



SCOPING OPINION:

Proposed A66 Northern Trans- Pennine Project

Case Reference: TR010062

Adopted by the Planning Inspectorate (on behalf of the Secretary of State) pursuant to Regulation 10 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

July 2021

[This page has been intentionally left blank]



CONTENTS

1.	INTRODUCTION.....	1
1.1	Background	1
1.2	The Planning Inspectorate’s Consultation.....	2
2.	THE PROPOSED DEVELOPMENT	4
2.1	Introduction	4
2.2	Description of the Proposed Development.....	4
2.3	The Planning Inspectorate’s Comments.....	5
3.	ES APPROACH.....	9
3.1	Introduction	9
3.2	Relevant National Policy Statements (NPSs).....	9
3.3	Scope of Assessment	10
3.4	Coronavirus (COVID-19) Environmental Information and Data Collection	14
3.5	Confidential and Sensitive Information.....	14
4.	ASPECT BASED SCOPING TABLES.....	16
4.1	Air Quality.....	16
4.2	Biodiversity	21
4.3	Climate.....	29
4.4	Cultural Heritage.....	31
4.5	Geology and Soils.....	33
4.6	Landscape and Visual.....	42
4.7	Materials and Waste	47
4.8	Noise and Vibration	50
4.9	Population and Human Health.....	53
4.10	Road Drainage and the Water Environment	56
4.11	Assessment of Cumulative Effects	60
5.	INFORMATION SOURCES	62
 APPENDIX 1: CONSULTATION BODIES FORMALLY CONSULTED		
 APPENDIX 2: RESPONDENTS TO CONSULTATION AND COPIES OF REPLIES		

[This page has been intentionally left blank]

1. INTRODUCTION

1.1 Background

- 1.1.1 On 14 June 2021, the Planning Inspectorate (the Inspectorate) on behalf of the Secretary of State (SoS) received a scoping request from Highways England (the Applicant) under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) for the proposed A66 Northern Trans-Pennine Project (the Proposed Development).
- 1.1.2 In accordance with Regulation 10 of the EIA Regulations, an Applicant may ask the SoS to state in writing its opinion *'as to the scope, and level of detail, of the information to be provided in the environmental statement'*.
- 1.1.3 This document is the Scoping Opinion (the Opinion) provided by the Inspectorate on behalf of the SoS in respect of the Proposed Development. It is made on the basis of the information provided in the Applicant's report entitled PCF Stage 3 Environmental Scoping Report (the Scoping Report). This Opinion can only reflect the proposals as currently described by the Applicant. The Scoping Opinion should be read in conjunction with the Applicant's Scoping Report.
- 1.1.4 The Applicant has notified the SoS under Regulation 8(1)(b) of the EIA Regulations that they propose to provide an Environmental Statement (ES) in respect of the Proposed Development. Therefore, in accordance with Regulation 6(2)(a) of the EIA Regulations, the Proposed Development is EIA development.
- 1.1.5 Regulation 10(9) of the EIA Regulations requires that before adopting a scoping opinion the Inspectorate must take into account:
- (a) *any information provided about the proposed development;*
 - (b) *the specific characteristics of the development;*
 - (c) *the likely significant effects of the development on the environment; and*
 - (d) *in the case of a subsequent application, the environmental statement submitted with the original application.*
- 1.1.6 This Opinion has taken into account the requirements of the EIA Regulations, as well as current best practice towards preparation of an ES.
- 1.1.7 The Inspectorate has consulted on the Applicant's Scoping Report and the responses received from the consultation bodies have been taken into account in adopting this Opinion (see Appendix 2).
- 1.1.8 The points addressed by the Applicant in the Scoping Report have been carefully considered and use has been made of professional judgment and experience in order to adopt this Opinion. It should be noted that when it comes to consider the ES, the Inspectorate will take account of relevant legislation and guidelines. The Inspectorate will not be precluded from requiring additional information if it is considered necessary in connection with the ES submitted with the application for a Development Consent Order (DCO).

- 1.1.9 This Opinion should not be construed as implying that the Inspectorate agrees with the information or comments provided by the Applicant in their request for an opinion from the Inspectorate. In particular, comments from the Inspectorate in this Opinion are without prejudice to any later decisions taken (eg on submission of the application) that any development identified by the Applicant is necessarily to be treated as part of a Nationally Significant Infrastructure Project (NSIP) or Associated Development or development that does not require development consent.
- 1.1.10 Regulation 10(3) of the EIA Regulations states that a request for a scoping opinion must include:
- (a) *a plan sufficient to identify the land;*
 - (b) *a description of the proposed development, including its location and technical capacity;*
 - (c) *an explanation of the likely significant effects of the development on the environment; and*
 - (d) *such other information or representations as the person making the request may wish to provide or make.*
- 1.1.11 The Inspectorate considers that this has been provided in the Applicant's Scoping Report. The Inspectorate is satisfied that the Scoping Report encompasses the relevant aspects identified in the EIA Regulations.
- 1.1.12 In accordance with Regulation 14(3)(a), where a scoping opinion has been issued in accordance with Regulation 10 an ES accompanying an application for an order granting development consent should be based on '*the most recent scoping opinion adopted (so far as the proposed development remains materially the same as the proposed development which was subject to that opinion)*'.
- 1.1.13 The Inspectorate notes the potential need to carry out an assessment under The Conservation of Habitats and Species Regulations 2017, as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 ('the Habitats Regulations'). This assessment must be co-ordinated with the EIA in accordance with Regulation 26 of the EIA Regulations.

1.2 The Planning Inspectorate's Consultation

- 1.2.1 In accordance with Regulation 10(6) of the EIA Regulations the Inspectorate has consulted the consultation bodies before adopting a scoping opinion. A list of the consultation bodies formally consulted by the Inspectorate is provided at Appendix 1. The consultation bodies have been notified under Regulation 11(1)(a) of the duty imposed on them by Regulation 11(3) of the EIA Regulations to make information available to the Applicant relevant to the preparation of the ES. The Applicant should note that whilst the list can inform their consultation, it should not be relied upon for that purpose.
- 1.2.2 The list of respondents who replied within the statutory timeframe and whose comments have been taken into account in the preparation of this Opinion is

provided, along with copies of their comments, at Appendix 2, to which the Applicant should refer in preparing their ES.

- 1.2.3 The ES submitted by the Applicant should demonstrate consideration of the points raised by the consultation bodies. It is recommended that a table is provided in the ES summarising the scoping responses from the consultation bodies and how they are, or are not, addressed in the ES.
- 1.2.4 Any consultation responses received after the statutory deadline for receipt of comments will not be taken into account within this Opinion. Late responses will be forwarded to the Applicant and will be made available on the Inspectorate's website. The Applicant should also give due consideration to those comments in preparing their ES.

2. THE PROPOSED DEVELOPMENT

2.1 Introduction

2.1.1 The following is a summary of the information on the Proposed Development and its site and surroundings prepared by the Applicant and included in their Scoping Report. The information has not been verified and it has been assumed that the information provided reflects the existing knowledge of the Proposed Development and the potential receptors/resources.

2.2 Description of the Proposed Development

2.2.1 The Applicant's description of the Proposed Development, its location and technical capacity (where relevant) is provided in Chapter 2 of the Scoping Report.

2.2.2 The Proposed Development is for the upgrade of the Junctions at M6 at Penrith and the A1(M) at Scotch Corner and the dualling of six single lane sections of the A66 totalling approximately 30km, to two-lane all-purpose roads between these junctions. This includes provision of a major grade-separated junction, a multi-span viaduct, junctions and accesses, road crossings (including over bridges and underpass structures), public rights of way (PRoWs), slip roads, signalisation, laybys and culverts. Construction would also require earthworks, building demolition, and diversions of existing routes and PRoWs.

2.2.3 The Proposed Development has been divided into eight sections/schemes which are set out in Section 2.5 of the Scoping Report. These are:

- M6 Junction 40 Penrith;
- M6 Junction 40 to Kemplay Bank Roundabout;
- Penrith to Temple Sowerby (Center Parcs);
- Temple Sowerby to Appleby; Appleby to Brough (Warcop);
- Bowes Bypass (A66/A67);
- Cross Lanes to Rokeby;
- Stephen Bank to Carkin Moor; and
- A1(M) Junction 53 Scotch Corner.

2.2.4 These sections of the Proposed Development span the A66 from the M6 Junction at Penrith in the north west to the A1(M) Junction at Scotch Corner in the south east, and pass through three local planning authority administrative areas: Eden District, Durham County and Richmondshire District. A site location plan is provided at Figure 2.1.

2.2.5 The site of the Proposed Development includes online widening of the existing sections of the A66, together with offline sections largely within agricultural farmland, some of which is classified as Grade 2 best and most versatile land (BMV). The Proposed Development crosses a number of sensitive sites including the River Eden Special Area of Conservation (SAC), with a number of tributaries

to the River Eden running adjacent to and intersecting the Proposed Development along the route. The existing A66 runs through and adjacent to the North Pennines Area of Outstanding Natural Beauty (AONB) and in some locations defines the boundary of the AONB. In some routing options the Proposed Development encroaches into the AONB. The Lake District National Park is located approximately 2km south-west of Penrith and the Yorkshire Dales National Park is located approximately 3.5km south of the existing A66. The North Pennine Moors SAC and Special Protection Area (SPA) are located to the north and south of the Proposed Development. Figure 11.2 to the Scoping Report shows the location of the AONB and National Parks and Figure 7.1 presents ecological sites. The Proposed Development passes through flood risk zones 2 and 3 associated with the River Eden. The existing A66 roughly follows the line of a Roman Road for large sections. The Roman Road is also associated with extensive below-ground Roman archaeology and numerous scheduled monuments. There are also a number of historic constraints along the route including conservation areas, Scheduled Monuments, and a large number of Grade I, II* and II listed buildings and conservation areas, many of which lie directly adjacent to the A66. These are presented in Figures 9.1 to 9.2 to the Scoping Report.

- 2.2.6 In the wider area, the Lake District National Park is located approximately 2km to the south west of Penrith and the Yorkshire Dales National Park is approximately 3.5km south of the Proposed Development. These are shown on Figure 11.2 to the Scoping Report.

2.3 The Planning Inspectorate's Comments

Description of the Proposed Development

- 2.3.1 The Scoping Report paragraph 2.4.4 states that the red line boundary is yet to be refined and the current boundary is subject to change depending on the final routing options; therefore, land use and materials required are not yet defined. The ES should describe the land use requirement of the Proposed Development and the nature and quantity of materials and natural resources to be used during construction and operation, including water, land, soil and biodiversity. This should include materials to be imported, exported, excavated or stored on site and a description of any topographical and landscape changes as a result of the Proposed Development. This should be described both on a scheme-by-scheme basis and for the entirety of the Proposed Development. Where applicable, the ES should explain any changes/refinements in the site, design and size of the Proposed Development between Scoping and the ES and why these changes/refinements were made.
- 2.3.2 Scoping Report Section 2.5 includes a description of the likely development within each scheme, together with key constraints and/or neighbouring features, and refers to Figure 2-1. Some of the constraints/features described in the Scoping Report are not shown on this figure. For example, the Cumbria Fire and Rescue Service fire station within the M6 Junction 40 Penrith scheme is not labelled or easily identified from Figure 2.1. Features relevant to the Proposed Development and the assessments should be described in the ES and clearly located on supporting figures, where appropriate.

- 2.3.3 Scoping Report Section 2.6 sets out that the Proposed Development will be built in a phased approach across four work packages and there is potential for these packages to overlap. The ES should clearly set out the location, nature and timing of the works contained within each package and the relationship between these packages. This should include any pre-construction and/or associated works i.e. utility diversions, as applicable. Where there is potential for influence/delay, this should be incorporated into any worst-case scenario assessed. Additionally, worst-case scenarios may vary depending on the receptors being assessed. The assessment should take this into account when defining the worst-case scenario for construction (Scoping Report Section 2.7).
- 2.3.4 Section 2.7 and paragraph 5.3.8 of the Scoping Report state that the ES will include information relating to the potential location of construction compounds and haul routes, where possible, and that as the details of construction are unlikely to be known until later stages, the ES will be based on professional judgement and reasonable assumptions to inform a worst-case construction scenario. The Applicant should seek to refine construction details as much as possible and include clear parameters on which the assessment of likely significant effects in the ES has been based, particularly the number, size, location and use of construction compounds and haul routes, together with likely storage areas.
- 2.3.5 The Inspectorate notes from Section 2.6 of the Scoping Report that the construction programme and strategy is yet to be finalised. A potential accelerated programme of five years commencing in 2024 is referenced. It is noted that Paragraph 8.6.1 of the Scoping Report Climate chapter refers to construction anticipating to commence in 2024 and last six years. The Landscape and Visual chapter also identifies a 2024 starting year but references a construction period of five years. The ES should include an overarching description of the construction programme including dates, timing, and duration of works and ensure that this is consistently applied throughout the assessments included in the ES.
- 2.3.6 The Scoping Report identifies that a number of buildings are proposed to be demolished as a result of the Proposed Development, but as the final route is still to be decided, the number, nature and location of demolition is unknown. The ES should identify the number, locations, extent and nature of any infrastructure that requires to be demolished. Clear detail of such demolition/removal works should be included in the ES. along with an assessment of effects in relevant aspect chapters, where likely significant effects could occur.
- 2.3.7 The description of the Proposed Development within the Scoping Report contains limited reference to any proposed increase or changes to lighting, although it is noted that potential impacts associated with lighting, during both construction and operation are identified in a number of the aspect chapters. The ES should describe the likely changes to lighting and specify the parameters considered and assessed with regards to any proposed luminaires (eg column heights, lux levels), and assess any likely significant effects associated with lighting as part of the relevant aspect assessments.

- 2.3.8 Scoping Report paragraph 5.5.7 states that there is potential for the ES to be submitted in an alternative, digital-led format. The Planning Inspectorate is currently supporting an initial trial of a digital scoping approach as part of the Project Speed initiative and is exploring a number of technical challenges relating to the use of a fully digital ES. The Applicant should engage with the Inspectorate at the earliest possible opportunity to explore this issue and whether a digital submission is possible at this time.

Alternatives

- 2.3.9 The EIA Regulations require that the Applicant provide 'A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects'.
- 2.3.10 The Inspectorate acknowledges the Applicant's intention to consider alternatives within the ES. The Inspectorate would expect to see a discrete section in the ES that provides details of the reasonable alternatives studied and the reasoning for the selection of the chosen option(s), including a comparison of the environmental effects.
- 2.3.11 Scoping Report paragraph 3.4.12 references documents including "A66 Northern Trans-Pennine Public Consultation" and the "Northern Trans-Pennine Options Consultation Report" as explaining the main reasons for the selection of the preferred route. Where external documents have influenced refinement of the Proposed Development, such information should be provided with the application.

Flexibility

- 2.3.12 The Inspectorate notes the Applicant's desire to incorporate flexibility into their draft DCO (dDCO) and its intention to apply a Rochdale Envelope approach for this purpose. Where the details of the Proposed Development cannot be defined precisely, the Applicant will apply a worst-case scenario. The Inspectorate welcomes the reference to Planning Inspectorate Advice Note nine 'Using the 'Rochdale Envelope'¹ in this regard.
- 2.3.13 The Applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the Proposed Development have yet to be finalised and provide the reasons. At the time of application, any Proposed Development parameters should not be so wide-ranging as to represent effectively different developments. The development parameters should be clearly defined in the dDCO and in the accompanying ES. It is a matter for the Applicant, in preparing an ES, to consider whether it is possible to robustly assess a range of impacts resulting from a large number of undecided parameters. The description of the Proposed Development in the ES must not

¹ Advice Note nine: Using the Rochdale Envelope. Available at:
<https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

be so wide that it is insufficiently certain to comply with the requirements of Regulation 14 of the EIA Regulations.

- 2.3.14 It should be noted that if the Proposed Development materially changes prior to submission of the DCO application, the Applicant may wish to consider requesting a new scoping opinion.

3. ES APPROACH

3.1 Introduction

- 3.1.1 This section contains the Inspectorate's specific comments on the scope and level of detail of information to be provided in the Applicant's ES. General advice on the presentation of an ES is provided in the Inspectorate's Advice Note Seven 'Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements'² and associated appendices.
- 3.1.2 Aspects/matters (as defined in Advice Note Seven) are not scoped out unless specifically addressed and justified by the Applicant, and confirmed as being scoped out by the Inspectorate. The ES should be based on the Scoping Opinion in so far as the Proposed Development remains materially the same as the Proposed Development described in the Applicant's Scoping Report.
- 3.1.3 The Inspectorate has set out in this Opinion where it has/has not agreed to scope out certain aspects/ matters on the basis of the information available at this time. The Inspectorate is content that the receipt of a Scoping Opinion should not prevent the Applicant from subsequently agreeing with the relevant consultation bodies to scope such aspects / matters out of the ES, where further evidence has been provided to justify this approach. However, in order to demonstrate that the aspects/ matters have been appropriately addressed, the ES should explain the reasoning for scoping them out and justify the approach taken.
- 3.1.4 Where relevant, the ES should provide reference to how the delivery of measures proposed to prevent/minimise adverse effects is secured through dDCO requirements (or other suitably robust methods) and whether relevant consultation bodies agree on the adequacy of the measures proposed. Mitigation measures must be described to a sufficient level of detail to allow certainty regarding the assessment of effects and the effectiveness of any measures proposed.

3.2 Relevant National Policy Statements (NPSs)

- 3.2.1 Sector-specific NPSs are produced by the relevant Government Departments and set out national policy for NSIPs. They provide the framework within which the Examining Authority (ExA) will make their recommendation to the SoS and include the Government's objectives for the development of NSIPs. The NPSs may include environmental requirements for NSIPs, which Applicants should address within their ES.
- 3.2.2 The designated NPS relevant to the Proposed Development is the National Policy Statement for National Networks.

² Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements and annex. Available from: <https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

3.3 Scope of Assessment

General

- 3.3.1 The Inspectorate recommends that in order to assist the decision-making process, the Applicant uses tables:
- to demonstrate how the assessment has taken account of this Opinion;
 - to identify and collate the residual effects after mitigation for each of the aspect chapters, including the relevant interrelationships and cumulative effects;
 - to set out the proposed mitigation and/ or monitoring measures including cross-reference to the means of securing such measures (eg a dDCO requirement);
 - to describe any remedial measures that are identified as being necessary following monitoring; and
 - to identify where details are contained in the Habitats Regulations Assessment (HRA report) (where relevant), such as descriptions of National Site Network sites and their locations, together with any mitigation or compensation measures, that inform the findings of the ES.
- 3.3.2 The Scoping Report at paragraph 2.9.1 confirms that maintenance activities are not proposed to be considered separately in the ES, as the implementation of standard control measures will be applied and encapsulated in the Handover Environment Management Plan (HEMP) and on that basis, no significant effects from maintenance are considered likely that would not have already been considered for the construction phase. The Inspectorate is content that on this basis maintenance as an operational activity does not need to be considered separately within the ES.
- 3.3.3 The Inspectorate accepts that as the Proposed Development would form an integral part of the infrastructure in the area, its decommissioning is not envisaged and therefore that decommissioning of the Proposed Development as a whole is not proposed to be included in the ES (Section 2.10 and paragraph 5.3.10). The Inspectorate considers that this is a reasonable approach considering the specific nature and characteristics of the Proposed Development.
- 3.3.4 The Scoping Report at paragraph 6.3.4 (Chapter 6 Air Quality) and in the Biodiversity aspect chapter (Chapter 7), identify that other roads could require traffic screening and thus fall within the Affected Road Network (ARN). The ARN has currently been determined based on the Option Selection stage but will be reviewed as part of the ongoing consideration of the design options. The ES should clearly identify the ARN, based on the finalised traffic model and the process adopted to determine the ARN should be described in the ES. Technical aspect chapters underpinned by traffic modelling, such as air quality and noise, should clearly demonstrate that they are based on the final ARN.

- 3.3.5 Scoping Report paragraphs 5.3.1 and 5.3.2 state that due to the Covid-19 pandemic, traffic count data collected post March 2020 is not representative of typical conditions and therefore assumptions have been made for baseline conditions to inform scoping, including the use of traffic distribution patterns from the 2015 mobile network data, factored up to 2019. The Inspectorate also notes that it is anticipated that the traffic data for the ES will be based on the guidance within the May 2021 appraisal update to Transport Analysis Guidance (TAG). The Applicant should make effort to consult and agree on traffic and transport baseline conditions with the relevant Highways Authorities.
- 3.3.6 Whilst it is noted at Scoping Report paragraph 5.3.6 that the ES and DCO will set out the parameters of the Proposed Development, it is recommended that the ES cross-references to where parameters are secured in the DCO for ease of reference.
- 3.3.7 The Inspectorate notes that paragraph 5.5.5 of the Scoping Report considers that effects from multiple schemes on a single receptor are not considered to be cumulative effects, but also that any receptor that experiences an effect(s) from more than one scheme will be considered as a whole and only reported once in the ES. The Inspectorate recognises the intention to avoid duplication of assessments of effects. The ES should however make clear what the likely significant effects on that receptor are, and from which scheme(s), including whether the effects are additive or synergistic.
- 3.3.8 Scoping Report paragraph 5.2.11 identifies the format for the ES and states this will be "split by scheme where applicable". Where this approach is taken in the aspect chapters, the ES should also make clear the likely significant effects of the Proposed Development as a whole, drawing together the combined effects of the schemes, as necessary.

Baseline Scenario

- 3.3.9 The ES should include a description of the baseline scenario with and without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.

Forecasting Methods or Evidence

- 3.3.10 The ES should contain the timescales upon which the surveys which underpin the technical assessments have been based. For clarity, this information should be provided either in the introductory chapters of the ES (with confirmation that these timescales apply to all chapters), or in each aspect chapter.
- 3.3.11 The Inspectorate expects the ES to include a chapter setting out the overarching methodology for the assessment, which clearly distinguishes effects that are 'significant' from 'non-significant' effects. Any departure from that methodology should be described in individual aspect assessment chapters.
- 3.3.12 It is noted that those effects not deemed significant will be provided in a Technical Appendix in table format, whilst those that are concluded to be significant will form the main text of the ES. Where the effect is determined by

professional judgement as a result of falling into two categories in the significance matrix (eg minor/moderate), the ES should make clear whether the effect is deemed to be significant and thus included in the ES, or not significant and included in the Technical Appendix. Where an effect is reduced from significant to not significant due to the application of mitigation, the mitigation measure, its effectiveness, and the mechanism to secure such mitigation must be clearly articulated in the ES.

- 3.3.13 The ES should include details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.
- 3.3.14 Paragraph 5.4.4 of the Scoping Report states that "*In deriving significance of effects, the assessor will consider potential mitigation measures that could be viable for reducing effects, recognising that detailed mitigation strategies cannot be developed at this stage.*" The ES should clearly state the likely efficacy and deliverability of any mitigation measures relied upon in reaching the conclusion of significant effects, particularly where uncertainty regarding the mitigation remains.

Residues and Emissions

- 3.3.15 The EIA Regulations require an estimate, by type and quantity, of expected residues and emissions. Specific reference should be made to water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases, where relevant. This information should be provided in a clear and consistent fashion and may be integrated into the relevant aspect assessments.

Mitigation and Monitoring

- 3.3.16 Any mitigation relied upon for the purposes of the assessment should be explained in detail within the ES. The likely efficacy of the mitigation proposed should be explained with reference to residual effects. The ES should also address how any mitigation proposed is secured, with reference to specific dDCO requirements or other legally binding agreements.
- 3.3.17 Scoping Report Section 2.8 states that mitigation will remain flexible where design and parameters remain flexible in the DCO. It is anticipated that indicative mitigation plans will be secured in the DCO. Where mitigation is relied upon in an assessment of significant effects, this should be set out and secured via the DCO. Where possible, the Applicant should make effort to define mitigation measures to be delivered in the ES and ensure that mitigation measures refined beyond submission remain within the parameters of those set out in the ES and DCO.
- 3.3.18 The ES should identify and describe any proposed monitoring of significant adverse effects and how the results of such monitoring would be utilised to inform any necessary remedial actions.

Risks of Major Accidents and/or Disasters

- 3.3.19 The Scoping Report at Section 5.6 and in Appendix 18A concludes that the Proposed Development *"is unlikely to result in an unacceptable risk of significant environmental effects from major events and therefore it is proposed that this will be scoped out of the EIA."*
- 3.3.20 The Inspectorate acknowledges the assessment provided in Appendix 18A and is content that the ES does not need to include a standalone major accidents and/or disaster aspect chapter, provided consideration of such impacts are included in the relevant aspect chapters, where likely significant effects could occur. The Inspectorate notes the statement in Appendix 18A that *"All events identified will continue to be reviewed with the design team to ensure the risks are understood and addressed through design as necessary."* The ES should ensure that the consideration of major accidents and/or events reflects the Proposed Development for which development consent is being sought.
- 3.3.21 The Applicant's attention is also directed to the comments of Cumbria County Council, the Health and Safety Executive (HSE) and National Grid at Appendix 2 with regards other potential hazards within or in close proximity to the Proposed Development that have not been identified in the long list. These include ground instability risks associated with the Gypsum mines at Kirkby Thore, Hulands Quarry, railways and pipelines.
- 3.3.22 The ES should include a description and assessment (where relevant) of the likely significant effects resulting from accidents and disasters applicable to the Proposed Development. The Applicant should make use of appropriate guidance (e.g. that referenced in the Health and Safety Executives (HSE) Annex to the Inspectorate's Advice Note 11) to better understand the likelihood of an occurrence and the Proposed Development's susceptibility to potential major accidents and hazards. The description and assessment should consider the vulnerability of the Proposed Development to a potential accident or disaster and also the Proposed Development's potential to cause an accident or disaster. The assessment should specifically assess significant effects resulting from the risks to human health, cultural heritage or the environment. Any measures that will be employed to prevent and control significant effects should be presented in the ES.
- 3.3.23 Relevant information available and obtained through risk assessments pursuant to national legislation may be used for this purpose. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.

Climate and Climate Change

- 3.3.24 The ES should include a description and assessment (where relevant) of the likely significant effects the Proposed Development has on climate (for example having regard to the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change. Where relevant, the ES should describe and assess the adaptive capacity that has been incorporated into the design of the Proposed Development. This may include, for example, alternative

measures such as changes in the use of materials or construction and design techniques that will be more resilient to risks from climate change.

Transboundary Effects

- 3.3.25 Schedule 4 Part 5 of the EIA Regulations requires a description of the likely significant transboundary effects to be provided in an ES.
- 3.3.26 The Scoping Report at paragraph 5.3.11 concludes that the Proposed Development is not likely to have significant effects on a European Economic Area (EEA) State and proposes that transboundary effects do not need to be considered within the ES.
- 3.3.27 Having considered the nature and location of the Proposed Development, the Inspectorate is not aware that there are potential pathways of effect to any EEA states but recommends that, for the avoidance of doubt, the ES details any such consideration and assessment.

A Reference List

- 3.3.28 A reference list detailing the sources used for the descriptions and assessments must be included in the ES.

3.4 Coronavirus (COVID-19) Environmental Information and Data Collection

- 3.4.1 The Inspectorate understands government enforced measures in response to COVID-19 may have consequences for an applicant's ability to obtain relevant environmental information for the purposes of their ES. The Inspectorate understands that conducting specific surveys and obtaining representative data may be difficult in the current circumstance.
- 3.4.2 The Inspectorate has a duty to ensure that the environmental assessments necessary to inform a robust DCO application are supported by relevant and up to date information. Working closely with consultation bodies, the Inspectorate will seek to adopt a flexible approach, balancing the requirement for suitable rigour and scientific certainty in assessments with pragmatism in order to support the preparation and determination of applications in a timely fashion.
- 3.4.3 Applicants should make effort to agree their approach to the collection and presentation of information with relevant consultation bodies. In turn the Inspectorate expects that consultation bodies will work with applicants to find suitable approaches and points of reference to allow preparation of applications at this time. The Inspectorate is required to take into account the advice it receives from the consultation bodies and will continue to do so in this regard.

3.5 Confidential and Sensitive Information

- 3.5.1 In some circumstances it will be appropriate for information to be kept confidential. In particular, this may relate to personal information specifying the names and qualifications of those undertaking the assessments and/or the

presence and locations of rare or sensitive species such as badgers, rare birds and plants where disturbance, damage, persecution or commercial exploitation may result from publication of the information.

- 3.5.2 Where documents are intended to remain confidential the Applicant should provide these as separate documents with their confidential nature clearly indicated in the title and watermarked as such on each page. The information should not be incorporated within other documents that are intended for publication or which the Inspectorate would be required to disclose under the Environmental Information Regulations 2004.
- 3.5.3 The Inspectorate adheres to the data protection protocols set down by the Information Commissioners Office³. Please refer to the Inspectorate's National Infrastructure privacy notice⁴ for further information on how personal data is managed during the Planning Act 2008 process.

³ <https://ico.org.uk>

⁴ <https://www.gov.uk/government/publications/planning-inspectorate-privacy-notice>

4. ASPECT BASED SCOPING TABLES

4.1 Air Quality

(Scoping Report Chapter 6)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.1.1	Table 6-1 (Durham County Council)	PM ₁₀ and PM _{2.5} assessment	<p>Table 6-1 of the Scoping Report states that "<i>Based on the findings of the Option Selection stage Environmental Assessment Report (EAR), PM₁₀ concentrations are predicted to be below the Air Quality Objective. Therefore, as per paragraphs 2.21.2 and 2.21.4 in DMRB LA 105, an assessment of PM₁₀ and PM_{2.5} has been screened out.</i>"</p> <p>It is unclear whether an assessment of PM₁₀ and PM_{2.5} is proposed to be scoped out of the assessment as the Inspectorate also notes that Section 6.6.4 (Potential operational impacts) states "<i>These changes will impact on emissions of the main traffic related pollutants, NOX and PM10. As a result, pollutant concentrations at receptors in the vicinity of the preliminary design, and in the wider study area near the ARN will be affected by the project</i>" and Tables 6-4 and 6-5 both state that "<i>Nothing is Proposed to be scoped out for air quality at this stage</i>". No matters are identified to be scoped out of the Air Quality aspect in Tables 6-4 and 6-5 of the Scoping Report.</p> <p>For the avoidance of doubt, the Inspectorate is not in agreement that an assessment of PM₁₀ and PM_{2.5} can be scoped out of the assessment across all parts of the scheme at this stage based on the evidence currently presented.</p>

ID	Ref	Other points	Inspectorate's comments
4.1.2	Table 6-1 (Durham County Council) and Paragraph 6.9.9	Air quality modelling methodology	Table 6-1 of the Scoping Report states that the Atmospheric Dispersion Modelling Software-Roads dispersion model has been used for the assessment of preliminary design, applying a "simple" method which considers 24-hour Annual Average Daily Traffic (AADT) rather than the various peak and interpeak periods. The ES should explain why this method is appropriate for the Proposed Development.
4.1.3	Table 6-1 (Durham County Council)	Model verification	<p>Table 6-1 of the Scoping Report states that verification of air quality monitoring will be undertaken against 2018 nitrogen dioxide (NO₂) monitoring data, where located within the preliminary design traffic network and considered to be representative.</p> <p>The verification should be undertaken using the most recently available NO₂ monitoring data, if updated since 2018.</p>
4.1.4	Table 6-1 (Durham County Council)	Meteorological monitoring stations	<p>Table 6-1 of the Scoping Report states that the use of one meteorological data site is considered to be appropriate for consideration against annual mean averaging periods.</p> <p>Due to the extended linear nature of the Proposed Development, the Inspectorate considers that further justification is required for the use of a single meteorological monitoring station, to provide assurance that it is representative of the entire route of the Proposed Development.</p>
4.1.5	Paragraphs 6.5.1 and 6.5.3	Baseline conditions - Air Quality Management Areas (AQMA)	It is noted from Cumbria County Council comments (see Appendix 2) that an area around Castlegate is to be designated as an AQMA. The ES should ensure that this AQMA is considered within the impact assessment where increases in pollutant concentrations could occur as a result of the Proposed Development.

ID	Ref	Other points	Inspectorate's comments
4.1.6	Paragraphs 6.5.1 and 6.5.4	Site specific air quality monitoring	The Inspectorate notes that the baseline air quality information for the Proposed Development will be collected from the sources listed at paragraph 6.5.1, together with information obtained from the Option Selection stage Environmental Assessment Report (EAR) (Highways England, 2018). No further project-specific monitoring appears to be proposed unless gaps are identified in the local authority monitoring (paragraph 6.5.4). Where no further monitoring is undertaken, the ES should clearly explain why the baseline information is deemed sufficient to determine the baseline conditions for the purposes of the impact assessment.
4.1.7	Paragraphs 6.5.9 and 6.5.11	Sensitive receptors	The Inspectorate notes that the sensitive receptors were identified during the development of the Option Selection stage EAR and are considered to be worst-case locations. The Scoping Report acknowledges that this is not exhaustive and there may be others that will experience air quality impacts as a result of the project. The ES should clearly identify the locations of sensitive receptors and justify their selection as worst-case representative locations in line with appropriate guidance. These should be identified on supporting figures. The ES should ensure the worst case is representative of the Proposed Development for which development consent is being sought, particularly where this differs from the Option Selection stage EAR.
4.1.8	Paragraph 6.8.1	Likely significant effects - construction	Scoping Report paragraph 6.8.1 states that construction impacts are not considered to be significant due to their temporary nature and they will be controlled through the Environmental Management Plan (EMP). As construction is anticipated to last six years (paragraph 8.6.1), the construction phasing is currently unknown (section 2.7) and given that the construction traffic information being unavailable at this time (paragraph 6.6.2), it is considered that insufficient information has been provided to support this assertion. The ES

ID	Ref	Other points	Inspectorate's comments
			should justify any conclusions based on sufficiently detailed information.
4.1.9	Paragraphs 6.8.8 and 6.9.25	Likely significant effects – option selection, and assessment methodology	<p>The Inspectorate notes reference to the likely nitrogen deposition as a result of the proposed preferred route. This is based on the modelled information at the Option Selection stage EAR for the Bowes Moor Site of Special Scientific Interest (SSSI)/North Pennine Moors Special Protection Area (SPA) and Special Area of Conservation (SAC), and Augill Valley Pasture SSSI, together with reference to a background nitrogen deposition rate for 2015 of 20.7kgN/ha/yr. It is unclear to which designated site the quoted background deposition rate applies. The ES should ensure the most recent Air Pollution Information System (APIS) data, including critical loads, for ecological designated sites is used within the impact assessment and to understand trends of air quality at these sites.</p> <p>The Inspectorate notes the intention to apply the Design Manual for Roads and Bridges (DMRB) LA105 methodology and the measure of a loss of one species metric. The assessment should take account of the requirements of "<i>Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations, 2018 (NEA001)</i>".</p>
4.1.10	Paragraph 6.9.16	Use of professional judgement	Paragraph 6.9.16 of the Scoping Report states that professional judgement will be applied alongside the application of GIS tools to identify sensitive receptors. Where professional judgement has been applied, this should be clearly stated in the ES, together with any assumptions or limitations.
4.1.11	Section 6.9 and	Assessment methodology – ammonia	The Scoping Report confirms that the main traffic related pollutants, namely oxides of nitrogen (NOx) (together with nitrogen deposition) and PM ₁₀ , will be considered in the ES. The ES should also consider acid deposition and ammonia emissions from operational road traffic

ID	Ref	Other points	Inspectorate's comments
	paragraph 6.6.4		on sensitive receptors, such as ecological designated sites, where likely significant effects could occur.
4.1.12	N/A	Assessment methodology	The air quality assessment should consider the combined impact of all schemes within the Proposed Development, in addition to scheme-by-scheme effects (see comments in paragraph 3.3.8 of this Opinion).

4.2 Biodiversity

(Scoping Report Chapter 7)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.2.1	Paragraphs 7.8.2 and 7.8.3, Table 7-9, Table 7-10 construction and Table 7-11 operation	<p>Designated sites scoped out at this stage as listed in Tables 7-9, 7-10 and 7-11, including the following (various schemes, for construction and operation):</p> <ul style="list-style-type: none"> • Moor House Upper Teesdale Special Area of Conservation (SAC) • Udford Low Moss Site of Special Scientific Interest (SSSI) • Swindale Wood SSSI • Brignall Banks SSSI • Cowraik Quarry SSSI • Helbeck & Swindale Woods SSSI • Brignall Banks SSSI • Cowraik Quarry Local Nature Reserve (LNR) • Helbeck & Swindale Woods SAC • Helbeck Wood SSSI 	<p>The Inspectorate considers that if it can be demonstrated that there is no potential effect pathway between the Proposed Development and these designated sites, then the Inspectorate agrees that these can be scoped out.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
		<ul style="list-style-type: none"> • Myers Beck (Mardale Road) County Wildlife Site (CWS) • Swindale Woodland CWS • Aske Estate Woodlands Site of Importance to Nature Conservation (SINC) • Yanworth Wood CWS • Thorsgill Wood Local Wildlife Site (LWS) • Teesbank Woods, Rokeby LWS 	
4.2.2	Table 7-9, Table 7-10 and Table 7-11	Habitat - Upland Flushes, Fens and Swamps Priority Habitat for Appleby to Brough (Warcop) scheme – construction and operation	If it can be demonstrated that there is no potential effect pathway between the Proposed Development and upland flushes, fens and swamps priority habitat, the Inspectorate agrees that this can be scoped out. Any further habitat surveys undertaken for the Proposed Development should clearly set out presence / absence of this habitat within or in close to the Proposed Development (including having regard to the ARN) in demonstrating this .
4.2.3	Table 7-5, Table 7-9, Table 7-10 and Table 7-11	Habitat - Traditional Orchard Priority Habitat for the following schemes (construction and operation): <ul style="list-style-type: none"> • Appleby to Brough (Warcop) • A1(M) Junction 53 Scotch Corner 	The Inspectorate agrees on the basis of distance and likely absence of potential effect pathways that effects on Traditional Orchard Priority Habitat for the specified schemes can be scoped out of the ES.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.2.4	Table 7-10 and 7-11	Habitats – ancient woodland at the following schemes: <ul style="list-style-type: none"> • M6 Junction 40 • M6 Junction 40 to Kemplay Bank Roundabout • Appleby to Brough (Warcop) • Bowes Bypass • Stephen Bank to Carkin Moor • A1(M) Junction 53 Scotch Corner 	The Inspectorate considers that if it can be demonstrated that there is no potential effect pathway between the Proposed Development and ancient woodland, and that any further habitat surveys undertaken for the Proposed Development do not identify the presence of this habitat type within or in close proximity to the schemes and the ARN, such that it would be affected by the Proposed Development, then the Inspectorate agrees that this can be scoped out.
4.2.5	Table 7-11	Habitats – invasive species (operation) for all schemes	The Scoping Report references plant and animal invasive non-native species (INNS) at Section 7.5 of the Scoping Report, together with reference to mitigation at paragraph 7.7.3. It is noted to be scoped in for all schemes during construction (Table 7-10) and scoped out for operation (Table 7-11). The Inspectorate agrees that on the basis that likely significant effects associated with the spread of INNS will be assessed and mitigated in the ES for the construction phase, an assessment of invasive species during operation can be scoped out of the ES.
4.2.6	Paragraph 7.8.3, Table 7-9, Table 7-10 and Table 7-11	Hazel dormouse (all schemes – construction and operation)	On the basis that hazel dormouse have not been recorded in the area, there are no known introductions of this species to the area, and the stated absence of suitable habitat affected, the Inspectorate is content to scope out an assessment of effects on hazel dormouse. However, should the further studies and surveys proposed to inform the impact assessment identify suitable habitat and/or identify

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			possible presence of this species, the ES should include an assessment, where likely significant effects could occur.
4.2.7	Table 7-10 and Table 7-11	<p>A1(M) Junction 53 Scotch Corner scheme during construction and operation:</p> <ul style="list-style-type: none"> • Rivers and streams (nearest 0.7km) • Ponds (nearest 0.4km) • habitats which may support white-clawed crayfish, aquatic invertebrates, terrestrial invertebrates, fish, otter, water vole or reptiles – construction and operation 	<p>The justification for scoping out these habitats is not entirely clear from the Scoping Report, although it appears to be based on their absence (from desk-based records), an absence of effect pathway and/or distance from this scheme.</p> <p>The Inspectorate considers that if it can be demonstrated that there is no potential effect pathway between the Proposed Development and these receptors, and that any further habitat/species surveys undertaken for the Proposed Development do not identify the presence of such habitats/species in close proximity to this scheme then the Inspectorate agrees that this can be scoped out.</p>

ID	Ref	Other points	Inspectorate's comments
4.2.8	Paragraph 7.3.4 and Table 7-1	Study areas	<p>The Inspectorate welcomes the consideration of potential effect pathways regardless of distance when determining study areas; however, it is unclear whether the 'any other sites' excludes those sites identified in Table 7-1.</p> <p>The Inspectorate considers that study areas should be determined on the basis of the zones of influence (ZoI) from the Proposed Development, as opposed to the application of arbitrary distances. The ES should clearly identify the study areas/ZoI and provide a</p>

ID	Ref	Other points	Inspectorate's comments
			<p>robust justification as to why the defined study areas are appropriate for assessing potential impacts.</p> <p>The ES should also consider whether the study area selected for migratory fish species and otter, which may move up- and downstream within watercourses and habitats crossed by the Proposed Development (where present) is appropriate to identify the presence/absence of these ecological receptors. The Applicant is directed to the response of the EA at Appendix 2 of this Opinion.</p>
4.2.9	Paragraphs 7.3.9 to 7.3.12, and 7.5.49	Survey areas	<p>The Inspectorate notes the various ecological surveys that have been undertaken to inform the Proposed Development to date, including surveys that informed the Option Selection stages. Additionally, there are references to specific survey areas (such as 'Survey Area 9'), which is not identified in the Scoping Report.</p> <p>Given the variation between the surveys undertaken over time, coupled with changes to the project design/extent, the Inspectorate recommends that for clarity the ES should include figures to show the geographical extent of the surveys that have been used to inform the assessment.</p>
4.2.10	Paragraphs 7.5.6 and 7.5.8, Table 7-3 and Figure 7.1	ARN and designated sites	<p>The Inspectorate notes that designated sites within 200m of the ARN are listed in Table 7-3; however, they are not shown on Figure 7.1. The ES should also include figures to show the proximity of designated sites to the ARN, where considered in the ES.</p>
4.2.11	Table 7-4	Flood Storage basin with ponds on Thacka Beck	<p>This area is managed as a nature reserve by Cumbria Wildlife Trust and is located approximately 1.5km from the Proposed Development. This has not been included as a sensitive receptor in the Scoping Report. The ES should set out whether there is a pathway of effect for</p>

ID	Ref	Other points	Inspectorate's comments
			this site and assess effects on this site, where likely significant effects could occur.
4.2.12	Tables 7-3 and 7-8 and Paragraphs 7.5.47 to 7.5.48	River Eden SAC habitat – Rivers with floating vegetation often dominated by water crowfoot	Table 7-3 includes water crowfoot as a reason for designation of the River Eden SAC. Scoping Report paragraph 7.5.47 and Table 7-8 state that this feature was not found during the River Eden SAC surveys at the Option Selection stage. Natural England consider that water crowfoot is present in the study area and throughout the SAC. Impacts on this feature should be assessed in the ES where likely significant effects could occur.
4.2.13	Paragraphs 7.6.1 to 7.6.2	Potential impacts - habitat continuity and silt pollution impacts	Impacts from loss of habitat continuity during construction and operation in particular, at watercourse crossings and culverts for fish and mammal species, silt pollution in rivers from exposed soils and from accumulation of site water with high sediment loads due to earthworks and vehicle movements during construction are not included in the list of potential impacts. Scoping Report Chapter 15 does not identify ecological species as a sensitive receptor (Table 15-2). The ES should assess significant effects of these impacts on receptors where they are likely to occur.
4.2.14	Paragraph 7.6.2	Potential impacts – operation	The ES should consider potential impacts of watercourse crossings during operation, such as crossings of the River Eden within the Temple Sowerby to Appleby scheme, where likely significant effects could occur.
4.2.15	Paragraphs 7.7.1 and 7.7.2	Design – post-construction planting and Mitigation – compensatory habitats	It is not clear whether the post-construction planting enhancement proposed and measured using the Defra Biodiversity Metric, would be delivered through the DCO or through other means. Furthermore, it is not clear whether such planting, or other compensatory habitats proposed, would be located beyond the proposed DCO boundary.

