if the 'scientific interest' element could be maintained.

- 5.47 Emerging Policy QOP 4 goes on to say that development resulting in the loss or deterioration of ancient woodland and ancient or veteran trees will not be permitted unless wholly exceptional reasons exist to justify any loss or deterioration and a suitable compensatory strategy has been proposed.
- 5.48 This issue is addressed by ecologists and landscape experts elsewhere in this paper. However, it is considered far from clear that the loss of ancient woodland is being addressed satisfactorily from a spatial point of view in terms of the wording of these two policies. It should be pointed out that, while the policies cannot be given full weight, neither of the parts quoted is the subject of significant outstanding objections.
- 5.49 The wording of these policies – especially the phrase 'compensatory strategy' – requires a clear definition of what the mitigation and compensatory measures will be. The precise areas of the ancient woodland affected by the construction and works and the areas for the compensatory measures will need to be defined. This will include any areas of ancient woodland that could be enhanced, as well as the areas of new woodland planting. It will include clear information on the nature and timing of these measures.
- 5.50 As mentioned. There is also a wildlife corridor that crosses the route running along the River Lyne. Castle Morpeth Local Plan saved Policy C12 requires the protection, maintenance or enhancement of the corridor through appropriate landscaping and habitat creation or re-creation as part of the development proposals. This appears to be addressed.

Making the best use of land, resources and infrastructure

- 5.51 Another sustainability principle that runs through the various development plan documents is making the best use of resources, (MNP Policy Sus1, ACS Policy S3, NLP Policy STP_33 and ADNP sustainable development strategy).
- 5.52 There is clearly a considerable take-up of land involved with the road line itself and, on a temporary basis, with the various site compounds, materials storage areas etc. By necessity the vast majority of the land is 'greenfield', rather than 'brownfield'. The Council acknowledges that this is inevitable and accepts the situation so long as this does not result in longstanding – or even permanent – areas of brownfield or unproductive land being created in and around the compound areas once they are no longer needed for that purpose.

- 5.53 Another issue relating to resources is the displacement agricultural land and soils and the disruptions to the operation of farms. These matters are dealt with in great detail in the documentation and the Council considers that issues, such as the storing and reuse of materials and the continued operation and productive capacity of farms, have been adequately addressed.
- 5.54 In terms of infrastructure, a detailed options exercise was undertaken before the current scheme was arrived at and it is considered that the solution is probably the optimal one in terms of the use of existing infrastructure – reuse of existing carriageway areas, drainage solutions etc.

Other sustainability issues

- 5.55 There are many other themes in the sustainability policies and additional policies that link to these, including climate change and modal shift.
- 5.56 While it appears that these issues have been fully addressed in the various documents accompanying the Environmental Statement, the Council would wish to be assured that the opportunities that the route provides for dedicated cycleways, bus routes that do not involve long diversions and electric vehicle charging points are being fully exploited. (See especially Policies STP 4 and TRA 1 in the emerging Local Plan).

Green Belt

- 5.57 It was explained earlier that the general extent of the Green Belt in the area north of Morpeth forms part of the development plan through saved Policy S5 of the Northumberland Joint Structure Plan and that this means that a substantial section at the southern end of part A of the scheme falls within this general extent.
- 5.58 The precise outer boundary and the boundary of the Morpeth inset, are being defined through the emerging Northumberland Local Plan, which is currently at Examination. The boundary has been drawn following an agreed methodology and continues to adhere to the description in the saved Structure Pan policy.
- 5.59 As proposed, the Green Belt ‘washes over’ the line of the A1 on both sides of the existing carriageway as far north as the Causey Park staggered junction. The C-road that links the A1 with the hamlet of Chevington Moor forms the outer boundary. The proposed outer boundary then follows the western verge of the existing A1 carriageway for approximately 2 miles with areas to the west being Green Belt and to the east not. At a point north of Burgham, the outer boundary turns westwards to follow the C-road that links the A1 with the A697 via Bywell Cottages.

- 5.60 The northern edge of the proposed inset boundary for Morpeth follows the edge of the Northgate hospital site, parts of which now have the status as housing development sites. The red line of the A1 dualling application abuts this proposed inset boundary and some landscaping type works associated with the roadworks may slightly overlap into the proposed inset area.
- 5.61 It must be noted that, mindful of NPPF para 48, with unresolved objections to these boundary proposals, it remains a possibility that they could be amended as a result of the Examination into the overall soundness of the plan. Therefore, Policy STP 7, which defines the boundaries, can only be afforded limited weight.
- 5.62 Considering which of the five main purposes for having a Green Belt would be most relevant to the area of Green Belt that straddles the road line, it would be the third Green Belt purpose – to assist in safeguarding the countryside from encroachment. The Morpeth Outer Green Belt Boundary Report (GBB) (2013) confirms that within this area “there is potential pressure from development interests such as renewable energy and tourism development. Therefore, the need to protect the countryside from encroachment, whilst avoiding the sterilisation of rural growth potential”.
- 5.63 In the past, planning inspectors have concluded that it is enough for an area of land to contribute to only one of the five purposes for it to be within the general extent of the Green Belt. (APP/C2741/W/16/3149489).
- 5.64 Having established that a significant stretch of the new road is in the Green Belt, (bearing in mind that the precise definition of the boundary may alter), it is necessary to consider the appropriateness of the development in terms of Green Belt policy. The Green Belt policy in the Castle Morpeth Local Plan would not apply to this part of the Green Belt as that Plan predated the saved Structure Plan policy. In the emerging Local Plan, the policy that deals with appropriate development in the Green Belt is Policy STP 8. However, this mostly simply cross-refers to the NPPF.
- 5.65 In assessing the proposal, it is therefore necessary to consider whether the proposal would constitute inappropriate development in the Green Belt. Paragraph 146 of the NPPF sets out that certain forms of development are not inappropriate development in the Green Belt provided they preserve its openness and do not conflict with the purposes of including land within it. Under Paragraph 146(c), this includes local transport infrastructure which can demonstrate a requirement for a Green Belt location.
- 5.66 In relation to the second part of the test under Paragraph 146 (c), it is considered that the scheme can demonstrate a requirement for a Green Belt location as there is no available

route option for this scheme between Morpeth and Felton that avoids Green Belt and would allow Part A of the scheme to connect with the existing A1 to the south.

- 5.67 In relation to the first part of Paragraph 146 (c), it is necessary to consider whether the proposed scheme would constitute 'local transport infrastructure'. The scheme is highways-related development, involving the construction of new sections of road with associated junctions, bridges, and other structures as well as other engineering works associated with the construction. On this basis it is considered that the proposal would constitute transport infrastructure.
- 5.68 It is also necessary to consider whether the scheme would be 'local' in the context of Paragraph 146 (c). It is recognised that the proposed scheme is located entirely within Northumberland and would provide public benefits to the local community. It would improve local connections between locations within Northumberland, including locations in the north of the County and the south of the County, and would provide safety improvements at local junctions along the route. In addition, the principle of the scheme is supported by the emerging Northumberland Local Plan which identifies the improvements to the A1 as a 'key outcome' that would facilitate 'improvements to transport and communications infrastructure and the County's gateways to international growth'. Policy support in the emerging Northumberland Local Plan is provided under Part 1 (b, i) of Policy TRA 3 (Improving Northumberland's core road network).
- 5.69 Notwithstanding the local dimension to the scheme, it is recognised that the A1 is part of the Strategic Road Network. The route is of national importance as it provides an essential role in linking England and Scotland and provides an important route for long distance traffic. The benefits of the scheme include not only local benefits but regional and national benefits as well. The scheme aims to improve connectivity by road between England and Scotland and therefore it is also a transport infrastructure project that is of regional and national significance rather than just local significance. In addition, the southern extent of Part A of the scheme is around 42 kilometres from the northern extent of Part B of the scheme, which means that it covers several different localities along its length.
- 5.70 Given the nature of the scheme it can be considered to have national element which means it is not purely a 'local' transport infrastructure project that would be consistent with Paragraph 146 (c) of the NPPF. Therefore, the Council agrees with the applicant that it would be more appropriate to consider the scheme against the policy test in Paragraph 144 of the NPPF as by virtue of the form of development that this scheme involves, it would represent inappropriate development in the Green Belt as defined in the NPPF.
- 5.71 Paragraph 143 of the NPPF confirms states that inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special

circumstances. Paragraph 144 requires that when considering a proposal, substantial weight should be given to any harm to the Green Belt and that very special circumstances will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposal, is clearly outweighed by other considerations.

- 5.72 The harm to the Green Belt would arise from the expansion of the existing A1 beyond its current confines into areas of farmland that are currently undeveloped. As a result there would be conflict with the purpose of safeguarding the countryside from encroachment (Paragraph 134 (c)). The scheme would not conflict with the other purposes of including land in the Green Belt as set out in Paragraph 134 of the NPPF.
- 5.73 It is noted that, where the dual carriageway 'veers away' from the line of the existing A1 between the River Lyne and Burgham, this means that there is a greater take up of land in the Green Belt than would have been the case if the line of the route had followed the existing A1. Nevertheless, the Council is fully aware that all practicable options for the line of the road have been thoroughly assessed and is satisfied that the choice of the line has been sufficiently justified. Furthermore, given the necessity of this choice of option, the Council considers that the details of the scheme have sought to minimise the land taken up by built structures of the sort that would have a greater impact on openness. The Council has looked at the assessments provided of visual impacts and urbanising effects resulting from the new structures and the landscaping and other mitigation measures being proposed and is generally satisfied that these will provide some compensation for the encroachment into the countryside and the harm to openness.
- 5.74 With regards to the considerations that should be taken into account in demonstrating that very special circumstances exist, the Council agrees with the considerations identified by the applicant. In particular the scheme reflects local planning policy objectives and would help in the delivery of these policy aims as covered in Paragraph 5.67. It is also recognised that there are no reasonable alternatives for this scheme that avoid Green Belt and would allow it to connect with the existing dual carriageway at the southern end of the scheme. In addition, consideration should be given to the important safety improvements that would result from the proposal. This includes the improvements to the safety of the junctions and improvements to safety for non-motorised users.
- 5.75 On balance it is therefore considered that the harm to the Green Belt is significantly outweighed by the relevant other considerations and very special circumstances can be demonstrated in line with the requirements of Paragraph 144 of the NPPF.

Landscape

- 5.76 It has already been stated that parts of the roadline are in AHLVs designated in the Castle Morpeth and Alnwick Local Plans but that the policies associated with them (CMLP Policy C3 and ALP Policy RE17) simply seek to prevent development that will undermine their landscape value. However, they are not associated with any particular character descriptions and, given the preference for a character-based approach to assessing landscape impacts, these designations and the policies associated with them carry minimal weight and are ineffectual.
- 5.77 The Alnwick Core Strategy takes the preferred 'landscape character approach' in Policy S13 and cross refers to the Alnwick District Landscape Character Assessment Supplementary Planning Document. This document was already in place as SPD at the time when the Northumberland-wide landscape character assessment (LCA) was carried out and the two sets of character areas, while slightly different, are compatible in terms of their character descriptions and key qualities. The Northumberland LCA lists key qualities that, through emerging policy ENV 3 of the Northumberland Local Plan, can be material to decision making throughout the length of the scheme. However, the ACS and the accompanying SPD are able to be given greater weight, where they apply – i.e. the Part B section of the route and the very northern end of Part A.
- 5.78 It is noted that, in the Environmental Statement appendices that deal with landscape character, the Alnwick District Landscape Character Assessment Supplementary Planning Document may have been overlooked. Having said this, it does appear that very thorough consideration has been given to the impacts of the proposal on landscape character in bringing forward the scheme itself and the associated landscaping. The Northumberland LCA is clearly referenced and, as mentioned, these character area descriptions are compatible with the Alnwick SPD. As such the criteria in parts 1 (e & f) of Policy ENV 3 of the Northumberland Local Plan and also the policy on landscaping (QOP 4) should be met.

Minerals

- 5.79 Policy MIN 4 part 3 in the emerging Northumberland Local Plan seeks to ensure that proposals for non-mineral development would not lead to the unnecessary sterilisation of mineral resources within a Mineral Safeguarding Area. It is the case that the road line and its associated permanent structures coincide with a number of mineral resource areas proposed for safeguarding in the Local Plan. It is noted that these have been mapped and that the applicant has acknowledged that the part B carriageway would sterilise a significant area safeguarded for possible future consideration for sand and gravel extraction.

- 5.80 In terms of criteria in Policy MIN 4, the building of a road is not one of the development types that is exempt from consideration as to its effects on safeguarded mineral resources. As such, the proposal needs to be considered against Policy MIN_4 parts 3a to 3e.
- 5.81 The applicant has not sought to demonstrate that the mineral is not of economic value (part 3a), nor have they sought to extract material prior to the road development proceeding (part 3b). In terms of part 3c, some of the land take (for compounds etc.) will be temporary but the road itself is a permanent feature and the applicants consider that the amount of the resource that will be permanently removed from the possibility of future extraction is small compared with the overall safeguarded. The Council concurs with this conclusion and notes that proposed extraction sites for the forthcoming plan period are well away from the roadline. The Council is also satisfied that there are no reasonable alternative roadlines that would avoid the safeguarded resource areas, given that various options for the road scheme were considered, (part 3d). Furthermore, the Council considers that the overall social, economic or environmental benefits of the proposed development will outweigh the potential loss of the mineral resource, (part 3e).