ID	Ref	Other points	Inspectorate's comments
			<p>The ES should make clear what mitigation, compensation and/or enhancement measures are being relied upon for the conclusions of the EIA and how these are delivered and secured through the DCO. Any additional enhancements not relied upon for the ES should be clearly identified as such, together with how they are to be secured/delivered.</p>
4.2.16	Paragraphs 7.7.2 and 7.7.3	Embedded and essential mitigation measures	<p>The Inspectorate notes the list of embedded and essential mitigation measures, which are stated to be integral to the Proposed Development and have been considered in determining the magnitude of impact. The ES should ensure that such measures relied upon when determining magnitude are clearly secured and deliverable. The efficacy of such measures should also be explained in the ES.</p>
4.2.17	Paragraph 7.8.4	Incomplete surveys and precautionary approach to assessment	<p>The Inspectorate notes the potential requirement for an assumed presence and precautionary approach to the impact assessment (on a worst-case) basis in the event that surveys cannot be fully completed in all areas prior to the completion of the ES. The example provided is that of sites suitable for bat or reptile hibernation that may require surveys in autumn/winter 2021/22.</p> <p>The ES should be as complete as possible at the point of DCO application and any information gaps resulting in a precautionary approach should be discussed in terms of limitations of the assessment, and, where possible, the approach agreed with relevant consultation bodies.</p>
4.2.18	Paragraphs 7.9.4 to 7.9.10	Assessment methodology – assessing significance	<p>The Inspectorate notes the proposed application of Table 3.13 of DRMB LA08 and the statement made in paragraph 7.9.10 that significant effects will be only those determined to be 'moderate'/ 'large'/ 'very large'. By inference, significant effects would never be identified on ecological receptors of local importance, and only major</p>

ID	Ref	Other points	Inspectorate's comments
			<p>effects would be considered as significant on receptors of county or equivalent authority importance. The CIEEM Guidelines for Ecological Impact Assessment (2018) notes that effects may be significant at the local scale, particularly in view of policies for no net loss of biodiversity.</p> <p>Although the Scoping Report acknowledges at paragraph 7.9.4 that the assessment will in addition be undertaken in accordance with CIEEM Guidelines, it is not clear how this will be reflected in the assessment. The ES should clearly state where effects are deemed to be significant or non-significant in accordance with the EIA Regulations. The assessment should also consider and determine whether effects may be significant for those receptors valued at County level or below.</p>
4.2.19	Paragraphs 7.9.11 to 7.9.16	Proposed survey methodology	<p>A full suite of surveys is proposed within 250m of the construction boundary initially; however, no details are included in the Scoping Report as to which surveys will be undertaken or when. The scope of the surveys undertaken to inform the impact assessment should be discussed and where possible, agreed with relevant consultation bodies. The ES should identify the methodologies applied, timings and results and be accompanied by clear figures, as appropriate. Where methods depart from best practice guidelines or follow novel approaches, this should be expanded on in the ES, together with any assumptions or limitations.</p>

4.3 Climate

(Scoping Report Chapter 8)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.3.1	Table 8-12	Vulnerability to climate change during construction	<p>Although paragraph 8.9.11, Table 8-12 and footnote 99 seek to scope out vulnerability to climate change during construction, paragraph 8.6.6 of the Scoping Report explains that "<i>climate change is expected to lead to changes in temperature and weather patterns which have the potential to impact on the construction of the Project...The construction period is currently proposed to take place between 2024 and 2029 and could be effected by both summer and winter related climate change impacts</i>".</p> <p>Whilst the Inspectorate acknowledges the relatively limited duration of the construction period, the Applicant also states that "<i>extreme weather events are a feature of the baseline climate and projected climate at the time of construction</i>", and that "<i>the EMP would be prepared by the appointed contractor and implemented during the construction period to address vulnerability to climate impacts</i>".</p> <p>As detail of the EMP is not yet defined by way of mitigating potential effects of vulnerability to climate change during construction, the Inspectorate does not agree that matter can be scoped out at this stage.</p>

ID	Ref	Other points	Inspectorate's comments
4.3.2	Table 8-5	Baseline Conditions	Table 8-5 provides baseline conditions of the climate characteristics for the north west and north east regions but does not specify which sections of the Proposed Development the east and west regions

ID	Ref	Other points	Inspectorate's comments
			relate to. The ES should relate the described baseline conditions to the relevant sections of the Proposed Development. Additionally, the descriptions are more detailed for the north west region than for the north east. The baseline conditions should be sufficiently and consistently detailed across all the sections of the Proposed Development.
4.3.3	Paragraph 8.5.28	Climate change projections	The EA's climate change projections have been updated in July 2021. The appropriate and most up to date climate change projections should be applied to the assessments in the ES for the Proposed Development. The application of climate change projections should be justified, for example, flood risk projections should be applied using criteria set out by the Environment Agency (https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances)
4.3.4	Paragraph 8.6.6	Climate change delays	Scoping Report paragraph 8.6.6 identifies that extreme weather events may result in a disruption of supply materials and potentially cause delays. This may have a knock-on effect on the construction programme and should be considered when applying worst-case scenarios.
4.3.5	Paragraphs 8.6.8 to 8.6.11 and Table 8-10	Potential climate change impacts during operation	Scoping Report paragraphs 8.6.8 to 8.6.11 only describe some of the impacts set out in Table 8-10 but it is not made clear whether only some or all of the impacts set out in the Table will be assessed in the ES. The ES should provide an assessment of the impacts set out in Table 8-10 where significant effects are likely to occur.

4.4 Cultural Heritage

(Scoping Report Chapter 9)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.4.1	Table 9-15 (operation)	Physical effects during operation	Physical effects on heritage resources will have occurred during construction phase and as such the Applicant seeks to scope this matter out in terms of the assessment of operational effects. The Inspectorate agrees that on the basis that such effects will be considered for the operation phase this can be scoped out of the ES.

ID	Ref	Other points	Inspectorate's comments
4.4.2	Table 9-1 (Historic England 22 December 2020)	Trial trenching	The Inspectorate considers that efforts should be made to complete trial trenching prior to the making of an application. Where available the results of trial trenching must inform the baseline assessment. Should complete trial trenching not be possible, the ES should identify the limitations to any intrusive investigation and explain the information that has been used and any key assumptions made so as to inform the worst-case assessment. The worst-case assessment approach should be agreed with relevant consultation bodies, where possible.
4.4.3	Paragraph 9.5.2	Baseline data – Historic Landscape Characterisation (HLC) data	Historic Landscape Characterisation (HLC) data available held by the local authorities along the route is not referenced in the Scoping Report. The ES should include the HLC data in the Cultural Heritage aspect chapter. This information should also inform the Landscape and Visual aspect chapter as appropriate.

ID	Ref	Other points	Inspectorate's comments
4.4.4	N/A	Potential beneficial effects	The ES should consider the potential public benefits of the archaeological research, evaluation and mitigation in the overall assessment of significance of residual effects. This should be embedded within the scheme with clear outcomes for public participation and for legacy interpretation of the heritage of the route and its environs.
4.4.5	N/A	Assessment of effects	The ES should consider the overall combined effect(s) of the individual schemes on the historic landscape character.
4.4.6	Paragraph 15.7.6	Potential impacts - impacts on buried archaeology from hydrological alterations	Flood risk and hydrological mitigation measures have potential to impact on buried archaeology for example, locating settlement ponds and any alterations to embankments. Impacts on buried archaeology as a result of hydrological alterations should be assessed, where significant effects are likely to occur.

4.5 Geology and Soils

(Scoping Report Chapter 10)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.5.1	Paragraph 10.8.1	Risk to Construction Workers	<p>Paragraph 10.8.1 states that the assessment of risks to workers is to be controlled by legislation such as the Construction (Design and Management) Regulations and as such does not form part of the EIA.</p> <p>The Inspectorate agrees that on this basis risks to construction and operational workers can be scoped out of the Geology and soils chapter.</p>
4.5.2	Paragraph 10.8.3 and Table 10-11	Assessment of Unexploded Ordnance (UXO) for all schemes, during construction	<p>Table 10-3 to Table 10-11 of the Scoping Report do not identify significant potential for UXO for this project, therefore the Applicant is seeking to scope out UXO assessment for the Geology and Soils aspect chapter of the ES. These tables state that the assessment of UXO risks to workers is not a requirement for the impact assessment, and such risks would be managed as a construction risk.</p> <p>On the basis of the low potential for UXO, the Inspectorate agrees that this matter can be scoped out of the Geology and Soils aspect chapter. However, particularly in respect of the Warcop Ministry of Defence facility, the ES should explain the approach used to assess the UXO risk and include the Zetica Maps, alongside any Pre-Desk Study Assessment (PDSA) in justifying that further detailed assessment is not required.</p> <p>The ES should include a description of mitigation / control measures in the EMP in event that unknown UXO are encountered.</p>
4.5.3	Paragraph 10.8.12	Impact of contamination on ecological receptors	<p>Paragraph 10.8.12 of the Scoping Report states that the contamination assessment will not specifically assess potential</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			impacts of contamination on ecological receptors. On the basis that effects on groundwater and surface water quality are considered in the ES, the Inspectorate considers that a separate assessment of contamination is not required within the ES.
4.5.4	Table 10-12 Construction and Table 10-13 operation	Geological features for all schemes except Appleby to Brough and Bowes Bypass, construction and operation	The Inspectorate agrees that it is appropriate to scope out geological / geodiversity features where none are identified.
4.5.5	Table 10-12 Construction and Table 10-13 operation	Historic contamination on all schemes except Appleby to Brough and Bowes Bypass, construction and operation	<p>The Inspectorate agrees that it is appropriate to scope out historic contamination where no potentially contaminative land uses are noted within 250m of the DCO boundary.</p> <p>The Inspectorate disagrees that historic contamination during construction can be scoped out where potentially contaminative land uses are noted. Whilst this is likely to be a typographic error (as the table proposes to both scope in and scope out historic contamination), Table 10-12 as currently written appears to scope this matter out of 8 of the 10 works schemes, which is not considered appropriate as these sites will require assessment as per Scoping Report Section 10.7.5.</p> <p>During operation, the Inspectorate agrees that historical contamination can be scoped out of the assessment. Any likely significant effects would be considered as part of the construction effects assessment.</p>
4.5.6	Table 10-12 Construction and Table	New contamination for all schemes, construction and operation	The Inspectorate notes that the term "new contamination" is not defined or used elsewhere other than in Tables 10-12 and 10-13.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
	10-13 Operation		<p>Paragraph 10.6.7 refers to "Areas of contamination encountered during the investigation that are additional to those expected from desk based sources".</p> <p>Paragraph 10.5.4 states that "There is the potential that leaks or spills could occur from construction materials and equipment. It is envisaged that, with appropriate site controls, these are likely to be limited in extent".</p> <p>The Inspectorate is unclear as to whether the term "new contamination" is in either, or both of these contexts or another.</p> <p>On this basis the Inspectorate is unable to agree to matters of "new contamination" being scoped out of the assessment at this stage for any phase of the development.</p>
4.5.7	Table 10-12 Construction and Table 10-13 Operation	Soil resources at A1(M) J53 Scotch Corner Scotch	<p>Paragraphs 2.5.11 to 2.5.13 of the Scoping Report explains the limited scale of works at Scotch Corner. Table 10-11 states that there is ALC Grade 3 agricultural land in this area.</p> <p>Table 10-12 does not seek to scope out assessment of soil resources during construction, but nor is it specifically stated as being within the scope in the A1(M) J53 Scotch Corner column. The 'scope in' row of Table 10-12 also implies that soil resources is scoped in routewide. The Inspectorate therefore considers that an assessment of construction effects on soils at Scotch Corner should be provided where significant effects could occur.</p> <p>During operation, the Inspectorate agrees that significant effects on soil resources at Scotch Corner can be scoped out on the basis that such effects would be akin to those associated with the A66 as currently operating.</p>

ID	Ref	Other points	Inspectorate's comments
4.5.8	General and Paragraph 10.1.3	Geotechnical risk register and major accidents and disasters	<p>Paragraph 10.1.3 of the Scoping Report states that the assessment of impacts due to ground stability is not currently within the scope of this chapter, as these are stated to be assessed and mitigated in line with the requirements of CD 622 Managing geotechnical risk (Highways England, 2020a).</p> <p>The Scoping Report identifies current and historic mining for materials including gypsum, gravel, and other superficial deposits, and localised areas of potentially very soft peat deposits. There are also small areas that are identified to be within the vicinity of known coal mining features or within coal authority reporting or surface coal resource areas.</p> <p>The ES should incorporate a geotechnical risk register including, but not limited to, known and potentially unknown or unrecorded extraction, mining etc in relation to geotechnical stability and major accidents / disasters.</p>
4.5.9	Paragraph 10.1.3	Assessment of Peat resources	<p>Paragraph 10.1.3 states that the DMRB places the assessment of the loss of peat as a resource in the Material Assets and Waste chapter (see Chapter 12) and assessment of the loss of peat on Climate Change in the Climate assessment (Chapter 8: Climate). As a result, the Geology & Soils assessment will not include these aspects, but it will present details of any recorded peat deposits for cross-reference with other chapters. The Inspectorate considers that, although not specifically referred to as such, the loss of peat in terms of climate change will be covered as part of the land use change categories as set out in both tables 8-7 and 8-8 during construction and operation respectively.</p> <p>The Inspectorate is in agreement with this approach. It is noted that the presence of peat deposits may require assessment in relation to</p>

ID	Ref	Other points	Inspectorate's comments
			<p>stability hazards and ground gas generation which should form a part of the geology and soils chapter.</p> <p>The ES should also include an assessment of temporary and permanent land take and the effects on soil resources in relation to appropriate soil handling requirements so as to minimise soil disturbance, soil damage, soil loss and enhance soil reuse opportunities.</p>
4.5.10	Paragraph 10.2.2	Inclusion of Ground Investigation data	<p>Paragraph 10.2.2 of the Scoping Report states that intrusive, and where required non-intrusive, preliminary ground investigation and agricultural soil surveys preceding the Environmental Statement will be targeted within the indicative DCO boundary. Although further phases of intrusive ground investigation may be completed to inform detailed design, the information from any such investigations will not be available in time to inform the EIA. This should be addressed and considered as part of any description of assessment assumptions / limitations.</p> <p>The ES should include an assessment of as much preliminary ground investigation data as possible. The ES and/or relevant mitigation and management plans should be further updated based on the results of the detailed design ground investigations.</p>
4.5.11	Paragraph 10.2.3	Study Area	<p>Paragraph 10.2.3 of the Scoping Report states that the study area may require extension beyond the 1km buffer where necessary in order to capture potential impacts on groundwater quality from significant contamination sources that lie close to the study area boundary. A risk-based approach will be taken to the extension of the study area based on the data reviewed.</p> <p>Where the study area is extended, the ES should appraise this, and include it on any relevant figures.</p>

ID	Ref	Other points	Inspectorate's comments
4.5.12	Table 10-1 (Durham County Council)	Identification of potentially contaminated sites	<p>The ES should be consistent in its approach to identifying and naming contaminated sites.</p> <p>The Inspectorate also notes that a number of potential human burial sites, and animal burial sites associated with previous foot and mouth outbreaks are not listed within the Scoping Report and should be considered where relevant as part of the desk-based assessment.</p>
4.5.13	Table 10-1 (North Pennines AONB)	Geodiversity assets	<p>Table 10-1 of the Scoping Report states that the AONB designation would take precedence over the UNESCO Global Geopark designation within the North Pennines AONB.</p> <p>The Inspectorate is not in agreement that one designation in this area should take precedence over another, and each should be considered separately in the assessment of significance of effect. The Inspectorate is of the opinion that the AONB designation should be assessed in relation to landscape and visual impacts (Chapter 11 of the Scoping Report) and the impact on geodiversity and geological designations, where identified, should be assessed within the Geology and Soils Chapter (as per Table 10-12).</p>
4.5.14	Table 10-3 to table 10- 11	Potential sources of contamination	<p>The ES should define the methodology for determining whether a land use is considered to be a potential source of contamination.</p> <p>The ES should also define how these potential sources of contamination are to be described or represented (figures etc). The Inspectorate notes that the ES will include typical contaminants associated with the specific industries (paragraph 10.8.11). This should also include an assessment of potentially leachable contaminants.</p>
4.5.15	Paragraph 10.5.3	Assessment of controlled waters risk	Paragraph 10.5.3 states that there is the potential for construction phase impacts on human health, surface water and groundwater

ID	Ref	Other points	Inspectorate's comments
			<p>quality associated with mobilisation of contaminants within the ground.</p> <p>The ES should clearly define where risks to groundwater and surface water quality in relation to contaminated land are to be assessed. Chapter 15 of the Scoping Report presents information on aquifer designations, location of surface water bodies etc, but Chapter 10 also references water quality and the quantitative assessment of preliminary ground investigation data. Appropriate cross referencing should be made to aid understanding of the overall assessment of significance of effects.</p>
4.5.16	Paragraph 10.5.5	Geodiversity impacts	<p>The conclusion within paragraph 10.5.5 that no potential impacts on geodiversity resources have been identified based upon the existing baseline data does not match the identification of features in Table 10-3 to 10-11 and Table 10-12 and section 10.7.3. These scope in the assessment of sites of geological importance and geodiversity and references the UNESCO Geopark. The Inspectorate therefore considers these matters remain within the scope and that an assessment of likely significant effects will be provided in terms of geodiversity.</p>
4.5.17	Paragraph 10.6.7	Inclusion of further land identified as contaminated	<p>Paragraph 10.6.7 of the Scoping Report states that areas of contamination encountered during the ground investigation that are additional to those expected from desk-based sources will be evaluated and, where appropriate, included within the assessment.</p> <p>The ES should define the methodology that requires the ground investigation data to be included ("where appropriate") and also define the assessment methodology for the assessment of contamination risks.</p>

ID	Ref	Other points	Inspectorate's comments
4.5.18	Paragraph 10.6.8	Mitigation measures and reuse of materials	<p>Paragraph 10.6.8 of the Scoping Report states that where concentrations of contaminants are not acceptable, remediation will be required.</p> <p>The ES should ensure that any mitigation measures such as the Materials Management Plan, remediation approach and site waste management plan are compatible. The mitigation measures should also include reference to unforeseen contamination if encountered during construction.</p>
4.5.19	Paragraph 10.6.11	Materials Management Plan (MMP)	<p>The MMP should be considered in line with the consideration of potential receiver sites discussed in section 12 below, and any other remediation documents/measures to ensure compatibility.</p>
4.5.20	Paragraph 10.6.14	Operational pollution incidents	<p>Paragraph 10.6.4 of the Scoping Report states that any soils which become significantly affected by pollution incidents during operation would need to be assessed and if necessary, remediated to reduce the risk of any contamination migrating across a wider area.</p> <p>Where this is deemed to be required, the ES should detail how this is proposed to be managed in relation to land access and other considerations including provisions to be embedded into the HEMP or otherwise.</p>
4.5.21	Paragraph 10.7.3 and 10.7.5	Assessment of likely significant effects	<p>Scoping Report paragraph 10.7.3 states that based upon the baseline information currently available, and given the design and mitigation measures proposed, no significant effects are anticipated during construction as a result of contamination on human health receptors or controlled waters.</p> <p>Scoping Report paragraph 10.7.5 states that to determine whether significant effects are likely as a result of contamination, an assessment process will be carried out for each scheme which will</p>

ID	Ref	Other points	Inspectorate's comments
			<p>consider the potential for each identified contamination source to be disturbed or mobilised.</p> <p>These sections would appear to be contradictory. The Inspectorate is of the opinion that the approach within paragraph 10.7.5, to assess contaminated land within each scheme, is appropriate.</p>
4.5.22	Paragraph 10.7.6	Identification of potentially contaminated sites	<p>The Scoping Report does not define why Longriggs Mine is discussed individually in relation to potential contamination sources and other identified sites in the baseline data Table 10-3 to 10-11 are not. The ES should clearly define which sites are included within the assessment of potentially contaminated land and the methodology used to select these.</p>
4.5.23	Paragraph 10.8.12	Identification of receptors	<p>The potential receptors of contamination that will be assessed are listed as human health, groundwater, and surface water resources.</p> <p>It is noted from the consultation responses (see Appendix 2 to this Opinion) that the local authorities hold records of Potable Water Sources that do not appear within available data sources due to them not having an abstraction licence. These are known as 'Spring supplies' and are common in the area. The ES should include records of the spring supplies where available.</p> <p>As noted in 10.6.9 of the Scoping Report, the ES should also consider the integrity of structures and foundations as part of the assessment of contaminated land. It is noted that the preliminary ground investigation data may not be sufficient to fully assess this, and as such the ES should confirm that mitigation may follow as part of detailed design and additional risk assessment such as a foundation works risk assessment.</p>

4.6 Landscape and Visual

(Scoping Report Chapter 11)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.6.1	Table 11-8 and Table 11-9 and paragraph 11.5.11	Effects on the Lake District National Park during construction and operation (M6 Junction 40 Penrith scheme)	On the basis that the setting of the National Park within this area is deemed to be heavily influenced by major highways and other transport infrastructure such as the M6 and West Coast Mainline railway, coupled with the limited nature and character of the works proposed at this scheme that are assessed as unlikely to have a noticeable impact on the setting of the Lake District National Park, the Inspectorate is content that landscape and visual effects on this designation can be scoped out of the ES.
4.6.2	Table 11-5, Table 11-8 and Table 11-9	<p>Effects on the following Conservation Areas during construction and operation (for various schemes):</p> <ul style="list-style-type: none"> • Penrith • Penrith New Streets • Temple Sowerby • Appleby-In-Westmorland • Settle to Carlisle Railway • Church Brough • Barnard Castle • Middleton Tyas 	<p>These Conservation Areas are proposed to be scoped out predominately based on existing screening provided by built form or trees.</p> <p>The Inspectorate notes that the Settle to Carlisle Railway Conservation Area appears to lie within the indicative DCO boundary of the Temple Sowerby to Appleby scheme presented in the Scoping Report and may therefore be affected by the Proposed Development (albeit the indicative DCO boundary is in buffer form at this location). The ES should include an assessment of this Conservation Area, where likely significant effects could occur.</p> <p>For all other Conservation Areas identified in Table 11-5, the Inspectorate agrees that, on the basis of the existing screening, an assessment of landscape and visual effects on these Conservation Areas can be scoped out of the ES.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.6.3	Table 11-8 and Table 11-9, Paragraphs 11.8.55 to 11.8.57	Assessment of visual effects during construction and operation for Scotch Corner scheme	On the basis of existing screening and the proposed nature, limited scale and duration of the proposed works in this area, the Inspectorate agrees that an assessment of visual effects for this scheme can be scoped out of the ES.
4.6.4	Table 11-8 and Table 11-9, Table 11-5, and paragraph 11.8.44	Assessment of landscape effects on the following Landscape Character Area (LCA) during construction and operation for Scotch Corner scheme: <ul style="list-style-type: none"> Moors Fringe LCA Vale Farmland with Dispersed Settlements LCA 	<p>The Scoping Report states that the Moors Fringe LCA will be directly affected through construction activities, but the short term and temporary effects and the small extent and scale of the works would not lead to significant effects. During operation, embedded mitigation is expected to result in non-significant effects on the Moors Fringe and Vale Farmland with Dispersed Settlements LCAs and therefore this has been scoped out.</p> <p>The Inspectorate agrees that due to the likely small scale, nature and characteristics of the proposed changes in this location, that effects on these LCAs for the construction and operation of the Scotch Corner scheme can be scoped out of the ES.</p>

ID	Ref	Other points	Inspectorate's comments
4.6.5	Section 11.3 and paragraph 11.8.6	Study area	The Scoping Report indicates that the proposed study area is 7km from the Proposed Development, but also states that the extent is not intended to be a fixed or absolute limit. It is also noted that a 2km buffer is referenced in the Scoping Report to identify LCAs, but it also later states at paragraph 11.8.6 that all LCAs in the 7km study area will be considered in the EIA, and a number of viewpoints lie outside the 2km and 7km buffer. The ES should make clear the study area

ID	Ref	Other points	Inspectorate's comments
			<p>applied for the identification of landscape and visual receptors, including whether this varies across the schemes, and justify the study area(s) selected. The study area should be selected to an assessment is made of likely significant effects on sensitive landscape and visual receptors, including for example, views out of the AONB towards to Proposed Development from higher ground to the north.</p> <p>The ES should confirm if the study area and/or Zone of Theoretical Visibility (ZTV) is to be informed by available topographic or LIDAR data or similar.</p>
4.6.6	Section 11.5 and paragraph 11.10.3	Baseline conditions – heritage assets	<p>The ES should include reference to any heritage assets important to the landscape character within the baseline. Appropriate cross-references between the Cultural Heritage and Landscape and Visual aspect chapters should be provided. Any viewpoints included for heritage assets/sensitive receptors should be clearly identified in the ES.</p> <p>Scoping Report paragraph 11.10.3 states that the landscape and visual assessment will not consider the effects of the Proposed Development on the setting of heritage assets. The Inspectorate agrees this is appropriate, providing such an assessment is included within the Cultural Heritage aspect chapter.</p>
4.6.7	Paragraph 11.5.13	Baseline conditions – Durham County Council Area of Higher Landscape Value (AHLV)	<p>The Cross Lanes to Rokeby scheme is located within the Durham County AHLV. Consideration of effects on the AHLV should be included in the ES.</p>
4.6.8	Paragraph 11.5.16	Baseline condition – Wetheriggs Country Park	<p>Paragraph 11.5.16 states that Wetheriggs Country Park is located on the southern edge of Penrith immediately adjacent to the A66, however no further information or comment is provided on this Country Park. The ES should include an assessment of this Country Park, where likely significant effects could occur.</p>

ID	Ref	Other points	Inspectorate's comments
4.6.9	Paragraphs 11.5.19 to 11.5.21, and 11.10.5	Baseline data - viewpoints	<p>The Inspectorate notes the intention to identify viewpoints in consultation with stakeholders and that the scoping consultation responses include commentary on these viewpoints (see Appendix 2 to this Opinion). Noting that several scheme sections currently include options, the selected viewpoints should be representative of the Proposed Development (as a whole) for which development consent is ultimately to be sought.</p> <p>Paragraph 11.5.20 states that panoramic viewpoint photography will be undertaken in summer 2021 and winter 2021 to capture both summer and winter views. The ES should clarify, and where required present, whether both day and night-time viewpoint photography are proposed, in particular within the buffer zone of the AONB or for other receptors, where changes to night-time views/landscape may cause significant effects. The requirement to assess the night-time effects of the scheme are identified in paragraph 11.10.4.</p>
4.6.10	Paragraph 11.5.22	Baseline conditions – recreational user receptors	<p>The Scoping Report provides limited detail at this stage with regards to all likely recreational user receptors. The ES should consider the Lakes and Dales Cycle Route and Eden cycle routes, where likely significant effects could occur.</p>
4.6.11	Paragraphs 11.6.3 and 11.9.13	Assessment methodology - scenarios	<p>Paragraph 11.6.3 says that the operational phase will be assessed for year one and year fifteen. The ES should state the extent to which any mitigation measures, especially any screening vegetation, will have become established and started to achieve results (and / or any assumptions made in this regard).</p>
4.6.12	Paragraphs 11.6.4 and 11.6.5	Potential impacts - noise and vibration	<p>The ES should consider the potential impacts of noise and vibration on sensitive landscape and visual receptors, where likely significant effects could occur. Appropriate cross-reference should be included to the Noise and Vibration aspect chapter of the ES.</p>

ID	Ref	Other points	Inspectorate's comments
4.6.13	Paragraphs 11.8.28 to 11.8.38	Assessment of Rokeby Park	Paragraph 11.8.38 indicates that the effects on Rokeby Park registered park and garden will be assessed separately, yet there is no further information provided as to what this separate assessment would comprise. The ES should state how this separate assessment has informed the full LVIA and include detail of the methodology applied to assess the parkland landscape.
4.6.14	Paragraphs 11.8.58 to 11.8.59	Likely significant effects – views from the road	<p>The Scoping Report states that existing “panoramic” views experienced by existing road users will be included within the ES, but that these will not be subject to an assessment of significance of effects. Instead, the principles of DMRB LA107 and Guidelines for Landscape and Visual Impact Assessment (GLVIA3) would be used to undertake a qualitative assessment of potential change and identify appropriate design interventions and mitigation.</p> <p>It is not clear why the Scoping Report currently proposes to include but not assess these. The Inspectorate is of the opinion that if the viewpoints of existing road users are required to be included, they are also required to be assessed for significance, where likely significant effects could occur.</p>
4.6.15	Paragraph 11.9.31	Assessment methodology - AONB	Regard should also be had to the North Pennines AONB Planning Guidelines.

4.7 Materials and Waste

(Scoping Report Chapter 12)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.7.1	Paragraphs 12.8.2 to 12.8.3 and Table 12-13 and 12-15	Assessment of operational effects	<p>Materials use is expected to be limited beyond the first year of operation, and therefore, only the first year of operation has been scoped into the assessment as set out in Table 12-13.</p> <p>On the basis that operational waste streams generated by the project are likely to be similar to the wastes generated from the existing A66, the Inspectorate agrees that materials resource use and waste arisings during operation (beyond the first year of operation) can be scoped out of the assessment.</p>

ID	Ref	Other points	Inspectorate's comments
4.7.2	Table 12-1 (Durham County Council) and Paragraph 12.7.7	Receiver sites for surplus material	<p>Table 12-1 and paragraph 12.7.7 of the Scoping Report identify that Investigation will be made by the project team to identify the feasibility of using excess materials from the A66 in the restoration of sites.</p> <p>Where possible, the results of the investigation into restoration (receiver sites) should be included within the ES, as the movement of material to these sites may have both beneficial and adverse impacts to materials and waste, and other EIA aspect chapters.</p> <p>The ES should detail whether it is appropriate to advertise the scheme as a Donor site under the Contaminated Land: Applications in Real Environments - Definition of Waste: Code of Practice (CL:AIRE -</p>

ID	Ref	Other points	Inspectorate's comments
			DOW:COP) scheme where excess materials are likely to be present that cannot be reused within the scheme.
4.7.3	Paragraph 12.5.6	Baseline data	<p>The ES should confirm that the most up to date baseline information has been used to inform the assessment, as consultation with Durham County Council has indicated that a number of information sources and minerals and waste allocations have been updated or will be updated following completion of the Scoping Report.</p> <p>The ES should also confirm whether waste management, transfer and recovery facilities other than landfills are included within the baseline dataset.</p>
4.7.4	Paragraph 12.5.7 and Figure 12-1	Mineral Safeguarding Areas	<p>The ES should include a figure clearly showing the exact location of mineral safeguarding areas and the mineral types present within the DCO boundary and study buffer zone.</p> <p>The ES should also ensure a full list of sites is included with the Materials and Waste Assessments, including sites where planning permission has been granted but the sites are not yet operational, as well as identified safeguarding sites.</p> <p>The Minerals and Waste Chapter should also refer to the Minerals and Waste Joint Plan that has been produced by North Yorkshire County Council, the City of York Council and the North York Moors National Park Authority.</p>
4.7.5	Paragraph 12.6.8 and Table 12-12	Waste classification	<p>Any waste arisings of made ground, soils and sub soil should be classified as per Environment Agency Waste Management 3 (2015) guidelines for waste classification. Heavy metals (soils) and coal tar (asphalt) are not the only determinand which may render waste(s) as hazardous, and as such the ES should reference the anticipated testing and classification regime for these materials to ensure the correct waste sentencing or possibility of reuse.</p>

ID	Ref	Other points	Inspectorate's comments
4.7.6	Table 12-13	Operational waste	<p>Table 12-13 of the Scoping Report states that waste arisings during the operational phase are expected to be minimal, however there is likely to be hazardous waste such Waste Electrical and Electronic Equipment (WEEE) and non-hazardous waste will arise from re-surfacing and other activities.</p> <p>The ES should consider the possibility of resurfacing or other operational activities producing hazardous waste, for example resurfacing following a diesel or oil spill or the emptying of any interceptors / pollution control systems etc.</p>
4.7.7	Paragraph 12.9.5	Construction waste sources	<p>Paragraph 12.9.5 of the Scoping Report states that construction and excavation waste are likely to consist of hard and inert materials, soils and stones, wood, plastics, packaging (wooden and plastic), insulation material, miscellaneous metals, canteen, and office waste.</p> <p>The ES should also include an assessment of the potential for liquid wastes such as from dewatering and contaminated land and any groundwater remedial works.</p>
4.7.8	N/A	Construction material sources	<p>It is not clear from the Scoping Report whether it is expected that any borrow pits or material disposal will be required. The ES should explain the requirement for any borrow pits to be used, their dimensions, any assumptions made around quantity of materials to be 'won' and assess the impacts of such features across relevant aspects of the EIA. Figures indicating the location of borrow pits should be provided.</p>
4.7.9	N/A	Construction material use	<p>The ES should include, an estimate of material requirements including aggregates (by mineral type) and of waste requiring treatment and disposal. This information should be broken down by scheme but also considered and assessed for the Proposed Development as a whole.</p>

4.8 Noise and Vibration

(Scoping Report Chapter 13)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.8.1	Paragraph 13.3.14	Operational vibration	<p>The Applicant proposes to scope out operational vibration as a maintained road surface will be free of irregularities as part of project design and under general maintenance, so operational vibration will not have the potential to lead to significant adverse effects.</p> <p>The Inspectorate considers that operational vibration can be scoped out of the ES due to the low likelihood of long-term significant effects to sensitive receptors.</p>

ID	Ref	Other points	Inspectorate's comments
4.8.2	Paragraph 13.3.4	Professional judgement	Where professional judgement is used, the methodology for identifying and selecting sensitive receptors (or representative receptors) should be detailed within the ES on a receptor by receptor basis.
4.8.3	Paragraphs 13.5.6 – 13.5.8, 13.7.12	Noise Important Areas (NIA)	<p>The ES should specify how NIAs will be assessed as sensitive receptors or groups of receptors in their own right (they are not listed in paragraph 13.3.3 of the Scoping Report).</p> <p>Where paragraph 13.7.12 refers to further consideration of enhancement opportunities to reduce traffic noise levels in NIAs, there is limited detail at this stage about what such measures might actually comprise or how they would be integrated into the project design. Clear distinctions should be made in the ES between what are</p>

ID	Ref	Other points	Inspectorate's comments
			"enhancement" measures and what are mitigation measures necessary to avoid, minimise or offset potentially significant effects.
4.8.4	Section 13.7	Mitigation Measures	The ES should confirm whether the required noise mitigation measures are to be installed at the earliest available opportunity, and cross refer to other relevant aspects in the ES where these features are considered, for example (but not limited to) LVIA and cultural heritage assessments.
4.8.5	Section 13.9	Methodology	The methodology outlined within the Scoping Report for assessing noise from construction traffic impacts currently states that the threshold for assessment will be determined based solely on a change in traffic flow. The assessment should take into account changes in traffic flows, speeds, and percentages of heavy vehicles, rather than solely on traffic flow.
4.8.6	Paragraphs 13.9.5 to 13.9.7	Construction noise SOAEL values	The Scoping Report states that LOAEL and SOAEL are presented in DMRB LA111 for three scenarios (construction noise, construction vibration, operational noise). The construction noise values table referenced in DMRB cross references to the 'ABC' method in Appendix E3.2 of BS5228-1. Since the SOAEL values are set with reference to baseline noise conditions, it is unclear what SOAEL values are proposed to be set. The ES should explain how SOAEL values have been determined for the Proposed Development or at a work package level where relevant.
4.8.7	13.9.13	Model validation	No information is given as to how the operational road traffic noise effects modelling will be "appropriately validated", for example any primary or secondary data sources (or otherwise) that may be required for these purposes beyond that information to be gathered as set out in paragraph 13.5.2. The Inspectorate considers that such

ID	Ref	Other points	Inspectorate's comments
			matters will be discussed in consultation with the relevant local authorities and the validation process explained as part of the ES.

4.9 Population and Human Health

(Scoping Report Chapter 14)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.9.1	Paragraph 14.5.6	Human health risk from contamination	<p>Scoping Report paragraph 14.5.6 states that sources and pathways of potential pollution are reported in Chapter 10: Geology and Soils and Chapter 15: Road Drainage and the Water Environment, and as such ground and water pollution is scoped out of the health assessment.</p> <p>The Inspectorate is in agreement that based on the identified requirement to undertake groundwater and human health risk assessment in Chapter 10 (Geology and soils), the assessment is not required to be repeated within the population and human health chapter, and as such this can be scoped out of this chapter.</p> <p>The scoping out of this aspect should however be consistent throughout the ES chapter on population and human health, as the Scoping Report identifies at various points that the ES chapter for population and human health will include sources and pathways of potential pollution.</p>
4.9.2	Paragraphs 14.6.7 and 14.6.21	Contamination and odour impacts during construction and operation	<p>The Inspectorate agrees to scope out effects of soil and water contamination to human health during construction and operation on the basis that the Scoping Report states that the Proposed Development will comply with legal standards to prevent the emission of chemicals harmful to human health, soils and surface/groundwater and that there are no sources of significant odour associated with the Proposed Development. Sources and pathways of potential pollution to land and water are reported in Chapter 10: Geology and Soils and Chapter 15: Road Drainage and the Water Environment</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>The ES should reference where assessments are undertaken in other Chapters and reference how compliance with legal standards will be met and ensure that any mitigation is secured through the DCO to support scoping out these impacts.</p>
4.9.3	Paragraph 14.6.11 and Table 14-4	<p>Impacts to human health during construction at:</p> <ul style="list-style-type: none"> • Penrith to Temple Sowerby • Cross Lanes to Rokeby • A1(M) Junction 53 Scotch Corner 	<p>Scoping Report paragraph 14.6.11 states that health effects at the construction stage are scoped out for areas not listed in paragraph 14.6.10 because it is considered that the severity and extent of changes to health determinants is not sufficient to affect health outcomes, and/or there is no receptor population present. However, receptors are located within the red line boundary at these areas (as identified on Figure 14.1) and the severity and extent of change on receptors within these areas is not determined to justify this. Table 14-4 also notes for these schemes that elements will be determined following further assessment in the Preliminary Environmental Information Report (PEIR).</p> <p>In the absence of this information, the Inspectorate cannot agree to scope this matter out.</p>
4.9.4	Paragraphs 14.6.23 and 14.6.24	<p>Impacts to human health during operation at:</p> <ul style="list-style-type: none"> • M6 Junction 40 Penrith • Penrith to Temple Sowerby • Temple Sowerby to Appleby • Cross Lanes to Rokeby • Stephen Bank to Carkin Moor 	<p>Scoping Report paragraphs 14.6.23 and 14.6.24, and Table 14-5 state that operational health effects are scoped out for some areas because it is considered that the severity and extent of changes to health determinants is not sufficient to affect health outcomes, and/or there is no receptor population present.</p> <p>Scoping Report paragraph 14.6.23 and 14.6.24, and Table 14-5 states that health effects during operation are scoped out for areas not listed in paragraph 14.6.23 because it is considered that the severity and extent of changes to health determinants is not sufficient to affect health outcomes, and/or there is no receptor population present. However, receptors are located within the red line boundary</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
		<ul style="list-style-type: none"> <li data-bbox="524 314 958 376">A1(M) Junction 53 Scotch Corner 	<p data-bbox="1032 314 2069 416">at these areas (as identified on Figure 14.1) and the severity and extent of change on receptors within these areas is not determined to justify this.</p> <p data-bbox="1032 435 2047 497">In the absence of this information, the Inspectorate cannot agree to scope this matter out for these areas listed in the adjacent column.</p>

ID	Ref	Other points	Inspectorate's comments
4.9.5	Table 14-4	Mitigation measures	<p data-bbox="1032 667 2056 842">Table 14-4 of the Scoping Report states that construction traffic on the M6 Junction 40 will access the site via the A66 /M6 and not via local roads. This mitigation measure should be secured in the ES and associated mitigation plans, such as a construction travel management and routing plan.</p>
4.9.6	Table 14-2	Kirkby Thore receptor	<p data-bbox="1032 880 2063 1091">The Scoping Report identifies Crackenthorpe and Appleby-in-Westmorland as sensitive receptors for the Temple Sowerby to Appleby scheme but does not reference for example, the settlement of Kirkby Thore. No explanation is provided for this omission. The ES should assess significant effects on all relevant settlements, including Kirkby Thore as a sensitive receptor, where they are likely to occur.</p>

4.10 Road Drainage and the Water Environment

(Scoping Report Chapter 15)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.10.1	Paragraph 15.5.16 – 15.5.17, Tables 15-3 and 15-4	Flood risk and floodplain impacts at the M6 J40 section (construction and operation)	The Applicant sets out that this section of the Proposed Development is within flood zone 1 and no surface watercourse crossings are identified within it. Paragraph 15.5.17 and Figure 15.1 (sheet 1) describe and show areas of pluvial flooding across the study area (eg adjacent to the existing A66 at Skirsgill, slip roads to the north of Junction 40 and to the east of Junction 40) all of which are shown to have a "high risk of pluvial flooding". On the basis of these proximities, the Inspectorate does not agree that flood risk and floodplain impacts in this section can be scoped out at this stage.
4.10.2	Paragraph 15.5.121, Tables 15-3 and 15-4	Flood risk and floodplain impacts at the A1(M) Junction 53 Scotch Corner section (construction and operation)	The Applicant sets out that this section of the Proposed Development is within flood zone 1 and no surface watercourse crossings are identified within it, as shown on Figure 15.1 (sheet 7). The Inspectorate is content on basis of the proximity to areas of flood zones 2 and 3 that this matter can be scoped out of the assessment for this section of the Proposed Development.

ID	Ref	Other points	Inspectorate's comments
4.10.3	Paragraphs 15.3.2 to 15.3.4	Study area	The study area includes a 1km radius of the indicative boundary based on the source-pathway-receptor model, professional judgement and in comparison with assessments undertaken in relation to other highways schemes.

ID	Ref	Other points	Inspectorate's comments
			<p>It is important to note that justification for other similar schemes may not be applicable as each scheme should be assessed on its own merit.</p> <p>The study area should be justified in the ES based on the extent of potential impacts on receptors that are hydrologically linked to the Proposed Development site sections. For example, it should be explained why a 1km buffer study area was considered appropriate.</p>
4.10.4	Paragraph 15.3.2 and Table 15-2	Ponds and standing waters	<p>Ponds are identified in the description of the baseline environment in section 15.5 but these are not included in Table 15-2 where the value of environmental receptors is applied. The ES should assess impacts on ponds within the study area where significant effects are likely to occur or justify their omission from the assessment.</p>
4.10.5	Paragraph 15.5.6, 15.5.11 and Figure 15.1	Supporting Figures	<p>Flood risk zones are identified in the baseline and located on Figure 15.1. Pluvial flooding is described in the baseline but it is unclear where this sits in the context of the Proposed Development and existing landscape as this is not presented on Figure 15.1.</p> <p>Key receptors are stated to be located on Figure 15.1 however, some elements described in the Baseline description, for example, priority outfalls and aquifers are not located on these maps.</p> <p>The ES should identify all pathways and receptors and locate them in the context of the Proposed Development and surrounding hydrological environment.</p>
4.10.6	Paragraph 15.5.11 and Section 15.10	Highways England's Drainage Data Management System (HADDMS)	<p>The Scoping Report identifies that the HADDMS information is incomplete and expresses that effort will be made to identify existing assets that are not captured in this system in the EIA but does not explain how.</p> <p>The ES should explain how this information has been substituted/ collected or otherwise acknowledged as a limitation in the</p>

ID	Ref	Other points	Inspectorate's comments
			assessment, and any additional assumptions made and implications to the conclusions around likely significant effects.
4.10.7	Table 15-2	Definition of importance for surface water receptors based on DMRB LA 113 guidance Table 3.70.	For high importance surface water receptors, reference is made to the Water Framework Directive (WFD) classification and designation status but there is no reference to protected species therefore it is unclear whether these criteria have been considered in assigning importance. For example, tributaries to the River Eden SAC are valued as being of medium importance based on their WFD classification. It is unclear whether protected species are present that might increase the importance assigned to the tributaries, which should be considered as part of the ES.
4.10.8	Paragraph 15.5.29	Eamont Bridge Flood Alleviation	Paragraph 15.5.29 states that the Environment Agency is considering a flood alleviation scheme for the Eamont Bridge area but the Environment Agency's consultation response states that this is incorrect and no viable or affordable option has been identified. The ES should ensure that it represents the current status of other development in considering the potential effects of the Proposed Development, either as part of the baseline conditions or as a cumulative effect.
4.10.9	Paragraph 15.6.2	Flood impacts during construction	Whilst changes to local land drainage structures and patterns are identified as a potential impact pathway, for clarity this should specifically include changes and possible increase in flood velocity and flood depths due to structures/topographical alterations such as construction compounds and earthworks (and the durations for which these will be in place).
4.10.10	Section 15.7 (and	Flood mitigation such as settlement ponds and culverts	Although culverts are included in the description of the Proposed Development (paragraph 2.5.88) settlement ponds are not and are instead described as part of the potential mitigation solutions in

ID	Ref	Other points	Inspectorate's comments
	paragraph 2.5.88)		Section 15.7. The project description of the ES should include a description of proposed flood mitigation measures and assess any likely significant effects associated with construction and operation of these features as part of the relevant aspect assessments, which may be beyond purely the Road Drainage and the Water Environment aspect chapter.

4.11 Assessment of Cumulative Effects

(Scoping Report Chapter 16)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.11.1	Table 16-3	Material resources and Climate	<p>Table 16-1 of the Scoping Report identifies the requirement to assess the cumulative and in combination effects on material resources and climate change during construction and operation. This is not reflected in the scoping summary Table 16-3 and 16-4 which suggests that an assessment is not required.</p> <p>In the absence of further explanation and based on the text in Table 16-1, the Inspectorate considers that this matter cannot be scoped out at present.</p>
4.11.2	Table 16-4	Users of Public Rights of Way	<p>Table 16-4 of the Scoping Report indicates that population and human health are not required to be assessed as part of the assessment of the cumulative effects of users of public rights of way during operation, whereas the notes in the table suggest that human health determinants are relevant. In the absence of further explanation the Inspectorate does not agree that this can be scoped out.</p>
4.11.3	Table 16-4	Ecological sites and cultural heritage receptors	<p>Table 16-3 of the Scoping Report identifies the need to assess cumulative effects on ecological sites and cultural heritage during construction; however, Table 16-4 does not identify the requirement to assess operational cumulative effects on these receptors. Potential effects identified in Section 7.6 for Biodiversity and Section 9.6 for Cultural Heritage include impacts such as nitrogen deposition, noise, vibration, light pollution and changes to landscape and visual aspects, which have the potential to lead to cumulative effects on receptors.</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			<p>No explanation is provided as to why these impacts would not lead to cumulative effects on biodiversity and cultural heritage receptors.</p> <p>In the absence of this information, the Inspectorate cannot agree to scope these matters out.</p>

ID	Ref	Other points	Inspectorate's comments
4.11.4	Paragraph 16.2.11	ZoI	<p>Paragraph 16.2.11 of the Scoping Report states that following the establishment of the initial ZoI for each topic, an initial desk study is undertaken to identify other developments within 500m of the project that may need to be considered for inclusion in the cumulative effects assessment.</p> <p>The ES should explain why a 500m study area has been selected for the "other developments" category, as it is noted that some of the zone of influences for individual aspects are up to 2km.</p>

5. INFORMATION SOURCES

5.0.1 The Inspectorate's National Infrastructure Planning website includes links to a range of advice regarding the making of applications and environmental procedures, these include:

- Pre-application prospectus⁵
- Planning Inspectorate advice notes⁶:
 - Advice Note Three: EIA Notification and Consultation;
 - Advice Note Four: Section 52: Obtaining information about interests in land (Planning Act 2008);
 - Advice Note Five: Section 53: Rights of Entry (Planning Act 2008);
 - Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements;
 - Advice Note Nine: Using the 'Rochdale Envelope';
 - Advice Note Ten: Habitats Regulations Assessment relevant to nationally significant infrastructure projects (includes discussion of Evidence Plan process);
 - Advice Note Twelve: Transboundary Impacts;
 - Advice Note Seventeen: Cumulative Effects Assessment; and
 - Advice Note Eighteen: The Water Framework Directive.

5.0.2 Applicants are also advised to review the list of information required to be submitted within an application for Development as set out in The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009.

⁵ The Planning Inspectorate's pre-application services for applicants. Available from: <https://infrastructure.planninginspectorate.gov.uk/application-process/pre-application-service-for-applicants/>

⁶ The Planning Inspectorate's series of advice notes in relation to the Planning Act 2008 process. Available from: <https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

APPENDIX 1: CONSULTATION BODIES FORMALLY CONSULTED

TABLE A1: PRESCRIBED CONSULTATION BODIES⁷

SCHEDULE 1 DESCRIPTION	ORGANISATION
The Health and Safety Executive	Health and Safety Executive
The National Health Service Commissioning Board	NHS England
The relevant Clinical Commissioning Groups	NHS North Cumbria Clinical Commissioning Group
	NHS County Durham Clinical Commissioning Group
	NHS North Yorkshire Clinical Commissioning Group
Natural England	Natural England
The Historic Buildings and Monuments Commission for England	Historic England
The relevant fire and rescue authorities	County Durham and Darlington Fire and Rescue Service
	North Yorkshire Fire and Rescue Service
	Cumbria Fire and Rescue Service
The relevant police and crime commissioners	Cumbria Police and Crime Commissioner
	Durham Police and Crime Commissioner
	North Yorkshire Police and Crime Commissioner
The relevant parish councils	Dacre Parish Council
	Long Marton Parish Council
	Warcop Parish Council

⁷ Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the 'APFP Regulations')

SCHEDULE 1 DESCRIPTION	ORGANISATION
	Musgrave Parish Council
	Brough Parish Council
	Helbeck Parish Council
	Penrith Parish Council
	Kirkby Thore Parish Council
	Brougham Parish Council
	Langwathby Parish Council
	Appleby-in-Westmorland Parish Council
	Gilling with Hartforth and Sedbury Parish Council
	Yanwath and Eamont Bridge Parish Council
	Ravensworth Parish Council
	Dalton Parish Council
	East and West Layton and Carkin Parish Council
	Middleton Tyas Parish Council
	Bolton Parish Council
	Crackenthorpe Parish Council
	Temple Sowerby Parish Council
	Bowes Parish Council
	Gilmonby Parish Council
	Rokeby, Brignall and Egglestone Abbey Parish Council
	Boldron Parish Council
	Hutton Magna Parish Council
The Environment Agency	The Environment Agency

SCHEDULE 1 DESCRIPTION	ORGANISATION
The Relevant Highways Authorities	Durham County Council
	Cumbria Highways
	North Yorkshire County Council
The relevant strategic highways company	Highways England
The Coal Authority	The Coal Authority
The relevant internal drainage board	Swale and Ure Internal Drainage Board
Public Health England, an executive agency of the Department of Health	Public Health England
The Crown Estate Commissioners	The Crown Estate
The Forestry Commission	Forestry Commission
The Secretary of State for Defence	Ministry of Defence

TABLE A2: RELEVANT STATUTORY UNDERTAKERS⁸

STATUTORY UNDERTAKER	ORGANISATION
The relevant Clinical Commissioning Groups	NHS North Cumbria Clinical Commissioning Group
	NHS County Durham Clinical Commissioning Group
	NHS North Yorkshire Clinical Commissioning Group
The National Health Service Commissioning Board	NHS England
The relevant NHS Trusts	Penrith Hospital
	North West Ambulance Trust
	Yorkshire and the Humber Ambulance Trust

⁸ 'Statutory Undertaker' is defined in the APFP Regulations as having the same meaning as in Section 127 of the Planning Act 2008 (PA2008)

STATUTORY UNDERTAKER	ORGANISATION
The relevant NHS Foundation Trust	North East Ambulance Service Foundation Trust
Railways	Network Rail Infrastructure Ltd
	Highways England Historical Railways Estate
Universal Service Provider	Royal Mail Group
Homes and Communities Agency	Homes England
The relevant Environment Agency	The Environment Agency
The relevant water and sewage undertakers	Northumbrian Water
	United Utilities
	Yorkshire Water
The relevant public gas transporters	Cadent Gas Limited
	Last Mile Gas Ltd
	Energy Assets Pipelines Limited
	ES Pipelines Ltd
	ESP Networks Ltd
	ESP Pipelines Ltd
	ESP Connections Ltd
	Fulcrum Pipelines Limited
	Harlaxton Gas Networks Limited
	GTC Pipelines Limited
	Independent Pipelines Limited
	Indigo Pipelines Limited
	Leep Gas Networks Limited
Murphy Gas Networks limited	
Quadrant Pipelines Limited	

STATUTORY UNDERTAKER	ORGANISATION
	National Grid Gas Plc
	Scotland Gas Networks Plc
	Southern Gas Networks Plc
	Northern Gas Networks Limited
The relevant electricity distributors with CPO Powers	Eclipse Power Network Limited
	Last Mile Electricity Ltd
	Energy Assets Networks Limited
	ESP Electricity Limited
	Forbury Assets Limited
	Fulcrum Electricity Assets Limited
	Harlaxton Energy Networks Limited
	Independent Power Networks Limited
	Indigo Power Limited
	Leep Electricity Networks Limited
	Murphy Power Distribution Limited
	The Electricity Network Company Limited
	UK Power Distribution Limited
	Utility Assets Limited
	Vattenfall Networks Limited
	Electricity North West Limited
	Northern Powergrid (Northeast) Limited
	Northern Powergrid (Yorkshire) plc
The relevant electricity transmitter with CPO Powers	National Grid Electricity Transmission Plc

TABLE A3: SECTION 43 LOCAL AUTHORITIES (FOR THE PURPOSES OF SECTION 42(1)(B))⁹

LOCAL AUTHORITY¹⁰
Allerdale Borough Council
Bradford Metropolitan District Council
Carlisle City Council
Craven District Council
Cumbria County Council
Darlington Borough Council
Doncaster Metropolitan Borough Council
Durham County Council
East Riding of Yorkshire Council
Eden District Council
Gateshead Borough Council
Hambleton District Council
Harrogate Borough Council
Hartlepool Borough Council
Lake District National Park Authority
Lancashire County Council
Leeds City Council
Middlesbrough Borough Council
North York Moors National Park Authority
North Yorkshire County Council
Northumberland County Council
Northumberland National Park Authority

⁹ Sections 43 and 42(B) of the PA2008

¹⁰ As defined in Section 43(3) of the PA2008

LOCAL AUTHORITY¹⁰
Redcar and Cleveland Borough Council
Richmondshire District Council
South Lakeland District Council
Stockton-on-Tees Borough Council
Sunderland City Council
Wakefield Metropolitan District Council
York City Council
Yorkshire Dales National Park Authority

TABLE A4: NON-PRESCRIBED CONSULTATION BODIES

ORGANISATION
North East Combined Authority
West Yorkshire Combined Authority

APPENDIX 2: RESPONDENTS TO CONSULTATION AND COPIES OF REPLIES

CONSULTATION BODIES WHO REPLIED BY THE STATUTORY DEADLINE:
Allerdale Borough Council
Brough Parish Council
Cadent Gas Limited
The Coal Authority
Cumbria County Council
Durham County Council
East and West Layton and Carkin Parish Council
Eden District Council
Environment Agency
ESP Utilities Group Ltd
Forestry Commission
Hambleton District Council
Hartlepool Borough Council
Health and Safety Executive
Highways England Historical Railways Estate
Historic England
Kirkby Thore Parish Council
Musgrave Parish Council
National Grid Electricity Transmission Plc and National Grid Gas Plc
Natural England
North Yorkshire County Council and Richmondshire District Council (joint response)
North Yorkshire Fire and Rescue Service

CONSULTATION BODIES WHO REPLIED BY THE STATUTORY DEADLINE:
Northumbrian Water
Penrith Town Council
Public Health England
Redcar and Cleveland Borough Council
Royal Mail Group
Warcop Parish Council

From: [REDACTED]
To: [A66Dualling](#)
Subject: 7.7.21 - A66 dualling - Scoping request
Date: 07 July 2021 11:00:54

Dear Sir/Madam,

Your ref:- TR010062-000008-210614

Our ref:- SCO/2021/0001

In response to your letter dated 14th June 2021, I can confirm that Allerdale BC have no comments to make at this juncture.

Yours faithfully

Simon Sharp
Planning and Building Control Manager

Allerdale Borough Council, Allerdale House, Workington, Cumbria, CA14 3YJ

[REDACTED] | [REDACTED] | E: [REDACTED] W:
www.allerdale.gov.uk

Making Allerdale a great place to live, work and visit



Please consider the environment - do you really need to print this email?

COVID 19 NOTICE

Please be aware that due to COVID-19, I am involved in providing essential services during this unprecedented national situation. During this period we are experiencing significant pressures and need to prioritise services for the most vulnerable in our communities; as such it may take longer for me to respond to any enquiries. Any email enquiries will be prioritised and the most urgent dealt with quickly.

Allerdale Borough Council
Allerdale House, Workington, Cumbria, CA14 3YJ

Follow us on:

Web: <https://www.allerdale.gov.uk>

Twitter: <https://twitter.com/allerdale>

Facebook: <https://www.facebook.com/Allerdale/>

Download our new app, **myAllerdale**, from the [Google Play](#), [Apple](#) and [Microsoft](#) stores. Report problems, find information and access our services. Or see our website for details: <https://www.allerdale.gov.uk/en/contact-us/>

EMAIL DISCLAIMER

The views expressed in this document are those of the individual and are not necessarily the same as the Council's.

This electronic transmission is only intended for the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure. If you are not the intended recipient or employee

or agents responsible for delivering the message to the intended recipient you are hereby notified that any dissemination, distribution or copying of this communication and its attachments is strictly prohibited. If you have received this communication in error please notify us by telephone and return the original communication and attachments to us at the e-mail address above. The Council is not responsible for any changes made to this message after it has been sent.

The information contained in this email, and any response to it, may be subject to disclosure as required by law including under the Freedom of Information Act 2000. Unless the information requested is exempt from disclosure, we cannot guarantee that we will not provide all or part of this email to a third party making a request for information. This footnote also confirms that this email message has been swept for the presence of computer viruses.

From: [Brough PC](#)
To: [A66Dualling](#)
Subject: Re: TR010062 - A66 Northern Trans-Pennine - EIA Regulation 10 and 11 Scoping Notification and Consultation
Date: 21 June 2021 13:23:41

Further to the email below and attachment, I write to provide Brough Parish Council's response to the consultation:

"The Council has considered the Environmental Scoping Report and confirms that it has no comments to make."

Regards,

Andrew Bedford
Clerk
Brough Parish Council

Raine Hill
Church Brough
Kirkby Stephen
Cumbria
CA17 4EW

Tel: 
E-mail: clerk.broughpc@hotmail.co.uk

This e-mail may contain confidential information (which may also be legally privileged) and is intended solely for the use of the intended named recipient. If you are not the intended recipient you may not disclose, copy, distribute or retain any part of this message or its attachments. If you have received this message in error please notify the originator immediately by using the reply facility in your e-mail software. Incoming and outgoing emails may be monitored in line with current General Data Protection legislation. All copies of the message received in error should be destroyed. Any views or opinions expressed are solely those of the original author. Brough Parish Council's Privacy Policy can be viewed on www.brough-cumbria.info

From: A66Dualling <A66Dualling@planninginspectorate.gov.uk>
Sent: 14 June 2021 16:22
Subject: TR010062 - A66 Northern Trans-Pennine - EIA Regulation 10 and 11 Scoping Notification and Consultation

Dear Sir/Madam,

Please see attached correspondence on the proposed A66 Northern Trans-Pennine.

Please note the deadline for consultation responses is **12 July 2021**, and is a statutory requirement that cannot be extended.

Kind regards,
Marie Shoemith

Marie Shoesmith
Senior EIA Advisor
Environmental Services
Helpline: 0303 444 5000
Email: [REDACTED]

Web: <https://infrastructure.planninginspectorate.gov.uk/> (National Infrastructure Planning)
Web: www.gov.uk/government/organisations/planning-inspectorate (The Planning Inspectorate)

Twitter: @PINSgov

This communication does not constitute legal advice.



Please note that the contents of this email and any attachments are privileged and/or confidential and intended solely for the use of the intended recipient. If you are not the intended recipient of this email and its attachments, you must take no action based upon them, nor must you copy or show them to anyone. Please contact the sender if you believe you have received this email in error and then delete this email from your system.

Recipients should note that e-mail traffic on Planning Inspectorate systems is subject to monitoring, recording and auditing to secure the effective operation of the system and for other lawful purposes. The Planning Inspectorate has taken steps to keep this e-mail and any attachments free from viruses. It accepts no liability for any loss or damage caused as a result of any virus being passed on. It is the responsibility of the recipient to perform all necessary checks.

The statements expressed in this e-mail are personal and do not necessarily reflect the opinions or policies of the Inspectorate.

DPC:76616c646f72



[Please take a moment to review the Planning Inspectorate's Privacy Notice which can be accessed by clicking this link.](#)

From: [REDACTED]
To: A66Dualling
Subject: RE: [EXT] TR010062 - A66 Northern Trans-Pennine - EIA Regulation 10 and 11 Scoping Notification and Consultation
Date: 07 July 2021 10:01:06
Attachments: [image001.jpg](#)
[image002.jpg](#)

Dear Sir/Madam

Thank you for consulting Cadent of the proposed A66 Northern Trans Pennine DCO. I can confirm that this project falls outside of Cadent's network and therefore we have no comments to make.

Kind Regards
Vicky

Vicky Cashman
Planning & Consents
General Counsel Department

Cadent
Ashbrook Court, Prologis Park, Central Boulevard, Coventry, CV7 8PE
Tel: [REDACTED]
cadentgas.com

** Please note Thursdays are my non-working day **

From: A66Dualling <A66Dualling@planninginspectorate.gov.uk>
Sent: 14 June 2021 16:23
Subject: [EXT] TR010062 - A66 Northern Trans-Pennine - EIA Regulation 10 and 11 Scoping Notification and Consultation

Dear Sir/Madam,

Please see attached correspondence on the proposed A66 Northern Trans-Pennine.

Please note the deadline for consultation responses is **12 July 2021**, and is a statutory requirement that cannot be extended.

Kind regards,
Marie Shoemith

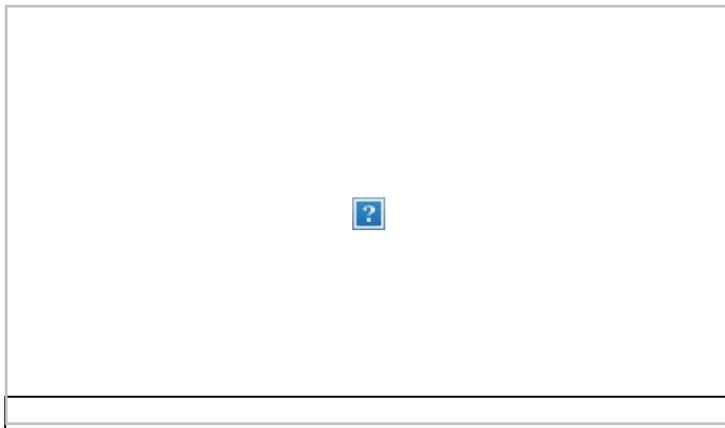
Marie Shoemith
Senior EIA Advisor
Environmental Services
Helpline: 0303 444 5000
Email: [REDACTED]

Web: <https://infrastructure.planninginspectorate.gov.uk/> (National Infrastructure Planning)
Web: www.gov.uk/government/organisations/planning-inspectorate (The

Planning Inspectorate)

Twitter: [@PINSgov](#)

This communication does not constitute legal advice.



Please note that the contents of this email and any attachments are privileged and/or confidential and intended solely for the use of the intended recipient. If you are not the intended recipient of this email and its attachments, you must take no action based upon them, nor must you copy or show them to anyone. Please contact the sender if you believe you have received this email in error and then delete this email from your system.

Recipients should note that e-mail traffic on Planning Inspectorate systems is subject to monitoring, recording and auditing to secure the effective operation of the system and for other lawful purposes. The Planning Inspectorate has taken steps to keep this e-mail and any attachments free from viruses. It accepts no liability for any loss or damage caused as a result of any virus being passed on. It is the responsibility of the recipient to perform all necessary checks.

The statements expressed in this e-mail are personal and do not necessarily reflect the opinions or policies of the Inspectorate.

DPC:76616c646f72



[Please take a moment to review the **Planning Inspectorate's Privacy Notice** which can be accessed by clicking this link.](#)

This e-mail, and any attachments are strictly confidential and intended for the addressee(s) only. The content may also contain legal, professional or other privileged information. If you are not the intended recipient, please notify the sender immediately and then delete the e-mail and any attachments. You should not disclose, copy or take any action in reliance on this transmission.

Please ensure you have adequate virus protection before you open or detach any documents from this transmission. Cadent Gas Limited does not accept any liability for viruses. An e-mail reply to this address may be subject to monitoring for operational reasons or lawful business practices.

Cadent Gas Limited is a limited liability company, registered in England and Wales (registered no. 10080864) with its registered office at Ashbrook Court, Prologis Park, Central Boulevard, Coventry CV7 8PE.

Economy and Infrastructure
Cumbria County Council • Parkhouse Building
Kingmoor Business Park • Baron Way • Carlisle
CA6 4SJ

T: [REDACTED] E: [REDACTED]

Marie Shoesmith
Senior EIA Advisor
Environmental Services
Central Operations
The Planning Inspectorate
Temple Quay House
2 The Square
Bristol
BS1 6PN

Date: 12 July 2021
PINS reference: TRO10062-000008-210614
CCC reference: HEA66NTP Environmental Scoping Report – July 2021

SENT BY EMAIL: A66Dualling@planninginspectorate.gov.uk

Dear Ms Shoesmith

PLANNING ACT 2008 (AS AMENDED) AND THE INFRASTRUCTURE PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017 (THE EIA REGULATIONS) – REGULATIONS 10 AND 11

APPLICATION BY HIGHWAYS ENGLAND (THE APPLICANT) FOR AN ORDER GRANTING DEVELOPMENT CONSENT FOR THE A66 NORTHERN TRANS-PENNINE PROJECT (THE PROPOSED DEVELOPMENT)

CUMBRIA COUNTY COUNCIL'S RESPONSE TO SCOPING CONSULTATION

Thank you for providing Cumbria County Council (the County Council) with the opportunity to comment on Highway England's (HE) Environmental Scoping Report which has been submitted to PINS for the Secretary of State's Opinion (Scoping Opinion) as to the information to be included within the Environmental Statement to be provided as part the Development Consent Order application.

The County Council's response adheres to and is based on the technical review of HE's Environmental Scoping Report undertaken by WSP (the County Council's consultants appointed to provide technical support). The technical review is attached and should be read in conjunction with this letter.

During HE's PCF Stage 2, when HE was considering options, the County Council and the Cumbria LEP responded to HE's non-statutory public consultation (July 2019) to inform the consideration of the preferred route. The response sought to provide clear support for the proposed upgrade while also drawing out number of specific considerations and key tests that need to be reflected as the scheme progresses.

The response to HE's Environmental Scoping therefore identifies opportunities for how these considerations and key tests can be met in the development of the project as well as commenting upon where further information to allow them to be demonstrated would be beneficial.

The County Council welcomes the ongoing liaison with Highways England throughout the development of the project to help assist in developing a solution that is consistent with the key tests. Reference is also made to the knowledge that the County Council hold about the baseline environment within Cumbria. The County Council are willing to share any further information to encourage HE's understanding and how the projects effects upon the environment can be appropriately mitigated.

Whilst the response predominantly comments upon matters that relate to the six Schemes within Cumbria, and whilst no comment has been made specifically about Schemes 7-11, any assessment presented within the ES should draw holistic conclusions about the likely significant effects of the entire project.

Traffic and Transport

The County Council challenge the omission of the chapter within the ES relating to traffic and transport impacts of the project, which is inconsistent with the approach proposed in paragraph 5.206 of the National Policy Statement for National Networks.

The County Council considers that a dedicated ES chapter that considers the impact of the Project upon traffic and transport in both the construction and operational phases is vital. No clear justification has been provided as to why this topic has been excluded from the ES Without such an assessment being included, the assessment of likely significant effects upon the population of Cumbria would not be included within the scope of the ES.

The scope of the traffic and transport chapter should be informed by suitable guidance such as the 'Guidelines for the Environmental Assessment of Road Traffic' produced by the Institute of Environmental Management and Assessment (IEMA) and should in particular consider the impact of severance of communities along the route as consequence of new junction designs.

Associated Assessments

The inclusion of a Habitats Regulations Assessment (HRA), a Water Framework Directive (WFD) assessment and a Transport Assessment in support of the DCO is appropriate. It will be important that the scope and conclusions of the ES are consistent and integrated with any mitigation measures that are proposed within these associated assessments.

Scheme Detail

There remains considerable uncertainty as to what the precise boundary of the project proposals will be.

This is particularly the case in the Kirkby Thore area where the orange, red and blue routes could all lead to different significant effects upon the environment.

In addition, further engagement is required with HE and County Council for the proposals for scheme 1-6 package A and B) including how they could impact on the Council's statutory function and highways assets. We would recommend that a collaborative approach, focussing on the Key Tests would mean that fuller knowledge of the area brings maximum benefit to the design, reduces the need for future design changes and ensure the impacts from the proposed change would be minimal in negative impact or would give opportunity to maximise benefits.

Limits of Deviation

Any Limits of Deviation that HE wishes to include within the DCO should be clearly presented within the ES so that it is possible to identify that the worst-case scenario of what consent is sought for has been considered in the EIA process. This is particularly relevant for any ecological surveys that will not have been completed by the time the DCO application is submitted, because the extent of mitigation needed may not have been fully identified.

HE identifies that therefore not all survey information may be available within the ES and a 'highly precautionary worst-case approach' will be undertaken. This is an acceptable approach, but it would be

beneficial for HE to identify as soon as possible to the County Council and certainly at the S42 stage what surveys will not be available within the ES and the approach that they will be taking to address this knowledge gap and what deficiencies and limitations this presents.

Construction Information

It is the County Council's firm view that there is insufficient information on construction proposals and how HE proposes to phase or programme the delivery of the Schemes.

The County Council require, as a minimum the following to be included in the ES:

- Construction start, duration and end dates for each Scheme clearly shown to understand whether the Schemes will be under construction in parallel or not;
- The location of construction compounds, including satellite compounds, haul roads and storage soil handling areas;
- Proposed construction hours as well as the need for any night-time or weekend working, where this would be, and for what duration;
- Proposed construction employment numbers broken down into skill types and skill sets of the employees required;
- The need for the transfer of material (e.g. soil) between Schemes so that the impacts of construction related traffic, traffic diversions, and the potential for the re-use of site-won material related traffic can be fully understood.

Environmental Management Plan

The County Council recognises that HE confirm that a draft Environmental Management Plan (EMP) will accompany the DCO application. The County Council require that the draft DCO should include a requirement that an EMP be produced for each Scheme as appropriate prior to construction commencing.

Determination of Significance.

The Environmental Scoping Report does not always identify on an individual topic by topic basis what would constitute a negligible, minor, moderate or major impact and what defines the value of each receptor identified for assessment. Reference is made within the topic chapters to the appropriate document within the Design Manual for Roads and Bridges (DMRB) but the County Council would like to see these matrices included in the ES documentation so that it is clear to the reader how a determination of significance has been reached.

Associated Development

It is noted that the Environmental Scoping Report does not make reference to Associated Development.

Should HE wish to include any Associated Development, such as off-route works and utility diversions, within the DCO application, then this should be included at the S42 stage of the application so that any environmental effects can be understood and consulted upon.

Nomenclature

It is suggested that HE adopt in the ES the terminology that describes the stages of the DCO process that is aligned to the Planning Act (2008) and PINS guidance notes. The use of terms such as "PCF Stage 3" is less accessible to the public and consultees alike and does not give clarity on what stage the Project is presently at and when further information will be available.

It is also of note that Paragraphs 1.1.2 and 1.1.3 of the Environmental Scoping Report refer to HE undertaking the EIA whereas as defined in Paragraph 5(1) of the EIA Regulations, the EIA process is not completed solely by an Applicant; in fact EIA is a three stage process for which the Applicant only fulfils part a) of Paragraph 5(1), namely the preparation of an ES.

Alternatives

As the Project progresses to the detail required to support an application for development consent, the alternatives chapter of the ES should detail all the main alternatives that have been considered and the reasons for the choices made. This will be particularly important for understanding the decision-making process around the options presented for alternative route alignments around Kirkby Thore.

Major Accidents and Disasters

There does not appear to have been specific consideration of ground instability risks associated with the Gypsum mines at Kirkby Thore. In addition, the Long List states that “No railways located within the study area directly interface with the project” however, as illustrated in Figure 2.1 of the Environmental Scoping Report, the Settle to Carlisle line crosses the DCO boundary and the Evolved Preferred Route (blue route) appears to pass beneath the railway.

Further consideration needs to be given in the ES to major events that could be associated with ground instability and the proximity of the railway to the Project.

HE’s attention is also drawn to two pipelines that currently cross under the A66 to the south east of Penrith. These do not appear to have been considered in the assessment to date.

Digital EIA

Digital approaches to the Non-Technical Summary of the ES should also be encouraged to facilitate understanding and distribution of the information. This could also include the use of digital tools at consultation to reduce the need for paper copies of the application.

Mitigation Terminology

The County Council would encourage HE to identify in the ES the approach and terminology that will be used to identify the type of mitigation that is to be employed. It is noted that the terms ‘embedded mitigation’, ‘additional mitigation’ and ‘further mitigation’ are used within the Environmental Scoping Report. HE should provide a description and definition in the ES of what these terms mean.

Below are comments in relation to the topic areas. The County Council would like to emphasise the need to make reference to the Council’s Policies as well as the National Policy Statement for National Networks.

Air Quality

It is welcomed that during the construction phase any mitigation measures that are needed to reduce construction dust and emissions are secured via the Environmental Management Plan. However, at this stage, and with the information presented within the scoping report, the degree of mitigation for each scheme has not been provided and greater detail will be required within the ES so that the County Council can ensure that amenity and human health are protected.

Operational road traffic emissions from the Project have the potential to harm human health and ecologically designated sites. It is therefore imperative that adequate monitoring is implemented so that the baseline conditions can be fully understood. Of particular concern is the potential impact of Scheme 1 on traffic flows in the AQMA to be declared on Castlegate in Penrith.

Biodiversity

Considerable survey effort for protected species will be required along the route of the project and in the Scoping Report, HE has not identified any survey findings or identified any likely mitigation measures and therefore it is not possible to comment upon the likely significant effects of the Project in any detail.

The assessment of nitrogen and acid deposition from road traffic emissions is also of concern and the Council believes that ammonia emissions should be included within any modelling of the effects upon designated sites.

Climate

The assessment approach could be strengthened through the adoption of the IEMA guidance for assessing the significance of greenhouse gas emissions. Similarly, it is also recommended that the ES includes the potential sources of GHG emissions associated with the Project using the *PAS 2080* lifecycle stages and provides justification for which lifecycle stages are scoped in or out for further assessment.

Cultural Heritage

Considerable survey effort for unknown archaeological remains will be required and no baseline site specific survey findings have been provided by the Applicant within the Scoping Report. The County Council, in its care and safeguarding role for non-designated heritage assets, is aware that the Project will be constructed in an area of high potential for significant remains to be present. Of particular importance is where the route deviates from the current A66, as there is potential for considerable impacts on as yet unknown archaeological resources and it is important that these assets are considered early within the process as there is potential for remains to be present that are worthy of statutory designation.

The cumulative effect of the individual schemes on the historic landscape character does not appear to have been considered.

Geology and Soils

Potential impacts have been identified in relation to agricultural soils, human health, and groundwater and surface water quality. It is agreed with that these potential impacts are considered appropriate, although the County Council would encourage HE to liaise with them to discuss and agree the approach and scope of any proposed Ground Investigation. This should be preceded by a Preliminary Sources Study Report which would assist in determining where this Ground Investigation should be targeted.

The County Council also draw the attention of HE to the potential for foot and mouth burial sites, Ministry of Defence related remains and ground stability issues that are present along the corridor of the Project.

Landscape and Visual

The extent of the study area for the landscape and visual impact assessment is uncertain and it is important that the study area is broad enough to ensure that all sensitive receptors that could experience significant effects are appropriately assessed. The presence of ancient and veteran trees should also be identified through a site-specific survey and likely significant effects upon them should be provided in the ES.

Insufficient information has been provided in the ES on the scenarios that are to be assessed within the ES. This should by default include: construction at its peak, daytime and night-time scenarios as well as the winter year 1 (opening) and summer and winter year 15 (design year).

Materials Assets and Waste

The cut and fill balance of the Project is not yet known. Should the Applicant wish to balance earth movements across the schemes of the Project, then the consequential environmental impacts of doing so (traffic, noise, contamination, etc) should be included within the assessment in the ES.

Furthermore, HE should be made aware that the Local Aggregates Assessment (LAA) for 2019/2020 will be prepared by the County Council over the coming months and the information provided in the LAA should be incorporated in future EIA deliverables for the Project.

Noise and Vibration

The potential impacts identified in the Environmental Scoping Report are considered appropriate at this stage although further information on the construction and operational noise will be required within the ES.

Population and Human Health

The potential impacts identified in the Environmental Scoping Report are considered appropriate at this stage. However, to ensure a robust assessment of population and human health effects, it is recommended

that the Applicant includes physical activity as a health determinant to be assessed during construction and operational phases.

With the existing A66 being used by cyclists and crossed by pedestrians, further detail should be provided on the provision of footpaths and cycling infrastructure and how the Council's aspirations for increased provision in this area can be facilitated. The potential impact the Project is likely to have on road safety and associated health outcomes should also be considered within the ES.

Road Drainage and The Water Environment

The potential impacts identified for both the construction and operation stage are satisfactory, given the information available to inform the Scoping Report. However, there may be an impact on fluvial geomorphology and an impact to flood risk (surface water and groundwater) from ordinary watercourses. With respect to the construction phase, it is recommended that the potential hydrogeological impacts on buried archaeology is considered.

The County Council is also keen to work with HE to identify how highway drainage from both the Trunk Road and the highway within the control of the County Council can be shared for the efficient use of land for any treatment and attenuation purpose.