6. Local Impacts Assessment

6.1 Pre-amble

6.1.1 The Council has assessed the local impacts resulting from the scheme proposals and has designated them in terms of whether the impact is on balance considered to be positive, neutral or negative. This determination has been completed using the suite of supporting evidence available as part of the DCO application (TR010059) for the scheme.

6.2 Economic Growth and Transportation – positive impact

6.2.1 The Case for the Scheme (Chapter 7.1 of the Environmental Statement (ES)) (APP-062) has been produced by Highways England (HE) and sets out the case for the scheme from a transportation and economic development perspective.

6.2.2 A number of studies have been undertaken across a range of different transport modes and from a variety of perspectives which demonstrate the need and the benefits of dualling the A1. The Road Investment Strategy (RIS) has identified the dualling of the A1 north of Newcastle as providing a “nationally important” connection between Newcastle and Edinburgh and that it comprises an “essential” link for the North East and Northumberland and needs “substantial improvement” to meet the needs of the local economy and to better fulfil its role in the national transport network.

6.2.3 The A1 North of Newcastle Feasibility Study (2015) identified several key problems and issues on the A1 to the north of Newcastle which are set out at paragraph 2.4.18 of the Case for the Scheme (APP-062).

6.2.4 The London to Scotland East Route Based Strategy (March 2017) sets out the current performance and perceived pressures on this route and identifies the current proposal as a means to supporting economic growth and providing a safe route through the region. The strategy identifies the opportunity to provide better cycle and pedestrian accessibility where there are severance issues in this single carriageway section of the network.

6.2.5 The Northumberland Economic Strategy 2015 -2020 identifies the need to connect the county’s economy to that of the wider region and the dualling of the A1 will deliver the infrastructure and connectivity to support successful towns and communities.

6.2.6 The existing infrastructure and proposed improvements were analysed (2015/6) for the proposed year of opening (2023), design year (2038) and horizon year (2051). The Council is content with the baseline assessments undertaken.

- 6.2.7 On the Highways England network, the Case for the Scheme demonstrates that the scheme will reduce delays and accidents and allow the free flow of traffic on the A1. We continue to assess whether the redistribution of traffic on the local road network will impact upon the capacity of the wider local road network. On the local road network, it demonstrates that the scheme will provide capacity at least equal to the present arrangement and improves facilities for non-motorised users (NMUs)
- 6.2.8 The Case for the Scheme concludes that the scheme provides benefits to the A1 corridor and that it:
- Meets the requirements of central government’s transport objectives around economy, environment, social and public accounts;
 - Aligns with national and local planning policy;
 - Addresses future traffic demand and creates improved traffic congestion conditions and journey experience for motorists;
 - Improves facilities for NMUs;
 - Creates a safer environment for all.
- 6.2.9 The Council considers that the proposed scheme will contribute to economic growth both during the construction period and thereafter. It is anticipated that the improved accessibility throughout the A1 corridor will make towns and sites in Northumberland more attractive to new businesses and attract further investment for improvements at existing sites.
- 6.2.10 In delivering highway improvements which will address future traffic demand and reduce congestion on this key regional route, the Council is content that the proposals are in full accordance with current local plan, national transport policies and the Northumberland Economic Strategy to improve access both to key employment corridors and residential areas and to help foster the right conditions to ensure that the region can offer transport infrastructure which will ensure it is attractive to future investment and associated job growth.
- 6.2.11 The Council considers that the needs of NMU has not been fully utilised by the proposed development in particular on the Morpeth to Felton section of the scheme where the potential to provide a continuous footway and cycleway connection between the settlements has not been fully utilised. The de-trunked section, use of diverted Public Rights of Way and small sections of additional connectivity over that currently shown in the proposals offer the opportunity to provide a strong connection along the former A1 route between Morpeth and Felton. We continue to work with Highways England to secure this improvement and reduce the impact upon NMUs as a result of the scheme.

6.3 Noise and Vibration- neutral impact

6.3.1 The Environmental Statement (ES) dated June 2020 (TR010041) has been produced by Highways England. Chapter 6 of the ES (DCO documents APP-042 and APP-043) refers to the noise and vibration assessments that have undertaken. The Council is in agreement with the methodology and the baseline data used.

Noise – operational - Positive Impacts

- 6.3.2 The eighteen-hour LA_{10} ($LA_{10, 18\text{-hour}}$) metric is widely used in road traffic assessments as it more accurately correlates to the subjective response of the human receptor. The LA_{10} metric has been used for comparison of Do-Minimum (without dualling) to Do-Something (dualling of the two sections as proposed) for 2023 (Opening Year) and 2038 (Design Year).
- 6.3.3 Operational noise levels have been modelled for Part A and Part B of the scheme and the most significant impacts are related to the entirely new dual-carriageway section from Priest Bridge to Felmoor Park, which will be up to 450 metres west of the existing single-carriageway.
- 6.3.4 For the opening year for Part A of the scheme, the overall impact is minimal with many of the closest receptors having an improvement in noise levels principally because of an overall improvement in traffic flow. Places such as Hebron will see a slight deterioration in noise levels but these are predicted to be at or below the perceptible audible level.
- 6.3.5 As mentioned, the most significant noise impact is for the realigned section of the dualling from Priest Bridge to Felmoor where one receptor will experience a marked shift in their noise environment of 3 to greater than 5 dB LA_{10} increase in noise. However, this must be weighed against the acoustic improvement for over thirty receptors on the stretch of the existing single carriageway A1 which will be left once the dualled section is opened. One of these thirty receptors that will experience a positive improvement is a first school where noise levels will be reduced by more than 5dB LA_{10} .
- 6.3.6 The long-term changes (2038) are broadly similar with a slight contraction in the areas with a positive improvement in noise levels.
- 6.3.7 Operational noise levels have also been modelled for Part B of the dualling scheme where the impacts have been determined. Many receptors are predicted to experience an immediate improvement in the noise environment associated with improved flows of road traffic and the associated noise in the 2023 (Opening Year) and 2038 (Design Year). This has to be set against a predicted negligible deterioration in noise (+0.1 to +2.9 dB LA_{10} increase) in a Do-Minimum scenario (no dualling).

- 6.3.8 However, unlike Part B of the scheme, there does not appear to be the inclusion of a Do-Minimum noise prediction for Part A of the scheme. Therefore, it is impossible to draw any conclusions of the relative impact of a Do-Something (Opening Year) against a Do-Minimum (without dualling) scenario. For consistency and appropriate interpretation of the impacts of the scheme, the applicant should produce and submit a Do-Minimum (without dualling) prediction of operational road traffic on Part A of the scheme.
- 6.3.9 With the exception of the new receptor introduced by the new section of dual carriageway between Priest Bridge and Felmoor Park, most receptors are already at similar distance from the existing A1 carriageway and may already have some impact from road traffic noise.
- 6.3.10 This is generally acceptable, and the Public Health Protection Unit would see the proposed dualling as an overall betterment in the noise impacts to the existing and future receptors along both sections of the scheme.

Vibration – Operational - Neutral Impacts

- 6.3.11 Ground-borne vibration from road traffic is normally brought about because of issues with the quality of the road surface. As stated by the applicant, guidance indicates that ground-borne vibration from road traffic on new roads is unlikely to be important in relation to disturbance.
- 6.3.12 Air-borne vibration has been assessed and the relationship between air-borne vibration and noise ($LA_{10,18\text{-hour}}$) are broadly similar other than less people are unduly disturbed by vibration as compared to noise. Guidance indicates that the proportion of people bothered by airborne vibration is ten per cent lower than for noise.
- 6.3.13 The assessment has shown that consideration of airborne vibration nuisance is only appropriate for dwellings within 40 metres of a carriageway and that at noise levels above 58 dB LA_{10} should be considered to cause disturbance to residential receptors.
- 6.3.14 With the exception of the new receptor introduced by the new section of dual carriageway between Priest Bridge and Felmoor Park, most receptors are already at similar distance from the existing A1 carriageway and may already have some impact from road traffic vibration.
- 6.3.15 This is generally acceptable, and the Council would see the proposed dualling to not introduce a source of operational vibration from the carriageways at existing and future receptors along both sections of the scheme

Noise and Vibration – Construction/Demolition - Negative Impacts

- 6.3.16 The applicant has predicted areas LOAEL (Lowest Observable Adverse Effect Level) and SOAEL (Significant Observed Adverse Effect Level) for construction noise and vibration, although it appears that the LOAEL areas are not shown on any of the submitted plans.
- 6.3.17 The applicant has proposed that LOAEL would be where construction noise was below the ambient noise level and SOAEL would follow the ABC method in the British Standard (BS 5228-1:2009+A1:2014) where the threshold would be either; A – absolute limit rounded to 5dB where ambient noise level is lower, B – threshold rounded to 5dB where ambient noise level is equal to absolute limit in A or C - threshold rounded to 5dB where ambient noise level is higher than the absolute limit in A.
- 6.3.18 These have been presented using the specific ambient noise levels measured in the baseline noise assessment at a number of measurement locations/receptors.
- 6.3.19 The SOAEL would be the level above which significant adverse effects on health and quality of life occur and is dependent upon the nature of the noise / vibration occurring and the subjective appreciation of a receptor to any impacts. Areas identified as exceeding the SOAEL limit would introduce stricter controls on works.
- 6.3.20 For vibration, areas of earthworks and piling (principally for bridge construction) have been identified and the receptors within these areas. For Part A there are no receptors within a SOAEL area for vibration from piling and only one in Part B. Both parts of the scheme would see receptors impacted above SOAEL by earthworks.
- 6.3.21 The applicant has submitted an outline construction environmental management plan (CEMP) which addresses noise and vibration from the construction/demolition phase. Understandably this is embryonic at this stage given that specific plant is unknown at this stage. However, generic modelling has been carried out using “standard” noise levels from a likely composition of plant along the routes and within compounds.
- 6.3.22 The applicant has stated that:
“The main contractor will develop and submit a noise and vibration management plan (NVMP) including method statements and any monitoring and reporting protocols that demonstrate to the Applicant that no significant impact will result from their construction works”
- 6.3.23 Additionally, the applicant has submitted a statement on “statutory nuisance” as required with Regulation 5(2)(f) of the Infrastructure Planning (Prescribed Forms and Procedure) Regulations 2009. This statement concludes that the proposed scheme will not give rise

to “statutory nuisance” as defined in S79 of The Environmental Protection Act 1990 with mitigation measures in place.

- 6.3.24 The submitted documents makes reference to consents under Section 61 of The Control of Pollution Act 1974, but it is not entirely clear whether there is an intention to apply to Northumberland County Council for any such consents.
- 6.3.25 It is noted that alternate access road and tracks have been considered for noise for the scheme and this is accepted as necessary inconvenience for the delivery of the scheme. It would be expected that these access points are not exploited to the detriment of receptors living on or near these accesses.
- 6.3.26 Whilst it is expected that for some parts of the dualling, access and works may need to occur outside the normal construction hours – these should not be considered as a normal approach to the proposed dualling but exceptional works which require agreement with the Council and prior notification to local receptors.
- 6.3.27 Ultimately, noise and vibration from demolition/construction works can be managed and mitigated and compliance with the (to be submitted) noise and vibration management plan from the main contractor and compliance with supporting information for any COPA Section 61 “prior consent” (if this is to be applied for) will be the controlling mechanisms during development.

6.4 Air Quality – neutral impact

- 6.4.1 The Environmental Statement (ES) dated June 2020 (TR010041) has been produced by Highways England. Chapter 5 of the ES (DCO documents APP-040 and APP-041) refers to the air quality assessments that have undertaken. The Council is in agreement with the methodology and the baseline data used.

Operational – Neutral Impact

- 6.4.2 The applicant has undertaken modelling of NO₂, PM₁₀ and PM_{2.5} using accepted methods and modelling based principally upon the predicted changes of road traffic flows resulting from the implementation of the scheme.
- 6.4.3 Baseline levels from DEFRA background maps for thirty-five (ten in Part A and twenty-five in Part B) of the nearest receptors has; NO₂ – 6 to 33 µg/m³, PM₁₀ / PM_{2.5} – 8 to 24 µg/m³.
- 6.4.4 The modelling of nitrogen dioxide (NO₂) impacts for thirty-five receptors (human) has shown that the difference between Do-Minimum (without dualling) and Do-Something (dualling of the two sections as proposed) results in an increase of 1.0 microgramme per cubic metre (µg/m³) or less for the opening year (2023) for the majority of receptors. Only one receptor would experience an increase of +3.1 µg/m³ and this is still below the current national Air Quality Objective for nitrogen dioxide.
- 6.4.5 The modelling of particulate (PM₁₀ and PM_{2.5}) impacts for thirty-five receptors (human) has shown that the difference between Do-Minimum (without dualling) and Do-Something (dualling of the two sections as proposed) results in an increase of 0.4 µg/m³ for the Opening Year (2023) or less for the majority of receptors. Only one receptor would experience an increase of +1.3 µg/m³ and this is still below the current national Air Quality Objective for PM₁₀.
- 6.4.6 Current guidance on emission factors does not contain emission rates for PM_{2.5} so the applicant has assumed these to be the same as for PM₁₀. This is acceptable and represents a “worst-case scenario”. However, experience of roadside monitoring by Northumberland County Council has shown PM_{2.5} levels to be in the region of half the measured PM₁₀ levels.
- 6.4.7 The predictions show that there will be a net reduction in emissions by 2038, even with an increase in AADT because of a “natural” replacement of older, higher emission vehicles over this time.
- 6.4.8 This is generally acceptable and the Public Health Protection Unit would see the proposed dualling will improve the overall flow of traffic on the entire section of dual-carriageway from Fairmoor to Ellingham and specifically along the two existing single-carriageway

sections (Part A and B). This will improve emissions from the majority of smaller vehicles whose speed limit is often constrained by slower moving HGV traffic.