Assessment of Cumulative Effects

Within the ES it would be beneficial for the justification to the Zone of Influence that is to be used in the CEA to be clarified. For example, the Biodiversity assessment (see Chapter 4 of this response) may need to be extended to a much larger area, and therefore the CEA should follow suit. Any deviation from the study area for the CEA should therefore mirror the technical topic chapter, unless it can be justified accordingly.

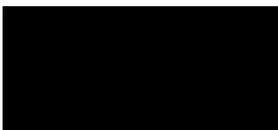
HE's proposal to consult with relevant Local Planning Authorities to identify the developments to be included in the CEA is supported. However, as Material Resources and Climate are to have a regional zone of influence (as shown in Table 16.1 of the Scoping Report, a greater number of authorities than listed will need to be consulted. The CEA should also ensure that NSIPs are identified from the PINS website and included as appropriate within the CEA.

It is accepted that at this early stage in the EIA process other developments that are to be considered in the CEA are often not available for consideration. However, as HE is keen to progress the DCO application within the year, there are clearly developments in the planning process at the moment that will be captured within the CEA that will be submitted with the ES.

It would therefore be beneficial for an initial list of the developments that will be considered in the ES to be provided in the PEIR and that the County Council is consulted to provide information on the other developments that are suitable for consideration.

I do hope you find the above helpful. Should you require any further clarification or information, please do not hesitate to contact me.

Yours sincerely



David Haughian
Senior Programme Manager
Economy and Infrastructure Directorate
Cumbria County Council



Cumbria County Council and Eden District
Council

A66 NORTHERN TRANS-PENNINE PROJECT

Technical Review of the Environmental Scoping
Report



Cumbria County Council and Eden District Council

A66 NORTHERN TRANS-PENNINE PROJECT

Technical Review of the Environmental Scoping Report

FINAL ISSUE

PUBLIC

PROJECT NO. 70081489

OUR REF. NO. 7081489_001

DATE: JULY 2021

WSP

8 First Street

Manchester

M15 4RP

Phone: +44 161 200 5000

WSP.com



QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	Draft for Client comment	2 nd draft for Client comment	Final	
Date	9 th June	29 th June	7 th July	
Prepared by	Various	Various	Various	
Checked by	Hywel Roberts	Hywel Roberts	Hywel Roberts	
Authorised by	Marcus Wood	David Hoare	John Leggett	
Project number	70081489	70081489	70081489	

CONTENTS

1	INTRODUCTION	1
1.2	SCHEME DETAIL	2
1.3	CONSULTATION WITH THE APPLICANT	2
2	GENERAL COMMENTS	3
2.1	TOPICS FOR INCLUSION IN THE EIA	3
2.2	SCHEME DETAIL	4
2.3	CONSTRUCTION INFORMATION	5
2.4	ENVIRONMENTAL MANAGEMENT PLAN	6
2.5	DETERMINATION OF SIGNIFICANCE	6
2.6	ASSOCIATED DEVELOPMENT	6
2.7	NOMENCLATURE	6
2.8	ALTERNATIVES	6
2.9	MAJOR ACCIDENTS AND DISASTERS	7
2.10	DIGITAL EIA	7
2.11	MITIGATION TERMINOLOGY	8
3	AIR QUALITY	9
3.1	STUDY AREA AND ASSESSMENT METHODOLOGY	9
3.2	BASELINE CONDITIONS	11
3.3	POTENTIAL IMPACTS	12
3.4	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	13
3.5	ASSUMPTIONS AND LIMITATIONS	13
4	BIODIVERSITY	14

4.1	INTRODUCTION AND POLICY CONTEXT	14
4.2	STUDY AREA AND ASSESSMENT METHODOLOGY	14
4.3	BASELINE CONDITIONS	17
4.4	POTENTIAL IMPACTS	17
4.5	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	18

5 CLIMATE **21**

CLIMATE RESILIENCE		21
5.2	STUDY AREA	21
5.3	BASELINE CONDITIONS	21
5.4	POTENTIAL IMPACTS	21
5.5	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	22
5.6	DESCRIPTION OF THE LIKELY SIGNIFICANT EFFECTS	22
5.7	ASSESSMENT METHODOLOGY	22
5.8	ASSUMPTIONS AND LIMITATIONS	22
GREENHOUSE GASES		22
5.9	STUDY AREA	22
5.10	BASELINE CONDITIONS	22
5.11	POTENTIAL IMPACTS	23
5.12	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	23
5.13	DESCRIPTION OF LIKELY SIGNIFICANT EFFECTS	23
5.14	ASSESSMENT METHODOLOGY	23
5.15	ASSUMPTIONS AND LIMITATIONS	23

6 CULTURAL HERITAGE **24**

6.1	INTRODUCTION AND POLICY CONTEXT	24
6.2	STUDY AREA AND ASSESSMENT METHODOLOGY	24
6.3	BASELINE CONDITIONS	25
6.4	POTENTIAL IMPACTS	27
6.5	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	27
6.6	ASSUMPTIONS AND LIMITATIONS	27

7	GEOLOGY AND SOILS	29
7.1	INTRODUCTION AND POLICY CONTEXT	29
7.2	STUDY AREA AND ASSESSMENT METHODOLOGY	29
7.3	BASELINE CONDITIONS	30
7.4	POTENTIAL IMPACTS	31
7.5	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	31
8	LANDSCAPE AND VISUAL	32
8.1	STUDY AREA AND ASSESSMENT METHODOLOGY	32
8.2	BASELINE CONDITIONS	32
8.3	POTENTIAL IMPACTS	33
8.4	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	34
8.5	DESCRIPTION OF LIKELY SIGNIFICANT EFFECTS	34
8.6	ASSESSMENT METHODOLOGY	35
8.7	CUMULATIVE EFFECTS	35
8.8	ASSUMPTIONS AND LIMITATIONS	35
9	MATERIAL ASSETS AND WASTE	37
9.1	INTRODUCTION AND POLICY CONTEXT	37
9.2	STUDY AREA AND ASSESSMENT METHODOLOGY	38
9.3	BASELINE CONDITIONS	38
9.4	POTENTIAL IMPACTS	38
9.5	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	39
9.6	ASSUMPTIONS AND LIMITATIONS	39
10	NOISE AND VIBRATION	40
10.1	INTRODUCTION AND POLICY CONTEXT	40
10.2	STUDY AREA	40
10.3	BASELINE CONDITIONS	41
10.4	POTENTIAL IMPACTS	41

10.5	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	41
10.6	DESCRIPTION OF THE LIKELY SIGNIFICANT EFFECTS	41
10.7	ASSESSMENT METHODOLOGY	42
10.8	ASSUMPTIONS AND LIMITATIONS	42
11	POPULATION AND HUMAN HEALTH	43
11.2	STUDY AREA AND ASSESSMENT METHODOLOGY	43
11.3	BASELINE CONDITIONS	43
11.4	POTENTIAL IMPACTS	44
11.5	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	45
12	ROAD DRAINAGE AND THE WATER ENVIRONMENT	46
12.1	STUDY AREA	46
12.2	OVERVIEW OF CONSULTATION TO DATE	46
12.3	BASELINE CONDITIONS	46
12.4	POTENTIAL IMPACTS	48
12.5	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	48
12.6	ASSESSMENT METHODOLOGY	48
12.7	ASSUMPTIONS AND LIMITATIONS	49
13	ASSESSMENT OF CUMULATIVE EFFECTS	50
13.1	STUDY AREA AND ASSESSMENT METHODOLOGY	50
13.2	BASELINE CONDITIONS	50
13.3	POTENTIAL IMPACTS	50

APPENDICES

APPENDIX A

CCC AND LEP CONSULTATION RESPONSE

1

INTRODUCTION



1 INTRODUCTION

- 1.1.1. WSP has been appointed by Cumbria County Council (CCC) and Eden District Council (EDC) (collectively, “the Councils”) to provide technical advice to help inform their response to the Planning Inspectorate (PINS) to the Environmental Scoping Report prepared by Highways England (the Applicant) for the A66 Northern Trans-Pennine (NTP) Project (the Project).
- 1.1.2. The Project is to be considered for consent via the Development Consent Order (DCO) process because it is a Nationally Significant Infrastructure Project (NSIP) as defined in the Planning Act 2008 and therefore the Councils’ role is that of host authorities rather than as consenting authorities. This response has been prepared in the context of PINS Advice Note 2: The Role of Local Authorities in the Development Consent Process.
- 1.1.3. The technical review of the Environmental Scoping Report has followed a chapter by chapter approach mirroring the topics that the Applicant has proposed for inclusion within the Environmental Statement (ES).
- 1.1.4. Where it is identified in this technical note that further information is required within the ES, it should be noted that this information would be beneficial at an earlier stage within the Preliminary Environmental Information Report (PEIR) where appropriate to do so.

CCC AND LEP RESPONSE

- 1.1.5. This technical review responds to the proposed scope for the EIA of the Project with consideration of CCCs and the Cumbria Local Enterprise Partnership’s (LEP) response to HE’s Non Statutory consultation to the Project in July 2019 (referred to as the CCC and LEP Response, a copy of which is included in Appendix A to this report).
- 1.1.6. The CCC and LEP Response identifies 10 Key Tests that were identified as necessary in order for the strongest schemes to emerge through the design of the Project. These Key Tests are:
- Clear and effective junction strategies;
 - No loss of connectivity for local communities;
 - An effective solution for Kemplay Bank; M6 Junction 40 and Skirsgill Depot for all users;
 - A clear strategy for sections of the A66 that are ‘de-trunked’;
 - An “off A66” route for walking and cycling between M6 and A1(M);
 - More and smarter technology to bolster resilience;
 - Meeting wider service and infrastructure needs;
 - Environmental mitigation to minimise harm and boost benefit;
 - A clear strategy for the establishment of alternative/diversion routes; and
 - Even further and stronger joint working.
- 1.1.7. This technical review therefore identifies opportunities for how the Key Tests can be met in the development of the Project as well as commenting upon where further information to allow them to be demonstrated would be beneficial. The Key Tests’ aims are to enable Highways England to allow for the strongest possible scheme to emerge, providing adequate environmental and social value be woven in as a ‘golden thread’ of excellence in the A66 scheme. This technical review of the Environmental Scoping Report identifies where elements of the review align to these Key Tests, although not all references to mitigation measures are cross referenced to the Key Tests and

wherever reference to mitigation is made it should be accepted that this is compliant with the proposals of the relevant Key Test.

1.2 SCHEME DETAIL

- 1.2.1. The Project consists of 10 Schemes and six of these Schemes are within Cumbria (Schemes 1-6). These have been further aggregated by the Applicant as Package A (Schemes 1-3) and Package B (Schemes 4-6). In this response to the Environmental Scoping Report, this technical note predominantly comments upon matters that relate to the six Schemes within Cumbria, and whilst no comment has been made specifically about Schemes 7-11, any assessment presented within the ES should draw holistic conclusions about the likely significant effects of the entire Project.

1.3 CONSULTATION WITH THE APPLICANT

- 1.3.1. As part of this technical review, we are aware that the Councils have liaised with the Applicant on a number of matters relating to the Project prior to publication of the Environmental Scoping Report.
- 1.3.2. WSP would endorse and advise the Councils that ongoing liaison with the Applicant throughout the development of the Project will assist in developing a solution that is consistent with the Key Tests.
- 1.3.3. Reference within this technical review is made to the knowledge that the Councils hold about the baseline environment within Cumbria. The sharing of baseline information between the Councils and the Applicant is encouraged to improve understanding and identify how the Project's effects upon the environment can be appropriately mitigated. This is particularly important to allow for the necessary depth of understanding of the area for guiding the proposed development that Environmental Impact Assessment alone does not achieve, ensuring adequate design and legacy from the HE proposals.

2 GENERAL COMMENTS

2.1 TOPICS FOR INCLUSION IN THE EIA

2.1.1. This technical review of HE's Environmental Scoping Report has identified that the proposed format of the ES is acceptable, assuming that the technical chapters of the Environmental Scoping Report are the chapters that will be carried forward to the ES. The chapters are:

- Air Quality
- Biodiversity
- Climate
- Cultural Heritage
- Geology and Soils
- Landscape and Visual
- Material Assets and Waste
- Noise and Vibration
- Population and Human Health
- Road Drainage and the Water Environment
- Cumulative Impact Assessment.

2.1.2. A technical review of each topic chapter is presented in Chapters 3-13 of this report, and where sub-components to the topics have been scoped out, but with insufficient justification for doing so, then this is addressed individually in the relevant chapter.

TRAFFIC AND TRANSPORT

2.1.3. In addition to these assessments it is noted that traffic and transport matters relating to the Project have not been proposed as an assessment within the ES which is inconsistent with the approach proposed in paragraph 5.206 of the National Policy Statement for National Networks. A dedicated chapter within the ES that considers the impact of the Project upon traffic and transport in both the construction and operational phase is considered to be necessary as insufficient information has been provided in the Environmental Scoping Report to justify the exclusion of this topic from the EIA. Without such an assessment being included, the assessment of likely significant effects upon the population of Cumbria would not be included within the scope of the EIA.

2.1.4. The scope of the traffic and transport chapter should be informed by suitable guidance such as the 'Guidelines for the Environmental Assessment of Road Traffic' produced by the Institute of Environmental Management and Assessment (IEMA) and should consider:

- Severance (including new pedestrian severance from community facilities and relief from severance for pedestrians);
- Driver stress and delay;
- Pedestrian and cyclist amenity, journey times and delay;
- Collisions and safety; and
- Fear and intimidation.

2.1.5. The assessment within the Traffic and Transport chapter should also consider the likely effects upon public transport and propose mitigation measures that are needed in order to ensure that communities are not disrupted and affected by significant changes to the public transport system. Opportunities to promote and facilitate increased public transport usage should be identified by the

Applicant and discussed with the Councils so that the Project doesn't solely benefit private car users.

- 2.1.6. Furthermore, having a clear position on the requirements for the scheme design will assist HE with making the Case for the Scheme for DCO by being able to demonstrate where the first four Key Tests have been developed in agreement with the local authorities.
- 2.1.7. This is considered to be necessary acknowledging that the Covid-19 pandemic has disrupted patterns of work and travel across the country creating potential changes in behaviour and demand for, or use of infrastructure, potentially different to that envisaged at the time of publications of RIS1 and 2.
- 2.1.8. Within a Traffic and Transport Chapter, the Applicant should draw upon how the Project will help to deliver the three broad objectives of the Cumbria Transport Infrastructure Plan (CTIP). The CTIP is currently being prepared but a draft will be presented to the CCC Cabinet in late July 2021 and will be adopted in full 2022. The three broad objectives are:
- Clean and Healthy Cumbria – promoting the role of active travel and digital infrastructure as an enabler of inclusive economic growth and in supporting the health and well-being of our communities;
 - Connected Cumbria – making the case for improved transport networks across and into Cumbria to connect our places and support economic growth and opportunities for businesses and communities; and
 - Community Cumbria – promoting integrated approaches to transport, supporting opportunity and renewal within towns and communities across Cumbria.
- 2.1.9. It is also of note for the Applicant to be aware that the draft CTIP states that CCC proposes to “*work closely with Highways England to support delivery of this proposal [the A66] and ensuring the effecting integration of existing communities, sites and transport modes*”.
- 2.1.10. The Applicant should therefore be aware that emerging local transport planning policy mirrors some of Cumbria County Council's Key Tests.

ASSOCIATED ASSESSMENTS

- 2.1.11. The inclusion of a Habitats Regulations Assessment (HRA), a Water Framework Directive (WFD) assessment and a Transport Assessment in support of the DCO is appropriate. It will be important that the scope and conclusions of the ES are consistent and integrated with any mitigation measures that are proposed within these associated assessments.

2.2 SCHEME DETAIL

- 2.2.1. The Applicant has provided sufficient detail that, in our view, meets the requirements of Regulation 10(1) of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations) although at this stage, there remains considerable uncertainty as to what the precise boundary of the project proposals will be. This is particularly the case in the Kirkby Thore area where the orange, red and blue routes could all lead to different significant effects upon the environment.
- 2.2.2. Further to comments in Section 1, it is therefore recommended that the Applicant discuss in more detail with the Councils the proposals for Schemes 1-6 including how it could impact upon the Councils' statutory functions and highway assets. We would recommend that a collaborative

approach, focussing on the Key Tests would mean that fuller knowledge of the area brings maximum benefit to the design, reduces the need for future design changes and ensure the impacts from the proposed change would be minimal in negative impact or would give opportunity to maximise benefits.

- 2.2.3. The Applicant should be encouraged to consider the Key Tests identified in Paragraph 1.1.6 when further developing their designs and proposals for the Project and it is recommended that within the Statement of Common Ground (SoCG) the Applicant should detail how the Key Tests have been met.

LIMITS OF DEVIATION

- 2.2.4. Any Limits of Deviation that the Applicant wishes to include within the DCO should be clearly presented within the ES so that it is possible to identify that the worst-case scenario of what consent is sought for has been considered in the EIA process. This is particularly relevant for any ecological surveys that will not have been completed by the submission of the DCO application because the extent of mitigation needed may not have been fully identified.
- 2.2.5. It is noted that in Section 1.3 of the Environmental Scoping Report, that the Applicant draws attention to 'Project Speed' and that the submission of the DCO application will be made in early 2022 (paragraph 1.1.3 of the Environmental Scoping Report).
- 2.2.6. The Applicant identifies that therefore not all survey information may be available within the ES and a 'highly precautionary worst-case approach' will be undertaken. This is an acceptable approach, but it would be beneficial for the Applicant to identify as soon as possible to the Councils, and certainly at the S42 stage, what surveys will not be available within the ES and the approach that they will be taking to address this knowledge gap and what deficiencies and limitations this presents.

2.3 CONSTRUCTION INFORMATION

- 2.3.1. The Environmental Scoping Report does not include sufficient information on the approach to the construction of the Project and how the Applicant proposes to phase or programme the constituent Schemes. In Paragraph 2.6.2 the Applicant states that it is presently assumed that there will be a phased approach to construction across the four packages of work (although as stated previously in Paragraph 1.2.1 only two of these packages of work will be in Cumbria).
- 2.3.2. The ES should include as a minimum further information on the following aspects of the construction process:
- Construction start, duration and end dates for each Scheme clearly shown to understand whether the Schemes will be under construction in parallel or not;
 - The location of construction compounds, including satellite compounds, haul roads and storage and soil handling areas;
 - Proposed construction hours as well as the need for any night time or weekend working, where this would be, and for what duration;
 - Proposed construction employment numbers broken down into skill types and skill sets of the employees required;
 - The need for the transfer of material (e.g. soil) between Schemes so that the impacts of construction related traffic, traffic diversions, and the potential for the re-use of site won material can be fully understood.

- 2.3.3. The Applicant should provide further justification and explanation of what they mean in Paragraph 2.7.2 of the Environmental Scoping Report when it is stated that “*it is likely that a risk-based approach will be taken...*”. The Applicant needs to identify what *will* be the approach to the EIA rather than what is *likely* to be the approach to the EIA so that certainty can be provided regarding the methods of assessment that are proposed. The “*risk-based approach*” should also be defined so that it can be understood what this means in practice.

2.4 ENVIRONMENTAL MANAGEMENT PLAN

- 2.4.1. The need for an Environmental Management Plan (EMP) has been identified within the Environmental Scoping Report, and the Applicant has committed to providing a draft alongside the DCO application. It is recommended that the draft DCO should allow for, as a requirement to the DCO, an EMP to be produced for each Scheme as appropriate prior to construction commencing.

2.5 DETERMINATION OF SIGNIFICANCE

- 2.5.1. The common approach to the determination of significance, that is presented in Table 5-1 of the Environmental Scoping Report, is based on the matrix in LA104 and is considered to be appropriate. Any deviation from the use of this matrix should be justified accordingly in the ES.
- 2.5.2. However, the Environmental Scoping Report does not always identify on an individual topic by topic basis what would constitute a negligible, minor, moderate or major impact and what defines the value of each receptor identified for assessment. Reference is made within the topic chapters to the appropriate document within the Design Manual for Roads and Bridges (DMRB) but these matrices should be included in the ES documentation so that it is clear to the reader how a determination of significance has been reached.

2.6 ASSOCIATED DEVELOPMENT

- 2.6.1. It is noted that the Environmental Scoping Report does not reference Associated Development. Should the Applicant wish to include any Associated Development, such as off-route works and utility diversions, within the DCO application, then this should be included at the S42 stage of the application so that any environmental effects can be understood and consulted upon.

2.7 NOMENCLATURE

- 2.7.1. It is suggested that the Applicant adopt in the ES the terminology that describes the stages of the DCO process that is aligned to the Planning Act (2008) and PINS guidance notes. The use of terms such as “PCF Stage 3” is less accessible to the public and consultees alike and does not give clarity on what stage the Project is presently at and when further information will be available.
- 2.7.2. It is also of note that in Paragraphs 1.1.2 and 1.1.3 of the Environmental Scoping Report refers to the Applicant undertaking the EIA whereas as defined in Paragraph 5(1) of the EIA Regulations, the EIA process is not completed solely by an Applicant and that in fact EIA is a three stage process for which the Applicant only fulfils part a) of Paragraph 5(1) namely the preparation of an ES.

2.8 ALTERNATIVES

- 2.8.1. The information in the Environmental Scoping Report details the approach taken to the consideration of alternatives undertaken to date. This is a useful introduction to how the Project has evolved at this stage. As the Project progresses to the detail required to support an application for development consent, the alternatives chapter of the ES should detail all the main alternatives that

have been considered to the Applicant and the reasons for the choices made. This will be particularly important for understanding the decision making process around the options presented for alternative route alignments around Kirkby Thore.

2.9 MAJOR ACCIDENTS AND DISASTERS

- 2.9.1. The approach to the assessment of major events is supported and it is welcomed that this has been aligned with the IEMA Primer on Major Accidents and Disasters in EIA¹ and DMRB LA104². The use of the Applicant's preferred term of 'major events' rather than 'major accidents and disasters' is also acceptable.
- 2.9.2. It is noted that a three-stage approach has been proposed to identify major events with the potential to lead to significant effects. It is also noted that Stage 3 was not considered to be required by the Applicant as a result of the conclusions from Stage 2.
- 2.9.3. A study area of the DCO boundary plus a 500m buffer is considered sufficient to:
- capture internal and external influencing factors which may have high adverse consequences on the project; and
 - identify receptors which may be impacted by a major event.
- 2.9.4. It is welcomed that the UK National Risk Register of Civil Emergencies has been used in the development of the "Long List", however, it should be noted that the 2017 edition referenced has been withdrawn and replaced by the 2020 edition³ which was published on 18th December 2020.
- 2.9.5. Although we generally agree with the major event types carried forward from Stage 1 to Stage 2, there does not appear to have been specific consideration of ground instability risks associated with the Gypsum mines at Kirkby Thore. In addition, the Long List states that "No railways located within the study area directly interface with the project" however, as illustrated in Figure 2.1 of the Environmental Scoping Report, the Settle to Carlisle line crosses the DCO boundary and the Evolved Preferred Route (blue route) appears to pass beneath the railway.
- 2.9.6. The Applicant's attention should also be drawn to two pipelines that currently cross under the A66 to the south east of Penrith. These do not appear to have been considered in the assessment to date.
- 2.9.7. It is understood that the major event types identified at Stage 2 will be addressed within the specific topic chapters of the ES or other documentation associated with the design, construction and maintenance of the Project. However, further consideration needs to be given in the ES to major events that could be associated with ground instability and the proximity of the railway to the Project.

2.10 DIGITAL EIA

- 2.10.1. It is noted that the Applicant is considering digital-led solutions to the ES (Paragraph 5.5.7 of the Environmental Scoping Report) and the opportunity for the Applicant to use digital EIA techniques to

¹ IEMA, Major Accidents and Disasters in EIA: A Primer, September 2020.

² Design Manual for Roads and Bridges LA 104 - Environmental assessment and monitoring, Revision 1, August 2020.

³ Cabinet Office, National Risk Register 2020 edition, 18 December 2020.

facilitate the understanding of the topics assessed in the ES is welcomed. Digital approaches to the Non-Technical Summary of the ES should also be encouraged to facilitate understanding and distribution of the information. This could also include the use of digital tools at consultation to reduce the need for paper copies of the application.

2.11 MITIGATION TERMINOLOGY

- 2.11.1. The Applicant is encouraged to identify in the ES the approach and terminology that will be used to identify the type of mitigation that is to be employed. It is noted that the terms ‘embedded mitigation’, ‘additional mitigation’ and ‘further mitigation’ are used within the Environmental Scoping Report. The Applicant should provide a description and definition in the ES of what these terms mean. This is important to meet the Key Test of ‘Environmental mitigation to minimise harm and boost benefit’. As noted by the National Infrastructure Commission (NIC): *“It is vital that major infrastructure projects consider their impact on the environment at every stage of their planning and design, as reflected in our design principles for national infrastructure”*. NIC design principles are: climate, people, places and value. NIC also state that major infrastructure construction and operation *“can actively contribute⁴ to the protection of the country’s natural resources and environment.”*

⁴ e.g. not merely mitigate.

3 AIR QUALITY

3.1 STUDY AREA AND ASSESSMENT METHODOLOGY

- 3.1.1. The Applicant should confirm that the latest available version of DMRB LA105: *Air Quality* will be followed in the ES.

Study Area

- 3.1.2. It is stated that the study area will be defined by applying the DMRB LA105: *Air Quality* criteria on roads within the Traffic Reliability Area, which relate to changes in traffic flow, changes in HDVs, speed band and carriageway alignment. All roads which trigger the criteria, and adjoining roads within 200m, will define the Affected Road Network (ARN). We agree with this approach and welcome the commitment to review the ARN as options are considered.
- 3.1.3. We note the study area highlighted in Figure 6.1 to Figure 6.21 is not always consistent with the definition in Section 6.2 as follows:
- The 200m study area buffer does not correspond to the ARN in all areas and should include the existing and proposed alignment;
 - The proposed Air Quality Management Area (AQMA) at Castlegate in Penrith, which is a compliance link for the purpose of national reporting under the EU Directive 2008/50/EC, is not shown on Figure 6.22;
 - Several ancient woodland and veteran tree sites are not included across the preferred route corridor; and
 - County wildlife sites are the responsibility of Cumbria County Council and the assessment of impacts of the Project on these sites is not addressed.
- 3.1.4. The ES should show the extent of the study area based on the draft order limits. This should be shown in a series of figures including specific human and ecological receptors in relation to the study area and order limits for the preferred option. The Applicant should ensure that the study area is sufficient to encompass all sensitive human and ecological receptors which may experience significant effects from each scheme.
- 3.1.5. The Applicant states that the assessment will use data from the traffic model for future years including future committed developments which is considered appropriate. The Applicant should also confirm which committed developments have been identified within the study area. This should include how the committed developments have been identified and assessed and how they may impact both the construction and operational phases.

Construction Phase

- 3.1.6. It is agreed that the impact of construction activities on air quality cannot be assessed without sufficient information on construction activities and vehicle/plant movements and this is unlikely to be available in its entirety at the scoping stage. However, more detail on the methodology for the assessment of construction phase impacts would be beneficial. For example, there is a lack of information on how construction phase road traffic impacts will be screened and subsequently assessed and how the level of mitigation required for the control of dust emissions will be determined. The construction phase assessment methodology should be presented in the ES accordingly.

- 3.1.7. It is noted there may be a temporal element to the construction phase study area depending on the proposed phasing of the schemes which could yield overlapping or single study areas at different times. These could be subject to different baseline conditions as datasets are updated. It would be helpful if this could be explored in the PEIR if phasing information is available. This would allow construction activities to be reconciled with live local action plan measures contained within the local air quality action plan.

Operational Phase

- 3.1.8. The Environmental Scoping Report proposes the application of 'simple' or 'detailed' assessment specific to each scheme to provide a proportionate assessment and this is agreed. However, the requirements for simple and detailed assessments should be defined in the PEIR so the council can review and provide comment.
- 3.1.9. The methodology described in the Environmental Scoping Report is a broadly accurate representation of the Highways England LA105: *Air Quality* method. However, application of the ADMS-Roads v5.0.0.1 is described in broad terms and lacks detail and justification in the following areas:
- The specific assessment years representing the Do-Minimum (DM), Opening Year (OY) and the Do-Something (DS) scenarios;
 - The method for estimating vehicle emissions where detailed modelling using ADMS-Roads v5.0.0.1 is required;
 - The method to be applied to model verification, including justification for using 2018 as the model verification year;
 - The use of a single meteorological data site to represent the whole project;
 - The monitoring data to be applied;
 - The adequacy of existing monitored datasets to support model verification; and
 - The requirement for further baseline monitoring in the context of the limitations in the Defra background maps to represent local conditions where properties are either very close to the carriageway (Eden) and where concentrations are close to the Air Quality Objective level (Penrith and Eamont Bridge).
- 3.1.10. There is an absence of the assessment of PM_{2.5} (particulate matter with an aerodynamic diameter of 2.5µm or less) in the Environmental Scoping Report which is consistent with the Highways England LA105: *Air Quality* guidance. However, as detailed in Policy Guidance Local Air Quality Management; Policy Guidance 16 (2016) (Chapter 7), local authorities are expected to work towards reducing emissions and/or concentrations of PM_{2.5}. It is accepted that for the majority of the route, PM_{2.5} emissions will tend to background levels at a short distance from the route alignment. However, Eden District Council has recently purchased continuous monitoring equipment which will be suitable for providing estimates of actual levels of PM_{2.5} which could be used to inform a local assessment of this pollutant species specific to the M6 J40 Penrith scheme if these data are available. It is recommended that PM_{2.5} emissions are assessed at the M6 J40 Penrith and A1(M) J53 Scotch Corner) schemes in the ES in the presence of local sources (A66, local traffic and the A1) in light of potential changes to the particulate air quality objectives.

- 3.1.11. There is emerging evidence⁵ to show that ammonia (NH₃) provides a greater contribution to nitrogen deposition than previously understood. LA105: *Air Quality* guidance does not provide a methodology to address this emerging issue nor the impact of the deposition of nitric/sulphuric acid. However, county councils have a responsibility for the protection of the health of county designated sites within their jurisdiction. This is a potential gap in the assessment of nitrogen and acid deposition which needs to be included in the assessment. Further information is provided in Chapter 4 Biodiversity.

3.2 BASELINE CONDITIONS

- 3.2.1. The method for the definition of sensitive receptors is broadly agreed with and support the commitment to review and update the list during the determination of the ARN. In the PEIR it would be useful for these to be presented on scheme drawings, particularly for the M6 J40 Penrith and A1(M) J53 Scotch Corner schemes, which have not been assessed to date
- 3.2.2. The reassessment of receptors should incorporate the relevant receptors already shown in Figure 14.1 to Figure 14.7 and the compliance link receptors allow any overlap within Cumbria to be identified. Further information should be provided on the underlying datasets which will be used to identify the sensitive receptors (e.g. residential properties, schools and hospitals) in the ES.
- 3.2.3. For the compliance risk assessment, areas with qualifying features on the Pollution Climate Mapping (PCM) road network that meet Defra's interpretation of the Air Quality Directive will be identified. Further information on the underlying datasets that will be used to identify the qualifying features such as public access (e.g. footpath) and sensitive receptors (e.g. residential properties, schools and hospitals) within 15m of the kerbside are not within 25m of a junction, should be described in the ES. This will ensure that all potential exposures within Cumbria have been captured.
- 3.2.4. The 2020 Annual Status Report (ASR) states that an AQMA will be declared on Castlegate in Penrith because of exceedances of the NO₂ annual mean objective. In addition to the declared AQMAs by Durham Council, special attention should be afforded to changes in traffic flows in the proposed Castlegate AQMA by the Applicant in the ES and particularly the potential for increased traffic flows as a result of the Project.
- 3.2.5. The Environmental Scoping Report states that all human receptors exposed to vehicle exhaust emissions will be assigned equal sensitivity (or value) and this should therefore be included within the ES.
- 3.2.6. There are 14 ecological receptors identified within 200m of the ARN. We note 46 designated ecological sites are referenced in the Environmental Scoping Report and would advise that ecological receptors as defined in LA105: *Air Quality* be re-examined during the determination of the ARN. Ancient woodland and veteran tree sites should also be included. The approach to assess nitrogen deposition at all sites is considered acceptable, but this assessment should be expanded to assess the contribution of potential NH₃ emissions. It is also noted that the requirement to assess

⁵ Air Quality Consultants (2020). Ammonia Emissions from Roads for Assessing Impacts on Nitrogen-sensitive Habitats.

impacts at designated County Wildlife Sites which lie outside the jurisdiction of Highways England. These sites are discussed further in Chapter 4 Biodiversity.

- 3.2.7. As part of the assessment, the latest baseline information will be collected. The description of the datasets proposed should also incorporate:
- Air quality monitoring data within the ‘vicinity of the project’ that has been ratified, bias corrected and annualised by the Council ready for use rather than that reported at fixed annual intervals to Defra in the Annual Status Report. This will ensure the most recent data available to characterise the baseline and validate the model has been considered and we encourage the Applicant to consult the Councils to obtain these data; and
 - The Defra background maps corresponding to the latest available reference year, including pollutants NO₂ and PM_{2.5}. However, supplementary baseline monitoring in the context of the limitations in the Defra background maps to represent local conditions (paragraph 3.1.9) should be also described.

3.3 POTENTIAL IMPACTS

Construction Phase

- 3.3.1. It is agreed that residual construction impacts are unlikely to be significant as they will be temporary and controlled through mitigation measures secured in the EMP. However, the PEIR should describe in more detail the method used to determine the type and level of mitigation required to ensure amenity and human health protection for each scheme. The mitigation measures required for the schemes 1 and 2 could be quite different to those required for more rural schemes and generic measures may not be sufficient.
- 3.3.2. The potential for cumulative construction phase impacts should also be considered in the PEIR construction phase assessment, particularly for the schemes in more built-up areas such as Penrith, and Appleby-in-Westmorland.

Operational Phase

- 3.3.3. The assessment must demonstrate that the Project will comply with the ambient Air Quality Directive⁶, the Councils’ Local Plan and local Air Quality Action Plan measures.
- 3.3.4. The schemes assessed to date are set in a rural location and as such background air quality is generally good. It is therefore likely that judgement of significant effects at PCF Stage 3 assessment for will be the same as at Stage 2 for human and ecological health.
- 3.3.5. For the schemes to be assessed in the ES, at scheme 1 local sources of air pollution mean that air quality is likely to be poorer and the risk of non-compliance greater. Of particular concern is the potential impact of scheme 1 on traffic flows in the AQMA to be declared on Castlegate in Penrith.

⁶ Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe

- 3.3.6. It is also suggested that the description of likely significant effects should also address compliance risk receptors where they overlap with any of the Council areas.

3.4 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

Construction Phase

- 3.4.1. The robust assessment of the risks of construction phase impacts is likely to yield a series of mitigation measures which will be sufficient to protect amenity and health in Cumbria.
- 3.4.2. The preliminary mitigation measures, though not exhaustive, are best practice but may need to be supplemented in high risk areas. In Penrith, a summary of the likely increase in traffic through the Castlegate AQMA would be required to understand the potential impact of increases in construction HGV traffic on local air quality which may require a change to the construction traffic route.

Operational Phase

- 3.4.3. The commitment to implement a Project Air Quality Action Plan (PAQAP) to mitigate adverse effects in accordance with the guidance in LA105: *Air Quality* is acknowledged. It is suggested that any PAQAP is based upon the specific requirements of each scheme and is aligned with the proposed Construction Management Plans for each of the Councils.

3.5 ASSUMPTIONS AND LIMITATIONS

- 3.5.1. Uncertainties or limitations related to transport data will be discussed in the Transport chapter that has been previously identified as an omission to the ES. However, it is requested that further detail is provided in the PEIR on the limitations of the transport data specific to the air quality assessment including:
- The type of road transport model, verification and applicability of the transport model outputs to local scale impact assessment considering that traffic modelling will be completed for the project as a whole rather than schemes in isolation; and
 - The proposed approach to minimising uncertainty through the air quality model verification process.
- 3.5.2. The Applicant is requested to provide further detail on how the significance of effects (in line with the EIA Regulations) will be determined and mitigated, and how the Project will be compliant with national planning policy (i.e. NPSNN) and local planning policy (Eden Local Plan 2014 to 2032).
- 3.5.3. Further detail should be provided within the PEIR to detail how the assessment will comply with Policy ENV7 of the Eden Local Plan 2014-2032 which requires that *'All major development proposals will be required to assess the likely impacts of the development on air quality and mitigate any negative impacts by: 4. Contributing towards the improvement of the highway network where the development is predicted to result in increased congestion on the highway network.'*

4 BIODIVERSITY

4.1 INTRODUCTION AND POLICY CONTEXT

- 4.1.1. This review of the proposed assessment of effects on biodiversity is informed by Policy DEV5 of A *Plan for Eden: Eden Local Plan 2014 to 2032*⁷ which requires that “*New development will be required to demonstrate that it meets each of the following criteria:*
- *Shows a clear understanding of the form and character of the district’s built and natural environment, complementing and enhancing the existing area.*
 - *Protects and where possible enhances the district’s distinctive rural landscape, natural environment and biodiversity....”*
- 4.1.2. Policy ENV1 of the Eden Local Plan 2014 to 2032 also gives substantial protection to the natural environment and biodiversity and states “*New development will be required to avoid any net loss of biodiversity and geodiversity, and where possible enhance existing assets....”*
- 4.1.3. Furthermore, Policy ENV2 of the Eden Local Plan requires that development “*...should contribute to landscape enhancement including the provision of new trees and hedgerows of appropriate species and in suitable locations...”*; and Policy ENV3 requires that major development within the North Pennines Area of Outstanding Natural Beauty (AONB) fully considers detrimental effect on the environment.
- 4.1.4. Policy ENV 4 of the Plan requires that “*New development should ensure that:*
- *Opportunities for the protection and enhancement of the district’s green infrastructure network are maximised.*
 - *Proposals account for any known local deficiencies of green infrastructure identified by the Council.”*
- 4.1.5. It is therefore appropriate that the Applicant proposes to address matters relating to biodiversity within the ES so that the impacts of the Project can be fully understood.
- 4.1.6. The requirements of Paragraphs 5.22 and 5.23 of the National Policy Statement for National Networks⁸ should also form part of the assessment in the ES.

4.2 STUDY AREA AND ASSESSMENT METHODOLOGY

- 4.2.1. The biodiversity assessment methodology for the Project is described at a high level as being in line with DMRB LA108 *Biodiversity*, and also refers to Chartered Institute of Ecology and Environmental Managements; *Guidelines for Ecological Impact Assessment in the UK and Ireland* (CIEEM 2018). This is considered a suitable approach but there are a number of clarifications needed with regard to:

- Study area(s); and
-

⁷ <https://www.eden.gov.uk/media/5032/edenlocalplan2014-2032finalwithoutforeword.pdf>

⁸ National Policy Statement for National Networks

- Assessment methodology

STUDY AREA

- 4.2.2. A description of the proposed study area is divided into Desk Study and Surveys.
- 4.2.3. Desktop data search parameters are clearly presented in paragraph 7.3.3 of the Environmental Scoping Report, but there is no stated reason for the search radius of 2km from the boundary of all land required for construction for European Sites (excepting sites designated for bats at 30km). A list of data sources is provided and desktop data search for protected species, based on the general summary tables presented, appears to have been comprehensive to date. Desktop data on Priority Habitats from Natural England's Open Data and from MAGIC are presented. Reference is made to statutory sites beyond 2km from the Project, that are likely to be affected by changes in air quality and noise. However, no Biodiversity Action Plans appear to have been consulted, and no search for potential connectivity to Special Protection Areas (SPA) for geese – which in some species can mean a range of up to 20km.
- 4.2.4. For proposed field surveys, there is a brief statement on carrying out surveys up to a distance of 250m from each scheme boundary in paragraph 7.3.12 of the Environmental Scoping Report, with further brief commentary in paragraph 7.9.14 and 7.9.15. However, with the exception of reference to Phase 1 habitat survey methods in 7.9.12, no reference to relevant terrestrial survey guidance is provided. Some relevant references are provided at the back of the document, but these do not cover all the proposed surveys. There is sufficient reference to methods provided for the proposed aquatic ecology surveys.
- 4.2.5. There is no information on proposed terrestrial survey methods. Relevant survey methods for the habitat and species surveys listed can be obtained from the sources set out in *CIEEM's Competencies for Species Surveys*⁹ and elsewhere. Consultation with Natural England and other statutory bodies on survey scopes is discussed and this should continue to occur.
- 4.2.6. With regard to aquatic ecology, survey distances are not confirmed, with a suggestion that distances of 500m from any crossing points. It is noted that this is not consistent with earlier statements that otter will be surveyed for distances of 250m from the construction boundary; otters may be indirectly affected by changes in aquatic habitat quality. No survey distance for white-clawed crayfish or other aquatic invertebrates is provided.
- 4.2.7. The following items for field surveys require further clarification before the proposed field study area can be considered appropriate:
- A clear rationale for the survey distances should be provided for each survey type being proposed;
 - Survey methods should be informed by clearly referenced survey guidance within the ES. Where the Applicant intends to deviate from any standard methodology, a clear rationale for this should be provided; and

⁹ <https://cieem.net/resource/competencies-for-species-survey-css/>

- Clarification that connectivity with Special Protection Areas¹⁰ within 20km that support geese has been considered. A search for these SPA should be carried out to confirm the presence or absence of such sites and where relevant they should be screened for likely significant effects.

4.2.8. The following items need to be considered and assessed as appropriate in the ES:

- Given the importance of red squirrel in Cumbria it is recommended that the Applicant also engages with Penrith and District Red Squirrel Group, in addition to updating their desktop study using the sources that they have already obtained data from;
- The ES should also have regard to emerging Local Natural Recovery Strategies (LNRSs) and any related local habitat data available from Cumbria Biodiversity Data Centre (CBDC).
- Connectivity to wildlife corridors in Cumbria which are not directly in the zone of influence or Affected Road Network, such as Smardale Gill National Nature Reserve (NNR), should be considered.
- In accordance with DMRB LA105 *Air Quality*, the effects of nitrogen and acid deposition should be assessed for Ramsar Sites, SPA, Special Areas of Conservation (SAC), Site of Specific Scientific Interest (SSSI), Local Nature Reserves (LNR), Local Wildlife Sites (LWS), Nature Improvement Areas, ancient woodland and veteran trees. However, the Institute of Air Quality Management guidance on *Air quality impacts on nature conservation sites* defines LWS more broadly to include sites designated by local authorities. County Wildlife Sites should therefore be included in any assessment of nitrogen and acid deposition on local sites and habitats; this would include all County Wildlife Sites where these lie within 200m of the Affected Road Network.
- Inclusion of Asby Complex SAC in any combined biodiversity and air quality assessment that is made to inform the ES and Habitat Regulation Assessment, including the collection of relevant botanical data.

ASSESSMENT METHODOLOGY

- 4.2.9. The assessment methodology combines elements of DMRB LA108 *Biodiversity* and CIEEM *Guidelines for Ecological Impact Assessment in the UK and Ireland 2018*. A key point of clarification is on the statements of significance. In the CIEEM approach, the importance of an ecological feature is first determined before it is included in the detailed assessment. At that point the significance – or not – of any effects on the feature is determined. In paragraph 7.9.10 of the Environmental Scoping Report the Applicant states that, “*To retain consistency with other EIA topic chapters, whilst also ensuring compliance with DMRB LA108, an agreed approach and matrix for evaluation of relative significance of effects will be used, However it should be noted that this is not included within the CIEEM Guidelines for EclA and does not replace the CIEEM EclA guidelines.*”
- 4.2.10. Clarity on the assessment methodology is required for how significance will be determined: based on the nature of an effect on an important feature (as per CIEEM); or on a combination of a feature’s importance and the nature of the effect (as per DMRB LA108 *Biodiversity*).

¹⁰ Scottish Natural Heritage (2016). Assessing Connectivity with Special Protection Areas (SPAs). Version 3.

4.3 BASELINE CONDITIONS

- 4.3.1. The Scoping Report presents a range of baseline information, collected through desktop study and limited field survey, at an earlier stage of the Project, referred to as 'PCF2'. A list of statutory and non-statutory designated sites is provided, together with the reasons for designation and the distances from the Project. Similarly, tables of protected species records are presented with an indication of which of the schemes they were recorded in proximity to.
- 4.3.2. The Scoping Report implies that a limited amount of field survey has already been undertaken. For locations relevant to Cumbria and Eden, the Applicant has carried out a number of surveys along the River Eden SAC and tributaries including Trout Beck. However, there is no rationale provided for the types of surveys chosen, or any explanation of how the data will be used to either assess impacts within the ES or assess likely significant effects on the River Eden SAC. The Asby Complex SAC is only briefly discussed given its location within the ARN.
- 4.3.3. There is no explanation as to why Phase 1 habitat surveys were carried out at PCF2 for part but not all of the Project.
- 4.3.4. As noted under 'Study Area', no Biodiversity Action Plan appears to have been reviewed in production of the Scoping Report. The Cumbria Biodiversity Evidence Base (CBEB) provides publicly accessible species and habitat statements for UK Biodiversity Action Plan (UKBAP) Priority Habitats and Species within Cumbria and these should be consulted, in conjunction with any updated records obtained from Cumbria Biological Data Centre.
- 4.3.5. The mapping of designated sites provided is useful. Mapping for protected species records, and of locations already surveyed, would greatly improve the clarity of baseline information presented.
- 4.3.6. Mapping of local sites and veteran trees in relation to the Affected Road Network should also be carried out. Currently the figures in the Air Quality section of the report present only SSSI, European Sites and ancient woodland in relation to the ARN. Local sites and veteran trees are presented in the figures for the Biodiversity section of the report, but not in relation to the ARN.
- 4.3.7. The following clarifications and additional items are should be made available within the PEIR:
- Mapping of protected and notable species records;
 - Justification for surveys already carried out, including clarity on how it informs the proposed scope; and
 - Review and appropriate discussion of priority habitats and species statements in the Cumbria Biodiversity Evidence Base and, where relevant, Cumbria Biodiversity Action Plan.

4.4 POTENTIAL IMPACTS

CONSTRUCTION

- 4.4.1. The proposed scope of potential impacts for construction listed on paragraph 7.4.1 of the Environmental Scoping Report is reasonably comprehensive, but does not appear to be consistently followed through to the summary tables of likely significant effects in section 7.6, especially as summarised in Table 7.6.
- 4.4.2. Clarifications on the reasoning for the scoping out of the following items from construction impact assessment are required and should be scoped into the ES as appropriate:

- Asby Complex Special Area of Conservation (SAC) is noted as being within the ARN but is then scoped out from being subject to likely significant construction effects. Nitrogen deposition to this designated site and other sites is noted as a potential impact of construction in 7.6.1 of the Environmental Scoping Report – but it is not clear how the stated emissions from traffic diversions would be mitigated during construction;
- Conversely, dust deposition on a number of County Wildlife Sites is noted as a potential impact – but there is no consideration of nitrogen deposition on these sites as the aforementioned IAQM guidance on air quality impacts on nature conservation sites indicates is necessary;
- Construction effects on veteran trees are not explicitly discussed;
- It is not clear why Yanwath Wood CWS and Skirsgill Wood CWS are scoped in for construction whilst other CWSs are not; and
- Specific reference to risks to barn owl – a brief mention of barn owl is made but this species has particular vulnerabilities to traffic collisions given its hunting behaviour, and standard best practice mitigation for breeding birds in construction may not be sufficient to avoid mortality or injury to this species due to construction traffic, including any local diversions of traffic.

4.4.3. Overall, the stated construction impacts do not appear to be logically linked, through the application of the stated best practice mitigation techniques, to the likely significant effects for construction outlined in Table 7.10 of the Environmental Scoping Report.

OPERATION

4.4.4. A brief listing of operational effects is provided in paragraph 7.6.2 of the Environmental Scoping Report. The list should also include severance of foraging and commuting routes for protected species.

4.4.5. Again, a clear, logical reasoning for scoping out some effects, as presented in Table 7.9, should be provided.

4.4.6. The following items require clarification as to why they are not included in the scope of operational impacts and should be scoped into the ES as appropriate:

- Scoping out of Asby Complex SAC from operational effects despite its position relative to the Affected Road Network (adjacent to M6);
- Scoping out of County Wildlife Sites (local sites) from consideration of the effects of operational nitrogen (NO_x and NH₃) and acid deposition;
- Operational effects upon bats;
- Operational effects on veteran trees are not explicitly discussed; and
- Specific reference to risks to barn owl – this species has particular vulnerabilities to traffic collisions given its hunting behaviour.

4.5 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

DESIGN AND ENHANCEMENT

4.5.1. Any design of the Project should seek to:

- Not only avoid severance of foraging and commuting habitats for protected species, notably for mobile species such as badgers, bats and red squirrels but should seek to enhance it. There are significant opportunities to create green bridges and crossing points, avoid severing key links between existing patches of habitat, and also create habitat corridors along road verges.

Landscape level connectivity for priority species and habitats should be an overarching design principle for the Project;

- Local habitat networks, especially those in the emerging Cumbria Local Nature Recovery Strategy, should also be enhanced or protected in the design;
- Specific design for the provision of safe crossing for red squirrel, bats and barn owl should also be considered and included in the design if necessary to avoid significant effects; and
- Biodiversity Net Gain (BNG) should be aligned to seeking a 10% net gain in line with the requirements of the forthcoming Environment Bill. Discussion with the Councils, and consultation with partners including Cumbria Biodiversity Data Centre (CBDC) on the emerging Cumbria Local Nature Recovery Strategy, should inform the opportunities for BNG in Schemes 1-6, although the extent to which a project wide BNG is achieved will depend upon the degree to where the net-loss is experienced. It is therefore recommended that the Applicant liaises with the Councils in the development of the BNG proposals so that the proposals can be commented upon. The aforementioned policies from within *A Plan for Eden: Eden Local Plan 2014 to 2032* should also be considered.

CONSTRUCTION MITIGATION

- 4.5.2. The best practice mitigation techniques set out in section 7.5 of the Environmental Scoping Report should include consideration of the specific effects of noise and vibration in aquatic environments, particularly for the effects on the various fish species in the River Eden SAC.
- 4.5.3. Mitigation for increased Nitrogen and acid deposition due to traffic diversions should include local habitats and sites as discussed above.
- 4.5.4. Additional potential mitigation during construction appears limited to several bat crossing points, otter holts and creation of river habitat and replacement ponds (two for one to be lost). Given the large number of protected species noted from the desktop study, the suggested additional mitigation is limited in scale.
- 4.5.5. The PEIR and the ES should consider specific construction mitigation for:
- Birds including barn owl;
 - Badger;
 - Bats;
 - Red squirrel;
 - Other mammals (European hedgehog, brown hare, European polecat); and
 - Fish – with regard to noise and vibration within the aquatic environment and the differing requirements of the species recorded.

OPERATIONAL MITIGATION

- 4.5.6. Early descriptions of mitigation as set out in the Environmental Scoping Report are limited to construction.
- 4.5.7. The ES should include operational mitigation, taking account of:

- Design considerations, such as the BCT/ILP Bats and Artificial Lighting in the UK¹¹, and the DMRB LD118 *Biodiversity design* on mammal crossings for species such as otter and badger, should be considered as the minimum standard for mitigation of operational effects. Crossings for bats and red squirrels, and connectivity of aquatic and terrestrial habitats, should also be key factors in the mitigation of operational effects as described in Design and Enhancement above;
- Guidance from the Barn Owl Trust¹² on mitigation for barn owls and major roads should be followed, with landscaping as appropriate to increase flight heights around activity hotspots;
- Nitrogen and acid depositions on local sites within the Affected Road Network should be assessed and relevant mitigation applied; and
- Post-construction monitoring should be included in the mitigation.

¹¹ Bat Conservation Trust/Institution of Lighting Professionals (2018). Bats and Artificial Lighting in the UK. Guidance Note 08/18.

¹² Barn Owl Trust (2012). Barn Owl Conservation Handbook.

5 CLIMATE

- 5.1.1. The climate chapter of the Scoping Report is divided into two subsections covering greenhouse gas (GHG) emissions and climate change adaptation. This technical review has also therefore been divided into two, commensurate with the Scoping Report layout.

CLIMATE RESILIENCE

5.2 STUDY AREA

- 5.2.1. The study area for climate change adaptation is identified to comprise the draft DCO boundary. It is recommended that the Applicant extends the study area (such as up to 1km beyond the draft DCO boundary) to encompass any potential climate risks which may impact on both the Project and the immediate wider environment.

5.3 BASELINE CONDITIONS

- 5.3.1. The baseline for climate resilience presents historical observed data and projected climate data as advised in DMRB LA114 *Climate*. The historic data makes use of regional weather data; however, to ensure the baseline conditions align with DMRB LA114 *Climate*, the Applicant should supplement this information with local weather station data from the Met Office.
- 5.3.2. The future baseline presents UK Climate Projections (UKCP18) for RCP8.5 at the 50th percentile for time periods encompassing the construction and design life. This is considered appropriate to inform the assessment.

5.4 POTENTIAL IMPACTS

- 5.4.1. The potential impacts identified for the construction phase are considered appropriate for the scale and nature of the Project and the EIA.
- 5.4.2. The potential impacts identified for the operational phase are comprehensive in relation to impacts as a result of increased precipitation although the Applicant should consider the potential for melting and/or deterioration of road surface as a result of increased temperatures and prolonged periods of hot weather. This is currently omitted from Table 8-10 of the Scoping Report.
- 5.4.3. The potential impacts section of the Scoping Report does not identify any potential in-combination climate impacts (the extent to which climate exacerbates or ameliorates the effects of the Project on the environment). The assessment of in-combination climate impacts is outlined in the *Institute of Environmental Management and Assessment EIA Guide to Climate Change Resilience and Adaptation*.¹³ It is noted in the Scoping Report (8.1.4) that climate change has the potential to influence impacts considered under other discipline topics, and each discipline chapter will consider the potential for climate to influence the impacts identified. The discipline chapters listed do not at

¹³ *Institute of Environmental Management and Assessment (2020) EIA Guide to Climate Change Resilience and Adaptation*

present provide such consideration. Therefore, to comply with the IEMA guidance and good practice the ES should consider in-combination climate impacts.

5.5 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 5.5.1. It is noted that a detailed assessment of mitigation and enhancement measures, including resilience measures embedded within the design and additional to the design, was not undertaken within the Scoping Report and this should be included within the ES provided on the climate.

5.6 DESCRIPTION OF THE LIKELY SIGNIFICANT EFFECTS

- 5.6.1. No likely significant effects have been identified for the construction stage due to its duration. It is identified that an EMP will include adaptation measures in relation to extreme weather events during the construction stage. The assessment within the ES should provide details of such measures as a minimum and set out, with clarity on the measures themselves, as well as roles and responsibilities and a commentary on the status of the planned EMP.
- 5.6.2. The significance of impacts during the operation stage is outlined to be determined by a combination of likelihood and consequence as set out in DMRB LA114 *Climate*. It is concluded that there is potential for some receptors to be adversely affected by climate change however it is not clear how this conclusion has been reached as no assessment of likelihood and consequence is presented. The ES should clarify the likelihood and consequence of such impacts and as such, the conclusion of likely significant effects.

5.7 ASSESSMENT METHODOLOGY

- 5.7.1. The assessment methodology outlined in line with DMRB LA114 is considered acceptable.

5.8 ASSUMPTIONS AND LIMITATIONS

- 5.8.1. We do not agree with the statement on their being limited guidance relating to undertaking climate change resilience assessments in EIA (paragraph 8.10.7). IEMA's *EIA Guide to Climate Change Resilience and Adaptation* in conjunction with DMRB LA114 *Climate* should be followed to undertake the next stage of assessment in accordance with good practice.

GREENHOUSE GASES

5.9 STUDY AREA

- 5.9.1. The study area for GHG emissions is stated to be in line with DMRB LA114 *Climate* which is considered to be acceptable.

5.10 BASELINE CONDITIONS

- 5.10.1. The baseline scenario is described as advised in DMRB LA114 *Climate*. The Environmental Scoping Report has outlined the 'do minimum' scenario for the baseline and future baseline GHG emission, covering operational road user emissions in the ARN.
- 5.10.2. The baseline conditions within the ES should make reference to the future construction baseline and the assessment to be undertaken accordingly.

5.11 POTENTIAL IMPACTS

- 5.11.1. The scoped in emissions sources are considered to be appropriate for the size and nature of the Project to determine overall emissions. Although reference is made to *PAS 2080*, Table 8-10 of the Environmental Scoping Report does not make reference to *PAS 2080* when outlining emissions sources. It is recommended that the ES includes the potential sources of GHG emissions associated with the Project using the *PAS 2080* lifecycle stages and provides justification for which lifecycle stages are scoped in or out for further assessment.

5.12 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 5.12.1. The mitigation measures identified are considered appropriate for the scoping stage. It is recommended that specific mitigation measures are identified at the ES stage depending on the outcome of the assessment.

5.13 DESCRIPTION OF LIKELY SIGNIFICANT EFFECTS

- 5.13.1. The Environmental Scoping Report states that significance will be assessed in line with DMRB LA114 *Climate*, reporting on emissions that will have a material impact on the ability of Government to meet carbon reduction targets. There is no reference to the best practice guidance document, Institute of Environmental Management and Assessment (IEMA) *EIA Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance*. Although the Environmental Scoping Report states that emissions will be assessed in line with DMRB LA114 *Climate*, it is requested that the ES should refer to the IEMA guidance, acknowledging that all GHG emissions are considered significant.

5.14 ASSESSMENT METHODOLOGY

- 5.14.1. The assessment methodology is in line with DMRB LA114 *Climate* and is considered acceptable. It is however, worth noting that since this report was published the sixth carbon budget has been released by the Climate Change Committee (CCC). The ES should therefore contextualise GHG emissions from the Project against the sixth carbon budget.

5.15 ASSUMPTIONS AND LIMITATIONS

- 5.15.1. The assumptions and limitations outlined are considered acceptable.

6 CULTURAL HERITAGE

6.1 INTRODUCTION AND POLICY CONTEXT

- 6.1.1. This response to the proposed assessment upon Cultural Heritage is informed by Policy ENV3 and ENV10 of the Eden Local Plan 2014 to 2032.
- 6.1.2. *Policy ENV3 - Development within or affecting the North Pennines Area of Outstanding Natural Beauty (AONB) will only be permitted where each of the following criteria apply:*
- Individually or cumulatively it will not have a significant or adverse impact upon the special qualities or statutory purpose of the AONB;
 - It does not lessen or cause harm to the distinctive character of the area, the historic environment, heritage assets and their setting.
- 6.1.3. *Policy ENV10 - The Council will attach great weight to the conservation and enhancement of the historic environment, heritage assets and their setting, which help to make Eden a distinctive place.*
- 6.1.4. It is therefore welcome that the Applicant proposes to address matters relating to cultural heritage within the ES so that the impacts of the Project can be fully understood.
- 6.1.5. The requirements of Paragraphs 5.126 and 5.127 of the National Policy Statement for National Networks and should also form part of the assessment in the ES.

6.2 STUDY AREA AND ASSESSMENT METHODOLOGY

- 6.2.1. The approach and methodology within the Environmental Scoping Report is generally acceptable given the information available at this stage, with the understanding that the ES will present a realistic worst case scenario to enable flexibility through limits of deviation.
- 6.2.2. Study areas have been set at 300m for non-designated resources; 1km for designated resources and 2km for assessment of the Zone of Visual Influence (ZVI) for designated resources of very high and high value only. The Applicant should also consider views to and from Conservation Areas, even where they are assessed of as medium value. Eden District Council's guidance relating to Conservation Areas should be cited, and particular attention paid to matters relating to views and impacts on setting.
- 6.2.3. The Applicant should provide further clarification regarding the specific methodology to be used, particularly with regard to the assessment of setting.
- 6.2.4. Further to the proposals in Paragraph 9.9.11 of the Environmental Scoping Report, the ES should consider the principle of harm to the historic environment, and the methods for the assessment of harm needs further clarification.
- 6.2.5. It is noted, and encouraging to see, that only operational effects on buried archaeology are scoped out of the assessment at this stage. The scoping tables acknowledge the limited nature of the project design proposals and the requirement for an iterative approach to the assessment and the potential for scoping out of effects in response to design changes. It is assumed that where Table 9-14 *scoping criteria for construction* currently makes reference to the air quality assessment that this is in error. It is suggested that clarification of this should be provided by the Applicant.
- 6.2.6. The Applicant should consider and outline an appropriate strategy for the assessment of historic hedgerows and to be prepared and submitted alongside the PEIR so that comment can be provided

as appropriate. The Applicant should also include the strategy for air photography, LiDAR and geophysical survey, and for deposit modelling. An appropriate method for the assessment of potential for undisturbed archaeological deposits remaining beneath the existing carriageway should also be included within the ES assessment (see Paragraph 6.4.2 below).

- 6.2.7. The Applicant is requested to define what is meant by the “margin of forecasting error” and how this is determined.
- 6.2.8. The full assessment methodology should be presented in the PEIR and the results of this assessment should be presented in full in the ES to enable review and comment as appropriate. It is noted that a survey strategy will be prepared, in consultation with key stakeholders, in support of the assessment. The timing of this should be detailed in order to be clear at what stage of the DCO process this will be finalised.

6.3 BASELINE CONDITIONS

- 6.3.1. We note that there has been no assessment of non-designated resources to date for Schemes 1 and 2 and that all Historic Environment Records (HER) data presented in the Scoping Report is out of date and needs to be updated. As such the baseline presented for non-designated resources is incomplete and this needs to be updated in the assessment to ensure that all likely significant effects have been identified.
- 6.3.2. Non-designated resources and currently unknown archaeological resources (with the potential to be assessed as nationally significant) will be a key consideration, and assessment of the setting of non-designated assets is important within this generally cohesive landscape.
- 6.3.3. The Applicant should request the HER datasets for Schemes 1 and 2 and updated data for the other schemes from the both Cumbria County Council and Eden District Council.
- 6.3.4. Tabulated data for the Scheme 1 states that there are no designated or other heritage assets within the project boundary, and therefore no impacts. The absence of full baseline evidence means that this cannot currently be confirmed and it is not possible to agree to this scheme being scoped out of further study. The conclusion of no impact also appears to be contradicted by the information in Table 9-2 *Baseline Conditions Summary*, which suggests that assets may be expected to extend in to the DCO application boundary.
- 6.3.5. The Applicant should consider as stated in Paragraph 5.124 of the NPSNN “*Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to Scheduled Monuments, should be considered subject to the policies for designated heritage assets. The absence of designation for such heritage assets does not indicate lower significance.*”. For this reason, it would be useful to have the whole route surveyed, evaluated and assessed at the ES stage.
- 6.3.6. The Applicant is advised to consult the following
- Penrith Conservation Area Character Appraisal;
 - Temple Sowerby Conservation Area Character Appraisal and Management Plan;
 - Appleby-In-Westmorland Conservation Area Historic Area Assessment;
 - Settle to Carlisle Conservation Area Railway buildings descriptions;
 - Management of Conservation Areas in Eden Supplementary Planning Document; and
 - North Pennines AONB Management Plan 2019-2024.

- 6.3.7. The Applicant should also be aware that a Conservation Area Character Appraisal and Management Plan of Appleby in Westmorland is currently underway and is due for adoption in 2022.
- 6.3.8. A Cumbria-wide project to create a local list of built heritage assets is currently underway. The Applicant should be aware that consultations will be ongoing during 2021 and 2022. Cumbria County Council and Eden District Council can provide guidance on the selection criteria to help inform the identification of new assets during the proposed site visits.
- 6.3.9. Historic Landscape Character (HLC) data has not been comprehensively discussed and it is unclear whether this data has been included within the scope of the assessment. Further consultation regarding HLC will be required with all relevant parties.
- 6.3.10. Inter-relationships with other disciplines should be carefully considered by the Applicant. This will be especially important when assessing temporary construction impacts – for example where it is predicted that traffic will re-route through conservation areas – and where proposed ecological mitigation may impact directly upon archaeology and/or result in a change to the setting of an asset.
- 6.3.11. It is noted that a scheme numbering system has been used which assigned new Project IDs to all assets based on their classification (e.g. SM01 – scheduled monument) and a gazetteer providing concordance information is proposed to accompany the PEIR. It is suggested that the Applicant use the existing historic environment identification numbers (e.g. HER number) to reduce the chance of error or omission within the ES, but it is an acceptable system providing the concordance information is accurate and sufficient to enable identification of assets.
- 6.3.12. Should trial trenching survey information not accompany the ES, then the Applicant could fail to assess (and prepare for) as yet unknown remains of potential national importance. This could result in unanticipated large-scale mitigation excavation or redesign, with increased costs and timescale. A programme of extensive, early, geophysical survey is supported to minimise the risk of unexpected sub-surface discoveries late in the programme. The Applicant should provide detail of the evaluation strategies to be employed where geophysical survey is not possible and the locations where these strategies apply. In the absence of geophysical survey, the default position will be for intrusive evaluation. The Applicant should consult with the planning authority to develop and agree the approach to geophysical survey and other non-intrusive evaluation techniques.
- 6.3.13. The location and extent of the Conservation Areas has not been presented, yet Penrith, Temple Sowerby, Appleby-in-Westmorland, Settle to Carlisle Railway and Church Brough are affected by or in close proximity with the Project. This information is publicly available and assistance can be provided to the Applicant in locating this data by the planning authority.
- 6.3.14. The Figure 9 series plans have numbers in the small insert boxes which do not match with the Scheme shown and the Applicant should address this to ensure clarity. There are also a number of designated heritage assets which have been omitted, or incorrectly labelled on the mapping. These include, but may not be limited to:
- The Grade II* listed Hornby Hall and Barns Adjoining (LB 1326775) on the northern edge of the study area;
 - A number of listed assets in Long Marton;
 - Church Brough Conservation Area and the listed buildings within the village; and

- The Settle-Carlisle Railway is identified as a non-designated heritage asset whereas it is a conservation area and should be identified as such on the designated asset plans.

6.4 POTENTIAL IMPACTS

- 6.4.1. The Applicant should clearly present a breakdown by Scheme with a summary of key constraints (e.g. proportion of scheme requiring new land take), and which of the impacts outlined apply. Where the route deviates from the current A66 there is the potential for considerable impacts on as yet unknown archaeological resources, the assessment of which will be of particular importance.
- 6.4.2. Previous works on the A66 have identified archaeological deposits beneath the carriageway (specifically Roman burials). At present the impacts section states that “Where the project is contained within the existing road corridor and alongside areas of prior disturbance, the potential for the presence of as-yet unknown archaeological remains would have been previously removed”. Given the previous work, this should be revised to acknowledge the (albeit limited) potential that some remains are present. Cumbria County Council can provide the Applicant with further details of this work if required.
- 6.4.3. The cumulative effect of the individual schemes on the historic landscape character does not appear to have been considered, or this is not clearly articulated. At present no cumulative operational effects on the historic landscape character have been included in the tables of potential effects.
- 6.4.4. The current wording of Paragraph 9.6.5 of the Environmental Scoping Report suggests that areas of new land take adjacent to the current route is being considered as previously disturbed. We assume that this sentence was intended to refer only to the land within the existing roadway, but this requires confirmation.
- 6.4.5. The ES should also consider that cumulative loss of contemporaneous assets within the setting of those assets of high value, may result in loss of context and significance.

6.5 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 6.5.1. There is little design detail currently provided and further detail would have been appreciated at this stage. For example, construction compounds are likely to have a significant impact on currently undeveloped areas and the location of such temporary works must be considered in the assessment presented in the ES.
- 6.5.2. Clarity is needed in how the Environmental Management Plan (EMP) will be prepared so that activities at specific sensitive locations can be recognised and understood.
- 6.5.3. The Applicant should conduct consultation with the planning authority to discuss how the ES and mitigation detailed in the EMP can be informed by a Project-wide research design and local research priorities.
- 6.5.4. The Applicant should consider and include reference to opportunities for enhancement, with particular reference to the Eden Local Plan and Historic England Guidance.

6.6 ASSUMPTIONS AND LIMITATIONS

- 6.6.1. It is not clear how areas will be assessed in the absence of geophysical survey, or evaluation trenching where geophysical survey has not been undertaken. While we appreciate that this work is ongoing, the Environmental Scoping Report states ‘where it is not possible to undertake geophysical survey and/or trial trenching, professional judgement will be employed to take a precautionary



approach to the assessment' (9.11.3). It is not clear at this stage what this will entail, or what scale of area is to be treated in this way.

- 6.6.2. A Written Scheme of Investigation and adequate reporting for surveys should be submitted with the ES.

7 GEOLOGY AND SOILS

7.1 INTRODUCTION AND POLICY CONTEXT

- 7.1.1. This response to the proposed assessment of Geology and Soils effects is informed by Policy ENV8 of *A Plan for Eden: Eden Local Plan 2014 to 2032* which states:
- 7.1.2. *ENV8 - The Council will approve development on land that is contaminated or where contamination is suspected, subject to other policies if:*
- *Adequate contaminated land assessments prepared by a suitably competent person are submitted prior to any planning decision being taken, to determine whether or not unacceptable risks to human health or the environment arise from the proposals.*
 - *Where necessary, suitable remediation is carried out to ensure safe development.*
- 7.1.3. Environment Agency Guidance, Land Contamination Risk Management (LRCM) and Yorkshire and Lincolnshire Pollution Advisory Group (YALPAG) guidance are referenced in the Environmental Scoping Report with respect to the assessment of land contamination and this is considered appropriate. The Applicant should also complete the assessment in consideration of the available Local Authority Guidance 'Development of Potentially Contaminated Land and Sensitive End Uses. An Essential Guide for Developers'.

7.2 STUDY AREA AND ASSESSMENT METHODOLOGY

- 7.2.1. The study area is stated to comprise a 250m buffer either side of the draft DCO boundary. This is stated to be based on professional judgement and is also in line with other major highway and infrastructure schemes, which is considered acceptable. It is also stated that a 1km buffer will be considered in areas where sensitive groundwater receptors are present; again, this is considered acceptable.
- 7.2.2. Intrusive ground investigation (GI) and soil surveys will target areas within the DCO boundary only. At this stage this is acceptable. The extent of the GI should be reviewed as the Project progresses and consideration made to GI outwith the DCO boundary if warranted, e.g. to increase understanding of baseline conditions such as groundwater quality.
- 7.2.3. Section 10.6.6 of the Environmental Scoping Report states that an intrusive GI is currently being completed. Clarification should be provided in the ES of the extent to which the Councils have commented on the scope of the GI.
- 7.2.4. Section 10.6.7 of the Environmental Scoping Report states that the assessment of impacts on contaminated land will be primarily based on desk based sources, however, also the Environmental Scoping Report goes on to state that the desk based information will be validated using the results of the intrusive GI. Clarification is required as to whether the GI is targeting potential contaminative sources.
- 7.2.5. Section 10.7.5 of the Environmental Scoping Report discusses an initial assessment of significant effects as a result of contamination, which will be presented in the PEIR. It states that furthermore detailed assessment will be carried out and reported in the ES if contamination sources cannot be screened out in the PEIR. Clarification is required as to whether the more detailed assessment will be desk based or intrusive and if intrusive whether it be completed as part of the GI being currently completed (it is noted that it is stated in Section 10.8.5 that the GI was completed in Spring 2021).

- 7.2.6. It is stated within Section 10.2.2 of the Environmental Scoping Report that where invasive methods of GI are not possible, non invasive methods will be considered and that the findings of any additional GI which may be required as part of detailed will not be available in time to inform the EIA. The scope and methodology of additional GI should be discussed with the Councils.
- 7.2.7. The methodology is stated to follow the requirements of DMRB LA109 *Geology and Soils*; this is considered appropriate. The Environmental Scoping Report confirms that the loss of peat as a resource and the effects the loss of peat may have on climate change will be assessed in Chapter 12: Materials and Waste and Chapter 8: Climate respectively, this is in line with the DMRB guidance and considered appropriate.
- 7.2.8. The methodology notes that the PCF Stage 2 data will be reviewed and updated as appropriate and that this will include additional stakeholder engagement and intrusive GI and soil survey data. The GI and Agricultural Land Classification (ALC) soil surveys appear to have been programmed such that the findings are included within the ES.

7.3 BASELINE CONDITIONS

- 7.3.1. There is no reference to previous Phase 1 reporting or Preliminary Sources Study Report (PSSR) currently available for the Project. It is assumed that the document will be undertaken in line with DMRB guidance and used to further define the baseline conditions. The Environmental Assessment Report (EAR) is referenced, however, this has not been provided alongside the request for a scoping opinion and the level of detail contained within it is not known.
- 7.3.2. A comprehensive summary of the sources of baseline data is provided and it is highlighted that baseline information was not available within the Stage 2 EAR for Schemes 1 and 11. The methodology confirms that the baseline data for Schemes 1 and 11 has been collated from readily available information as part of the Environmental Scoping Report.
- 7.3.3. The methodology recognises that there are gaps within the existing baseline data and outlines the areas where the existing baseline is to be supplemented via further consultation with stakeholders and publicly available records. Further consultation to be completed and reason for consultation is listed in Table 4-3, this includes the Councils.
- 7.3.4. It is stated that the Animal and Plant Health Agency (APHA) have confirmed that no recorded burial sites are within the study area but have noted that their records are incomplete. The Applicant should request records held by the Councils on burial sites and burn sites as part of the consultation process.
- 7.3.5. The Councils hold records of Potable Water Sources that do not appear within available data sources due to them not having an abstraction licence. These are known as 'Spring supplies' and are common in the area. The Councils would be willing to provide records of the spring supplies where available and can provide to the Applicant as part of the consultation process.
- 7.3.6. Further information with respect of unexploded Ordnance (UXO) should be included within the ES. Data is stated to be from the Zetica Risk Maps online and it is suggested that further information (e.g. Pre-Desk Study Assessment (PDSA)) is obtained for each of the Schemes. Further detailed UXO assessment may be required, in particular in relation to the Warcop MoD facility.
- 7.3.7. For schemes which lie within Coal Authority (CA) Coal Mining Reporting Area, a CA mining report will be required.

- 7.3.8. The recognition for the requirement for further research into Warcop MoD facility, foot and mouth burial sites and Longriggs mine in particular are noted. Relevant consultees for these aspects are included within Table 4-3 of the Environmental Scoping Report.

7.4 POTENTIAL IMPACTS

- 7.4.1. Potential impacts have been identified in relation to agricultural soils, human health, and groundwater and surface water quality. It is agreed with that these potential impacts are considered relevant to this topic.

7.5 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 7.5.1. The Applicant highlights that GI has been completed in Spring 2021. Clarification is required as to whether the Councils have been given the opportunity to comment on the scope of the GI.
- 7.5.2. The Applicant's consideration of beneficial enhancement measures such as the potential exposure of potentially important geological features is noted.
- 7.5.3. Table 10-12 of the Environmental Scoping Report states; – *'4) is the project likely to disturb historical contamination?* For all schemes it is stated to be either 'Y' or 'TBC', for Route Wide it is currently stated as 'N'. The Applicant should provide clarity on the above.

8 LANDSCAPE AND VISUAL

8.1 STUDY AREA AND ASSESSMENT METHODOLOGY

- 8.1.1. Reference to requirements of DMRB *LA 107 Landscape and Visual Effects* (Highways England, 2020a), DMRB *LA 104 Environmental assessment and monitoring* (Highways, England, 2020b), and Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA3) (Landscape Institute and Institute of Environmental Management and Assessment, 2013) for the Landscape and Visual assessment is considered appropriate. It would be helpful if the Applicant could identify which aspects of the guidance are to be applied and how.
- 8.1.2. In determining the study area reference is made to a Zone of Theoretical Visibility (ZTV), that is limited to 10km. However, with the exception of the defined 7km study area for the Temple Sowerby to Appleby and Appleby to Brough (Warcop), it is unclear what the extent of the study area is for the remaining Schemes for landscape character and visual effects. Although this is subsequently defined in Table 11-1 DMRB Study area selection criteria, the preceding text suggests that for some Schemes this would be less than 7km, reference to a 2km buffer is made in relation to landscape character (refer to paragraph 11.5.8, 11.5.11, 11.5.15). In line with DMRB LA104 *Environmental assessment and monitoring*, paragraph 3.13, the ES shall clearly define the study area to be used for the purpose of landscape character and visual effects.
- 8.1.3. In defining the landscape character and visual effects study area, it is unclear where the 7km study area is being measured from. The application site (draft Order Limits) is likely to extend beyond the centreline of the relevant options by some margin to incorporate construction compounds, side road changes, haul routes and changes to accesses. In line with DMRB LA104 *Environmental assessment and monitoring*, paragraph 3.13, the ES shall clearly define the study area, and in order to do so should define from where the study area is to be measured from.

8.2 BASELINE CONDITIONS

- 8.2.1. The identification of relevant National and Regional Character Areas is satisfactory. However, Local Character Areas (LCAs), appear to have been defined within a 2km buffer which does not reflect the 7km study area in the preceding paragraphs. The Applicant should clearly define the study area and the extent to which LCAs would be assessed.
- 8.2.2. With reference to paragraph 11.5.6 of the Environmental Scoping Report, it is considered that guidance provided by Natural England within 'An Approach to Landscape Character Assessment' (2014) would also be relevant, particularly where new LCAs are to be derived from Landscape Character Types (LCTs).
- 8.2.3. The LCT, subsequently referred to as LCAs, are identified as being relevant to the study area within a 2km buffer, however reference is also made to a 7km study area. Clarity is therefore required as to the extent to which LCAs will be scoped into the assessment. With reference to Table 11-4 Landscape Character Types/Areas relevant to the project and Figure 11.4 Landscape Character, it is unclear which documents these landscape character types relate to, and how the scheme and landscape character areas relate to one another. In describing the new LCAs in Eden and Cumbria, the Applicant should refer to Natural England's guidance 'An Approach to Landscape Character Assessment' (2014)

- 8.2.4. In describing the Project's orientation and proximity in relation to the North Pennines Area of Outstanding Natural Beauty (AONB), it is not clear how these relate to the separate Schemes. Reference to the location of the Lake District National Park boundary is incorrect, the boundary lying west of the Project. Nevertheless, the reasons for scoping out the assessment of effects on this designation are appropriate. Given the rural context of the Schemes east of Penrith, and its proximity to the Yorkshire Dales National Park boundary, the scoping in of the assessment of effects on the designation is appropriate.
- 8.2.5. In relation to relevant conservation areas, the approach taken to scoping of the conservation areas set out in Table 11-5: Conservation Areas relevant to the project, is satisfactory with the exception of the Settle to Carlisle Railway Conservation Area. The ES should consider the potential impacts on the designation and its purpose, particularly in relation to potential localised impacts associated with the crossing of the A66 and a winter assessment, in the absence of foliage on trees.
- 8.2.6. Confirmation is required as to whether effects on visitors to Wetheriggs Country Park are to be scoped into the assessment within the ES.
- 8.2.7. With reference to Table 11-6: Key features relevant to the assessment of landscape and visual effects, the Environmental Scoping Report correctly identifies the features to be scoped in, although the proximity and orientation to some of the Schemes are incorrect.
- 8.2.8. The range of sensitive receptors is considered to be wider than that described in Paragraph 11.5.22 of the Scoping Report and should include clusters of dwellings that form local communities, and local roads, particularly those with scenic views, and other recreational routes. This should be fully detailed and explained within the PEIR.
- 8.2.9. In line with LA107: *Landscape and visual effects*, the Applicant should provide a list of representative, illustrative or specific viewpoints for the purpose of helping to demonstrate the visual effects of the Scheme. This should identify the locations and provide descriptions of the receptors represented through these viewpoints, describing the associated visual effects and whether they are significant or not.
- 8.2.10. In line with guidance provided in LA107: *Landscape and visual effects*, the Applicant should consider the opinions of local people and interest groups, identifying the impacts on communities, and this includes potential intervisibility between the small clusters of dwellings, that in combination form communities at a local scale.
- 8.2.11. The approach to the preparation of photomontages is considered suitable, and it is suggested that the locations of these should be agreed with the Councils prior to the photographs being taken.

8.3 POTENTIAL IMPACTS

- 8.3.1. The potential impacts identified as a result of the Project are appropriate. However, some potential impacts relating to landscape and visual impact have not been identified, as outlined below.
- Schemes 3 – 6 all lie within 5km of the North Pennines AONB. As such, potentially significant effects on the setting and special qualities of the North Pennines AONB may result from the Project. Any assessment of effects should also reflect any updates to the study area as outlined above;
 - The Applicant has identified that tranquillity may be impacted, the issue of tranquillity should be within the scope of the assessment in relation to relevant landscape character, with the exception

of Scheme 1 and Scheme 2 where it is considered that tranquillity is low, and not a contributing factor towards the perception of landscape character; and

- The Ancient Tree Inventory does not identify any ancient/veteran trees within the immediate vicinity of Schemes 1- 5. Nevertheless, there remains the potential for trees that have characteristics of ancient/veteran trees to be identified through an arboricultural survey. As such, the PEIR should describe how the presence of potential ancient/veteran trees would be addressed within the ES.