Construction and Demolition - Neutral Impact

- 6.4.9 The applicant has not submitted any detailed or geographically specific information on the risks or mitigation from “dust” generated by construction / demolition works and this would often be something which would require by condition. No apparent distinction has been made between dust and particulates in relation to construction/demolition works: *The Department of the Environment Minerals Division, in December 1995 described ‘dust’ as comprising organic or inorganic particles in the size range of 1-75µm. Dust particles with an aerodynamic diameter between 1 and 10µm are classed as particulate matter and those between 10 and 75µm are simply termed dust.*
- 6.4.10 Whilst it is generally accepted that the greatest dust impacts and deposition will be within 100 metres of a source and this includes both large (>30 µm) and small dust particles, there does not appear to be a risk assessment of dust and particulate impacts to local receptors.
- 6.4.11 The principal source of dust/particulates will be from earthworks and the most impacted will be within one hundred metres of the source, without mitigation. There are eight receptors within 100 metres of the carriageway on Part A of the scheme, seven of these are at Fairmoor and there are thirteen receptors within 100 metres of the carriageway on Part B of the scheme, one of these is to be demolished to accommodate the scheme.
- 6.4.12 The applicant has submitted an outline construction environmental management plan (CEMP) which very briefly addresses dust from the construction / demolition phase. This does not constitute a dust management plan document which a contractor or sub-contractor could work from on a daily basis. The outline CEMP states that a “...*dust audit programme will be devised and implemented by the main contractor*”.
- 6.4.13 It is recommended that the applicant commits to a dust management plan (which could include a dust audit programme) which identifies the main sources and locations of dust and particulates generation and methods to mitigate. This could be in an outline format which is refined and finalised by the main contractor.
- 6.4.14 Any dust management plan could form part of further iterations of the CEMP but the aspects relating to “dust” needs to be developed further and be specific to the likely sources from operations along the routes and within compounds and to local receptors.
- 6.4.15 Ultimately, “dust” from demolition / construction works can be managed and mitigated and compliance with a dust management plan would be the controlling mechanism during development.

6.5 Landscape and Visual Impacts – negative impacts

- 6.5.1 The Environmental Statement (ES) dated June 2020 (TR010041) has been produced by Highways England (HE). Chapter 7 of the ES (DCO documents APP-044 and APP-045) refers to the Landscape and Visual impacts of the scheme. It is considered that one of the most major impacts of the scheme is to the landscape and the visual impacts of the proposal and therefore the Council have engaged consultants to assess these impacts in the absence of employing an in-house specialist.
- 6.5.2 This section of the report sets out the Local Impacts in relation to landscape and visual matters on behalf of Northumberland County Council (NCC). It has been prepared by Chartered Landscape Architects at Stephenson Halliday who are appointed by the Council to consider the A1 Dualling: Morpeth to Ellingham project.
- 6.5.3 Whilst the body of this report focusses on environmental impacts, we would also note the ‘local impact’ arising from the Applicant’s desire to avoid effort and cost resulting in the use of an LVIA methodology which is out-dated; presenting the assessment as two separate LVIA’s undertaken to different approaches; and adding a further document which reviews whether using the outdated methodology matters or not. This has notably complicated the reviewing of the application compared to a single LVIA undertaken to current guidance.
- 6.5.4 There is agreement on a number of aspects of the landscape and visual impacts as set out within the Statement of Common Ground. This report focusses on those matters which are not agreed, as follows:
- Certainty and clarity of design and mitigation measures – see paragraph 6.5.5 - 6.5.8;
 - Adequacy of mitigation measures – see paragraphs 6.6.9 - 6.6.10.
 - Landscape character – consideration of sensitivity and effects – see paragraphs 6.6.11 - 6.6.23
 - Effects on viewpoints – see paragraph 6.6.24; and
 - Visual effects on communities – see paragraphs 6.6.25 - 6.6.52

Design and Mitigation - Certainty and clarity of design and mitigation

- 6.5.5 NCC remain concerned that the landscape design and mitigation measures included within the application are not clearly communicated by the plans which include a mix of proposed and ‘desirable’ measures. Furthermore, the inclusion of these plans as ES Figures (Part A Figure 7.8 and Part B Figure 7.14) rather than application plans suggests a stance that regards the road itself as the proposal and landscape mitigation as an ‘add on’.
- 6.5.6 Apart from the lines and areas on the plans and brief descriptions in the ES chapters and Outline CEMP, very little information is provided regarding the landscape proposals in terms of design intent or the proposed materials and approaches to achieve this.

6.6.7 The approach taken to this application contrasts sharply with that for another Highways England NSIP - the M25 junction 10/A3 Wisley interchange, which has clear, holistic layout plans including the intended treatment of planting and footpaths, and a detailed landscape and ecology management and monitoring plan (LEMP) to provide further supporting detail:

https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/TR010030/TR010030-000108-TR010030_2.8_scheme_layout_plans11_31.pdf

https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/TR010030/TR010030-000202-TR010030_6.5_environmental_statement_appendix7.20_Lemp.pdf

6.6.8 Whilst we understand the desire for some flexibility before finalizing the detailed design, we consider that the level of detail included in the M25 junction 10/A3 Wisley interchange application is sufficient to give some certainty over the effectiveness and delivery of the landscape proposals whilst retaining flexibility, and the application in its present form is too vague.

Adequacy of mitigation

6.6.9 Notwithstanding the uncertainty of the landscape proposals, we also have some concerns about their adequacy. In some cases, this overlaps with elements of uncertainty or lack of detail such that whilst it is likely that the design intent is to provide adequate mitigation, there is insufficient detail or certainty to ensure effectiveness. In other cases, we judge that the proposed mitigation would be insufficient regardless of the design intent.

6.6.10 The key areas where we have concerns are:

- Loss and very limited reinstatement of trees within Coronation Avenue –The removal of 187 no. (mostly category B) of the 300 no. trees that form the Coronation Avenue is proposed to be mitigated by 38 no. trees planted at roughly 100m intervals – which, even at the ‘Design Year’ would fail to achieve the appearance of an avenue (see photomontages for viewpoint 6). No justification has been provided for the inadequacy of the replanting, which will have a permanent and adverse effect on landscape fabric due to the loss of mature trees in good condition, local character (paras 6.6.11-23) and views (see para 6.6.24).
- Lack of confidence in the effectiveness of mitigation and the potential appearance of bunding and the proposed junction in views from Fenrother (paras 6.6.28-30).
- Lack of confidence in the effectiveness of mitigation and the adequacy of ‘individual tree’ planting proposed to mitigate effects in views from Causey Bridge (paras 6.6.31-34).
- Inadequate mitigation of significant visual effects on the community at West Moor (see 6.6.37-39 below).

- The provision of ‘hedgerows’ of unspecified scale along stretches of Part B, where it is judged that substantial hedgerows or tree belts would provide more effective and characteristic mitigation (see 6.6.20 -23 and 6.6.40 onwards below).

Local Landscape and Visual Impacts

Effects on Landscape Character

- 6.6.11 For both Part A and Part B we identified some concerns arising from the methodology in relation to the way in which landscape character is considered:
- The landscape susceptibility judgements are not explained or supported by way of reference to guidance or factors considered – the assessment text primarily focuses on quality and value.
 - The identified effects on landscape character pay insufficient attention to localised effects, with this tendency being particularly pronounced for Part B.
- 6.6.12 Taken together with our concerns regarding the lack of detail in mitigation proposals, we judged it appropriate to reconsider both the sensitivity and assessment of effects for the host landscape character areas through which the proposal passes in order to identify the local impacts and ensure that mitigation addresses localised impacts on landscape character.
- 6.6.13 Appendix 1 contains a full consideration of landscape sensitivity for the four main host landscape character areas.
- 6.6.14 Appendix 2 contains a consideration of effects on landscape character for the four main host landscape character areas.

Part A

- 6.6.15 Part A passes mainly through two host landscape character areas (omitting the small area at the southern end near Morpeth).
- 6.6.16 The ES LVIA assessment of the magnitude of effects on character area 35a Coquet Valley is agreed. Given the slightly lower assessment of sensitivity set out within Appendix 1, it is judged that effects may be of slightly lower significance than those set out within the ES, however NCC agree that effects during construction would be significant and effects after construction would not be, reducing to negligible with time as vegetation matures.
- 6.6.17 As set out within Appendices 1 and 2, the ES LVIA assessment of effects on character area 38b Longhorsley at the construction and early completion stages is agreed. However it is judged that the significance of permanent effects greater than Minor magnitude effects (defined within the ES as “*Slight loss or damage to existing character or feature and elements, and/or the addition of new but uncharacteristic features and elements*”).

- 6.6.18 The development involves the introduction of the entirely new elements of dual carriageway and grade-separated junctions which do not currently exist within the character area, and the loss and inadequate replacement of Coronation Avenue, which is a key feature of the A1 corridor in this area. Screening by existing and proposed vegetation would mean that away from these more obvious features the change would be less apparent, and the extent of effects would be fairly contained.
- 6.6.19 NCC agree that the permanent effects would fall below the threshold of significance, but judge that this is more borderline than the ES suggests, falling closer to the definition of Moderate magnitude effects (*“Partial loss or noticeable damage to existing character or distinctive features and elements, and/or the addition of new but uncharacteristic noticeable features and elements.”*). Improvements to the Coronation Avenue replanting to achieve a more substantial replacement and further mitigation planting around the West Moor junction to achieve better screening (akin to the more substantial planting proposals around the proposed High Laws junction) are needed to mitigate effects to the lower levels assessed by the ES.

Part B

- 6.6.20 Part B largely passes through the 3c Farmed Coastal Plain – Rock character area and only just encroaches into the edge of the 8c Outcrop Hills and Escarpments – Charlton Ridge character area, as illustrated by Part B ES Figure 7.6 Local Landscape Character.
- 6.6.21 The ES LVIA assessment of the significance of effects on character area 8c is mostly agreed although it is judged that the Long-term effects on this area would be greater than the Negligible magnitude identified within the ES LVIA, and until planting is well-established would be Moderate\slight magnitude, Moderate\minor significance and Adverse set out in Appendix 2.
- 6.6.22 As set out within Appendices 1 and 2, the ES LVIA assessment of effects on character area 3c Farmed Coastal Plain – Rock at the construction stage is agreed. However, it is judged that Long-term effects would remain Moderate Adverse until the design year and potentially a little beyond. The proposals would result in a particularly dramatic change in the southern part of the character area where the undulating landform confines the road within a more intimate localised valley setting.
- 6.6.23 The proposals involve the removal of extensive roadside vegetation that provides a considerable degree of screening of the existing road and traffic upon it. This would be replaced with a much larger road and proposed mitigation planting would take a considerable amount of time to provide a comparable degree of screening to the current baseline. However, given sufficient time this is likely to occur. NCC agree that the permanent effects would be Slight, as set out in the ES, although may take longer to reach this stage than the design year (year 15).

Effects on Viewpoints

6.6.24 The assessment for Part B contains no assessment of the scale or magnitude of effects on viewpoints. The Part A assessment does contain such judgements and for the most part these are agreed, with the following exceptions:

- Viewpoint 6 - The ES assessment appears to take inadequate account of the loss of vegetation and the way in which the road will appear closer and traffic more eye-catching without the mature hedges and trees. Given this and the proximity and width of view occupied by the proposals it is considered that for users of the nearby PRoW, Year 1 effects would be of Moderate (rather than Minor) magnitude and Large (rather than Moderate) significance and Adverse at Year 1 would remain so at Year 15 (rather than Negligible magnitude and Slight significance) – as illustrated by the photomontages provided.
- Viewpoints 31 and 36 – there is a mismatch between the ES assessment of effects for nearby residents at the viewpoint in Appendix 7.2 and the assessment of effects on the nearest residents in Appendix 7.3. In each case the viewpoint assessment indicates markedly lower effects, and we judge that the effects should match those assessed for the nearest dwellings. For viewpoint 31, this would be dwellings R50 at Causey Park and for viewpoint 36 this would be dwellings R78 and R79 at Fenrother, indicating significant effects for local residents near both viewpoints rather than the non-significant effects identified in the viewpoint assessment.

Visual Effects on Communities

6.6.25 The ES assessments for both sections do not fully consider effects on local communities close to the route, focusing more on views from private properties and public rights of way. Effects on views from roads in and near settlements are only considered in Part A at the viewpoint locations, and in part B not at all. Residents of local communities will use these roads frequently, including for recreational activities such as cycling, horse-riding or walking. NCC judge that this approach of regarding hamlets as individual homeowners rather than as a place and community with shared public amenity has led to inadequate mitigation of effects for the communities affected by the proposal.

Part A

6.6.26 The communities along this route where we feel that effects should be better communicated (and in some instances better mitigated) are:

- Fenrother & Tritlington,
- Causey Bridge,
- Causey Park and
- West Moor.

6.6.27 Effects on these communities, drawing on the information provided in the ES and supplemented with further information as necessary, are considered below. Key references within the ES relating to these community receptor groups are listed in Appendix 3.