8.4 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 8.4.1. It is appropriate that the proposed mitigation strategy should reflect the guidance provided in Highways England's *The Road to Good Design* (Highways England, 2018), *LD117 Landscape Design*; The value of design in infrastructure delivery report (National Infrastructure Commission, 2018a); and Design Principles for National Infrastructure (National Infrastructure Commission, 2018b). Reference should also be made to DMRB *LD119 Roadside environmental mitigation and enhancement Revision 0* (or as current at the time of writing).
- 8.4.2. The Project mitigation measures provide a high-level approach to landscape and visual mitigation and are appropriate. In line with best practice, and *LD117 Landscape Design and LD119 Roadside environmental mitigation and enhancement*, and as mitigation measures are developed, these should be discussed with statutory bodies in order that a high-quality landscape led approach is adopted, and where appropriate this reflects local variations in the landscape character. This approach should be reflected in the Landscape Management Plan developed for each Scheme at a scale that specific measures can be readily identified.
- 8.4.3. As set out in DMRB *LD119 Roadside environmental mitigation and enhancement*, the landform should form an integral part of the landscape design associated with the Schemes and can be particularly effective in providing or reinforcing other mitigation measures such as planting blocks. As such, the design should consider suitably graded and profiled landscape earthworks that integrate embankment slopes and cuttings into the surrounding landform where this mitigates likely significant effects. Proposed landforms should not give rise to impacts but should be complementary to the existing landscape. The ES should include suitably scaled cross sections to aid understanding on the approach taken to earthworks, screening and planting as part of the mitigation design.
- 8.4.4. Further investigation into off-site enhancement measures is appropriate, however these must be supported with appropriately detailed management plans and funding for future management.
- 8.4.5. The provision of an appropriate lighting design strategy, and with the exception of safety reasons, lighting should be avoided wherever possible, both during construction and operation. The lighting design strategy should consider alternatives to standard designs to reduce potential impacts, and also any ecological constraints that may be present.
- 8.4.6. The ES needs to provide a clear description of the proposed lighting strategy, particularly given its proximity to the dark skies associated with North Pennines AONB, and this should be clarified within the PEIR.

8.5 DESCRIPTION OF LIKELY SIGNIFICANT EFFECTS

- 8.5.1. The overview description of likely significant effects on landscape character during construction and operation is suitable. However, the establishment of the study area which suggests a 7km buffer

remains unclear, and subsequent adoption of a 2km buffer in determining character areas most likely to be impacted is confusing, refer to paragraph 8.1.2 – 8.1.3 above.

- 8.5.2. The preliminary description of likely significant effects on landscape character during construction and operation and scoping of potential effects associated with the schemes are relevant and appropriate.
- 8.5.3. The overview description of likely significant effects on views during construction and operation is suitable, however as part of the assessment of operational effects the ES should set out the assumptions made on the establishment of planting as part of the mitigation strategy, taking into consideration the challenging growing conditions that will exist in exposed locations.
- 8.5.4. The approach to the qualitative assessment of the view from the road is considered appropriate.

8.6 ASSESSMENT METHODOLOGY

- 8.6.1. The approach to landscape and visual sensitivity, by describing the associated value and susceptibility, and the magnitude of effects (change), describing the size/scale, geographic extent, duration and reversibility, is appropriate and broadly reflects the guidance provided in LA107 *Landscape and visual effects*.
- 8.6.2. The Environmental Scoping Report does not explicitly set out the scenarios by which the Project would be assessed. Greater clarity should be provided in the ES as to the scenarios that are to be assessed through reference to LA107: *Landscape and visual effects*. This should by default include; construction at its peak, daytime and night-time scenarios as well as the winter year 1 (opening) and summer and winter year 15 (design year) in order that a clear understanding of the nature/form and scale of the significant effects are understood and explained. It would be appropriate that this is explained fully within the PEIR.
- 8.6.3. The Environmental Scoping Report does not explain the relationship between the principal representative viewpoints indicated on Figure 11.6: ZTV and viewpoints, and how these relate to areas of settlements or locally important specific views. It is requested that this is explained fully within the PEIR.
- 8.6.4. There is a lack of clarity in relation to the terminology used to describe the significance of effect, where this is derived from, and how a significant effect is to be determined, with different terminology being referenced. Greater clarity needs to be provided in terms of the terminology and how guidance is to be interpreted.

8.7 CUMULATIVE EFFECTS

- 8.7.1. The Applicant should draw a clear distinction between the combined effects (the different environmental effects or Schemes on a single receptor as a result of the Project) and the cumulative effects (the landscape and/or visual effects of different projects within the vicinity of the Project, alongside the Project itself).

8.8 ASSUMPTIONS AND LIMITATIONS

- 8.8.1. Assumptions made as to the growth of trees/shrubs planted in order to understand its capacity to provide mitigation in the Design Year would be appropriate to include, taking into consideration the challenging growing conditions experienced in parts of the corridor.

- 8.8.2. It is acknowledged that the assessment of landscape and visual effects would be made against the information available at the time. It should be clear in the ES what assumptions have been made, in order that the worst-case scenario has been assessed within the principles of the Rochdale envelope and parameters applied.

9 MATERIAL ASSETS AND WASTE

9.1 INTRODUCTION AND POLICY CONTEXT

- 9.1.1. The following policy and underpinning commitments are noted to be of relevance to the Project:
- Cumbria Minerals and Waste Local Plan 2015-2030 (adopted September 2017)**
- 9.1.2. Policy SP1 – Presumption in favour of sustainable development - *“When considering development proposals, the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. It will always work proactively with applicants to find solutions that mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area”.*
- 9.1.3. Policy SP8 – Minerals Safeguarding - *“Mineral resources, existing, planned and potential infrastructure and plant will be safeguarded from being unnecessarily sterilised by other developments by identifying existing and potential railheads and wharfs to be safeguarded and Mineral Safeguarding Areas for:*
- *the indicative sand and gravel and hard rock resources (including aggregates, high specification aggregates, industrial minerals and building stones), shallow coal and fireclay resources;*
 - *identified resources of brick clay; remaining gypsum resources; resources of slate and secondary aggregates; and*
 - *and identifying Mineral Consultation Area, which covers the resources within all the Mineral Safeguarding Areas [MSAs]”.*
- 9.1.4. Policy SP9 – Strategic areas for new mineral developments - The Applicant should ensure the areas of development do not affect the areas identified in the Local Plan.
- 9.1.5. Policy SP12 – Peat - *“Planning permission will not be granted for peat extraction from new or physically extended sites. Time extensions for existing peat extraction planning consents will be considered on a case-by-case basis, where it is demonstrated that it is necessary to enable the proper restoration of the land or to secure biodiversity, climate change or other appropriate objectives of this Plan”.*
- 9.1.6. Policy DC15 – Minerals Safeguarding - *“The Mineral Planning Authority will safeguard those mineral resources that are shown on the Policies Map. Within those areas, the Mineral Planning Authority should be consulted by the Local Planning Authorities on any planning applications they receive for non-minerals development that would be likely to affect the winning and working of minerals”.*

Eden Local Plan 2014-2032

- 9.1.7. Policy ENV5 – Environmentally Sustainable Design -*“Minimising construction waste, through for example designing out waste during the design stage, selecting sustainable and efficient building materials and reusing materials where possible”.*
- 9.1.8. *“Examples of guidance and sources of useful information at present include the Sustainable Drainage Systems (SuDS) Guide that has been prepared by Cumbria County Council, the guidance and information on minimising construction waste and increasing resource efficiency provided by WRAP, and information and case studies on renewable energy and sustainable construction provided by Cumbria Action for Sustainability”.*
- 9.1.9. The Applicant is requested to make reference to Air Quality and Noise & Vibration chapters in the ES, as the content of these topics of the EIA have a direct interrelationship with Material Assets and Waste.

9.2 STUDY AREA AND ASSESSMENT METHODOLOGY

- 9.2.1. The study area is stated correctly, as set out within DMRB LA110 *Material Assets and Waste*.
- 9.2.2. The Applicant should state within the ES whether (or not) non-landfill waste infrastructure (for example, Material Recovery Facilities) are included in the assessment, and the basis upon which such assets are considered a sensitive receptor.

9.3 BASELINE CONDITIONS

- 9.3.1. Within the ES, the Applicant is requested to update the baseline data, in accordance with the most recent available information. The Applicant should be made aware that the Local Aggregates Assessment (LAA) for 2019/2020 will be prepared by Cumbria County Council over the coming months and should be publicly available (endorsed by the North West Aggregate Working Party) by the end of 2021. The information provided in the LAA should be incorporated in future EIA deliverables for the Project.
- 9.3.2. In paragraphs 12.5.13 and 12.9.11, which reference recovery targets, the Applicant is recommended to include reference to the fact that the Waste Directive target specifically excludes naturally occurring materials (specifically European Waste Catalogue category 17 05 04 in the list of waste defined as non-hazardous soils and stones).
- 9.3.3. The Applicant also refers to the fact that there are no sites recorded as having had planning permission for commercial peat extraction. This information should be included in the ES.

9.4 POTENTIAL IMPACTS

- 9.4.1. In paragraph 12.6.5 of the Environmental Scoping Report, the Applicant is requested to confirm how waste management facilities are considered sensitive environmental receptors. If it cannot be justified why those facilities are sensitive environmental receptors, it is recommended that references to this receptor type are removed.
- 9.4.2. The cut and fill balance of the Project is not yet known. Should the Applicant wish to balance earth movements across the schemes of the Project, then the consequential environmental impacts of doing so (traffic, noise, contamination etc) should be included within the assessment in the ES although the re-use of material is to be encouraged rather than the use of virgin aggregate.

9.5 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 9.5.1. The Applicant's attention should be drawn to Paragraph 2.5 of LA110 *Material Assets and Waste*, and is requested to make suitable (proportionate) reference to the circular economy as part of the mitigation and enhancement measures proposed.
- 9.5.2. In paragraphs 12.8.2 and 12.8.3 of the Environmental Scoping Report, statements are made on the scoping out of operational effects after the first year of operation. The Applicant should make clear the bases of these assertions, through the provision of more detailed justification e.g. *"impacts will be limited to small volumes of materials required for minor surfacing repairs, which are not – using professional judgement – expected to result in significant adverse environmental effects"* (as per Table 12-13).
- 9.5.3. Notwithstanding the above, the approach to the design mitigation and enhancement measures proposed by the Applicant are considered to be adequate.

9.6 ASSUMPTIONS AND LIMITATIONS

- 9.6.1. The Applicant should provide clarity that describes what benchmarks or comparators could be used, where (for example) the exact sources and origins of materials, are not known.
- 9.6.2. It is recommended that the Applicant changes the title of "Table 12-15: Geology scoping criteria from DMRB LA 109 – operation" which should refer to "Table 12-15: Material Assets and Waste scoping criteria from DMRB LA 110 *Material Assets and Waste* – operation".

10 NOISE AND VIBRATION

10.1 INTRODUCTION AND POLICY CONTEXT

- 10.1.1. The response to the proposed assessment upon Noise and Vibration is informed by Policy ENV9 of Eden's Local Plan (2014 – 2032) which states:
- 10.1.2. *“Development proposals for development likely to experience noise, light, dust, odour or vibration from road, rail or air, or other sources must be supported by an adequate assessment to assess risks and their acceptability, and to ensure that appropriate mitigation is put in place to ensure occupiers are not adversely affected.*
- 10.1.3. *Assessments should consider both the likely level of exposure at the time of application and any increase that might be reasonably expected in the foreseeable future.*
- 10.1.4. *To safeguard the continued use of existing industrial and commercial uses and to protect amenity, noise, light, dust and contamination sensitive development, proposals will need to demonstrate that existing levels of noise and vibration, light, dust or odour from industrial, commercial, leisure or sporting facilities are not likely to give rise to an unacceptable impact on the proposed development.*
- 10.1.5. *To safeguard sensitive development from the impact of proposed industrial, commercial, leisure or sporting facilities, developers will need to demonstrate that:*
- *High levels of noise, light or dust will not occur throughout the construction phase of the development, especially at night, during the hours when people are normally sleeping.*
 - *Development proposals for development likely to cause noise, light, dust, odour or vibration sources must be supported by an adequate assessment to assess risks and their acceptability, and to ensure that appropriate mitigation is put in place to ensure existing noise sensitive premises are not adversely affected.”*
- 10.1.6. Therefore, it is expected that the ES will address matters relating to noise and vibration so that the impacts can be fully understood.
- 10.1.7. The requirements of Paragraph 5.189 of the National Policy Statement for National Networks (NPSNN) should also be noted and this approach should form part of the assessment within the ES.

10.2 STUDY AREA

- 10.2.1. It is noted that the Applicant will define the study area using the guidance in DMRB LA111: *Noise and Vibration*. The approach to this is considered to be satisfactory.
- 10.2.2. Clarification of which version (i.e. month and revision number) of LA111: *Noise and Vibration* that will be followed should be presented in the ES.
- 10.2.3. The ES should clearly describe, with the aid of a plan, the extent of the study area for both the construction and operational phases of the assessment of noise and vibration. Confirmation should be provided to ensure that the study area is sufficient to encompass all sensitive receptors which may experience significant effects from the Project in the ES.
- 10.2.4. Confirmation of how the assessment will take into account any committed developments within the study area should be provided in the ES. This should include how the committed developments have been identified and assessed.

- 10.2.5. The current methodology outlined within the Environmental Scoping Report for assessing construction traffic impacts is not considered satisfactory, and further information is required in the PEIR. To note, construction traffic is likely to have an impact on the percentage of heavy vehicles leading to a potential change in road traffic noise. Therefore, the threshold for assessment should not be determined based solely on a change in traffic flow. The assessment of construction traffic changes across the network should be based on the traffic flow, speed and percentage of heavy vehicles (rather than solely on traffic flow). The construction road traffic assessment methodology should be presented in the PEIR and the results of this assessment should be presented in full at the ES stage.
- 10.2.6. As above, the methodology for operational traffic impacts is not considered satisfactory as a change in traffic flow is not the only factor that could affect a noise level change. It is suggested that Basic Noise Levels are predicted across the network to ensure that links where a change of speed and percentage heavy vehicles may result in a change of 1dB are also captured and assessed. The operational road traffic assessment methodology should be presented in the PEIR and the results of this assessment should be presented in full in the ES.

10.3 BASELINE CONDITIONS

- 10.3.1. A plan that shows the proposed noise monitoring locations should be presented in the PEIR. Confirmation should also be provided on the noise survey methodology, including the reason for selecting each monitoring location and the duration of the survey period in the PEIR.
- 10.3.2. The ES should confirm that the identification of the Noise Important Areas (NIAs) is based on the more recent Round 3 mapping information to identify receptors that are already exposed to higher noise levels.

10.4 POTENTIAL IMPACTS

- 10.4.1. The potential impacts identified in Section 13.4 of the Environmental Scoping Report are considered appropriate at this stage.

10.5 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 10.5.1. The inclusion of Best Practicable Means (BPM) and commitment to mitigation measures during the construction phase, and which will be included in the Noise and Vibration Management Plan, is suitable. Further details should be provided in the ES once the construction noise and vibration assessment has been undertaken.
- 10.5.2. Confirmation should be provided on how the noise and vibration assessment will take the project objective to “*optimise environmental improvement opportunities*” (see Table 2-1) into account in the PEIR. This also aligns to the Key Tests of CCC and the LEP.

10.6 DESCRIPTION OF THE LIKELY SIGNIFICANT EFFECTS

- 10.6.1. Clarification and further details on the construction vibration assessment methodology for road traffic using diversion routes should be provided in the ES. This should include the assessment criteria and the options for mitigation that will be explored and implemented.
- 10.6.2. Further justification is requested for the limitation of the study area for construction phase effects along the preferred route only (Paragraph 13.6.3 of the Scoping Report) in the PEIR. The approach is not considered to be robust without further details being provided, as there may also be significant

effects at dwellings further away from the preferred route, e.g. close to diversion routes that may extend further away.

10.7 ASSESSMENT METHODOLOGY

- 10.7.1. The sensitivity (or value) of receptors should ideally be provided in the PEIR.
- 10.7.2. Values for the Lowest Observed Adverse Effect Level (LOAEL) and Significant Observed Adverse Effect Level (SOAEL) should be provided in the PEIR. The assessment methodology provided in the PEIR should also provide detail on how these values will be used to in determining significance within the assessment in the ES.
- 10.7.3. Further detail on the “*high-level commentary*” and “*risk-based consideration of construction impacts*” should be provided in the PEIR. This should include how the construction noise and vibration levels will be predicted, and how the impacts will be assessed to determine significance. The Applicant should also provide detail on whether the duration of construction noise/vibration impacts is likely to be an integral part for determining significance.
- 10.7.4. Further detail is requested on how the model will be ‘appropriately validated’. This should be presented in the ES.
- 10.7.5. It is agreed that operational vibration is scoped out of the assessment on the understanding that the road surface will be maintained to be free from irregularities as part of the project design and general maintenance.

10.8 ASSUMPTIONS AND LIMITATIONS

- 10.8.1. Further detail is required within the PEIR on how impacts relating to construction noise/vibration impacts will be assessed (including assessment criteria) and mitigated.
- 10.8.2. Further detail is required within the PEIR to detail how the assessment will determine that “*appropriate mitigation is put in place to ensure existing noise sensitive premises are not adversely affected*” by the development proposals, in line with Policy ENV9 of the Eden Local Plan 2014-2032.
- 10.8.3. Clarification should be provided for the acoustician(s) preparing the noise and vibration chapter and how they are ‘suitably qualified’, in line with Eden District Council’s National and Local Checklist Guidance.
- 10.8.4. Further detail on how the second aim of the Noise Policy Statement for England (NPSE) will be assessed and achieved should be presented in the PEIR. “*The second aim of the NPSE refers to the situation where the impact lies somewhere between LOAEL and SOAEL. It requires that all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life while also taking into account the guiding principles of sustainable development*”. More generally, further details on how significant effects will be determined and mitigated, and how the Project will be compliant with national planning policy (i.e. National Policy Statement for England (NPSE) and NPSNN) and local planning policy (Eden Local Plan) should be provided in the PEIR.

11 POPULATION AND HUMAN HEALTH

- 11.1.1. Cumbria's Local Industrial Strategy (March 2019) published by the Cumbria Local Enterprise Partnership (LEP) identified the Project as an infrastructure priority for the region, and as stated in Paragraph 2.1.9, the Project is supported in principle in the CTIP.
- 11.1.2. It is therefore to be expected that the ES will include details of how the Project will support the Cumbria's Local Industrial Strategy, in particular the strategic objective of improving connectivity across the county, which is again aligned with the Key Tests.
- 11.1.3. The LEP also identified the Project as a medium / long term priority within the Cumbria Infrastructure Plan (May 2016), and it is expected that the ES will include details of how the Project will support this Plan.
- 11.1.4. There are no planning policies within the Eden Local Plan 2014-2032 that are directly pertinent to human health although Policy DEV3 states:
- 11.1.5. *Development will not be supported where..... it would remove an existing right of way, unless there is no alternative suitable location and the benefits from the development would justify the loss, or where an acceptable diversion is provided and a legal diversion order obtained.*
- 11.1.6. It is therefore expected that the ES will include details of how the Project will achieve the aim of this Policy.
- 11.1.7. The requirements of Paragraph 5.184 of the NPSNN are deemed appropriate and this approach should form part of the assessment within the ES.

11.2 STUDY AREA AND ASSESSMENT METHODOLOGY

- 11.2.1. It is noted that the study area will be defined using the guidance in the DMRB LA112 *Population and Human Health*; this is considered to be acceptable. While significant adverse effects are not anticipated outside the 500m area (para 14.3.1 of the Environmental Scoping Report), it is expected that the ES will clarify whether effects have been identified beyond the 500m area and the study area extended (para 14.3.2 of the Environmental Scoping Report).
- 11.2.2. It is recommended that the Applicant reviews the network of Public Rights of Way (PRoW) beyond the 500m area surrounding the project boundary, to confirm there are no likely significant effects. It is noted that PRoW have been marked on Figure 14 which are outside of the 500m study area and expect the ES to confirm whether these will be included in the assessment.
- 11.2.3. It is noted that the assessment of human health effects will be undertaken using guidance in the DMRB LA112 *Population and Human Health*. However, a deviation with this guidance is noted with the determination of significance for health effects (para 14.9.11 of the Environmental Scoping Report). Further details of the methodology for determining significance should be set out in the ES.

11.3 BASELINE CONDITIONS

- 11.3.1. The Applicant is requested to show the location of Agricultural Land Holdings on appropriate figures in the ES.
- 11.3.2. The Applicant should define the sensitivity (or value) of Population receptors in the ES.

- 11.3.3. It is recommended that the Applicant use the terminology set out in DMRB LA112 *Population and Human Health* for determining the sensitivity (or value) of Human Health receptors; low, medium; or high instead of a comparison to the average (which has been assumed to be national average).
- 11.3.4. It is noted that the Applicant intends to build a more detailed baseline of demographic, social and health characteristics of the communities in the study area; this is welcomed. However, the absence of reporting on District health indicators has meant that a potential impact associated with road safety has not been identified. It is recommended that these health indicators are used to inform the baseline in the ES.
- 11.3.5. It is recommended that Cumbria's Joint Strategic Needs Assessment (JSNA) is used to further inform the baseline with details of the health and social care needs of local communities.

11.4 POTENTIAL IMPACTS

- 11.4.1. The potential impacts identified in Section 14.4 of the Environmental Scoping Report are accepted at this stage, however it is recommended that the inclusion of the assessment of impacts on Tourism and Recreation, Road safety of Walkers, Cyclists and Horse riders (WCH), and Employment Generation are also included to ensure a robust assessment of population and human health effects. It is also recommended that the Applicant includes physical activity as a health determinant to be assessed during construction and operational phases.
- 11.4.2. Tourism is an important economic driver for the region. In 2019, Cumbria welcomed almost 48 million visitors, contributing £3.13 billion to the local economy, supporting 65,500 jobs¹⁴. The Applicant is requested to provide further detail on the potential impacts that the Project is likely to have on the local economy and Tourism and Recreation in the region, beyond land take and severance of access for local businesses. This should include an assessment on the demands upon temporary accommodation during the construction phase.
- 11.4.3. The Public Health England Local Authority Health Profile (2019) for Eden District reports that the "Killed and seriously injured (KSI) rate on England's roads is significantly worse when compared to the national average"¹⁵. A review of fatal road traffic collisions (RTC) in Cumbria¹⁶ identified that 21% of RTCs occurred in Eden, and that the majority of fatal RTCs occur on A-roads (62%) including the A66. 17% of road deaths were pedestrians. The existing A66 is used by cyclists, and crossed by pedestrians. The Applicant should provide further detail on the potential impacts that the Project is likely to have on road safety, and associated health outcomes within the ES. The Applicant should also request traffic collision data as part of consultation with Cumbria County Council, to further inform the ES.

¹⁴ Cumbria Tourism, Accessed online at cumbriatourism.org

¹⁵ Public Health England, 2019. Local Authority Health Profiles, Eden District. Accessed online: <https://fingertips.phe.org.uk/profile/health-profiles>

¹⁶ Brown, Rachel E., 2015. Avoidable Mortality in Cumbria – A Review of 73 Fatal Road Traffic Collisions. Centre for Public Health, Liverpool John Moores University. Accessed online: <https://cumbria.gov.uk/elibrary/Content/Internet/536/671/4674/5359/5360/42135155438.PDF>

- 11.4.4. It is noted that potential employment benefits have been identified during the construction phase. It is recommended that the Applicant support this statement with further assessment of employment generation, including calculations, resulting from the Project and to what extent these employees can be sourced locally to the Project. The ES should also detail how the Project will benefit the local population through apprenticeships, training and upskilling of the workforce.
- 11.4.5. Relevant vulnerable groups have been identified, and it is noted that the list provided is not exhaustive. It is recommended that the Applicant includes Gypsies and Travellers as a vulnerable group, due to the large numbers of this population who visit Appleby-in-Westmorland (situated between Scheme 5 and Scheme 6) on an annual basis for the Appleby Horse Fair.
- 11.4.6. The Applicant is requested to provide further detail within the PEIR on the frequency of use of WCH provision within the study area. This may need to be supported by counts of WCH on PRoWs. It is expected this information will support the scoping out of health effects for Schemes by demonstrating the absence of sensitive receptors in the associated study areas. The Applicant should also consider the impacts of the Project upon the National Cycle Network routes both near Penrith (NCN 71) and Appleby-in-Westmorland (NCN 68).
- 11.4.7. The Applicant is requested to provide further information on the Agricultural Land Holdings within the study area, existing accessibility issues associated with them, and the frequency of use. This may need to be supported by surveys undertaken with holders of agricultural land in the study area.

11.5 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 11.5.1. The preparation of an Environmental Management Plan prior to construction work commencing is welcome. The Applicant is recommended to include the consideration of the timing of the construction programme to accommodate for peak tourism periods, accommodation changeover days, and events such as the Appleby Horse Fair.
- 11.5.2. The Applicant should provide further details for how adverse effects on the function and viability of agricultural businesses will be mitigated, particularly if it involves the provision of equivalent facilities.
- 11.5.3. It is expected that the Applicant will confirm that use of the north to south crossing of the Pennine Bridleway National Trail in the Kirkby Stephen area will be uninterrupted, and that provision will be made to ensure access will be retained both during construction and operation of the Project.
- 11.5.4. The Key Tests of CCC and the LEP include for an “off A66” route for walking and cycling between M6 and A1(M) and the Applicant should provide further details in the ES as to how this will be achieved. The Applicant should also have consideration of any emerging Local Walking and Cycling Infrastructure Plans and any significant effects upon WCH routes should be appropriately mitigated with details included within the ES. Cumbria County Council has aspirations for promoting further traffic free options for connecting Penrith with Pooley Bridge for walkers and cyclists and any proposals at J40 of the M6 and Kemplay Bank should incorporate adequate and safe measures to facilitate travel for these vulnerable road users.

12 ROAD DRAINAGE AND THE WATER ENVIRONMENT

12.1 STUDY AREA

- 12.1.1. It is noted that the study area will include surface water and groundwater features within a 1km radius of the indicative DCO boundary and that this may be extended if it is necessary to capture potential impacts outside of this 1km radius. This approach is considered to be satisfactory.
- 12.1.2. The ES should clearly describe the extent of the study area and it should be shown on a plan.

12.2 OVERVIEW OF CONSULTATION TO DATE

- 12.2.1. Table 15-1 indicates that initial consultation has been undertaken with the Environment Agency (EA) and Natural England. It is recommended that consultation already undertaken with the Lead Local Flood Authorities (LLFAs) are also recorded in the ES.

12.3 BASELINE CONDITIONS

- 12.3.1. The information presented within Section 15.5 is very high level with limited sources of information used to complete the baseline assessment. The Applicant should incorporate further detail into the PEIR and ES including:
- Further consultation with key consultees including the EA, Cumbria County Council, Eden District Council and the Eden Rivers Trust with reference to key documents (for surface water and groundwater receptors);
 - Information on any consented surface water and groundwater abstractions or discharges (including private (non-licensed) abstractions);
 - Existing drainage arrangements and systems along the existing and proposed scheme routes;
 - Additional assets identified and added to Highways England's Drainage Data Management System (HADDMS);
 - Further details on surface water and groundwater receptors affected by the Project, including but not limited to information on the smaller watercourses, ponds, any culverts / structures / flood defences in the vicinity, catchments, hydrology and modelled flood levels (where available) aquatics / fish / mammal information relevant to any watercourse, any below ground work that could affect groundwater;
 - Update on the potential for Groundwater Dependent Terrestrial Ecosystems (GWDTE's) and the development of a conceptual hydrogeological model;
 - Further details on the assessment of the potential for groundwater flooding risk with relevant consultation sought on the matter.
 - Further details on the significance of karsts / gypsum deposits will need to be explored and what potential impacts these may have on groundwater receptors;
 - Specific site visit information including historical/current ground investigation data and groundwater level/water quality data;
 - Further information on the Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI) that is located within the study area; and
 - Reasons for the waterbodies failing elements of the WFD.
- 12.3.2. The assessment within the ES should include a review the provisional importance of key surface water and groundwater receptors once further baseline information becomes available, for example,

it appears that all watercourses not classified under the Water Framework Directive (WFD) have been allocated a medium importance which may not necessarily be the case.

12.3.3. The Applicant should also consider potential risks that may directly / indirectly impact all surface water and groundwater receptors.

12.3.4. In addition to the above, the below paragraphs provide further information on the individual schemes from west to east.

Scheme 1; M6 Junction 40

12.3.5. The closest watercourse is the River Eamont and the smaller watercourses within the study area are also detailed. It should be noted that Dog Beck is classed as a main river, not an ordinary watercourse to the east of the M6.

Scheme 2; M6 Junction 40 to Kemplay Bank Roundabout

12.3.6. The main watercourses are detailed and it should be noted that the Dog Beck is classed as a main river not an ordinary watercourse to the east of the M6. It is encouraging to note the likely interaction with groundwater as this scheme is an underpass and is located in a total catchment area of a Source Protection Zone (SPZ). The ES should include further information on the unnamed tributaries that flow into the River Eamont, if they are open or culverted, their location and also further details on the Thacka Beck as it is noted that the culvert along Thacka Beck will be affected by the proposals.

Scheme 3; Penrith to Temple Sowerby (Center Parcs)

12.3.7. The main watercourses are detailed but it would be beneficial for further information on the ponds, field drains and smaller unnamed watercourses within the study area and any structures / culverts that may be affected by the Scheme to be provided. It should be noted that Medium and Low pluvial flood risk is associated with the Light Water along the A66 and that the Light Water is shown as a Main River on Figure 15.1 when it is an ordinary watercourse.

Scheme 4; Temple Sowerby to Appleby

12.3.8. It is noted that alternative alignments are being assessed for this Scheme at the scoping stage. It is likely that Birk Sike, a main river will be included within the study area and that once a preferred alignment is selected, further baseline information should be included within the assessment because, for example, there are numerous watercourses, drains, ponds and springs that are not detailed.

Scheme 5; Appleby to Brough (Warcop)

12.3.9. It is noted that alternative alignments are being assessed for this Scheme at the scoping stage. It is likely that Hilton Beck, a main river, will be included within the study area and that once a preferred alignment is selected, further baseline information should be included within the assessment because, for example, there are numerous watercourses, drains, ponds and springs that are not detailed. Details on pluvial flood risk should also be included for this Scheme.

Provisional summary of receptors

12.3.10. Table 15-2 within the Scoping Report provides the provisional importance assigned to key receptors identified at this stage of the assessment. The ES should identify all the receptors that have been included within the assessment.

12.4 POTENTIAL IMPACTS

- 12.4.1. The potential impacts identified for the construction stage are satisfactory, given the information available to inform the Scoping Report. However, there may be an impact on fluvial geomorphology and an impact to flood risk (surface water and groundwater) for example, temporary works within areas of fluvial flood storage, works to existing watercourse alignments and culverts, associated changes to catchment permeability and hydrology. It is recommended that the potential hydrogeological impacts on buried archaeology is considered.
- 12.4.2. The potential impacts identified for the operation stage are satisfactory, given the information available to inform the Scoping Report. In addition, there may be an impact on fluvial geomorphology, changes in natural catchments and susceptibility to groundwater flooding risks. Further detail and consideration on how dissolution impacts of gypsum will be quantitatively assessed at the operational stage should be included within the ES. In addition, it should be noted whether Cumbria County Council would have additional maintenance duties as a consequence.

12.5 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 12.5.1. The design and mitigation measures listed by the Applicant in the Scoping Report are very high level and are agreed at this stage given the information available.
- 12.5.2. It is recommended that discussions around the proposal to improve flow conveyance of structures within watercourses are discussed at an early stage with the LLFA's when designs are available. This requires careful consideration as improving flow conveyance is likely to increase flood risk downstream.
- 12.5.3. The LLFA and EA are currently working together with regards to natural flood management, sustainability and reducing flood risk, in particular around Warcop. It is recommended that the Applicant engages with the LLFA and EA to ensure that the Project complements these proposals.
- 12.5.4. As the designs for each Scheme are developed, it is recommended that the applicant engages with the LLFA to ensure that the scheme compliments the LLFA's objectives and any LLFA proposals.

12.6 ASSESSMENT METHODOLOGY

- 12.6.1. The assessment methodology described is agreed at this stage given the information available to within the Scoping Report.
- 12.6.2. The PEIR and ES should provide further information on the proposed methodology for:
- Flood Risk Assessment – what modelling is being undertaken and why, how culverts are being sized, how compensatory flood storage is being calculated and associated flood risk implications;
 - Various groundwater studies proposed including any detailed hydrogeological modelling and purpose of such modelling;
 - Spillage assessment;
 - Hydromorphological assessment;
 - WFD assessment;
 - Geomorphology Assessment (if deemed appropriate for any part of the proposed Scheme);
 - Drainage Strategy;
 - Scour assessment; and

- Assessment of dissolution impacts of gypsum and any other “bespoke” impact assessments on groundwater receptors that are not covered by DMRB LA 113 *Road Drainage and the Water Environment*. Where gaps in information are identified, how will this be considered and addressed against the Scheme design and specific mitigation measures should be included.

- 12.6.3. It is noted that site visits are planned to inform the assessments, that discharge locations of highway drainage will be investigated and confirmed and that consultation with the EA and LLFA will continue.
- 12.6.4. It is recommended that a water features survey (including groundwater receptors) be considered following early engagement / consultation with the relevant stakeholders.
- 12.6.5. It is also noted that if mitigation is not possible, then the residual effects will be discussed in detail with relevant stakeholders to determine acceptability and compensation requirements. It is recommended that these discussions happen as early as possible in the design process.

12.7 ASSUMPTIONS AND LIMITATIONS

- 12.7.1. It is noted that the assessment of potential impacts is based on indicative project layout drawings with decisions regarding the proposed design and mitigation not yet made. The assumptions and limitations described are agreed at this stage given the information available to inform the Scoping Report.
- 12.7.2. In addition to items listed in Section 15.10.2 reference should also be made to any reports and any anecdotal/factual evidence of groundwater flooding risk to further complement historic flooding information already provided. Private (non-licensed) groundwater abstractions will also need to be considered to inform detailed assessment as the Scheme progresses.
- 12.7.3. In addition to the items listed, a Drainage Strategy with associated catchments, calculations and drawings for each Scheme should be provided alongside the ES. It is recommended that the Applicant engages with the LLFA's to discuss the potential drainage solution for each Scheme as the design progresses.
- 12.7.4. It is recommended that the Applicant engages with the EA and LLFA regarding the Natural Flood Management options that are being considered in the upper catchments of the Eden. Such proposals would align with the Key Tests.
- 12.7.5. Table 15-3 lists the scoping criteria from DMRB LA 113 *Road Drainage and the Water Environment* for construction and operation of the Project.
- 12.7.6. Table 15-3 is agreed at this stage given the information available to inform the Scoping Report but it should be noted that additional receptors that have not been considered, for example, groundwater receptors will need to be included and further justification as to why these receptors are scoped in or out based on the scheme design provided. It is also recommended that impacts to the floodplain should be scoped in.

13 ASSESSMENT OF CUMULATIVE EFFECTS

13.1 STUDY AREA AND ASSESSMENT METHODOLOGY

- 13.1.1. The approach to the cumulative effects assessment (CEA) will follow DMRB LA104 and PINS Advice Note 17 and this is considered to be an acceptable approach.
- 13.1.2. The proposal to consider combination and cumulative effects resulting from the Project is also considered to be acceptable, as is the acknowledgement that effects arising from more than one scheme are not cumulative effects but rather the effects of the Project itself.
- 13.1.3. Within the ES it would be beneficial for the justification to the Zone of Influence that is to be used in the CEA to be clarified. For example, the Biodiversity (see Chapter 4 of this response) assessment may need to be extended to a much larger area, and therefore the CEA should follow suit. Any deviation for the study area for the CEA should therefore mirror the technical topic chapter, unless it can be justified accordingly.

13.2 BASELINE CONDITIONS

- 13.2.1. The Applicant's proposal to consult with relevant Local Planning Authorities to identify the developments to be included in the CEA is to be encouraged. However, as Material Resources and Climate are to have a regional zone of influence (as shown in Table 16.1 of the Scoping Report, a greater number of authorities than listed will need to be consulted. The CEA should also ensure that NSIPs are identified from the PINS website and included as appropriate within the CEA.

13.3 POTENTIAL IMPACTS

- 13.3.1. It is accepted that at this early stage in the EIA process other developments that are to be considered in the CEA are often not available for consideration. However, as the Applicant is keen to progress the DCO application within the year, there are clearly developments in the planning process at the moment that will be captured within the CEA that will be submitted with the ES.
- 13.3.2. It would therefore be beneficial for an initial list of the developments that will be considered in the ES to be provided in the PEIR and that the Councils are consulted to provide information on the other developments that are suitable for consideration.

Appendix A

CCC AND LEP CONSULTATION RESPONSE





CUMBRIA
LOCAL
ENTERPRISE
PARTNERSHIP



A66 Northern Trans-Pennine Project Public consultation

Cumbria County Council and
Local Enterprise Partnership



A66 Northern Trans-Pennine Project - Public consultation

Cumbria County Council and Cumbria Local Enterprise Partnership Response

The Importance of this Proposal

Cumbria County Council and Cumbria Local Enterprise Partnership strongly support the proposed upgrade to the A66; this is one of our shared strategic infrastructure priorities for Cumbria and can create far reaching benefits. We consider that this upgrade can:

- **Bolster connectivity to support inward investment** – by increasing accessibility, we consider that this proposal can help drive inward investment across Cumbria; supporting ambitious Local Plan proposals for Penrith and St Cuthbert's Garden Village in Carlisle and major employment sites in west Cumbria.
- **Better connect Cumbria to national and international markets** – the proposed upgrade can boost access to markets, an opportunity amplified by Cumbria's major strengths in transport reliant sectors like, energy, nuclear, advanced manufacturing and logistics.
- **Bolster resilience and safety for all users** – the A66 has significant safety challenges with changes in carriageway standards; junction arrangements and weather significant contributing factors. More widely, and in common with much of Cumbria, the mountainous landscape encompassing this route significantly limits the ability to provide appropriate diversions.
- **Better support local trips** – while the A66 plays a national and regional role; for communities along the route it is an important part of day to day life, being used to access, work, services and education. The proposed upgrade of the route has the potential to support all users and their journeys.
- **Support national traffic and operation of the Northern Powerhouse / M62** – the route already plays a strategically significant role in supporting journeys between Cumbria and Scotland and Yorkshire, Midlands and South East and this upgrade can further enhance this role and drive growth across the Northern Powerhouse.
- **Enhance Cumbria's major visitor economy** – Cumbria is globally recognised for its beauty and natural capital with nearly 50 million visitors each year. Improving the A66 will increase Cumbria's reach as a destination and help to address major congestion issues at peak times.

Key Tests

While there are a number of significant benefits that could be realised, we consider there to be a range of key tests that should be met to enable the strongest possible scheme emerge, namely:

- **Clear and effective junction strategies** – considering those not only on the newly dualled sections but also existing junctions on the route. We consider that the outcome should see greater junction safety and legibility, supporting both east and west bound journeys.
- **No loss of connectivity for local communities** – there is a need to ensure that junctions are integrated with a comprehensive arrangement of connecting routes to enable businesses, communities and visitors to enjoy ready access to key destinations.
- **An effective solution for Kemplay; M6 Junction 40 and Skirsgill** – the section of the A66 between Kemplay Bank and Junction 40 of the M6 is critical to the success of this scheme. As part of proposals it is vital that additional capacity is provided through Junction 40, there is no loss of connectivity for emergency services at Kemplay Bank and effective access arrangements are provided for the Cumbria County Council owned facilities and Local Plan allocation at Skirsgill.
- **A clear strategy for sections of the A66 that are “de-trunked”** – it is considered that any “de-trunked” sections of the existing A66 do not include a maintenance backlog, and that commuted sums be provided to support future up keep. We also consider that transferred sections of the route should be subject to enhancements where these are considered to best reflect their new role, for example to junction arrangements or the introduction of improved facilities for non-motorised users.
- **An “off A66” route for walking and cycling between M6 and A1(M)** – we consider it is important for this scheme to bring meaningful benefit for the community and all users. In particular we consider that the scheme should seek to support delivery of a Scotch Corner to Penrith “off A66” route suitable for walking and cycling. Moreover the scheme should incorporate meaningful improvement for horse drawn traffic accessing Appleby Horse Fair.
- **More and smarter technology to bolster resilience** – resilience is a challenge along this route. We consider it critical that as part of the proposed upgrade greater use be made of technology including smart signage, vehicle charging, 5G and CCTV.
- **Meeting wider service and infrastructure needs** – the distance of the A66 from the south east and southern ports and rules on driving time often sees HGVs parked on side roads and lay-bys overnight. This creates a poor environment, safety issues and difficulty for HGV drivers. We consider that as part of this scheme Highways England work with Cumbria County Council, Cumbria LEP and Eden District Council to explore opportunities for the introduction of services for HGV's.

- **Environmental mitigation to minimise harm and boost benefit** – the A66 is located within a high quality environment, reflecting this, it is vital for the development and delivery of proposals to be supported by a comprehensive approach to mitigation.
- **A clear strategy for the establishment of alternative/diversion routes** – it is important that there is detailed consideration of diversion routes to support both the construction and operational period and that necessary upgrades are delivered to support their operation.
- **Even further and stronger joint working** – Cumbria County Council, LEP and Highways England have enjoyed an effective working relationship; as proposals move forward this needs to be further enhanced. In particular we see a real opportunities to establish a planning performance agreement with the County Council as part of a deepened working relationship.