Fenrother & Tritlington

6.6.28 This community consists of a small number of homes at Fenrother and Tritlington and the local primary school. There are two distinct clusters with a nucleated group of properties on the higher ground at Fenrother and a looser grouping near the existing A1 and the primary school. These two groups are connected by a local road and footpaths 423/001 and 423/002.

6.6.29 The proposed dual carriageway would intervene between these two groups, rerouting both footpath 423/001 and local road over a grade-separated junction. The assessments of effects on views from the nearest homes and from the local road and footpath 423/001 indicate significant effects during construction and early completion, with some (but not all) of these effects reducing to become not significant as vegetation matures.

6.6.30 As shown by viewpoint 8, proposed planting would provide limited mitigation for views from the de-trunked A1, or from footpath 423/001 approaching from the east. Permanent effects on viewpoint 36, for local residents living on the elevated edge of Fenrother, and for people using the local road in this area are hard to judge given that no visualisation has been provided from this direction to show the appearance or effectiveness of the proposed mitigation bund and planting.

Causey Park Bridge

6.6.31 This community consists of a small number of homes and a pub clustered along a loop road off the A1 and along the existing A1. The new dual carriageway would pass within 150m of this small settlement on 4.5m embankment topped by a 3m noise fence with proposed mitigation consisting of 'individual trees'.

6.6.32 Houses to the east of the group closer to the existing A1 and the existing A1 and footpath 423/008 have views which are largely screened in the direction of the site, whereas houses on the western edges of the group would have more open views towards the new road, and similar open views would be seen from the loop road between and beyond the houses and footpath 423/013.

6.6.33 The assessments of effects on views from the nearest homes and from the local road and footpath 423/013 indicate significant effects during construction and early completion, with some (but not all) of these effects reducing to become not significant as vegetation matures.

6.6.34 It is judged that in some instances the mitigation provided by the planting has been overestimated in the assessment and that permanent effects would not be mitigated by the planting of 'occasional trees' as the ES indicates. Whilst the approach of planting individual trees rather than a woodland belt in order to respect local character is valid (as

suggested in the Applicant's response to our concerns); the mitigation could be enhanced by more carefully considering their position in views of the embankment and fence as seen from the closest point and more widely by tactically including some additional tree groups at varied distances closer to the settlement (e.g. within the conservation grassland) to take advantage of perspective to provide further screening.

Causey Park

- 6.6.35 This community consists of a small number of homes and large groups of farm buildings along a local road which heads west from the existing A1. The new dual carriageway would pass between the main group of houses and the two further east with the local road being taken over an overbridge as shown in the photomontages for viewpoint 31.
- 6.6.36 Most of the houses have views which face perpendicular to the proposed route and/or have screening by trees such that effects would be limited, but the assessments of effects on views from the local road and footpaths indicate significant effects during construction and early completion, with these effects reducing to become not significant as vegetation matures.

West Moor

- 6.6.37 This community consists of a small number of homes including some which are recently constructed (and would experience effects similar to those assessed for group R37), along a local road which heads west from the existing A1. The new dual carriageway would pass nearby to the west with a proposed grade-separated junction within 100m of the nearest homes.
- 6.6.38 As noted within the assessment of effects for the nearest homes and viewpoint 27, the proposed junction would be very visible during construction and early completion, giving rise to significant effects which would not be notably mitigated by the proposed planting even at maturity. As can be seen from the 'design year' photomontage and the Landscape Mitigation Masterplan, the alignment of the local road as it approaches the junction and the positioning of the proposed woodland on the far side of the junction to the settlement means that open views of the junction would remain.
- 6.6.39 It is not clear from the assessment or mitigation description why these effects have not been better mitigated, given that there is an area inside the red line (indicated for 'topsoil storage' which could have been proposed for woodland planting to improve long-term mitigation.

Part B

Local Road Users

- 6.6.40 Local road users are scoped out of the assessment for Part B with ES Table 7.19 noting that they "would experience close proximity views of the Part B Main Scheme Area. However, as the receptors would be travelling at speed and would be focussed on their route rather than the wider landscape".

- 6.6.41 This assumption downplays the importance of views for users of what are generally quiet and relatively slow road routes and disregards passengers of vehicles or other road users such as cyclists for which views are an intrinsic part of the experience. There is also an inconsistent approach to the sensitivity of these receptors within the Part B ES, with paragraph 7.7.63 stating *“Due to the principal focus being on the road ahead, sensitivity of road users is considered as being low”* while the sensitivity assessment in Appendix 7.4 identifies the majority of local road users as being of Moderate sensitivity. NCC judge that, as a result of this approach, the ES assessment fails to properly consider potentially significant effects on these receptors, particularly in regard to the B6341.
- 6.6.42 The B6341 runs broadly parallel to the A1 between Charlton Mires and the junction at Broom House and provides the main road access for dispersed settlement to the immediate west of the A1. This 5.5km section of the route is entirely within 1km of the existing A1 (around half of it is within 500m) and the ZTV illustrated on ES Figure 7.2 indicates that the proposed development would be potentially visible from the majority of it.
- 6.6.43 The northern end of the route, between its junction with the A1 and Heiferlaw Bridge, lies closer to the A1 but sits at a relatively low elevation which, combined with frequent roadside hedgerows (along the B6341) and other intervening vegetation tends to limit views east towards the A1. South of here, the B6341 rises up over a number of low hilltops allowing more open and elevated views to the east which increase in frequency due to a reduction in the extent of roadside vegetation.
- 6.6.44 Views of the existing A1 are generally well screened by roadside vegetation (alongside the A1), as illustrated by viewpoints 4, 5, 6 and 20. This would be entirely removed during the construction stage resulting in a stark change to the outlook of from the B6341 and open views of the road, construction works and traffic. Once construction is complete, a view of a substantially larger road would remain.
- 6.6.45 Elevated views from the southern section of the B6341 would take in extensive sections of the new road and would be particularly open between Heifer Law and Heckley House, as illustrated by the opening year montage at viewpoint 20, where the proposed Heckley Fence overbridge would also be in open view. Similar views would occur for users descending the northern side of Heifer Law where the proposed Charlton Mires junction is likely to be openly visible. Views from the lower lying, closer proximity, northern section would be more limited although where possible are likely to be similar to that illustrated by the opening year montage at viewpoint 2.
- 6.6.46 The proposals would result in a Large\Medium scale of change to views from an Intermediate extent of this route, through the construction stage at least up until the design year (year 15), a Long-term duration. This would result in a Major\Moderate magnitude of change and, considering the Moderate sensitivity identified in the ES Appendix 7.4, effects would be Large\Moderate Adverse which would be Significant.
- 6.6.47 In time, proposed mitigation planting would mature to provide a more notable degree of screening. The design year montage at viewpoint 20 illustrates that where woodland planting is proposed as mitigation this would provide a notable degree of screening in

summer (no winter montage is provided). However, the majority of mitigation proposed comprises roadside hedgerows only and the management of these would have a considerable influence on their effectiveness as mitigation. If they were regularly trimmed and maintained at a relatively modest height (e.g. 1.5 – 2m) then they would be unlikely to provide any meaningful screening. It is not clear from the application material what the intended management of roadside hedgerows entails and assuming a worst-case scenario of limited screening, the permanent effects on users of the B6341 would potentially remain significant. NCC would prefer to see management measures included to ensure that the hedgerows be permitted to grow larger – both to provide more effective visual mitigation, but also to be more in character with other hedgerows in this area.

Night-time Effects

6.6.48 Night-time effects were scoped out of the assessment for Part B, with paragraph 7.1.6 noting:

“A night time assessment was not undertaken for Part B as there is no lighting proposed and the impact of traffic headlights would not substantially increase the effect on currently unlit landscape areas.”

- 6.6.49 As set out in the preceding section, the proposals involve complete removal of existing roadside vegetation which provides a considerable degree of screening of the existing road; this includes screening or heavy filtering of views of headlights at night. The proposed development would result in a notable change to the night-time impacts of the A1 compared to those of the current road, with vehicle headlights along the route becoming more of a focal point of the night-time environment.
- 6.6.50 In this context, effects on landscape character are almost exclusively concerned with perceptions of darkness and the absence of development as the key characteristic constituent elements of landscapes are generally obscured after dark. The proposed development would result in a Medium-term, Localised increase in the influence of headlights along the route but would not change the existing pattern of artificial lighting within the study area and would have no wider influence on night-time character. Effects on night-time character would be Slight Adverse or less.
- 6.6.51 For visual receptors, the value attached to night-time views is considered to be low unless there is a particular feature that can be best appreciated in the hours of darkness, which is not the case here. The susceptibility of visual receptors also differs at night reflecting the different activities people undertake in the hours of darkness.
- 6.6.52 In this case, the only receptors likely to be notable affected by the proposed development are users of local roads, particularly the B6341, who are considered to be of Low susceptibility, and thus Low sensitivity, given the influence of their own headlights and that views from these routes have no particular amenity value during hours of darkness. These users would experience increased views of headlights from the same locations identified at 3.3.18 - 3.3.21 above, particularly during construction and in early operational years. Headlights tend to be low level and, as such, proposed mitigation planting would begin to provide some screening/filtering relatively early on. Medium-term effect arising due the increase in vehicle headlights seen as a result of the proposed

development would be Large\Medium scale over an intermediate extent of the B6341. This would result in a Moderate magnitude of change and overall effects of Moderate\Slight Adverse significance.

6.6 Cultural Heritage- Neutral Impacts

- 6.6.1 The Environmental Statement (ES) dated June 2020 (TR010041) has been produced by Highways England (HE). Chapter 8 of the ES (DCO documents APP-046 and APP-047) refers to Cultural Heritage.
- 6.6.2 The County Archaeologist and the Council's Built Environment Conservation Officer have both been consulted by Highways England and are satisfied with the methodology used and the baseline assessments undertaken.

Built Heritage – neutral impact

- 6.6.3 Due to the nature of the assessment process values are assigned to heritage assets such that impacts that might otherwise be considered significant are considered not significant within the terms of the EIA process. Thus, for example, the demolition of a non-designated heritage asset may be considered not significant in EIA terms although the loss is total.
- 6.6.4 For Part A (except for milepost reference 1153544 which is to be relocated) the impacts will be indirect to setting. New over junction structures will have a degree of impact on heritage assets. It is accepted that most of these impacts will be in the construction phase and that in operation the mitigation measures proposed would prove effective.
- 6.6.5 For Part B there would be a wider range of effects. Direct impacts to designated heritage assets would again be limited to the relocation of mileposts. One unlisted milepost, a NDHA, would also be relocated. The greatest direct impact would be to Charlton Mires Farm, also a NDHA, which would be demolished. This would be a major adverse impact but after mitigation by recording would be a slightly adverse effect (and therefore not significant in EIA terms).
- 6.6.6 Indirect setting impacts would be experienced by West Lodge House, a NDHA and gatehouse to the Charlton Hall estate in that the road would move closer to it. The grade II listed Patterson's Cottage would be similarly impacted by roadway widening. However, the most significant indirect setting impact would be to the grade II listed Dovecote at Heckley Fence (NHL 1371059) due to the construction of an overbridge. Here the proposal would result in a permanent moderate adverse effect.
- 6.6.7 In terms of mitigation, measures that ensure the appropriate recording of the buildings to be demolished at Charlton Mires should be included in the CEMP and this is discussed further at paragraph 6.6.21.

- 6.6.8 The applicant is urged that all mileposts (whether designated or otherwise) to be subject to a method statement to cover their recording in situ, temporary safe storage for the duration of the works and subsequent relocation within the completed scheme.

Archaeology- neutral impacts

- 6.6.9 The proposed scheme is located in a wider archaeological landscape containing known sites from the prehistoric to the post-medieval periods. The study area has been the subject of a desk based assessment and geophysical survey which has identified the potential for previously unidentified archaeological remains to be present within the proposed development area.
- 6.6.10 The proposed scheme is located in close proximity to three scheduled monuments in the northern part of the scheme comprising North Charlton medieval village and open field system, a prehistoric burial mound, 420m north west of East Linkhall and West Linkhall Camp.
- 6.6.11 The Archaeology section of the NCC Conservation Team has been in discussion with WSP, the archaeological consultant for this scheme since 2018. The proposed scheme has been considered for both its indirect impact on the setting of designated heritage assets and its direct (physical) impact on archaeological remains and standing historic structures.

Indirect Impact on the Setting of Scheduled Monuments

- 6.6.12 The impact of the proposals on the designated heritage assets in the wider area has been assessed in detail in the assessment for both Parts A and B⁷.
- 6.6.13 Based on the discussion and conclusions in the assessment documents, the topography of the area and the current setting of the monuments, the County Archaeologist is in agreement with the conclusions in the assessment reports that the proposed scheme should not have an adverse impact in the setting of the scheduled monuments in the immediately adjacent and wider area.

Direct Impact on Heritage Assets

- 6.6.14 Archaeological investigation comprises 3 broad categories of archaeological work – assessment, evaluation and mitigation.

⁷ 6.7 Environmental Statement – Appendix 8.1 Historic Environment Desk Based Assessment Part A

6.8 Environmental Statement – Appendix 8.1 Historic Environment Desk Based Assessment Part B

Assessment

6.6.15 In line with paragraphs 5.126 and 5.127 of the NPSNN and paragraph 189 of the NPPF, a detailed desk-based assessment including a walkover survey has been undertaken along the length of the proposed road scheme⁸. An assessment was undertaken of available LiDAR between Morpeth and Felton which transcribed a range of archaeological features and sites of potential historical interest⁹. There were insufficient existing LiDAR images for this work to be undertaken between Alnwick and Ellingham (Part B).

Evaluation

6.6.16 The assessment was followed by non-intrusive evaluation in the form of geophysical survey along the length of the scheme¹⁰. The reports identified a number of geophysical anomalies of potential archaeological origin and glaciofluvial deposits and later disturbance which may mask earlier archaeological remains. Further intrusive archaeological investigation is required by trial trenching in order to establish the nature, date and significance of the anomalies that have been identified and to test the apparent “blank” areas.

6.6.17 Trial trenching was undertaken in two areas adjacent to the scheduled monuments of North Charlton medieval village and open field system¹¹ and West Linkhall Camp¹². The evaluations were undertaken in line with a Written Scheme of Investigation (WSI) which I approved. The evaluation at North Charlton concluded that earlier archaeological remains, particularly those associated with the nationally important medieval field system had been removed by later activity. At West Linkhall no archaeological remains of significance were revealed.

6.6.18 Following the results of the assessment and geophysical surveys along the length of the scheme, two WSIs were produced by WSP for programmes of trial trenching, which I subsequently approved¹³. The trial trenching has not been undertaken to date but the results of both programmes of trial trenching will inform the nature and extent of any archaeological mitigation requirement for below ground archaeological remains affected by the proposed scheme.

⁸ 6.7 Environmental Statement – Appendix 8.1 Historic Environment Desk Based Assessment Part A

6.8 Environmental Statement – Appendix 8.1 Historic Environment Desk Based Assessment Part B

⁹ 6.7 Environmental Statement – Appendix 8.3 Light Detection and Ranging (LiDAR) Assessment Part A

¹⁰ 6.5 Environmental Statement – Figure 8.4 Geophysical Survey Part A

6.6 Environmental Statement – Figure 8.4 Geophysical Survey Data Part B

6.7 Environmental Statement – Appendix 8.2 Geophysical Survey Report Part A

6.8 Environmental Statement – Appendix 8.2 Geophysical Survey Report Part B

¹¹ 6.8 Environmental Statement – Appendix 8.4 North Charlton Intrusive Survey Information Part B

¹² 6.8 Environmental Statement – Appendix 8.3 West Linkhall Intrusive Survey Information Part B

¹³ 6.7 Environmental Statement – Appendix 8.5 Written Scheme of Investigation for an Archaeological Trial Trench Evaluation Part A

6.8 Environmental Statement – Appendix 8.5 Draft Written Scheme for Investigation for Post DCO-Consent Trial Trenching Part B

Mitigation

- 6.6.19 The mitigation requirement on this site can be broadly divided into two categories:
- fieldwork/recording work with an approved WSI
 - mitigation work which requires a WSI
- 6.6.20 Two WSIs have been approved by the County Archaeologist for archaeological mitigation work. The first comprised a programme of Archaeological Strip, Map and Record on the site of a potential Iron Age/Romano-British enclosure identified by non-intrusive evaluation on land to the south of Causey Park¹⁴. Having taken into consideration the potential local or regional significance of the site and its location in relation to the proposed scheme which would prevent preservation in situ, it was agreed that the site could be preserved by record. The fieldwork has been completed which confirmed that an Iron Age enclosure was not present on the site. The report for this work will be provided in due course.
- 6.6.21 The WSI for a programme of Historic Building Recording has also been approved for a complex of farm buildings at Charlton Mires which are of local importance and are proposed for demolition as part of this scheme¹⁵. The programme of historic building recording has yet to be carried out.
- 6.6.23 The scheme of mitigation for below ground archaeological remains along the length of the scheme will be formulated once the outstanding programmes of trial trenching have been completed. The results of the trial trenching will define the nature and extent of the archaeological mitigation that will be required in defined areas. This may range from open area excavation or Strip, Map and Record in advance of development work commencing to a watching brief during the groundworks required for the development. Equally, some areas may not require archaeological mitigation work based on the results of the programme of trial trenching. A WSI will be produced and approved for this work in due course, based on the results of the programme of trial trenching required along the length of the scheme.
- 6.6.24 In addition, a methodology and a WSI are required for the recording, removal or protection and reinstatement of the listed and undesignated milestones present along the A1.
- 6.6.25 Given the range of archaeological work still required as part of this scheme, the requirements in relation to the Outline Construction Environmental Management Plan¹⁶

¹⁴ 6.7 Environmental Statement –Appendix 8.6 Written Scheme of Investigation for an Archaeological Strip, Map and Sample Excavation (National Grid Diversion Works) Part A

¹⁵ 6.8 Environmental Statement –Appendix 8.6 Draft Written Scheme for Investigation for Historic Building Recording Part B

¹⁶ 7.3 Outline Construction Environmental Management Plan

and the Draft Development Consent Order¹⁷ have been commented on by the County Archaeologist at this stage.

6.6.26 The Draft Development Consent Order includes Schedule 2, part 1 requirements with point 9 dealing with below ground archaeological remains and point 10 dealing with the listed milestones.

6.6.27 For ease of discussion, the archaeological requirements are summarised in a table below with the relevant reference from the Outline Construction Environmental Management Plan, Section 3 Register of environmental actions and commitments table 3-1

Outstanding programme of archaeological work	Reference on table 3-1
Trial trenching along the length of the scheme (Parts A and B)	S-CH2, S-CH3
Mitigation for below ground archaeological remains (Parts A and B)	S-CH3; S-CH7
Potential preservation in situ of important archaeological remains identified during evaluation	S-CH5
Avoidance of impact on designated heritage assets	S-CH6
- the listed milepost	A-CH2
- the scheduled monuments	B-CH1
Non-designated milepost North of Shipperton Bridge (HER 16878)	B-CH3
Historic building recording of the buildings at Charlton Mires	B-CH4
Removal of historic field boundaries	S-CH4
Stripping of soil where archaeological remains are known or have the potential to be present	S-GS5
Potential changes to water hydrology impact in archaeological remains	A-CH1; B-CH2

6.6.28 The County Archaeologist has identified a number of amendments or points for clarification which are required in the Outline Construction Environmental Management Plan which are detailed below:

6.6.29 Section 2 - Scheme roles and responsibilities - Scheme Archaeologist - The production of a Written Scheme of Investigation (WSI) will also be needed for mitigation work, where required, not just evaluation.

6.6.30 Archaeologist (main contractor) – point b, the evaluation will establish the appropriate mitigation. This may be excavation, strip, map and record or watching brief dependant on

¹⁷ 3.1 Draft Development Consent Order

the extent and significance of archaeological remains, this needs to be amended to reflect the range of potential mitigation.

- 6.6.31 Reference S-CH3 it is useful to identify at this stage that mitigation work may not just happen during the construction phase but may be required prior to construction work commencing if excavation or strip map and record are required. Further work, as recommended by the results of the trial trench evaluation, will be determined in consultation with NCC and implemented by the main contractor during construction.
- 6.6.32 Reference B-CH4 relates to Charlton Mires but has a reference to consultation with NCC and the Milestone Society, this text should be in references B-CH3 and A-CH2 Table 5-1 - Monitoring to be carried out during construction - clarification is required about which archaeologist is responsible for monitoring impacts on cultural heritage

Advice

- 6.6.33 The proposed development is located within a wider archaeological landscape with the potential to impact on a range of known and previously unknown archaeological remains ranging in date from the prehistoric to post-medieval periods.
- 6.6.34 The County Archaeologist has been directly involved in a number of detailed discussions with WSP, the archaeological consultant on this scheme and have approved various documents including Written schemes of investigation for both evaluation and mitigation work and monitoring the archaeological evaluations carried out to date.
- 6.6.35 The archaeological schemes that have been developed for field evaluation and the potential range of archaeological mitigation work that may be required are appropriate for a scheme of this type in this location, based on the known and potential archaeological remains that may be impacted by the proposed development.
- 6.6.36 Providing that the archaeological requirements remain within the Construction Environmental Management Plan and the Development Consent Order and are carried out in a timely manner, this scheme should progress smoothly investigating, recording and reporting the archaeological remains and historic standing buildings impacted by the road development in an appropriate and proportionate manner.
- 6.6.37 The Council welcomes requirements 9 (Archaeological Remains) and 10 (Safeguarding of Listed Milestones) of the draft DCO.

6.7 Biodiversity - negative impacts

- 6.7.1 The Environmental Statement (ES) dated June 2020 (DCO document TR010041) has been produced by Highways England (HE). Chapter 9 of the Environmental Statement (DCO Documents APP-048 and APP-049) refers to the biodiversity impacts of the scheme.
- 6.7.2 An overall assessment of the impact of the proposals on ecology and nature conservation is given using terminology specified in Interim Advice Note 130/10 Ecology and Nature Conservation: Criteria for Impact Assessment (IAN130/10), with Northumberland County Council accepting the methodology undertaken and baseline assessments. The Highways Agency has provided a detailed Habitats Regulations Assessment and 'No Net Loss' report both of which are comprehensive.
- 6.7.3 The scheme area contains key ecological features such as protected nature conservation sites and other sensitive habitats including wetlands, scrub, semi-improved grassland, species poor hedgerows, watercourses and ditches. The scheme would result in some loss of habitats within the landscape that currently provide connectivity and dispersal routes for species (faunal and floral).
- 6.7.4 The identified legally protected species present in the survey area include water vole, otter, bats and wintering and breeding birds including barn owl. The Council is satisfied that appropriate surveys have been carried out to assess the value of the habitat and the presence of any protected species.
- 6.7.5 The Habitats Regulations Assessment assesses impacts within a 10km buffer to include European Sites at the coast and concludes that significant effects (direct or indirect) are not likely.
- 6.7.6 Survey and mitigation for the protected species found along the route is also robust, and the provision of a number of animal crossing points for a range of species is welcome.
- 6.7.7 Habitat creation and landscaping plans show a number of features which will replace lost habitats and prevent run off from the road (during construction and operation) entering watercourses.
- 6.7.8 A number of UK and European Protected Species are present within the road corridor and may be impacted by the development but the approach to mitigation and licensing is sound.
- 6.7.9 The outline Construction Environmental Management Plan (CEMP) includes all of the mitigation requirements proposed and is comprehensive and robust, for this stage of the

project. Further fine detail is required for works affecting watercourses including bridges, culverts and pollution prevention, although the detail provided so far is a good basis.

6.7.10 The key issue is the loss of 0.68ha of ancient woodland, of which 0.27ha is within the River Coquet and Coquet Valley Woodlands SSSI and 0.41ha in the Coquet River Felton Park LWS. A new area of 8.16ha of ancient woodland (agreed with Natural England) will be established adjacent to the lost woodland on the south west bank of the River Coquet, under a 50 year management plan. Whilst fine detail of that woodland creation is required (soil analysis of receptor site, translocation details of soils and young trees) the overall plan is welcomed

6.7.11 Given the extent of the scheme, it is expected that wildlife will be at risk of disturbance, direct mortality and pollution, as well as severance of habitat. Highways England have identified a number of design and mitigation measures to reduce the negative effects which include (in summary and not limited to):

- Replacing the lost habitat which amongst other habitats will include 0.68ha of ancient woodland;
- Habitat compensation for breeding birds
- Installation of anti-glare fencing where appropriate;
- Creation of detention basins along Part A;
- Construction of wildlife culverts;
- Timing of construction works to avoid the most sensitive times of year;
- Relocating/displacement of relevant protected species before the start of works to move them from the area of the proposals;
- Landscape planting designed to discourage bats and barn owls from hunting within the road corridor and provision of compensatory roosting features;
- Minimising night-time working;
- Pollution control measures to prevent damage and degradation to habitats;
- Directional lighting to avoid illumination of habitats;
- Management Plan for Japanese Knotweed and rhododendron (and other invasive species).
- Appropriate stand off distances implemented during construction;
- Badger resistant fencing around compounds and storage areas; and
- Landscape planting and newly created habitat to locally native species of local provenance and would comprise a mixture of species.

6.7.12 It is considered that the indicated proposed mitigation identified in the CEMP reasonably considers construction and operational impacts of the project. However, some of the proposed mitigation will require time to establish and reach its full potential and this is why the Council considers the impacts on biodiversity overall to be a negative impact.

6.7.13 Finally, the Council acknowledges that pursuant to requirement 7 of schedule 2 (Protected Species) of the draft DCO, Natural England must be consulted on the preparation of a scheme for protection and mitigation measures (such scheme to be approved by the Secretary of State) for protected species.

6.8 Road Drainage and Flood Risk – neutral impacts

- 6.8.1 The Environmental Statement (ES) dated June 2020 (DCO document TR010041) has been produced by Highways England (HE). Chapter 10 of the ES (DCO documents APP-050 and APP-051) of the Environmental Statement document refers to flood risk and surface water disposal from the scheme.

Flood Risk assessment – neutral impact

- 6.8.2 Flood risk to and from the proposals can be separated into two main sources – fluvial and surface water. Fluvial flood risk being from watercourses, including ditches, whereas surface water (pluvial) being from overland flows.

6.8.3 Fluvial flood risk can further be separated looking at designated main rivers and ordinary watercourses. Within the extent of this DCO – only one main river is crossed – the river Coquet. In this instance, we have been in regular dialogue with the Environment Agency who are the statutory consultee for main rivers. Throughout these discussions, we are satisfied with the proposals and mitigation in relation to flood risk and drainage.