A66 Consultation – Route Sections

1) Junction 40, M6 to Kemplay Bank, Penrith

Housing the headquarters for Cumbria Fire and Rescue and Cumbria Constabulary respectively Kemplay Bank Roundabout plays a critical role in the provision of emergency services within Cumbria.

Current arrangements allow Cumbria Fire and Rescue to take direct access to the A66 with a further non-emergency access provided through an access road/underpass from the A686.

From this station, fire service vehicles were mobilised 244 times in 2018/19 with an average crew turnout time (time it takes the crew to respond to the station) at 3 minutes 47 seconds and an average response time (time it takes the crew to arrive at the incident from the station) of 10 minutes 8 seconds. It is critical that as part of the proposals, the ability to achieve direct emergency access to the A66 is maintained and that delays to emergency vehicles response times or crew turnout time are avoided.

The need to overcome capacity issues at Kemplay is understood however it will be important that through the development process consideration be given to the sensitivity of the design solution. In this context we note that the A66 overpass option has the potential to create a detrimental visual impact.

Within the consultation, we note proposals to remove the non-emergency road/underpass to the fire station from the A686, replaced by a new link from the A6. This proposal requires further consideration as part of the land proposed for the link has been identified as a possible location for additional emergency service facilities. Mindful of this, it is very important that access arrangements around Kemplay Bank are developed working closely with Cumbria County Council, Cumbria Fire and Rescue and Cumbria Constabulary.

Another important element within this section of the A66 surrounds land at Skirsgill. This is currently accessed from the westbound carriageway of the A66 and hosts a Cumbria County Council highway depot and office facility. Alongside these, 3.89 hectares of adjoining land has been allocated for employment development in the recently adopted Eden Local Plan. Current access to this site is from the A66 and as part of the scheme proposals; effective vehicular and pedestrian access to the site will need to be accommodated.

Junction 40 of the M6 represents a key interchange and there is a need to ensure that it can accommodate future demand. While we note that within the consultation there is a clear commitment to improve the junction, detail on this arrangement is not provided. We also consider it important that as the development of proposals move forward, the A592 arm of this junction be brought into scope.

2) Penrith to Temple Sowerby

This section of the A66 plays an important role, providing direct access to Center Parcs and a number of important side roads including access to Brougham and a number of local businesses.

Within the proposals we note that it is stated that the Brougham junction would operate on a westbound only basis. By making the junction to Brougham west bound only there could be significant impact on local trips with proposals likely to result in additional journey time for traffic needing to access the A66 eastbound.

While both options are presented as online improvements it will nevertheless be important to consider whether the dualled section could be provided in parallel to the existing A66 route. Such an arrangement could bring benefit to all road users.

Flooding has been experienced in the vicinity of the Karma Llama Café due to a watercourse culvert underneath the A66 and it will be important for this issue to be addressed through the proposal.

3) Temple Sowerby to Crackenthorpe

The proposed bypass of Kirkby Thore has the potential to bring significant amenity benefit for the community.

Notwithstanding this, it is important that as part of any improvement, the village and the services within it are not isolated from the A66. While it is appreciated that proposals remain conceptual there are concerns that they do not provide adequate access into and out of the town for local residents and businesses. To address this point, it is considered important for all junctions to support both east and west bound movements.

With regard to the southern option assessment will need to include the detailed consideration of impacts to the Site of Special Scientific Interest and flood risk from the River Eden.

4) Crackenthorpe to Appleby

Improvements within this section having the potential to deliver significant benefit improving journey times and with that, free up the existing A66 to support all users and journeys. Alongside this, proposals to provide all-movement junctions (as opposed to one directional) are welcome.

This section does include a number of features of historic significance including a Roman Road and Scheduled Ancient Monument and these will need careful considered as part of proposals.

5) Appleby to Brough

Within this section of the route, poor vertical and horizontal alignment combined with sub-standard junction arrangements contribute to significant safety concerns.

The proposed dualling has the potential to address these issues while improving journey times and freeing up the existing A66 to support local and non-motorised trips.

Notwithstanding these opportunities, we are concerned with the suggested junction strategy seeing the introduction of three west bound only junctions with only a single all-movement junction. We have concerns that such arrangements could prove extremely restrictive to local users with the potential for convoluted arrangements and with that extended journey times.

Responding to these concerns we would wish for the proposals to be enhanced to provide effective east bound access with this further supported by the introduction of an all movement junction where the current and future A66 converge to the east of Warcop.

In parallel with the development of an effective junction strategy, detailed consideration needs to be given to the future use of former sections of the A66 to support all users and journeys.

To the west of Warcop, it is important for consideration to be given to the feasibility of enhancing junctions on the Appleby bypass. There is an important industrial estate located to the north east of Appleby but junction arrangements means that to access it from the A66 east bound there is a need to go through the heart of the town.

Providing effective direct access from the eastern end of the bypass would support this important site while helping the environment of the town and the legibility of the highway network.

End.



8 First Street
Manchester
M15 4RP

wsp.com

Contact: Claire Teasdale
Direct Tel: 03000 261390
Your ref: TR010062-000008-210614
Our ref: AACON/20/02942



Ms Marie Shoesmith
Senior EIA Advisor
The Planning Inspectorate
Environmental Services
Central Operations
Temple Quay House
2 The Square
Bristol, BS1 6PN

A66Dualling@planninginspectorate.gov.uk

12 July 2021

Dear Ms Shoesmith

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11

Application by Highways England (the Applicant) for an Order granting Development Consent for the A66 Northern Trans-Pennine Project (the Proposed Development)

Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested

I write in response to your letter dated 14 June 2021 regarding the above.

It is noted that the Applicant has asked the Planning Inspectorate on behalf of the Secretary of State for its opinion (a Scoping Opinion) as to the information to be provided in an Environmental Statement (ES) relating to the Proposed Development.

The ES must include the information set out in Regulation 14(2) and meet the requirements of Regulations 14(3) and 14(4). It must also include the information set out in Schedule 4 of the EIA Regulations that is relevant to the specific characteristics of the particular development or type of development and to the environmental features likely to be significantly affected.

It is noted that the PCF Stage 3 Environmental Scoping Report considers that the ES should focus on the following environmental impact chapters:

Regeneration, Economy and Growth

Durham County Council, Planning Development (Strategic), Room 4/123-128, County Hall,
Durham DH1 5UL Main Telephone: 03000 262 830

- Air Quality
- Biodiversity
- Climate
- Cultural Heritage
- Geology and Soils
- Landscape and Visual
- Minerals and Waste
- Noise and Vibration
- Population and Human Health
- Road Drainage and the Water Environment
- Assessment of Cumulative Effects

The Scoping Report sets out the format of matters for inclusion within the main environmental impact chapters which generally appears to be appropriate covering matters such as baseline conditions, potential impacts, design, mitigation and enhancement measures, description of the likely significant effects, assessment methodology and assessment assumptions and limitations. However, Officer comments in relation to the applicant's request for a Scoping Opinion are set out in the attached Appendix.

A chapter to consider the transport and traffic impacts on users along with details of traffic modelling is not proposed in the ES. The applicant has advised that there will be a separate Transport Assessment prepared with the DCO and there will be a Local Transport Report for Statutory Consultation. The applicant also advises that the ES will consider the environmental impacts of the changes to traffic on receptors (through AQ, noise, climate, population and human health) and the effects will be reported in these chapters. It will be for the Planning Inspectorate to decide the acceptability of this approach.

Yours sincerely



Claire Teasdale
Principal Planning Officer

Encs.

Comments in relation to the proposed Chapters of the ES

- Chapter 6 – Air Quality
- Chapter 7 – Biodiversity
- Chapter 8 – Climate
- Chapter 9 – Cultural Heritage
- Chapter 10 – Geology and Soils
- Chapter 11 – Landscape and Visual
- Chapter 12 – Minerals and Waste
- Chapter 13 – Noise and Vibration
- Chapter 14 – Population and Human Health
- Chapter 15 – Road Drainage and the Water Environment
- Chapter 16 – Assessment of Cumulative Effects

Chapter 6 – Air Quality

DCC Environmental Health (Air Quality)

Section 2.4 of the PCF Stage 3 Environmental Scoping Report states that the project has been split into a number of schemes. It should be confirmed whether the air quality assessment will consider the combined impact of all schemes within the project, or the impact of each scheme individually. The approach would likely alter the extent of traffic impacts significantly. If the latter approach is taken, justification should be provided as to why the project as a whole is not being evaluated.

Chapter 6 – Air Quality - in Table 6-1, it is confirmed that PM10 and PM2.5 are screened out of the assessment. Justification is given that earlier assessment stages of the project identified that PM10 concentrations in the study area were predicted to be well below the air quality objective. No issue with this providing justification for omitting PM10 and PM2.5 is included in the air quality assessment chapter, with reference to concentrations predicted in previous rounds of assessment along with relevant monitoring data within the area of the TRA.

In Table 6-1, it is stated that the sensitivity of alternative meteorological data sites will be considered in the assessment of preliminary design, by means of qualitative review. It then goes on to state that the use of one meteorological data site is considered to be proportionate for consideration against annual mean averaging periods. Providing the air quality assessment chapter includes evidence that the meteorological conditions used to inform model verification and the prediction of air quality impacts is representative of the entire study area (noting that the study area is dissected by the Pennines), then the use of a single met site is not seen as a fundamental issue.

In Section 6.5, it states that air quality monitoring data will be obtained from a variety of sources. It would have been useful to see what baseline data is available and where that data has been gathered, to comment on the suitability of the data to represent baseline conditions and inform dispersion model verification.

Figure 6.3 provides the spatial location of monitoring sites. The quantity of monitoring data shown on sections of the A66 through the County Durham area of the scheme (and sections within other LA areas) appears to be very limited. The air quality assessment

should consider the potential implications of limited monitoring data on model verification at areas adjacent to the A66.

In response to the key questions for scoping listed in the Scoping report:

1) Do you agree with the proposed scope of the air quality assessment outlined in this chapter?

Yes, subject to the comments listed above and in the Council's response to the Informal Scoping report submission.

2) Do you agree with the proposed study area and methodology for undertaking the air quality assessment outlined in this chapter? Are there any comments on the methodology you wish to raise?

Yes, subject to the comments listed above and in the Council's response to the Informal Scoping report submission.

3) Is there any baseline information or data that you wish to draw our attention to, or are able to provide us with to inform our assessments?

None.

4) Are there any other key issues or aspects relevant to the air quality assessment that you wish to bring to the attention of the design and assessment team?

Nothing beyond the comments listed above and those in the Council's response to the Informal Scoping report submission.

5) Are you happy to be contacted directly to discuss any aspects of your response to this scoping request? If so, we would be grateful if you could please include contact details in your response.

It is noted that not all comments made on the informal Scoping report provided in January 2021 have been responded to or addressed in the current Scoping report. Those comments remain live.

Table 6-1 (*Air Quality Scope Comments to date*) of the Scoping report does not include all of the comments raised previously to the informal Scoping Report. However, there is more detail in this version of the Scoping report than the earlier version reviewed earlier this year, so the majority have been covered in the text, but not directly included in that consultation table.

Responses to points made previously have not been addressed in full, with points outstanding underlined:

- It is noted that the approach to verification is not discussed in detail in the Scoping Report, although it is committed to being undertaken 'at appropriate locations'. Dispersion model and 'simple' assessment outputs should be verified in line with Defra LAQM TG(16) guidance. It is noted that any recent data collection may have been invalidated due to conditions during the on-going pandemic. If data gathered during previous stages of assessment is available, from before the pandemic began, then this could be used again, providing the data is adjusted to

accommodate any change to the traffic data base year for the assessment of the preferred option. If not, then it is recommended that an NO2 survey is undertaken at some point in the future, if conditions allow and before examination, so that the Inspectors judgement is informed by model outputs that have been verified.

- Mitigation measures should also include minimising emissions associated with site plant and non-road mobile machinery.
- The Scoping Report states that the Environmental Statement submission will include an Environmental Management Plan. This document should commit the applicant to the dust and site plant emissions mitigation measures described within it. Durham Council would appreciate consultation on the measures to be included in that document prior to formal submission.

DCC Officer contact: John Hayes, Principal Public Protection Officer,

Tel: [REDACTED]

Chapter 7 – Biodiversity

Officers have viewed the scope of the proposed ES and have nothing to add at this stage.

Officer: Tammy Morris-Hale, Senior Ecologist, [REDACTED] Tel: [REDACTED]

Chapter 8 – Climate

DCC Low Carbon Economy Team

Officers have considered Chapter 8 and consider everything to be covered. The only thing questioned is the AADT of being over 10%

Officers query what modelling has been done that includes the impact of electrification on traffic levels, especially over such routes.

The project raises concerns given the level of GHG emissions associated with its construction and operation, but no adverse comments on the scoping are raised.

DCC Officer contact: Stephen McDonald, Principal Officer – Low Carbon Economy Team, [REDACTED] Tel: [REDACTED]

Chapter 9 – Cultural Heritage

The information set out in section 9 of the scoping report regarding cultural heritage is considered to be acceptable. The study areas for designated and non-designated assets are appropriate given the emerging finalised design and the removal of overbridges in sensitive locations which will result in the corridor having a traditional linear presence in the landscape. The methodologies for assessing impact follow established practices and all relevant guidance is referenced. Nothing further to add at this point to scope the ES regarding cultural heritage.

DCC Officer contact: Bryan Harris, Senior Design & Conservation Officer,

Tel: [REDACTED]

DCC Officer contact: David Mason, Principal Archaeologist,

Tel: [REDACTED]

Chapter 10 – Geology and Soils

DCC Environmental Health – Contaminated Land

Officers have assessed the available information and historical maps with respect to land contamination.

There are some sites of potential land contamination identified along the route, including landfilling and therefore in places the Made Ground could be several metres deep. Although the risks posed to the end user are low, Made Ground and contamination will need to be identified and dealt with accordingly. Having liaised with the ARUP regarding the site, they are proposing on carrying out a phase 2 site investigation and are in the process of identifying the sources.

Given this, the following contaminated land condition should apply.

Contaminated Land (Phase 1-3)

No development shall commence until a land contamination scheme has been submitted to and approved in writing by the Local Planning Authority. The submitted scheme shall be compliant with the YALPAG guidance and include a Phase 1 preliminary risk assessment (desk top study) and a Phase 2 site investigation. If the Phase 2 identifies any unacceptable risks, a Phase 3 remediation strategy shall be produced.

Reason: To ensure that the presence of contamination is identified, risk assessed and proposed remediation works are agreed in order to ensure the site is suitable for use, in accordance with Part 15 of the National Planning Policy Framework. Required to be pre-commencement to ensure that the development can be carried out safely.

Contaminated Land (Phase 4)

Remediation works shall be carried out in accordance with the approved remediation strategy. The development shall not be brought into use until such time a Phase 4 verification report related to that part of the development has been submitted to and approved in writing by the Local Planning Authority.

Reason: To ensure that the remediation works are fully implemented as agreed and the site is suitable for use, in accordance with Part 15 of the National Planning Policy Framework.

The following should be added as an informative:

If unforeseen contamination is encountered, the Local Planning Authority shall be notified in writing immediately. Operations on the affected part of the site shall cease until an investigation and risk assessment, and if necessary a remediation strategy is carried out in

accordance with the YALPAG guidance and agreed with the Local Planning Authority. The development shall be completed in accordance with any amended specification of works.

DCC Officer contact: Sarah Clement-Dawson, Senior Contaminated Land Officer,
[REDACTED] Tel: [REDACTED]

Chapter 11 – Landscape and Visual

DCC Landscape

The Scoping Report is detailed and well considered.

In response to the key questions set out in 11.2:

1. The proposed scope is appropriate.
2. Study area and methodology are appropriate.
3. Baseline data from the County Durham Landscape Assessment, County Durham Landscape Strategy, Landscape Guidelines and County Durham Landscape Value Assessment are available in electronic formats from DCC landscape Officers.
4. Landscape contact details Ged Lawson ([REDACTED]) and Guy Rawlinson ([REDACTED])

There are few matters of detail.

11.5.13

11.5.13 refers to DCC Area of High Landscape Value and states that the Appleby to Brough (Warcop) scheme crosses the AHLV. The DCC designation is Area of Higher Landscape Value. The Appleby to Brough (Warcop) scheme lies outside of County Durham and isn't covered by the AHLV. The Cross Lanes to Rokeby section of the route does lie in the AHLV.

11.8.28 to 11.8.38

There is a bit of confusion in these sections where effects on the registered Rokeby Park are described as part of the effects of the Bowes Bypass rather than those of Cross Lanes to Rokeby - this just needs to be sense checked and corrected for clarity.

11.9.31

Regard should also be had to the North Pennines AONB Planning Guidelines which contains a section on development outside of the AONB.

Viewpoint selection

Viewpoints in the vicinity of Cross Lanes and Rokeby junctions need be revisited as those initially suggested and agreed were based on earlier junction options.

Residential visual amenity

We note that a free-standing RVAA is not proposed but that assessment of visual effects on residential receptors is to be included in the LVIA. Particular care will need to be taken

in the assessment of effects on residential visual amenity on properties lying particularly close to the proposals.

DCC Officer contact: Ged Lawson, Principal Landscape Officer,
[REDACTED] Tel: [REDACTED]

DCC Officer contact: Guy Rawlinson, Senior Landscape Officer,
[REDACTED]

Chapter 12 – Minerals and Waste

1. Do you agree with the proposed scope of the material assets and waste assessment outlined in this chapter?

2. Do you agree with the proposed study area and methodology for undertaking the material assets and waste assessment outlined in this chapter? Are there any comments on the methodology you wish to raise?

The basis of study area 1 and 2 seems reasonable.

Text relating to the North East which it is presumed should be in paragraphs 12.3.3 and 12.3.4 is missing.

Paragraph 12.5.9 states, “The potential impacts of the sterilisation of existing or future peat resources for commercial extraction will be assessed in the material assets and waste chapter in the ES in line with DMRB LA 110”. Should there be similar text at this point for aggregates and other mineral resources? In addition, should the chapter also include an assessment of the potential for prior extraction as dependent on the design of the scheme i.e. levels, grading and underpasses there may be opportunities for aggregate to be extracted which could be used on site.

The emphasis placed in relation to the management of waste, waste reduction and using recycled and secondary aggregates and opportunities for recycling demolition materials is welcomed.

In overall terms therefore the Council’s welcome the preparation of an assessment of material assets and waste. However, Minerals and Waste Planning Authorities are required to plan and make decisions on planning application to enable a steady and adequate supply of aggregates and provide sufficient waste facilities to manage forecast waste arisings whilst ensuring adequate provision is also made for waste disposal. The assessments should be sufficiently comprehensive to provide a basis for the project and to also allow interested parties to understand the likely implications of the project upon material assets and waste within each of the Minerals and Waste Planning Authorities impacted by the schemes over the schemes period of construction. It would therefore be beneficial for the ES to include an overall forecast ‘routewide’ material requirement for both aggregates (by mineral type) and waste requiring treatment and disposal and for this information to be broken down by each scheme. This will enable Minerals and Waste Planning Authorities to understand how permitted reserves of minerals may be drawn down by the scheme and how void space of landfill sites may be affected and enable this to be taken into account in the preparation of Local Plans and in determining planning applications. It would be beneficial if this information could be provided, it would then feed into Local Aggregate Assessments and Waste Needs Assessments prepared by respective Minerals and Waste Planning Authorities.

3. Is there any baseline information or data that you wish to draw our attention to, or are able to provide us with to inform our assessments?

Para 12.5.6 refers to Local Aggregate Assessments (LAAs). It is expected that the next LAA for CDCC will be available by October/November and will include both 2019 and 2020 based information and forecasts. Since the last LAA was published the North East Aggregates Working Party has published its Annual Aggregates Monitoring Report for 2019 (March 2021). A copy has been attached for your information. Crushed rock permitted reserves in County Durham have fallen from 122,259,000 tonnes on 31.12.18 to 111,060 tonnes on 31.12.19. Sand and gravel permitted reserves in County Durham have fallen from 6,474,000 tonnes on 31.12.18 to 5,600,000 tonnes on 31.12.19. See attached copy.

Table 12-5: Landfill capacity in the North East in 2019. The data in this table is not recognised as representing the figures for County Durham or the North East and should be reconsidered. See attached file "2019 Remaining Landfill Capacity".

- On 31.12.19 7,486,410 cu m of inert landfill capacity remained available in County Durham at Bishop Middleham Quarry, Crime Rigg Quarry and Old Quarrington and Cold Knuckles Quarry (L05 - Inert Landfill).
- On 31.12.19 1,721,036 cu m of Non Hazardous landfill capacity remained available in County Durham at Aycliffe Quarry (L02 - Non Hazardous Landfill with SNRHW cell).
- The only other County Durham landfill in County Durham (in recent years) was Joint Stocks Quarry Landfill (L04 - Non Hazardous) which is now under restoration using inert material.

The above figures are more accurate than in the 'Environment Agency Waste Management Information 2019 for the former North East Planning Region' as this latter source misallocates Hollins Hill landfill to County Durham instead of Northumberland.

Table 12-10: Non-exhaustive list of landfill sites that could potentially accept CD&E waste arisings – 2019 data is now available, see attached file. It should be noted that some of these sites would be unlikely to take large volumes of inert material as they may be dedicated non-hazardous or hazardous landfill sites. Some of these landfill sites may also not be available during the construction period as they may have closed, regard should therefore be given to both planning permission end dates as well as remaining capacity.

4. Are there any other key issues or aspects relevant to the material assets and waste assessment that you wish to bring to the attention of the design and assessment team?

The Council will be consulting upon its Minerals and Waste Policies and Allocations Document towards the end of September. This document is likely to allocate two sites for mineral working. It also appraises a number of further proposals which have been proposed by mineral operators as allocation including a further eastward extension to Hulands Quarry (over and above the County Durham Plan Preferred Area) and a new site to both the west and east of Cross Lanes Junction.

5. Do you consider assessing cut and fill balance at a) the scheme level b) work package c) route wide appropriate?

It seems appropriate. It would be beneficial for the ES to include an overall forecast 'routewide' material requirements for aggregates (by mineral type) and waste requiring treatment and disposal and for this information to be broken down by each scheme. This will enable Minerals and Waste Planning Authorities to understand how permitted reserves

of minerals and void space of landfill sites may be affected and enable this to be taken into account in the preparation of Local Plans and in determining planning applications.

6. Are you happy to be contacted directly to discuss any aspects of your response to this scoping request? If so, we would be grateful if you could please include contact details in your response.

Yes.

In addition, it is important that the environmental impacts of any mineral extraction associated with the development will need to be assessed in the relevant chapters of the proposed ES.

DCC Officer contact: Jason McKewon, Senior Policy Officer,

Chapter 13 – Noise and Vibration

DCC Environmental Health (Nuisance Action)

In response to the key questions for scoping listed in the Scoping report officers comment as follows:

1. Do you agree with the proposed scope of the noise and vibration assessment outlined in this chapter?

The PCF Stage 3 Environmental Scoping Report sets out the proposed approach for the assessment of construction and operational phase impacts and effects. Being a Highways England scheme, the assessment of noise and vibration impacts is proposed to be undertaken in line with the latest Design Manual for Roads and Bridges (DMRB) LA 111 Revision 2 (May 2020), including consideration of the three main aims of the Noise Policy Statement for England (NPSE) to avoid significant adverse impacts, mitigate and minimise other adverse impacts and improve health and quality of life, where possible.

DCC is content with that approach.

2. Do you agree with the proposed study area and methodology for undertaking the noise and vibration assessment outlined in this chapter? Are there any comments on the methodology you wish to raise?

Study Area

The study area within which noise modelling is undertaken, to predict noise levels at all noise sensitive properties in accordance with CRTN, should be at least 600m and larger if necessary to capture, and mitigate where possible, all likely significant effects resulting from operation of new road links, roads physically changed or bypassed by the project, plus other adjoining roads affected by the project.

Baseline

DCC acknowledges the difficulties surrounding the collection of representative road traffic noise levels, due to the Coronavirus pandemic. DCC welcomes the proposal to undertake baseline surveys, provided these can be undertaken safely. The acoustics consultant

should work closely with the transport consultant to determine the most appropriate timing of the surveys to best represent 'normal' traffic conditions as possible, and also to understand the likely levels of flow during the surveys compared with 'normal conditions'.

Correlation between the results of the proposed baseline noise surveys, available previous survey results in the vicinity of the route corridor, and Defra Round 3 Noise Mapping should be made to help quantify the potential variance in noise levels as a result of the Coronavirus pandemic.

There are small number of Noise Important Areas (NIAs) within the DCC area along the route of the A66. DCC welcomes the intention to consider opportunities to reduce road traffic noise levels at noise sensitive receptors in these NIAs, and so improve health and quality of life for residents. Noise reductions should be achieved at noise sensitive receptors in NIAs located within the limits of the scheme proposals, and where possible at other NIAs along the existing A66 corridor.

Construction Noise and Vibration Assessment

It is hoped that at the time of undertaking the PCF Stage 3 EIA, suitable and sufficient data regarding the construction programme, working methods and plant and equipment requirements are available, upon which to base a robust assessment of likely significant noise and vibration effects and resulting mitigation requirements, during construction.

Operational Noise Assessment

The general approach following DMRB LA 111 is acceptable to DCC. The Scoping Report describes the traffic data to be provided by the project traffic consultant to inform the operational noise assessment. The consultant should work closely with the transport consultant to ensure the correct identification of roads included in the traffic model, and to accurately interpret and apply the data onto those roads.

See comment under Study Area above which is relevant to the operational assessment methodology.

We would also request that clear statements are provided within the PCF Stage 3 EIA setting out how the project achieves the three main aims of the NPSE and National Policy Statement for National Networks to avoid significant adverse impacts, mitigate and minimise other adverse impacts, and contribute to improvements to health and quality of life, where possible.

Design, Mitigation and Enhancement Measures

DCC welcomes the commitment to prepare an Environmental Management Plan (EMP) and Noise and Vibration Management Plan (NVMP) to help identify and implement appropriate mitigation measures during the construction phase to protect noise and vibration sensitive receptors. DCC would appreciate consultation on the measures to be included in that document prior to formal submission.

DCC would also welcome the early implementation of noise mitigation measures e.g. packages of noise insulation where residential properties are identified as highly likely to qualify under the Noise Insulation Regulations, or construction of earthworks bunds, in

order that sensitive receptors would be afforded the maximum benefit during construction as well as during operation of the project.

3. Is there any baseline information or data that you wish to draw our attention to, or are able to provide us with to inform our assessments?

Other than the Defra Noise Mapping (extrium.co.uk/noiseviewer.html) produced for Round 3 of the Environmental Noise Directive (END) (Directive 2002/49/EC), DCC is unable to draw your attention to any other baseline noise data at this present time.

4. Are there any other key issues or aspects relevant to the noise and vibration that you wish to bring to the attention of the design and assessment team?

Not specifically at this stage of consultation.

5. Are you happy to be contacted directly to discuss any aspects of your response to this scoping request? If so, we would be grateful if you could please include contact details in your response.

DCC Officer contact: John Hayes, Principal Public Protection Officer,
[REDACTED] Tel: [REDACTED]

Chapter 14 – Population and Human Health

DCC Officer contact: Michael Shannon, Public Health Strategic Manager, Email:
[REDACTED] Tel: [REDACTED]

DCC Officer contact: John Hayes, Principal Public Protection Officer,
[REDACTED] Tel: [REDACTED]

DCC Access and Rights of Way

Although the overall project objectives include “seek to improve NMU provision along the route” and “reduce the impact of the route on severance for local communities”, and public rights of way get mentioned sometimes in the scheme-by-scheme descriptions, it is disappointing that public rights of way do not feature in a coherent form within the document. They could, and do, feature in a number of chapters, as users of public rights of way in the vicinity of the A66 will be affected by air quality, landscape and visual impacts, noise and vibration impacts, and population/human health impacts.

The landscape and visual impacts chapter does identify some key public rights of way and open access locations as visual receptors, but this tends to focus on the promoted/visitor routes and locations, whilst only referencing in passing the wider public rights of way network, which may only attract local use but is nonetheless of significance and value to those communities. The rerouting of public rights of way to accommodate this project, particularly to run adjacent to the A66 to reach new crossing points, has an impact on users of those rights of way, as they are exposed to the various impacts for longer than at present, and those proposed routes need to be assessed as well as the existing routes.

Previous comments on these matters made by DCC Access and Rights of Way officers to the Informal Scoping Report are reported in table 14.1 and largely addressed, though the

reference for the guidance document suggested – it should be the Institute of Public Rights of Way and Access Management (IPROW) <https://www.lulu.com/en/gb/shop/iprow-/environmental-impact-assessment-appraising-access/paperback/product-vqg82m.html> - Non-members can also purchase a PDF copy by emailing iprow@iprow.co.uk

Overall public rights of way are taken into account, but it is not immediately obvious to anyone looking at the document where they will find that information.

DCC Officer contact: Mike Ogden, Access and Rights of Way Team Leader,
[REDACTED] Tel: [REDACTED]

Chapter 15 – Road Drainage and the Water Environment

DCC Drainage and Coastal Protection

Officers have had early consultation and discussion with the designers and agreed drainage principals that the Applicant have used withing their designs.

Officers have read section 15 of the report and consider it is all acceptable and in line with local and national standards.

DCC Officer contact: Brian Weatherall, Senior Area Drainage Engineer,
[REDACTED] Tel: [REDACTED]

Chapter 16 – Assessment of Cumulative Effects

The key consultees for the various environmental topics are set out in this response.

Details of planning applications can be found on the Council's website at <https://publicaccess.durham.gov.uk/online-applications/search.do?action=simple&searchType=Application> and searching on the application number, key word or address under the 'Simple' tab. By selecting the 'Map' tab application boundaries can be seen and if the funnel shape is selected you can change what you see on the map.

The County Durham Plan can be viewed at <https://www.durham.gov.uk/article/3266/Development-Plan-for-County-Durham> and includes details of allocations. The County Durham Plan page provides a link the proposals map which will be of use in terms of allocations and can be found at <https://durhamcc-consult.objective.co.uk/kse/folder/52317>

The Environmental Agency's public register should also be checked in order to ascertain locations of any Permitted sites which may be of relevance.

Other Comments

DCC Highways Officers

Clarification was requested from the applicant regarding the absence of Traffic modelling information in the Scoping Report, and the need for such information to be transmitted to DCC. Subject to receipt of traffic modelling information, the two most recent drafts of Rokeby and Cross Lane junction designs presented to officers on 21 June 2021 were

preferred. (Respectively, overbridge at Cross Lanes and underpass approx. 180m west of C165 at Rokeby).

The applicant has advised that that there will be a separate Transport Assessment prepared with the DCO and there will be a Local Transport Report for Statutory Consultation. The applicant also advises that the ES will consider the environmental impacts of the changes to traffic on receptors (through AQ, noise, climate, population and human health) and the effects will be reported in these chapters. It will be for the Planning Inspectorate to decide the acceptability of this approach.

DCC Officer contact: Dave Wafer, Head of Transport & Contract Services,
[REDACTED] Tel: [REDACTED]

DCC Officer contact: Dave Stewart, Principal DM Engineer,
[REDACTED] Tel: [REDACTED]

DCC Officer contact: Phillip Thompson, Highways Adoption Engineer,
[REDACTED] Tel: 03000 267106

DCC Officer contact: Paul Newman, Structures Manager, [REDACTED]
Tel: [REDACTED]

DCC Officer contact: Mick Donaldson, Structures Engineer,
[REDACTED] Tel: [REDACTED]

Spatial Policy

It is understood from the applicant that the applications will not be determined against local plan policies nevertheless comments have been provided from our Spatial Policy Team which may be of relevance – see Appendix 2 below.

DCC Officer contact: Rebecca Winlow, Policy Officer, [REDACTED]
Tel: [REDACTED]

SPATIAL POLICY TEAM RESPONSE

1. Scope of this response

This response identifies the key planning policies and issues relevant to the consideration of this proposal. It also highlights any policy related material considerations relevant to the consideration of this proposal in terms of national policy, guidance and locally derived evidence bases.

2. Existing Planning Policy Context

The relevant planning policy context relating to this proposal is set out below:

(i) Adopted Local Plans

In considering this proposal due regard should be had to the requirements of Section 38(6) of the Planning and Compulsory Purchase Act 2004 which requires that proposals be determined in accordance with the statutory development plan, unless other material considerations indicate otherwise. This requirement is reaffirmed in paragraph 2 of the NPPF.

The County Durham Plan (CDP) was adopted on 21st October 2020 and is now the development plan which covers the whole of County Durham.

(iv) Policy related material considerations: NPPF

Paragraph 2 of NPPF confirms that this Framework is to be regarded as a material consideration in determining planning applications. NPPF sets out a range of specific national policy approaches which should also be given due regard when considering this proposal alongside relevant parts of Planning Practice Guidance (PPG), the latter providing further clarity on such matters.

In assessing the application regard should be had to the key paragraphs in the NPPF as these will be material considerations, for example:

Promoting Sustainable Transport

Paragraph 104 states that planning policies should:

- b) be prepared with the active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned;
- c) identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development; and
- e) provide for any large scale transport facilities that need to be located in the area⁴², and the infrastructure and wider development required to support their operation, expansion and contribution to the wider economy. In doing so they should take into account whether such development is likely to be a nationally significant infrastructure project and any relevant national policy statements.

Conserving and enhancing the natural environment

Paragraph 170 of the NPPF advises that planning policies and decisions should contribute to and enhance the natural and local environment including by protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan).

3. Key planning considerations relating to the proposal:

Suitability of the Development

Policy 24 (Provision of Transport Infrastructure) sets out specific criteria that proposals for new or improvements to existing transport infrastructure should meet. Such proposals should be necessary to improve the highway network, minimise and mitigate any harmful impact upon the built, historic and natural environment and the amenity of local communities including by incorporating green infrastructure, and make safe and proper provision for all road users, including cyclists and public transport. Proposals should also support economic growth and/or improve connectivity within the county or with other parts of the region. Specialist comments on this matter should be sought from colleagues in the Highways Team; further consultation on the location, layout and design of junctions should also be undertaken as the proposals progress.

Landscape Impact

Sections 07 (Bowes Bypass) and 08 (Cross Lanes to Rokeby) of the proposals are situated within the Area of Higher Landscape Value (AHLV). **Policy 39 (Landscape)** gives support to development which would not cause unacceptable harm to the character, quality, or distinctiveness of the landscape. It goes on to clarify that, where development would affect an AHLV, it would only be permitted where it conserves, and where appropriate enhances, the special qualities of the landscape, unless the benefits of development in that location clearly outweigh the harm. Specialist colleagues in the Landscape team will be able to provide more detailed comments on the proposal's likely impact on the AHLV and any mitigation required.

Impact on Trees and Hedgerows

Policy 40 (Trees, Woodlands and Hedges) sets out that proposals for new development will not be permitted that would result in the loss of, or damage to, trees of high landscape, amenity or biodiversity value unless the benefits of the proposal clearly outweigh the harm. There are a number of mature trees and hedgerows along much of the relevant sections of the A66, with trees along the southern edge of the Bowes Bypass providing screening and mitigation of noise pollution from the road to residents. Specialist comments from colleagues in the Ecology Team should be sought regarding the ecological value of the trees and hedgerows. These, especially those providing screening, should be retained or where possible replaced if affected by the development.

Impact on Listed Buildings and Conservation Area

Policy 44 (Historic Environment) states that development will be expected to sustain the significance of designated and non-designated heritage assets, including any

contribution made by their setting. Notably, great weight will be given to the conservation of all designated assets and their settings. There are a number of listed buildings in Bowes, with Grade II listed West End Farm Barn in particular located very close to the bypass. Much of Bowes is also covered by a conservation area. The layout of the development should be careful to avoid harm to the setting or significance of these heritage assets. More detailed comments on this issue can be sought from the Conservation Team.

Minerals Safeguarding

The eastern part of section 07 (Bowes Bypass) and the entirety of section 08 (Cross Lanes to Rokeby) of the proposal lies within a Minerals Safeguarding Area for carboniferous limestone. **Policy 56 (Safeguarding Mineral Resources)** states that permission will not be granted for non-mineral development that would lead to the sterilisation of mineral resources within a Mineral Safeguarding Area, unless it meets one of a number of exceptions set out by the policy, including that there is an overriding need for the non-minerals development which outweighs the need to safeguard the mineral. It should be noted however that in both cases the existing road layout also overlaps the Safeguarding Area.

4. Conclusion

The matters outlined above should be given consideration in planning the dualling of the single carriageway sections of the A66 within Durham's boundaries.

The Council is broadly supportive in principle of the proposals. This response raises a number of matters that should be considered in designing the new road layout. The council should continue to be consulted as the scheme progresses, particularly with regard to the design and layout of the improvements.

North East England Aggregates Working Party

Annual Aggregates Monitoring Report 2019

Published March 2021

Published by Northumberland County Council
on behalf of the North East England Aggregates Working Party

For further information on this document and the North East England
Aggregates Working Party, please contact:

Kevin Tipple
Secretary to the North East England Aggregates Working Party

Northumberland County Council
County Hall
Morpeth
Northumberland
NE61 2EF

Telephone: [REDACTED]

Email: [REDACTED]

Contents

Contents	i
Executive Summary	ii
1. Introduction.....	1
2. Planning policy context.....	4
3. Primary aggregates: Crushed rock.....	6
4. Primary aggregates: Land won sand and gravel	16
5. Primary aggregates: Marine sand and gravel.....	25
6. Primary aggregates: Crushed rock imports by sea.....	31
7. Recycled and secondary aggregates	35
8. Major developments that have a greater than local influence on aggregates demand	37
9. Local Aggregate Assessments	40
10. Development Plans	43

Appendices

Appendix 1: Primary aggregates producing sites included in the Monitoring Report .	45
Appendix 2: List of fixed sites producing recycled and secondary aggregates	53
Appendix 3: Planning applications for primary aggregates extraction.....	60
Appendix 4: Key milestones and progress with local minerals plan documents	63
Appendix 5: North East Aggregates Working Party – List of Members	67

Executive Summary

This report has been prepared by the North East England Aggregates Working Party and presents statistical information on sales of aggregate minerals from North East England in 2019 and the permitted reserves of aggregate minerals at 31 December 2019. The report also provides information on planning applications relating to the extraction of minerals for aggregate use and sales of recycled and secondary aggregates.

North East England Aggregates Working Party

- The North East England Aggregates Working Party covers a cluster of thirteen Mineral Planning Authorities in North East England over the sub-regional areas of County Durham, Northumberland, Tees Valley and Tyne and Wear.
- The North East England Aggregates Working Party is one of a number of similar groups throughout England and Wales. Its membership is made up of the Mineral Planning Authorities in North East England and the aggregates industry. The Aggregates Working Party has a role in helping to plan for a steady and adequate supply of aggregate minerals through providing data on sales, reserves and planning permissions for aggregate minerals and providing technical advice on the supply and demand for aggregates from their areas.

Primary aggregate sales and reserves

- Sales of primary aggregates extracted from quarries in North East England in 2019 were 6.7 million tonnes. Sales included 5.5 million tonnes of crushed rock and 1.2 million tonnes of sand and gravel. Sales of primary aggregates have generally increased from 2013 onwards reflecting growth in construction activity over that period compared to the period between 2009 and 2013.
- In addition sales of 633,000 tonnes of marine dredged sand and gravel were recorded. The survey also recorded sales of 245,000 tonnes of crushed rock from wharves in North East England in 2019 that were imported via sea.
- At 31 December 2019, North East England had 16.8 million tonnes of permitted sand and gravel reserves and 198 million tonnes of permitted crushed rock reserves.

Table ES1: Primary aggregates sales from quarries and wharves in North East England, 2010 to 2019 (thousand tonnes)

Year	Crushed rock	Sand and gravel	Total primary aggregates from quarries	Marine sand and gravel	Total primary aggregates	Crushed rock imported by sea*
2010	3,469	757	4,226	678	4,904	-
2011	3,433	869	4,302	509	4,811	-
2012	3,181	713	3,894	491	4,385	73
2013	3,569	716	4,285	451	4,736	160
2014	4,162	873	5,035	537	5,572	148
2015	4,533	917	5,450	595	6,045	145
2016	5,356	972	6,328	499	6,827	246
2017	4,808	955	5,763	535	6,298	98
2018	5,735	1,046	6,781	525	7,306	107
2019	5,468	1,187	6,655	633	7,288	245
3 year average	5,337	1,063	6,340	564	6,964	150
10 year average	4,371	901	5,272	545	6,514	-

Notes:

* - Imports of crushed rock by sea not included in total primary aggregates figure.