- 6.8.4 With regards to ordinary watercourses (all other watercourses i.e. streams, ditches, drains, etc.) which are not designated main rivers – Northumberland County Council as the Lead Local Flood Authority (LLFA) are the relevant statutory consultee. Regular communications between the LLFA and WSP who are the assigned flood risk and drainage consultants have continued.
- 6.8.5 The submitted documents and assessments have undertaken modelling of all the relevant watercourses for which the new highway will cross and will impact upon. All modelling has been in accordance with national policy and best practice guidance. This modelling shows that with appropriate design and mitigation flood risk will not increase on or off-site as a result of the development.

Mitigation

- 6.8.6 Appropriate mitigation and design is required to ensure flood risk will not increase. This includes ensuring the diameter of any new culvert is sufficient and that where existing culverts and bridges are being extended these match or are larger than the existing. The modelling undertaken has determined the appropriate sizing for each relevant culvert / bridge.
- 6.8.7 Reviewing the submitted information we are satisfied with the proposed mitigation measures in this instance.

Surface water flood risk assessment

- 6.8.8 The impact of overland (pluvial) flows onto the new highway has been assessed within the submitted information. These detail that at certain locations, there is a possibility that either overland flows would enter onto the new highway or would be diverted elsewhere. The assessment further looks at this and provides necessary mitigation to ensure that this does not occur.

Mitigation

- 6.8.9 Appropriate mitigation and design is required to ensure flood risk will not occur on or off site. This mitigation will involve the provision of cut-off drains which will intercept overland runoff and diverted it to the nearest watercourse, which is within the relevant catchment.
- 6.8.10 Reviewing the submitted information we are satisfied with the proposed mitigation measures in this instance.

Road Drainage assessment – neutral impact

- 6.8.11 This particular aspect of the development looks at drainage from the new highway and its disposal. National policy and guidance have been referenced within the submitted documents. If unmitigated flood risk downstream will increase due to the significant increase of hardstanding generated and an increase in surface water flows and volumes. The assessment further looks at this and provides necessary mitigation to ensure that this does not occur.
- 6.8.12 Northumberland County Council again as the Lead Local Flood Authority are the relevant statutory consultee for surface water drainage. Regular communications between ourselves and WSP who are the assigned surface water drainage consultants are on-going.
- 6.8.13 The submitted documents and assessments have looked at the disposal of surface water from the new highway. With this aspect it needs to be ensured that the rate and volume of water leaving the development / appropriate catchment is no greater than previous. Appropriate mitigation will be required in order to achieve this.

Mitigation

- 6.8.14 As above, appropriate mitigation is required in order to ensure flood risk does not increase on and off-site as a result of the works. In this instance, this mitigation involves a series of attenuation features which will store water in times of heavy rainfall, before slowly releasing it to a relevant watercourse at a controlled rate. These rates have been

discussed between WSP and NCC. We are content with the proposed rates. On-going discussions over the required volumes is continuing.

- 6.8.15 Further information will be required looking at the attenuation basins, looking at slope gradients, materials used, planting, access requirements for maintenance. It is believed that once the fundamental issues are resolved, that these remaining issues can be overcome via a condition / requirement of the DCO and that this will result in a neutral impact from this aspect.

Water Quality – neutral impact

- 6.8.16 The installation of a new highway can be detrimental to receiving watercourses due to an increase of oils, liquids and other solids which may occur. Looking at the receptor of watercourses where these are likely to wash into these could increase from existing. In order to ensure that the water quality within the receiving watercourses does not increase appropriate mitigation is required. This mitigation will consist of proprietary devices such as silt traps, but also filter trenches and attenuation basins. These will all provide an element of water quality treatment throughout the treatment train as is stipulated in best practice guidance.
- 6.8.17 Providing that the flood risk, surface water and water quality requirements remain within the Flood Risk Assessment, Drainage Strategy and the Development Consent Order and the appropriate mitigation measures are carried out, with any outstanding information provided, this will result in a neutral impact.
- 6.8.18 The Council welcomes requirement 8 of schedule 2 (Surface and foul water drainage) within the draft DCO.

6.9 Geology and Soils – neutral impacts

- 6.9.1 The Environmental Statement (ES) dated June 2020 (TR010041) has been produced by Highways England (HE) Chapter 11 of the Environmental Statement (ES) (DCO documents APP-052 and APP-053) refers to the Ground Condition assessments that have undertaken. The Council accepts the methodology used in the appraisal and agrees to the baseline assessments.
- 6.9.2 The site visits undertaken have quantified that the geological and geomorphological features of the local landscape are not highly sensitive to the effects of highway construction and operation. An assessment of agricultural land in the study area has shown it all falls predominantly into Agricultural Land Classification Grade 3b, which is of moderate quality.

Agricultural Land Class	Part A (ha)	Part B (ha)	Total (ha)
1 (Excellent)	-	-	-
2 (V. Good)	2.279	6.0	8.279
3a (Good)	12.843	50.3	63.143
3b (Moderate)	111.491	113.6	225.091
4 (Poor)	44.511	3.3	47.811
5 (V. Poor)	-	-	-

- 6.9.3 Given the extent of the scheme, the loss of agricultural land in both Parts A and B of the scheme will be predominately of Grade 3b agricultural land during/after construction. The Council is in agreement with the proposed mitigation identified in the outline CEMP (APP-0346) which references the soil handling strategy and standards of restoration for the return of the temporarily used areas to agricultural production to reduce the impacts.

Land Contamination- neutral impacts

- 6.9.4 A number of historic land uses have been identified by the applicant in a series of plans showing their locations along the routes of Part A and B of the sections to be dualled.
- 6.9.5 No assessment of risk from contamination has been presented and it would be normal not to require on for such a development as it does not introduce any sensitive receptors to contamination (should it exist).
- 6.9.6 On similar types of applications, the Public Health Protection Unit would normally recommend a condition for the applicant to deal with any unexpected contamination should it be discovered during development.
- 6.9.7 There is a potential risk of ground instability from historic coal mining in the area of Causey Park, this would be a matter for the applicant to address and may require a

licence from the Coal Authority should stabilisation works be required where entry in coal seams or historic coal workings is needed.

- 6.9.8 It is likely that any risks from contamination or ground instability are more likely to be Health and Safety at Work issue for the contractors.
- 6.9.10 This is generally acceptable and the Public Health Protection Unit would see the proposed dualling as not introducing any new, sensitive receptors to any contamination or risk of contamination.
- 6.9.11 The Council welcomes requirement 6 (Contaminated Land and Groundwater) of the draft DCO.

6.10 Materials – neutral impact

- 6.10.1 The Environmental Statement (ES) dated June 2020 (TR010041) has been produced by Highways England (HE). Chapter 13 of the ES (DCO documents APP-056 and APP-057) refers to the material assessments that have undertaken. The Council is broadly in agreement with the methodology and the baseline data used.
- 6.10.2 The scheme has the potential to consume materials in large quantities which may put pressure on the County's natural minerals resources, and produce and dispose of waste during the demolition, site preparation and construction phases of the carriageways and associated infrastructure. The associated potential impacts (both direct and indirect) would occur principally during construction, and potentially in the first year of operation. Potential impacts are associated with the production, processing, consumption and disposal of material resources and these will need to be managed carefully throughout the project.
- 6.10.3 Some discrepancies in the potential capacity for inert landfill in the county are noted in table 13-11, for example, at Merryshields Quarry (no extant permission for landfill), Alcan Ash Lagoons (not available for inert waste landfill) and Hollings Hill (capacity lower than stated).
- 6.10.4 The Council will continue to negotiate with Highways England to undertake close monitoring of the transported materials to ensure that there are limited impacts to the temporary storage areas and ensure that waste materials are disposed of in the most appropriate way, ensuring that no pollution to the environment both in proximity to the scheme or at the point of disposal occurs. The Council supports the production of a Materials Management Plan (MMP) and a Site Waste Management Plan (SWMP) as identified in the CEMP.
- 6.10.5 With respect to the transport of materials and waste during construction, the Council will discuss with Highways England the need to produce a traffic management plan to minimise the effects on amenity but is otherwise satisfied with the approach taken.

6.11 Construction Traffic - negative impact

- 6.11.1 Any construction project will have an impact upon the surrounding network due to the additional traffic movements associated with the construction of the scheme. These impacts are temporary and will only last throughout the construction phase and are summarised in the Environmental Impact Assessment. Whilst they are temporary, they should be mitigated and minimised where possible to reduce the impact upon the highway network.
- 6.11.2 The DCO submission includes an Outline Construction Environmental Management Plan (APP-365) that sets out the practical measures that will be used to minimise the impacts of construction traffic and the diversion of non-construction traffic during road closures during the construction phase.
- 6.11.3 A review of this document has been made by NCC Officers and a number of points of clarification have been sent to Highways England for comment and we are in dialogue with their consultant and contractor partners to resolve these queries. As such we are not in a position at this time to confirm whether the negative impacts of the construction phase can be fully minimised.
- 6.11.4 There are particular concerns in respect to the potential for additional traffic to use the Local Highway Network during the construction phase as a result of actual or perceived delays on the A1 as non-construction traffic travels through the scheme. Particular concerns relate to the A697 corridor and the villages on this route, but the impacts could be felt on any diversionary route taken by non-construction traffic on both formal and informal diversions made by vehicles. We are in dialogue with Highways England to seek assurances that the impacts will be minimal and minimised throughout the construction phase.
- 6.11.5 Whilst we accept that there will be negative impacts due to construction traffic and on non-construction traffic during the construction period, at this stage it is not clear whether these have been minimised. We will continue to work with Highways England and their consultant and construction partners to address our concerns and seek to reduce the impacts accordingly.

6.12 Road Safety- positive impact

- 6.12.1 The scheme will result in road safety impacts for traffic that will use the new dual carriageway section of the A1 over the current single carriageway section. This is because dual carriageways primarily allow for safer overtaking by removing the potential head-on conflict for vehicles in particular. The scheme also allows for slower moving vehicles to be overtaken more frequently without crossing into the path of oncoming traffic. Conflict points on the network are also reduced through the scheme by removing numerous side road junctions, private access junctions and reducing the number of at grade Public Rights of Way crossings of the Trunk Road. Furthermore, the design of the new route is in accordance with modern highway design standards.
- 6.12.2 In relation to the impact on road safety away from the Strategic Road Network, the proposals will make the A1 a more attractive travel option and those travellers who wish to avoid actual or perceived delays, especially in the summer months, will use the upgraded sections removing traffic from unsuitable routes on the Local Road Network.
- 6.12.3 In relation to Morpeth to Felton section (Part A), the de-trunked section of the A1 will experience reduced levels of traffic and therefore the retained junctions will have reduced risk of conflict. However, we continue to engage with Highways England in relation to the cross-section of the de-trunked sections both to improve NMU access and connectivity but additionally in respect to the road safety implications of retaining the existing carriageway widths where excessive width can be detrimental to road safety.
- 6.12.4 In relation to the Alnwick to Ellingham section (Part B), there are road safety benefits from removing the local traffic from the Strategic Road Network in particular through the provision of the new Local Access Roads to East and West Linkhall as well as new road to Rock South Farm.
- 6.12.5 These positive impacts upon Road Safety can only be fully confirmed once all additional points of clarification and additional information in relation to the development as requested from Highways England and their consultant and contractor partners is received and agreed.

7. Consideration of the Impact of the Proposed Provisions and Requirements within the Draft Order

- 7.1 The Council continues to liaise with HE on the contents of the draft DCO and has made comments on the drafting of some aspects of the DCO in response to questions from the Examining Authority in terms of accuracy. This LIR has identified a number of areas where the Council is seeking to satisfy itself on the scope and enforceability of construction controls and the mitigation of impacts. Those are the subject of ongoing discussions with HE. The Council is confident that most matters can be addressed by agreement with HE.

8. Conclusions

- 8.1 This report has been produced to consider the Local Impacts of the dualling of the A1 improvements North of Morpeth on the county of Northumberland.
- 8.2 This report has been prepared in accordance with the advice and requirements as set out in the Planning Act 2008, the Localism Act 2011 and Advice Note One: Local Impact Reports (Version 2, April 2012, The Planning Inspectorate).
- 8.3 The delivery of these improvement works has been an ambition of the Council for a number of years. There are congestion and road safety concerns in this key corridor through the county and this development will provide a means to relieve these current impacts and improve the free flow of traffic along the route. In doing so, it will also improve conditions for non-motorised users who will be able to use the de-trunked route for the same purpose, however, the Council strongly believe the works to this route should go further to provide adequate provision for cycling between Morpeth and Felton. The improvements will improve connectivity within the region, enable a range of economic development opportunities to be delivered and increase the county's attractiveness to economic development investment.
- 8.4 The construction of highway improvement works inevitably has some impact on the local landscape, ecology and amenities in terms of noise and air quality. Construction works can also have a temporary adverse impact on traffic movement.
- 8.5 The Local Impact Report demonstrates however, that the Council is satisfied that whilst there will be some negative local impacts primarily during the construction of the improvement works, none are so significant as to lead to the Council to object to the principle of the scheme. The Council is satisfied that the impacts are capable of being appropriately controlled by requirements contained within any DCO granted. The Council is continuing to liaise with Highways England on the scope of those requirements.
- 8.6 The Council welcomes this development which will significantly improve traffic flows along this key route, which in turn will improve road safety and improve opportunities for economic development investment both locally and in the wider area. The scheme will relieve congestion and improve accessibility to, from and within the County adding to the attractiveness of living and working in Northumberland, improving access to new economic development and housing locations. It is in accordance with national and local planning policy.

Appendix 1:

Landscape Sensitivity Assessment

Methodology

The methodology used within this assessment is informed by the following guidance:

- LA 107 Landscape and Visual Effects, revision 2 (Highways England, Feb 2020);
- Guidelines for Landscape and Visual Impact Assessment, 3rd Edition [GLVIA3] (Landscape Institute (LI) and the Institute for Environmental Management and Assessment (IEMA), 2013); and
- An Approach to Landscape Sensitivity Assessment, 2019 (Natural England)

Whilst the last of these is primarily intended to guide wide area baseline studies of sensitivity to particular types of development; the structured approach that it advocates to considering value and susceptibility is adapted to consider sensitivity to this particular development proposal in its proposed location.

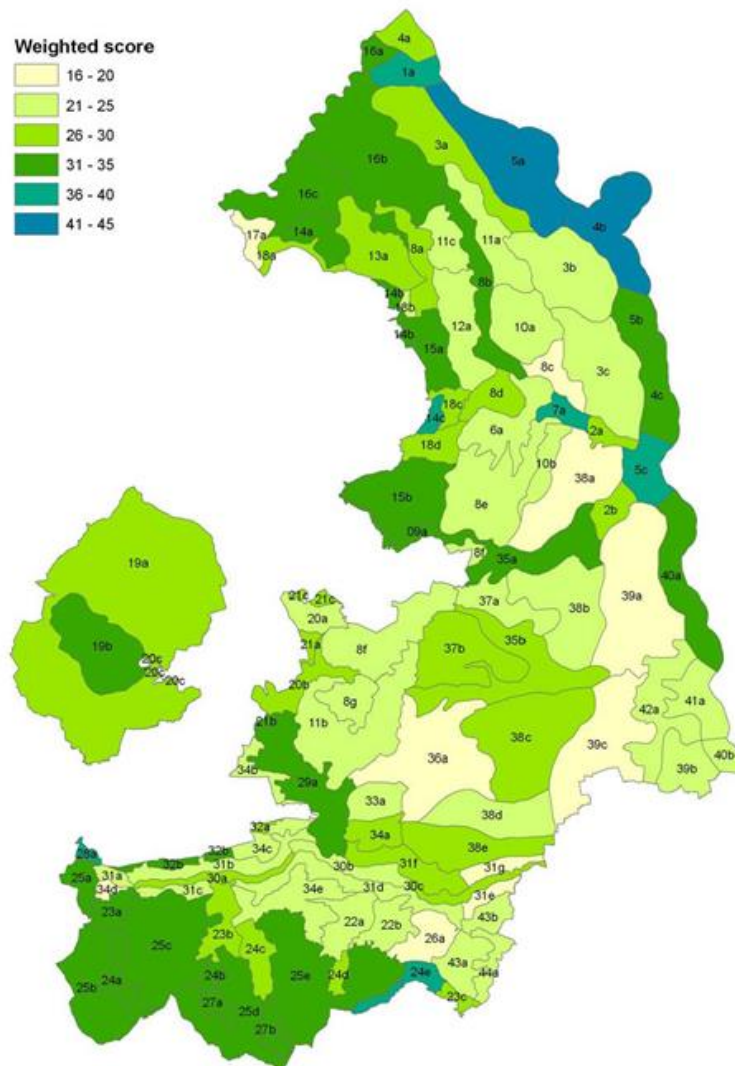
The **sensitivity** (high, medium, low) of the landscape to a particular development is considered on a case by case basis and considers the susceptibility of the landscape, which varies depending on the type of development proposed and the particular site location, and the landscape value (identified as national, regional, or community). As stated in GLVIA3, '*LVIA sensitivity is similar to the concept of landscape sensitivity used in the wider arena of landscape planning, but is not the same*'. Landscape sensitivity is not absolute and can only be defined in relation to each development and its location.

Landscape value: The importance attached to a landscape, often used as a basis for designation or recognition which expresses national or local authority consensus, because of its special qualities/attributes. The factors which are considered in landscape include aesthetic or perceptual aspects such as scenic beauty, tranquillity or wildness or cultural associations as well as recreational/community value, conservation interests, landscape character and condition and representativeness/rarity. Judgements of value within this assessment are not undertaken from first principles but are informed by designations and the findings of Northumberland Key Land Use Impact Study (NKLUIS) part D which uses a criteria based approach to consider the relative value of landscape character areas – see Inset 1 below.

Landscape susceptibility according to GLVIA3 means "*the ability of the landscape to accommodate the proposed Development without undue consequences for maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies*". Judgements on landscape susceptibility (high, medium, low) include references to both the physical and aesthetic characteristics and the potential scope for mitigation. Susceptibility of landscape character areas are influenced by their characteristics and are often considered (though often recorded as 'sensitivity' rather than susceptibility) within landscape character assessments and capacity studies.

Inset 1 – Relative Value summary plan from Northumberland Key Land Use Impact Study (NKLUIS) part D

Figure D3.2 Total scores after weighting applied



Sensitivity is judged taking into account the component judgments about the value and susceptibility of the receptor as illustrated by the table below. Where sensitivity is judged to lie between levels, an intermediate assessment will be adopted.

		Susceptibility		
		High	Medium	Low
Value	National	High	High/Medium	Medium
	Regional	High/Medium	Medium	Medium/Low
	Community	Medium	Medium/Low	Low

The sensitivity of the host landscape character types/areas which may receive significant landscape effects are assessed on following pages. The table below sets out the criteria used:

Factors affecting sensitivity	Lower Sensitivity to Roads and Bridges	Higher Sensitivity to Roads and Bridges
Designated scenic quality	No specific designation	National or regional designation
NKLUIS	Lower relative value score	Higher relative value score
Landform and scale	Smooth regular flowing, flat or uniform landscapes and where development is similar or smaller to scale of receiving landscape	Landforms with steep or complex topography which result in cuttings or embankments and where development is larger than scale of receiving landscape
Openness/enclosure	Enclosed and sheltered landscapes	Open and exposed landscapes with little enclosure
Land cover, complexity and patterns	Landscapes with sweeping lines or linear features/ patterns already established	Complex, intimate or mosaic cover or irregular patterns which new linear routes would contrast with
Built Environment	Linear infrastructure or contemporary elements already present	Established, traditional or historic built character and numerous settlements
Key Views and intervisibility	Visually contained and have limited inward or outward views	Extensive views within or of the area from key views
Landscapes that form skylines or settings	Landscapes which may be low lying or more elevated but do not form the skyline or the setting of a settlement or landscape feature	Landscapes which form the skyline or where there is potential to alter or sever the relationship between and settlement or landscape feature and its setting.

Host Landscape: 38b Lowland Rolling Farmland - Longhorsley

Factors affecting sensitivity	Explanation	Judgement
Designated scenic quality	Mostly undesignated but contains a number of AHLVs to either side of the route corridor.	Regional\Community
NKLUIS	Weighted score of 24, towards the lower end of the scale.	Community
Overall Judgement of Value		Community
Landform and scale	Medium to large scale rolling landscape with some smaller scale areas.	Medium
Openness/enclosure	Variable enclosure with more enclosed areas to the south and north parts of the route corridor.	Medium
Land cover, complexity and patterns	Landscape is not strongly patterned except by the sweeping linear routes of the existing A1 and A697	Low
Built Environment	Established vegetation along the line of the existing A1 limits its influence and small settlements have working rural character.	Medium
Key Views and intervisibility	Lacks the occasional extensive views more typical of other areas of this charatcer type due to localised enclosure by hedgerows, but still offers some open views.	Medium
Landscapes that form skylines or settings	Landscape dues not form the skyline and whilst it has a close relationship with a number of small settlements and historic parklands, it does not play an important role as a setting to these.	Low
Overall Judgement of Susceptibility		Medium\low
Overall Judgement of Sensitivity		Medium\Low

Host Landscape: 35a Broad Lowland Valley – Coquet Valley

Factors affecting sensitivity	Explanation	Judgement
Designated scenic quality	Area of High Landscape Value	Regional
NKLUIS	Weighted score of 31, in the upper half of the scale.	Regional
Overall Judgement of Value		Regional
Landform and scale	Steep sided valley	High
Openness/enclosure	Enclosed wooded valley	Low
Land cover, complexity and patterns	Winding river valley with irregular patterns of small scale fields and woodland	High
Built Environment	Apart from existing road crossings, smaller scale settlement of more traditional character e.g. at Felton.	Medium
Key Views and intervisibility	Visually contained.	Low
Landscapes that form skylines or settings	Bridge crossing would form a skyline feature in the local valley context, but there is already a bridge in this location.	Medium
Overall Judgement of Susceptibility		Medium
Overall Judgement of Sensitivity		Medium

Host Landscape: 3c Farmed Coastal Plain - Rock

Factors affecting sensitivity	Explanation	Judgement
Designated scenic quality	Partially within AHLV along the route corridor with Conservation Area at Rock and AONB further to the east.	Regional
NKLUIS	Weighted score of 24, towards the lower end of the scale.	Community
Overall Judgement of Value		Regional\Community
Landform and scale	Gently rolling with some localised valley landforms of smaller scale	Medium
Openness/enclosure	Generally more wooded than the wider character type	Medium
Land cover, complexity and patterns	Irregular field patterns with frequent coniferous shelterbelts and deciduous woodland	High
Built Environment	Frequent small villages and estate influences at Rock and Howick Hall, existing A1 to west	High\Medium
Key Views and intervisibility	Visually open for the most part, occasional sea views and visual containment in some localised valleys	Medium
Landscapes that form skylines or settings	Does not form skylines and while associated with historic parklands these are quite inward focussed, it does not play an important role as a setting to these	Low
Overall Judgement of Susceptibility		Medium
Overall Judgement of Sensitivity		Medium

Host Landscape: 8c Outcrop Hills and Escarpments – Charlton Ridge

Factors affecting sensitivity	Explanation	Judgement
Designated scenic quality	Partially within AHLV along the route corridor	Regional
NKLUIS	Weighted score of 18, in the lowest category, but noted as having some local value in terms of views and remoteness.	Community
Overall Judgement of Value		Regional\Community
Landform and scale	Large plateau like upland although gently rolling in northwest and more dramatically undulating to southeast.	Medium\Low
Openness/enclosure	Very open upland with little enclosure.	High
Land cover, complexity and patterns	Simple rectilinear field pattern.	Low
Built Environment	Little habitation and few roads or paths.	Low
Key Views and intervisibility	Wide open views within the area and across coastal plain.	High
Landscapes that form skylines or settings	Forms backdrop to coastal plain, less prominent than escarpments in other parts of the type.	High\Medium
Overall Judgement of Susceptibility		Medium
Overall Judgement of Sensitivity		Medium

Landscape Sensitivity - Summary and Comparison

Character Area	Sensitivity (this assessment)	Sensitivity (Applicant's LVIA)
LCA 38b Longhorsely (Part A South)	Value – Community Susceptibility – Medium\low Sensitivity – Medium\low	Value – Moderate Susceptibility – Moderate Sensitivity - Moderate
LCA 35a Coquet Valley (Part A North)	Value – Regional Susceptibility – Medium Sensitivity – Medium	Value – High Susceptibility – Low Sensitivity – High
LCA 3c Rock (Part B East)	Value – Regional\Community Susceptibility – Medium Sensitivity - Medium	Value – Very Attractive Susceptibility – Low Sensitivity - High
LCA 8c Charlton Ridge (Part B West)	Value – Regional\Community Susceptibility – Medium Sensitivity - Medium	Value – Good Susceptibility – Medium Sensitivity - Moderate

For Part A, there is limited difference between the two assessments for LCA38b, with a more pronounced difference for LCA 35a where the applicant's LVIA places greater weight on the landscape value, largely ignoring susceptibility in determining sensitivity.

Similarly, for Part B, there is no difference between the assessments for LCA 8c with a more pronounced difference for LCA 3c where the applicant's LVIA places greater weight on the landscape value, largely ignoring susceptibility in determining sensitivity.

Appendix 2:

Effects on landscape character

Methodology

The methodology used within this assessment is informed by the following guidance:

- LA 107 Landscape and Visual Effects, revision 2 (Highways England, Feb 2020);
- Guidelines for Landscape and Visual Impact Assessment, 3rd Edition [GLVIA3] (Landscape Institute (LI) and the Institute for Environmental Management and Assessment (IEMA), 2013); and
-

The **magnitude of change** arising from the proposed development at any particular location is assessed in terms of its size or scale, geographic extent of the area or receptor that is influenced and its duration and reversibility.

The **scale** of the change takes account of:

- degree of loss or alteration to key landscape features/elements; characteristics;
- distance from the development;
- landscape context to the development;

The approach to assessing effects on landscape character is to consider the key characteristics for the Landscape Character Type (LCT) within which the proposed development is located (host). For the host LCTs, a large scale change in landscape character is likely to occur where key characteristics would be lost or substantially changed. Where particular views are a key characteristic of a landscape type, large or medium scale landscape character effects may occur where the proposed development becomes a key feature of those views.

Having established the size/scale of change (large, medium, small, negligible) to the landscape baseline, the geographic **extent** of the change can be identified (wide, intermediate, localised or limited) and a judgement made as to the degree of change for each landscape receptor.

Duration and reversibility can be linked depending on the nature of the development. Reversibility is a judgement about the ability and practicality of the proposed development to be reversible (such as wind farms which are predominantly reversible), partially reversible to something similar (such as mineral extraction^[1]) or a permanent change in the landscape (such as housing). Duration reflects how long the change will last. The duration of the change would be considered short term when lasting less than 2 years; medium term when lasting between 2 and 10 years; or long term when lasting between 10 and 25 years, and permanent for more than 25 years.

^[1] GLVIA3 page 91, paragraph 5.52

Scale of effect is the first factor in determining magnitude; which may be higher if the effect is particularly widespread and/or long lasting, or lower if it is constrained in geographic extent and/or timescale. The tables below illustrate how this judgement is considered as a two-step process. Firstly, scale and extent are considered, for which the outcomes are illustrated by the first part of the table; the second part of the table illustrates the influence of duration on this initial judgement. Where magnitude is judged to lie between levels, an intermediate assessment will be adopted

Scale / extent		Large	Medium	Small	Negligible
Wide		Substantial			
Intermediate			Moderate		
Localised				Slight	
Limited					Negligible

Stage 1 Result/ Duration		Substantial	Moderate	Slight	Negligible
Permanent		Substantial			
Long-term			Moderate		
Medium-term				Slight	
Short-term					Negligible

The significance of effect is assessed as major, moderate, minor or negligible. These categories are based on the consideration of sensitivity with the predicted magnitude of change. The table below illustrates typical outcomes, allowing for the exercise of professional judgement. In some instances, a particular parameter may be considered as having a determining effect on the analysis.

		Magnitude of Change			
Receptor Sensitivity		Substantial	Moderate	Slight	Negligible
	High	Major	Major/ Moderate	Moderate	Minor
	Medium	Major/ Moderate	Moderate	Moderate/ Minor	Minor/ Negligible
	Low	Moderate	Moderate/ Minor	Minor	Negligible

Where the effect has been classified as Major or Major/Moderate this is considered to be equivalent to likely significant effects referred to in the EIA Regulations

Host Landscape: 38b Lowland Rolling Farmland – Longhorsley

Key references for this character area within the ES are:

- Part A ES Figure 7.2 Landscape Character Areas;
- Part A ES Figure 7.3 Zone of Theoretical Visibility;
- Part A ES Figure 7.4 Viewpoint Location Plan;
- Part A ES Figure 7.11 Photomontages – viewpoints 5, 6, 8, 10, 27, 28, 31;
- Part A ES Chapter 7 Table 7-15 (page 50) – baseline description;
- Part A ES Appendix 7.1 - Schedule of effects;
- Part A ES Chapter 7 Table 7-19 (page 77) – construction effects;
- Part A ES Chapter 7 para 7.10.14 (page 79) – year 1 effects;
- Part A ES Chapter 7 Table 7-20 (page 80) – year 15 effects.

As illustrated by Part A ES Figure 7.2, this character area would include most of the Part A proposals, including the offline section of the route. The baseline description and schedule of effects listed above provide reasonable summaries of the character and expected effects, although changes to the wider views within the character area (see ZTV and viewpoints listed above) arising in particular from the removal and replanting of Coronation Avenue and the introduction of the road junctions are not fully described.

The ES LVIA assessment of effects as being of Moderate magnitude, Moderate significance and Adverse during construction and early completion is agreed. However, NCC consider that the assessment of effects of Minor magnitude and Slight and Adverse significance at year 15 understates the permanent effects.

Permanent effects once planting is mature would be Large scale along the new route corridor due to the permanent change from farmland to road, and the introduction of the entirely new elements of dual carriageway and grade-separated junctions which do not currently exist within the character area. Some Large scale changes due to the loss of trees from Coronation Avenue (see viewpoint 6) and the new junctions (see viewpoints 8 and 27) would also remain. Screening by existing and proposed vegetation would mean that away from these more obvious features the change would be less apparent and the extent of Medium scale effects caused by changes to views would be fairly contained. Beyond this, effects would rapidly to Small and Negligible. The extent of effects would run through the character area; affecting an Intermediate extent, resulting in effects of Moderate magnitude and, taking account of the Medium\Low sensitivity would result in Moderate and Adverse effects.

These effects would fall just below the threshold of significance within the methodology used in this assessment, but would exceed the definition of Minor magnitude effects set out within ES chapter 7 Table 7-7 (page 28) which is “*Slight loss or damage to existing character or feature and elements, and/or the addition of new but uncharacteristic features and elements*”, falling closer to the definition of Moderate magnitude effects which is “*Partial loss or noticeable damage to existing character or distinctive features and elements, and/or the addition of new but uncharacteristic noticeable features and elements.*” The inclusion of additional mitigation planting around the Westmoor junction and along Coronation Avenue in particular would further reduce effects bringing them closer to the ES assessment.

Host Landscape: 35a Broad Lowland Valley – Coquet Valley

The ES LVIA assessment of the magnitude of effects on this character area is agreed. Given the slightly lower assessment of sensitivity set out within Appendix 1, it is judged that effects may be of slightly lower significance than those set out within the ES, however it would remain the case that effects during construction would be significant and effects after construction would not be, reducing further with time as vegetation matures.

Host Landscape: 3c Farmed Coastal Plain – Rock

Key references for this character area within the ES are:

- Part B ES Figure 7.6 Local Landscape Character;
- Part B ES Figure 7.3 Viewpoint Locations Plan;
- Part B ES Figure 7.9 Viewpoint Photography – viewpoints 1, 2, 3, 4, 8, 9, 10, 11, 12, 13, 14, 17, 18 and 19;
- Part B ES Appendix 7.5 Landscape Character (para. 7.1.3 - 7.1.4) – baseline description;
- Part B ES Appendix 7.3 Landscape Effects Schedule (pages 3 – 4) – assessment of effects;
- Part B Chapter 7 Table 7-20 (page 69) – construction effects;
- Part B Chapter 7 Table 7-21 (page 70) – operational effects.

As illustrated by Part B ES Figure 7.6, this character area would include most of the Part B proposals. The baseline description and schedule of effects listed above provide reasonable summaries of the character and effects expected but underestimates the extent of the character area likely to be impacted.

The viewpoints illustrate that the existing road and traffic is well screened by the roadside hedgerows and trees, even in winter views, and particularly so in the southern half of the character area. These would be entirely removed during the construction stage resulting in open views of the road, construction works and traffic. Once construction is complete, a view of a substantially larger road would remain until proposed mitigation planting is mature enough to provide a considerable degree of screening. The majority of the proposed mitigation comprises roadside hedgerows, the management of which would have a considerable influence on their effectiveness as mitigation. If these are regularly trimmed and maintained at a relatively modest height (e.g. 1.5 – 2m) then they are unlikely to provide any meaningful screening.

Although the scale of effect would begin to reduce by the design year (year 15), primarily where woodland planting is proposed, it is likely to take considerably longer before proposed planting provides the same degree of screening as that within the present landscape. This would be a particularly dramatic change in the southern part of the character area where the undulating landform confines the road within a more intimate localised valley setting.

This would result in a Medium scale of change extending up to around 500m from the road, an Intermediate extent of the character area, through the construction stage at least up until the design year (year 15) or thereabouts, a Long-term duration. This would result in a Moderate magnitude of change and taking account of the Medium sensitivity would result in Moderate and Adverse effects. This would fall just below the threshold for significance within the methodology for this assessment.

In time, proposed mitigation planting would mature to provide a more notable degree of screening and the Permanent effects would reduce to be more in line with the Slight Adverse effects identified in the ES assessment, assuming roadside hedgerows are allowed to grow out rather than being maintained at a more modest height.

Host Landscape: 8c Outcrop Hills and Escarpments – Charlton Ridge

The ES LVIA assessment of the significance of effects on this character area is agreed. However, owing to the open views of the road, similar to those described for 3c Farmed Coastal Plain – Rock above, that would occur from the closest part of this character area (also see viewpoints 5, 6, 7 and 20) it is judged that although the Permanent effects would be Negligible as set out in the ES, it is judged that this stage may not have been reached by the design year and the Long-term effects would be greater than Negligible magnitude – similar to those described at A.1.21 and A.1.22 albeit affecting a Localised area and resulting in Moderate-Slight magnitude and Moderate-Minor significance Adverse effects on the Medium sensitivity character area.

Effects on Host Landscape Character Areas - Summary and Comparison to LVIA findings

Character Area	Effects (this assessment)	Effects (Applicant's LVIA)
LCA 38b Longhorsely (Part A South)	<p><i>Construction and Long-term</i> Agreed</p> <p><i>Permanent:</i> Moderate magnitude, Moderate significance, Adverse</p>	<p><i>Construction and year 1:</i> Moderate magnitude, Moderate significance, Adverse</p> <p><i>Year 15:</i> Minor magnitude, Slight significance, Adverse</p>
LCA 35a Coquet Valley (Part A North)	Agreed	
LCA 3c Rock (Part B East)	<p><i>Construction and early completion</i> Agreed</p> <p><i>Long-term (years 1-15):</i> Moderate magnitude, Moderate significance, Adverse</p> <p><i>Permanent:</i> Agreed</p>	<p><i>Construction:</i> Minor magnitude, Moderate significance, Adverse</p> <p><i>Year 1:</i> Negligible magnitude, Slight significance, Adverse</p> <p><i>Year 15:</i> Negligible magnitude, Slight significance, Adverse</p>
LCA 8c Charlton Ridge (Part B West)	<p><i>Construction and early completion</i> Agreed</p> <p><i>Long-term (years 1-15):</i> Moderate\slight magnitude, Moderate\minor significance, Adverse</p> <p><i>Permanent:</i> Agreed</p>	<p><i>Construction:</i> Moderate magnitude, Moderate significance, Adverse</p> <p><i>Year 1:</i> Negligible magnitude, Slight significance, Adverse</p> <p><i>Year 15:</i> Negligible magnitude, Neutral significance</p>

In general, although the assessment included in Appendix 1 typically identifies the character areas as being of lower sensitivity than the applicant's LVIA, the long term (and in one case permanent) effects are judged to be greater. This is largely as a result of a closer consideration of susceptibilities, localised impacts and the effectiveness of mitigation.

No significant effects have been identified as a result of this review, but there are instances where mitigation could be improved to further reduce effects that fall just below the significance threshold

Appendix 3:

Visual receptors – Key references within the ES

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Key references within the ES relating to effects on this community group are:

- Part A ES Figure 7.4 Viewpoint Location Plan sheet 2;
- Part A ES Figure 7.5 Viewpoint Photographs – viewpoints 8-10 and 35-37;
- Part A ES Figure 7.6 Residential Properties Plan sheets 2 and 3;
- Part A ES Figure 7.7 Rights of Way Plan sheet 3;
- Part A ES Figure 7.8 Landscape Mitigation Masterplan sheet 7;
- Part A ES Figure 7.11 Photomontages – viewpoints 8 and 10;
- Part A ES Appendix 7.2 Viewpoints Effects Schedule – viewpoints 8-10 and 35-37;
- Part A ES Appendix 7.3 Residential Effects Schedule – R71-R81;
- Part A ES Appendix 7.4 PRow Effects Schedule – 423/001 and 423/002;

Causey Park Bridge

Key references within the ES relating to effects on this community group are:

- Part A ES Figure 7.4 Viewpoint Location Plan sheet 2;
- Part A ES Figure 7.5 Viewpoint Photographs – none;
- Part A ES Figure 7.6 Residential Properties Plan sheet 3;
- Part A ES Figure 7.7 Rights of Way Plan sheet 3;
- Part A ES Figure 7.8 Landscape Mitigation Masterplan sheet 10;
- Part A ES Figure 7.11 Photomontages – none;
- Part A ES Appendix 7.2 Viewpoints Effects Schedule – none;
- Part A ES Appendix 7.3 Residential Effects Schedule – R56-R64 and Oak Inn;
- Part A ES Appendix 7.4 PRow Effects Schedule – 423/008 and 423/013.

Causey Park

Key references within the ES relating to effects on this community group are:

- Part A ES Figure 7.4 Viewpoint Location Plan sheet 2;
- Part A ES Figure 7.5 Viewpoint Photographs – 29, 31, and 32;
- Part A ES Figure 7.6 Residential Properties Plan sheet 4;
- Part A ES Figure 7.7 Rights of Way Plan sheet 4;
- Part A ES Figure 7.8 Landscape Mitigation Masterplan sheet 11;
- Part A ES Figure 7.11 Photomontages – viewpoint 31;
- Part A ES Appendix 7.2 Viewpoints Effects Schedule – 29, 31, and 32;
- Part A ES Appendix 7.3 Residential Effects Schedule – R48-R54;

- Part A ES Appendix 7.4 PRow Effects Schedule – 423/011, 423/012 and 423/013.

West Moor

Key references within the ES relating to effects on this community group are:

- Part A ES Figure 7.4 Viewpoint Location Plan sheet 3;
- Part A ES Figure 7.5 Viewpoint Photographs – 27;
- Part A ES Figure 7.6 Residential Properties Plan sheet 5;
- Part A ES Figure 7.7 Rights of Way Plan - none;
- Part A ES Figure 7.8 Landscape Mitigation Masterplan sheet 15;
- Part A ES Figure 7.11 Photomontages – 27;
- Part A ES Appendix 7.2 Viewpoints Effects Schedule – 27;
- Part A ES Appendix 7.3 Residential Effects Schedule – R35–R39;
- Part A ES Appendix 7.4 PRow Effects Schedule – none.