Table ES2: Permitted reserves and landbank of primary aggregates in North East England at 31 December 2019

Resource	Permitted reserves (million tonnes)
Crushed rock	198.0
Sand and gravel	16.8

Table ES3: Summary of crushed rock sales and reserves at quarries in North East England by Mineral Planning Authority, 2019

Sub area	Mineral Planning Authority	Reserves at end of 2018 (thousand tonnes)	Sales in 2019 (thousand tonnes)	Additional reserves granted planning permission in 2019 (thousand tonnes)	Reserves at end of 2019 (thousand tonnes)	Sites with reserves	Sites with sales	Landbank at end of 2019 based on ten year sales average (years)
County Durham	Durham County Council	122,259	3,168	3,700	111,060	13	10	43.3
Northumberland	Northumberland County Council	78,520*	1,742*	3,450*	80,070*	7	6	56.3*
	Northumberland National Park	c	c	0	c	1	1	c
Tees Valley	Darlington Borough Council	-	0	0	-	0	0	-
	Hartlepool Borough Council	c	c	0	c	1	1	c
	Middlesbrough Borough Council	-	0	0	-	0	0	-
	Redcar and Cleveland Borough Council	-	0	0	-	0	0	-
	Stockton on Tees Borough Council	-	0	0	-	0	0	-
Tyne and Wear	Gateshead Council	-	0	0	-	0	0	-
	Newcastle City Council	-	0	0	-	0	0	-
	North Tyneside Council	-	0	0	-	0	0	-
	South Tyneside Council	c	c	0	c	1	1	c
	Sunderland City Council	c^	c^	0	c	1	1	c
	Total North East England	209,224^	5,468^	6,150	198,033	27	20	45.3

Notes:

c - Confidential figure.

* - Includes sales or reserves for Northumberland National Park.

^ - Includes estimated sales and reserves figure for Eppleton Quarry in Sunderland.

Table ES4: Summary sand and gravel sales and reserves at quarries in North East England by Mineral Planning Authority, 2019

Sub area	Mineral Planning Authority	Reserves at end of 2018 (thousand tonnes)	Sales in 2019 (thousand tonnes)	Additional reserves granted planning permission during 2019 (thousand tonnes)	Reserves at end of 2019 (thousand tonnes)	Sites with reserves	Sites with sales	Landbank at end of 2019 based on ten year sales average (years)
County Durham	Durham County Council	6,474	625	0	5,600	5	4	18.2
Northumberland	Northumberland County Council	5,104	312	0	5,585	6	5	14.7
	Northumberland National Park	-	-	0	-	0	0	-
Tees Valley	Darlington Borough Council	-	-	0	-	0	0	-
	Hartlepool Borough Council	c	c	0	c	1	0	c
	Middlesbrough Borough Council	-	-	0	-	0	0	-
	Redcar and Cleveland Borough Council	-	-	0	-	0	0	-
	Stockton on Tees Borough Council	-	-	0	-	0	0	-
Tyne and Wear	Gateshead Council	-	-	0	-	0	0	-
	Newcastle City Council	-	-	0	-	0	0	-
	North Tyneside Council	-	-	0	-	0	0	-
	South Tyneside Council	-	-	0	-	0	0	-
	Sunderland City Council	c	c	0	c	1	1	c
	Total North East England	18,752	1,187	0	16,831	13	10	18.7

Notes:

c - Confidential figure

Table ES5: Summary of crushed rock sales from quarries in North East England by Mineral Planning Authority, 2010 to 2019 (thousand tonnes)

Sub area	Mineral Planning Authority	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
County Durham	Durham County Council	2,056	1,955	1,696	2,245	2,654	2,770	2,990	2,636	3,484	3,168
Northumberland	Northumberland County Council	1,188*	1,230*	1,233*	1,060*	1,171*	1,473*	1,708*	1,768*	1,641*	1,742*
	Northumberland National Park	c	c	c	c	c	c	c	c	c	c
Tees Valley	Darlington Borough Council	0	0	0	0	0	0	0	0	0	0
	Hartlepool Borough Council	c	c	c	c	c	c	c	c	c	c
	Middlesbrough Borough Council	0	0	0	0	0	0	0	0	0	0
	Redcar and Cleveland Borough Council	0	0	0	0	0	0	0	0	0	0
	Stockton on Tees Borough Council	0	0	0	0	0	0	0	0	0	0
Tyne and Wear	Gateshead Council	0	0	0	0	0	0	0	0	0	0
	Newcastle City Council	0	0	0	0	0	0	0	0	0	0
	North Tyneside Council	0	0	0	0	0	0	0	0	0	0
	South Tyneside Council	c	c	c	c	c	c	c	c	c [^]	c
	Sunderland City Council	c	c	c	c	c	c	c	c	c	c
	Total North East England	3,462	3,433	3,181	3,569	4,162	4,533	5,356	4,808	5,735[^]	5,468

Notes:

c - Confidential figure

* - Includes sales from Northumberland National Park

[^] - Includes estimated sales figure for Marsden Quarry in South Tyneside

Table ES6: Summary of sand and gravel sales from quarries in North East England by Mineral Planning Authority, 2010 to 2019 (thousand tonnes)

Sub area	Mineral Planning Authority	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
County Durham	Durham County Council	164	237	199	218	276	256	322	330	446	625
Northumberland	Northumberland County Council	402	450	349	320	361	420	436	405	352	312
	Northumberland National Park	0	0	0	0	0	0	0	0	0	0
Tees Valley	Darlington Borough Council	0	0	0	0	0	0	0	0	0	0
	Hartlepool Borough Council	c	c	0	0	0	0	0	0	0	0
	Middlesbrough Borough Council	0	0	0	0	0	0	0	0	0	0
	Redcar and Cleveland Borough Council	0	0	0	0	0	0	0	0	0	0
	Stockton on Tees Borough Council	0	0	0	0	0	0	0	0	0	0
Tyne and Wear	Gateshead Council	0	0	0	0	0	0	0	0	0	0
	Newcastle City Council	0	0	0	0	0	0	0	0	0	0
	North Tyneside Council	0	0	0	0	0	0	0	0	0	0
	South Tyneside Council	0	0	0	0	0	0	0	0	0	0
	Sunderland City Council	c	c	c	c	c	c	c	c	c	c
	Total North East England	757	869	713	716	873	917	972	955	1,047	1,187

Notes:

c - Confidential figure

Planning applications for the extraction of primary aggregates

- Approvals – Planning permission was granted for the extraction of additional reserves of crushed rock at three sites in North East England in 2019. These are:
 - Heights Quarry in County Durham, - An extension to the existing site (3.7 million tonnes of Carboniferous limestone);
 - Divethill Quarry in Northumberland - An extension to the extraction area within the existing site boundary (700,000 tonnes of igneous rock): and
 - Longhoughton Quarry in Northumberland - An extension to the existing site (1,600,000 tonnes of igneous rock and 125,000 tonnes of the overlying Carboniferous limestone).

No planning applications for the extraction of additional reserves of sand and gravel were granted planning permission in 2019.

- Refusals – No planning applications for the extraction of additional reserves of primary aggregates were refused planning permission during 2019.
- Pending – Planning applications potentially involving the extraction of 10.25 million tonnes of crushed rock and 550,000 tonnes of sand and gravel were pending determination at 31 December 2019.

Table ES7: Quantities of primary aggregates subject to planning applications in North East England in 2019 (thousand tonnes)

	Crushed rock			Sand and gravel		
	Granted	Refused	Pending	Granted	Refused	Pending
County Durham	3,700	0	10,250	0	0	0
Northumberland	3,450	0	0	0	0	0
Tees Valley	0	0	0	0	0	0
Tyne and Wear	0	0	0	0	0	550
North East England	6,150	0	10,250	0	0	550

Recycled and secondary aggregates

- The 2019 survey of fixed construction and demolition recycling facilities and secondary aggregates producers found 845,000 tonnes of recycled and secondary aggregate were sold from North East England in 2019.
- Sources of recycled and secondary aggregates included construction, demolition and excavation wastes, spent road planings, and ash from the Haverton Hill Energy from Waste Plant on Teesside.
- This recycled and secondary aggregates sales figure should be treated with some degree of caution as not all producers in North East England responded to the survey and the figures include some estimates of production from some sites. In addition, the survey does not include mobile crushers and screens which are known to make a significant contribution in terms of the quantities of construction and demolition waste recycled for aggregate uses.

Local Aggregates Assessments

- North East England is currently covered by the following joint Local Aggregates Assessments (LAAs):
 - Joint LAA for County Durham, Northumberland and Tyne and Wear (produced jointly by the eight authorities in these sub-areas)
 - Joint LAA for Tees Valley (produced jointly by the five Tees Valley authorities)
- The provision for aggregates detailed in these LAAs is summarised in the table below and uses information from existing LAAs rather than emerging ones:

Table ES8: Provision for aggregates in LAAs in North East England

	Crushed rock – Provision in LAA (thousand tonnes)	Sand and gravel – provision in LAA (thousand tonnes)	Notes
County Durham	3,037	366	Based on a three year sales average.
Northumberland	1,706	398	Based on a three year sales average.
Tees Valley	187.5	175	Based on recommended sub-regional apportionment of national and regional guidelines (2015 to 2020)
Tyne and Wear	483	228	Based on a three year sales average.
North East England	5,413.5	1,167	Total provision detailed in the LAAs in North East England

Notes:

- Figures for County Durham, Northumberland and Tyne and Wear are taken from the Joint LAA for County Durham, Northumberland and Tyne and Wear (2018 data).
- Figures for Tees Valley taken from the Joint LAA for Tees Valley (2017 data).

Contribution to meeting local and national needs

- The provision set out in Local Aggregates Assessments by the Mineral Planning Authorities in North East England is currently below the levels of provision in the sub-national guidelines by 12.5% for crushed rock and 22% for sand and gravel.
- Notwithstanding the above, the monitoring data available indicates that there is currently no undue reliance on imports of aggregates and a contribution is made to meeting wider needs and, when taken as a whole, the landbanks do not indicate a shortfall in supply.

Summary of main statistics

Table ES9: Dashboard of main statistics for North East England

	Sales in 2019 (thousand tonnes)	Ten year sales average (thousand tonnes)	Three year sales average (thousand tonnes)	Trend	LAA annual provision (thousand tonnes)	Permitted reserves (thousand tonnes)	Landbank of permitted reserves (years)	Comments
Sand and gravel	1,187	901	991	Up	1,167	16,831	14.4	No issues identified with short-term supply but may be shortfall over the longer-term due to current planning permission end dates. No active sites in Tees Valley and only one active quarry in Tyne and Wear.
Crushed rock	5,468	4,371	5,337	Up	5,413.5	198,033	36.5	Large landbank of permitted reserves. Limited number of sites in Tees Valley (1 active quarry) and Tyne and Wear (2 active quarries).
Marine sand and gravel	633	545	564	Up	-	-	-	2019 sales include a wharf on the River Tees not included in previous surveys.
Rock imports by sea	244	Not available	150	Up	-	-	-	Three operational sites on River Tyne and River Tees in 2019.
Recycled and secondary aggregates	845	-	-		-	-	-	Full understanding of supply and role of recycled and secondary aggregates is limited due to data issues.

1. Introduction

1.1 The North East England Aggregates Working Party is one of a number of similar working parties throughout England and Wales originally established in the 1970s to collect data and monitor the production and supply of aggregate minerals, the reserves of aggregate minerals covered by valid planning permissions and provide technical advice on the supply and demand for aggregates from their areas. The aggregates working parties are a joint local government, central government and industry body. Funding for the secretariat is provided by the Ministry for Housing, Communities and Local Government but the members of the Aggregates Working Party provide their time on a voluntary basis.

1.2 There are thirteen mineral planning authorities in the North East England Aggregates Working Party cluster (see Figure 1.1). This includes seven unitary authorities, five metropolitan borough authorities and one National Park authority in four sub-regional clusters:

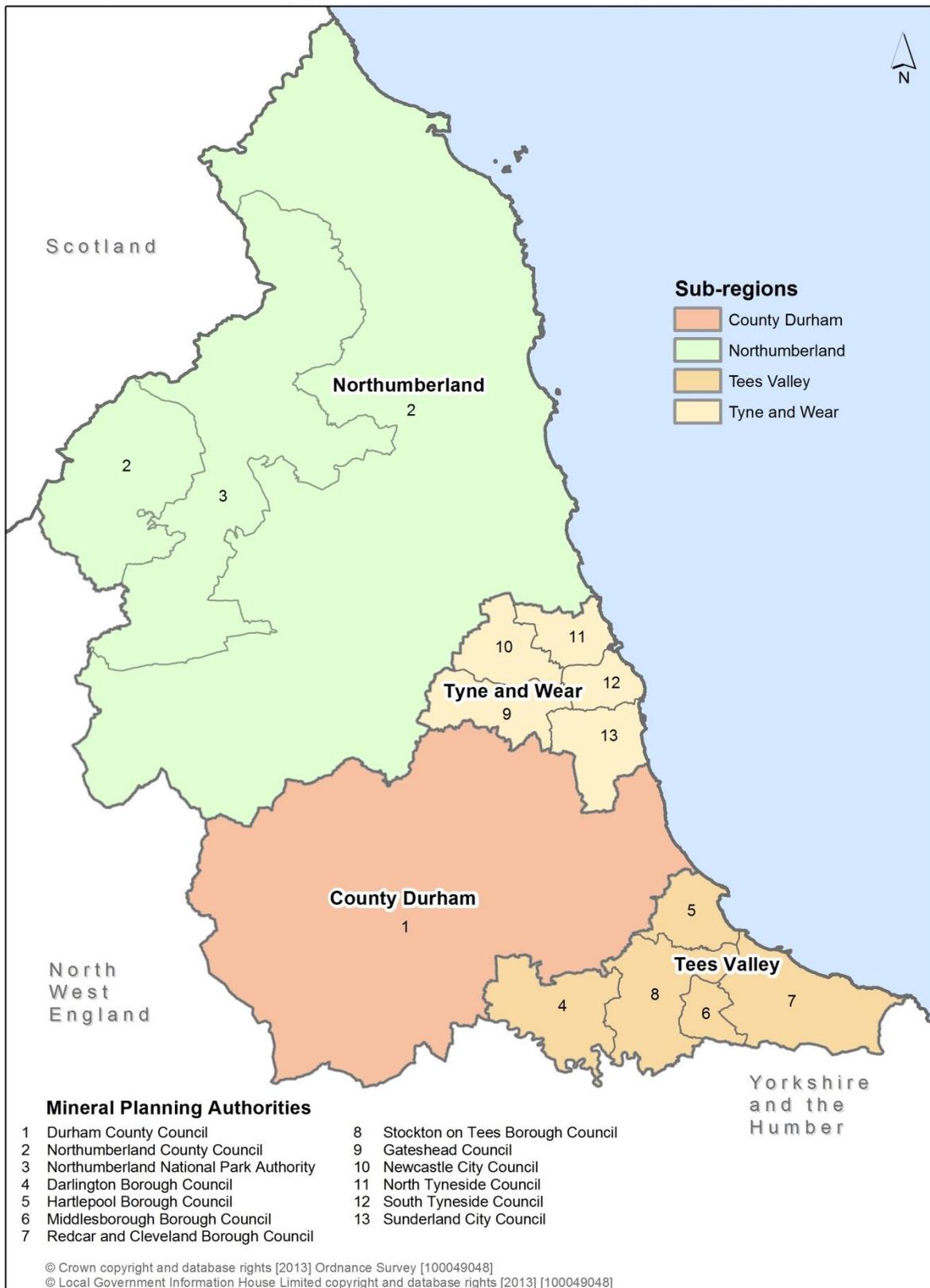
- **County Durham** (Durham County Council);
- **Northumberland** (Northumberland County Council and Northumberland National Park Authority);
- **Tees Valley** (Darlington Borough Council, Hartlepool Borough Council, Middlesbrough Council, Redcar and Cleveland Borough Council and Stockton on Tees Borough Council); and
- **Tyne and Wear** (Gateshead Council, Newcastle City Council, North Tyneside Council, South Tyneside Council and Sunderland City Council).

1.3 The North East England Aggregates Working Party cluster covers around 850,000 hectares between the Scottish Borders to the north, North West England to the west, Yorkshire and Humber to south and the North Sea to the east. The area has a population of over 2.5 million, primarily concentrated in the two conurbations of Tyne and Wear and Tees Valley. The remainder of North England is mostly rural in character and sparsely populated.

1.4 The distinctiveness and special nature of the environment and landscape is recognised with a number of national designations. This includes the Northumberland National Park, Northumberland Coast Area of Outstanding Natural Beauty and the North Pennines Area of Outstanding Natural Beauty.

1.5 In North East England a wide variety of mineral resources are found and extracted. The most important primary aggregate resources are Carboniferous limestone, magnesian limestone, igneous rock, Permian sand and glacial and fluvial sand and gravel.

Figure 1.1: North East England Aggregates Working Party area, showing the Mineral Planning Authorities and sub-regional clusters



1.6 This report presents information for North East England on sales of primary aggregates in 2019, permitted reserves of primary aggregates as at 31 December 2019 and the quantity of aggregate minerals granted and refused planning permission in 2019. Information relating to the production and use of recycled and secondary aggregates is also provided. In addition, this report gives an update of progress with the preparation of development plans applicable to minerals.

1.7 Detailed information from the previous aggregates monitoring surveys covering North East England can be found in previous Annual Aggregates Monitoring Reports produced by the North East England Aggregates Working Party. The Aggregates Monitoring Survey for 2019 was part of a more comprehensive national survey that are usually undertaken every four years¹ by the Ministry of Housing, Communities and Local Government. The aim of the survey was to provide an in-depth and up-to-date understanding of regional and national sales, inter-regional flows, transportation and permitted reserves of primary aggregates. A report collating the results of the national survey will be published by the Ministry of Housing, Communities and Local Government and will be available to view on the gov.uk website.

¹ There was a five-year period between the 2019 national survey and the previous surveys in 2014 and 2009.

2. Planning policy context

2.1 Planning policy for aggregate minerals is contained in the National Planning Policy Framework (NPPF) (February 2019²). The NPPF recognises that it is essential that there is a sufficient supply of minerals to provide infrastructure, buildings, energy and goods the country needs.

2.2 The approach to planning for aggregate minerals is underpinned by a Managed Aggregates Supply System (MASS). This seeks to ensure there is a steady and adequate supply of aggregate minerals to meet the needs of the construction industry and ensure the geographical imbalances between the occurrence of suitable aggregates and the areas where most demand arises are appropriately addressed at the local level. For example, in North East England, County Durham and Northumberland are net exporters of aggregates to the more urban areas of Tyne and Wear and Tees Valley, where suitable aggregate mineral resources are less abundant.

2.3 One of the key elements of the MASS involves the preparation of an annual Local Aggregate Assessment by each Mineral Planning Authority. The Local Aggregate Assessments are expected to forecast demand based on a rolling average of 10 years sales data, supply options, the balance between supply and demand and the environmental and economic constraints and opportunities that could influence supply. The Local Aggregate Assessment should also to indicate whether there is a surplus or shortage of supply and if there is a shortage how this is being addressed.

2.4 National and sub-national guidelines for the provision of aggregate minerals are also published by central government to provide an indication of the total amount of aggregate the Mineral Planning Authorities, collectively within each AWP cluster, should aim to provide. While there is no expectation that each AWP should meet the guidelines, particularly if the environmental cost of doing so is likely to be unacceptable, the guidelines are a material consideration when determining the soundness of minerals plans and in making decisions on planning applications. The most recent guidelines for aggregates provision were published in June 2009 and cover the period from 2005 to 2020 (see Table 2.1).

2.5 This current approach differs from the way the MASS operated in the past. Previously the MASS had more of a ‘top-down’ approach and involved central Government issuing national and sub-national guidelines for aggregates provision, based on forecasts of demand for aggregate minerals, with the AWPs then providing technical advice on how these guidelines should be apportioned to each mineral planning authority in their area. The mineral planning authorities were then expected to make provision for this apportionment in their local plan. The approach to MASS was amended to reflect the Government’s more localist approach to planning matters.

² The revised version of the National Planning Policy Framework published in February 2019 supersedes the versions from March 2012 and July 2018.

Table 2.1: National and regional guidelines for aggregates provision in England, 2005 to 2020 (million tonnes)

	Guidelines for land-won production		Assumptions		
	Sand and gravel	Crushed rock	Marine-dredged sand and gravel	Alternative materials	Net imports to England
South East England	195	25	121	130	31
London	18	0	72	95	12
East of England	236	8	14	117	7
East Midlands	174	500	0	110	0
West Midlands	165	82	0	100	23
South West England	85	412	12	142	5
North West England	52	154	15	117	55
Yorkshire Humber	78	212	5	133	3
North East England	24	99	20	50	0
England	1,028	1,492	259	993	136

Source: National and regional guidelines for aggregates provision in England 2005-2020, Department for Communities and Local Government (Published 29 June 2009).

3. Primary aggregates: Crushed rock

Overview

3.1 This chapter sets out information on sales and permitted reserves of crushed rock in North East England. Information is also presented on planning applications for crushed rock extraction for aggregate use.

Sites producing crushed rock

3.2 There were twenty active crushed rock aggregate quarries in North East England in 2019 (see Table 3.1 below). In addition to these active sites, a further seven quarries were ‘inactive’³. This includes quarries that have been mothballed or have gained planning consent for extraction but extraction has yet to commence. Further details of both the active and inactive sites are provided in Appendix 1.

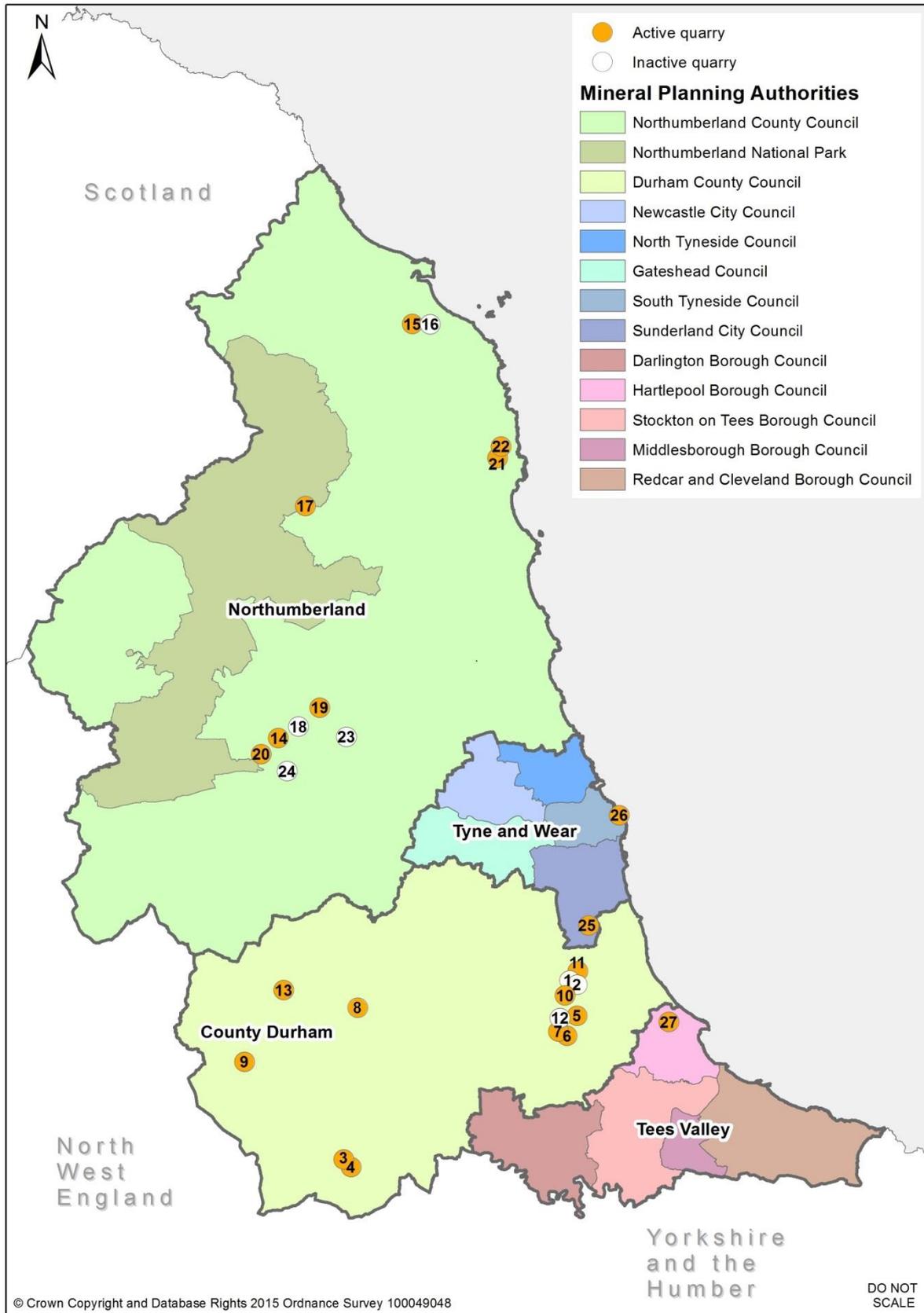
Table 3.1: Crushed rock aggregate sites in North East England, 2019

Sub-area	Active sites in 2019	Inactive sites in 2019
County Durham	<ul style="list-style-type: none"> • Bishop Middleham Quarry (6) • Broadwood Quarry (8) • Crime Rigg Quarry (11) • Force Garth Quarry (9) • Heights Quarry (13) • Hulands Quarry (3) • Kilmond Wood Quarry (4) • Quarrington Quarry (10) • Raisby Quarry (5) • Thrislington East Quarry and Thrislington West Quarry (7) 	<ul style="list-style-type: none"> • Cornforth Quarry (East and West) (12) • Running Waters Quarry (1) • Witch Hill Quarry (2)
Northumberland	<ul style="list-style-type: none"> • Barrasford Quarry (14) • Cragmill Quarry (15) • Divethill Quarry (19) • Harden Quarry (17) • Howick Quarry (22) • Keepersfield Quarry (20) • Longhoughton Quarry (21) 	<ul style="list-style-type: none"> • Belford Quarry (16) • Cocklaw Quarry (24) • Mootlaw Quarry (23) • Swinburne Quarry (18)
Tees Valley	<ul style="list-style-type: none"> • Hart Quarry (27) 	
Tyne and Wear	<ul style="list-style-type: none"> • Eppleton Quarry (25) • Marsden Quarry (26) 	

Notes: (1) – Numbers relate to the corresponding numbers shown on the map in Figure 3.2

³ The definition of ‘inactive’ sites only includes sites that have a valid planning permission and does not include dormant sites or sites that do not have a valid planning permission.

Figure 3.2: Crushed rock aggregate quarries in North East England



Crushed rock sales

3.3 Information on sales of crushed rock for aggregate use from quarries in North East England in 2019, along with sales in previous monitoring periods, is provided in Table 3.3. Sales from North East England in 2019 were just under 5.5 million tonnes. 57.9% of sales were from quarries in County Durham, 31.9% were from quarries in Northumberland and the remaining 10.2% of sales came from quarries in Tees Valley and Tyne and Wear.

3.4 Sales of crushed rock decreased by 33% between 2008 (5.1 million tonnes) and 2009 (3.3 million tonnes), which was considered to be mainly a result of the economic downturn and a resulting reduction in demand for primary aggregates. Following a significant decrease in sales in 2009, sales of crushed rock for aggregate use from North East England remained at a broadly similar level in the period from 2009 to 2013 reflecting the economic conditions at that time. Sales have increased by 53% from 2013 (3.6 million tonnes) to 2019 (5.5 million tonnes) reflecting growth in construction activity over this period.

Table 3.3: Sales of crushed rock for aggregate use from North East England, 2010 to 2019 (thousand tonnes)

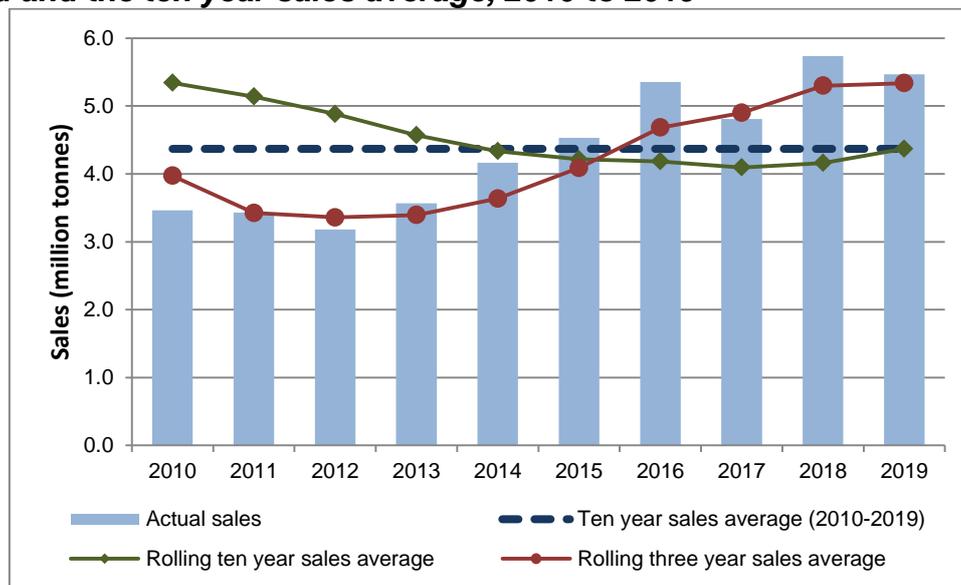
Year	County Durham	Northumberland	Tyne and Wear	Tees Valley	North East England
2010	2,056	1,188	#	#	3,462
2011	1,955	1,230	#	#	3,433
2012	1,696	1,233	#	#	3,181
2013	2,245	1,060	#	#	3,569
2014	2,654	1,171	#	#	4,162
2015	2,770	1,473	#	#	4,533
2016	2,990	1,708	#	#	5,356
2017	2,636	1,768	#	#	4,808
2018	3,484	1,641	#	#	5,735
2019	3,168	1,742	#	#	5,468
Ten year sales average (2010-19)	2,565	1,421	No figure available	No figure available	4,371
Three year sales average (2010-19)	3,096	1,717	No figure available	No figure available	5,337

Notes:

Confidential figure included in the total figure for North East England

3.5 A comparison between the actual sales of crushed rock from North East England and the ten year sales average is shown in Figure 3.4. The ten year sales average, covering the period from 2010 to 2019, for crushed rock from North East England is 4,371,000 tonnes. Also shown are the rolling three years sales averages and rolling ten years sales averages, which illustrate how demand has changed over this period. The ten year sales average has decreased over the period from 2010 to 2019 due to this including a period (2010 to 2013) where there were depressed sales. The three year sales average for North East England (5.3 million tonnes) is above the ten year sales average (4.37 million tonnes) and this indicates that demand has increased for crushed rock aggregate in comparison to the previous years.

Figure 3.4: Comparison of actual sales of crushed rock from North East England and the ten year sales average, 2010 to 2019



3.6 The sales of crushed rock by broad end-use product categories and mineral type are shown in Table 3.5. These end-use figures should be treated with some caution as, although operators know what products they sell, they cannot always be certain what the products will ultimately be used for. The crushed rock extracted in North East England has a wide range of end-uses and this can vary depending on mineral type. Uncoated roadstone (34.9%), other screened and graded aggregates (22.1%), Other constructional use (15.9%), concrete aggregate (15.5%), and coated roadstone and roadstone to be coated (11.1%) represent the main end-uses for aggregates from quarries in North East England in 2019.

Table 3.5: Sales of crushed rock for aggregate use in North East England by mineral resource and end-use, 2019 (tonnes)

	Carboniferous limestone	Magnesian limestone	Igneous rock	Total crushed rock
Coated roadstone	106,271	0	208,834	315,105
Roadstone to be coated	12,499	33,039	243,478	289,016
Uncoated roadstone (Type 1 and Type 2)	85,655	1,404,268	416,481	1,906,404
Uncoated roadstone (surface chippings)	0	0	10,751	10,571
Rail ballast	0	0	0	0
Concrete aggregate	336,095	317,780	194,824	848,699
Other screened/graded	161,644	506,853	538,116	1,206,613
Armour/gabion stone	15,811	5,314	2,176	23,301
Other constructional use	12,951	584,123	270,879	867,953
Unknown end use	0	0	0	0
Total	730,926	2,851,377	1,885,539	5,467,842

3.7 The national aggregate minerals survey, usually undertaken every 4 years, collects information on sales of aggregate minerals by destination. This provides information on flows of crushed rock for aggregate use to other mineral planning authority areas within North East England as well as flows to areas outside North East England. The figures should be treated with some degree of caution as the operators cannot always be sure where their products have been sold. This is particularly the case with 'collect' sales. Where it has not been possible to allocate sales to a particular area but it is known that they were sold within North East England the sales destination has been allocated as unknown but somewhere in North East England (i.e. unknown North East). Table 3.6 shows that 93% of crushed rock from sites in North East England was consumed within North East England.

Table 3.6: Destination of crushed rock for aggregate uses from quarries in North East England by sub-area and region, 2019

Destination	Source sub-area				North East England
	County Durham	Northumber-land	Tees Valley	Tyne and Wear	
County Durham	68.8%	3.5%	75%	-	42.0%
Northumberland	6.7%	68.5%	-	-	25.6%
Tees Valley	1.8%	1.8%	25%	-	1.9%
Tyne and Wear	6.8%	21.0%		69.3%	16.9%
Unknown North East England	-	-	-	30.7%	6.8%
Total North East England	90.9%	94.8%	100%	100%	93.1%
North West England	1.9%	1.3%	-	-	1.5%
Yorkshire / Humber	6.5%	0.2%	-	-	3.8%
East Midlands	<1%	0.7%	-	-	0.4%
West Midlands	-	<0.1%	-	-	<0.1%
East of England	<1%	-	-	-	0.3%
London	-	-	-	-	-
South East England	-	0.2%	-	-	<0.1%
South West England	-	-	-	-	-
Scotland	<1%	<1%	-	-	<0.1%
Wales	-	-	-	-	-
Mainland Europe	-	2.5%	-	-	0.8%

Crushed rock reserves

3.8 The permitted reserves of crushed rock for aggregate uses at quarries in North East England at 31 December 2019 were 198 million tonnes (Table 3.7). This represents a decrease in permitted reserves from 2010. The decrease in reserves is not in line with sales and this is principally as a result of a reduction in the permitted reserves at sites in County Durham. A large proportion of the permitted reserves of crushed rock in North East England are found at quarries in County Durham (56%) and Northumberland (40%), with the remaining reserves found at the sites in Tees Valley and Tyne and Wear (4%).

Table 3.7: Permitted reserves of crushed rock at quarries in North East England, 2010 to 2019 (thousand tonnes)

Year*	County Durham	Northumberland	Tees Valley	Tyne and Wear	North East England
2010	135,205	79,098	#	#	216,469
2011	136,734	78,004	#	#	218,249
2012	134,065	77,264	#	#	214,528
2013	140,732	76,643	#	#	220,373
2014	138,346	77,972	#	#	219,117
2015	138,326	83,991	#	#	230,950
2016	131,390	82,917	#	#	222,482
2017	130,745	81,016	#	#	220,668
2018	122,259	78,520	#	#	209,224
2019	111,060	80,070	#	#	198,033

Notes:

* Reserves at 31 December.

Confidential figure included in the figure for North East England.

Reserve figures do not include those reserves identified for non-aggregate end-uses.

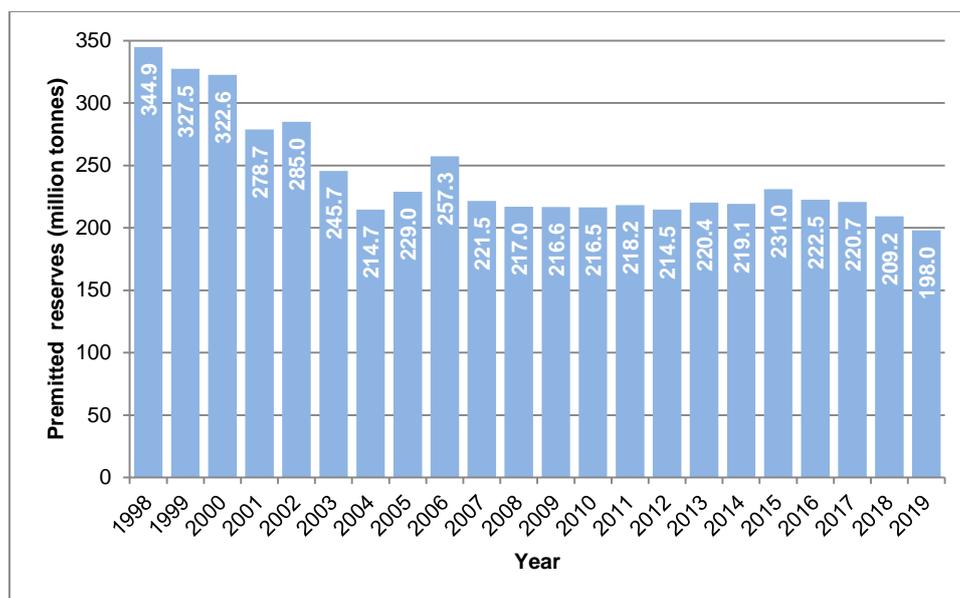
3.9 The permitted reserves of crushed rock in North East England by resource type are shown in Table 3.8. The permitted reserve figures quoted do not include those reserves within the quarries that are identified as being for non-aggregate uses. The most significant resources in terms of their contribution to the total permitted reserves in North East England are magnesian limestone (43.7%) and igneous rock (44.8%). The remaining permitted reserves are Carboniferous limestone (11.4%). The reserves of magnesian limestone are mainly concentrated in County Durham, while the reserves of igneous rock are mainly concentrated in Northumberland.

Table 3.8: Permitted reserves of crushed rock at quarries in North East England by mineral resource, at 31 December 2019 (tonnes)

Carboniferous limestone	Magnesian limestone	Igneous rock	Total crushed rock
22,616,500	86,632,810	88,783,264	198,032,574

3.10 A comparison of the level of permitted reserve over the monitoring periods since 1998 is shown in Figure 3.9.

Figure 3.9: Comparison of permitted reserves of crushed rock at quarries in North East England, 31 December 1998 to 31 December 2019



Crushed rock landbank

3.11 Landbanks of aggregate mineral reserves should be used by Mineral Planning Authorities principally as an indicator of the security of aggregate minerals supply, and to indicate the additional provision that needs to be made for new aggregate extraction and alternative supplies in mineral plans (NPPF, Paragraph 207, e). It specifies that the landbank indicator is at least 10 years should be maintained for crushed rock (NPPF, Paragraph 207, f).

3.12 The landbanks for crushed rock have been calculated using both the provision set out in the most up-to-date Local Aggregates Assessments or adopted Local Plans and the ten year sales average. The landbank of permitted reserves in North East England at 31 December 2019 and the landbanks for the four sub-regions are shown in Table 3.10. For North East England as a whole, the landbanks are above the landbank indicator of at least 10 years as set out in the National Planning Policy Framework.

Table 3.10: Landbank of permitted crushed rock reserves in North East England as at 31 December 2019

	County Durham	Northumberland	Tees Valley	Tyne and Wear	North East England
Reserves at 31 December 2019 (tonnes)	111,060,181	80,069,975	#	#	198,032,574
Annual provision in LAA (tonnes)	3,037,000 [^]	1,706,000 [^]	187,500 [*]	483,000 [^]	5,413,500
Ten year sales average (tonnes)	2,565,300	1,421,400	#	#	4,370,600
Landbank based on LAA provision (years)	36.6	46.9	#	#	36.5
Landbank based on ten year sales average (years)	43.3	56.3	#	#	45.3

Notes:

- Reserve and landbank figures for Tees Valley and Tyne and Wear have not been published due to the small number of sites in these areas and the requirement not to disclose confidential individual site information.

[^] - Figure from Joint LAA for County Durham, Northumberland and Tyne and Wear (version using 2018 data)

^{*} - Figure from Joint LAA for Tees Valley (Version using 2018 data)

Planning applications for crushed rock extraction

3.13 The North East England Aggregates Working Party monitors the nature and outcome of planning applications for aggregates extraction in North East England on an annual basis. Table 3.11 details the quantities of crushed rock granted or refused planning permission for extraction between 1 January 2019 and 31 December 2019 and the quantities in planning applications that were pending determination at 31 December 2019. Further detail on each of the planning applications is shown in Appendix 3.

3.14 During 2019 planning permission was granted for the extraction of additional reserves at three sites in North East England. These related to:

- Heights Quarry in County Durham - An extension to the existing site for the extraction of an additional 3.7 million tonnes of Carboniferous limestone;
- Divethill Quarry in Northumberland - An extension to the extraction area within the existing site boundary (700,000 tonnes of igneous rock); and
- Longhoughton Quarry in Northumberland - An extension to the existing site for the extraction of an additional 1,600,000 tonnes of igneous rock and 125,000 tonnes of the overlying Carboniferous limestone.

3.15 At 31 December 2019, three planning applications were pending determination involving the potential extraction of 10.25 million tonnes of rock for aggregate uses. Two applications are for the reactivation of dormant planning permissions at quarries in County Durham (3.75 million tonnes of Carboniferous limestone at Harrow and Ashy Bank Quarry and 4 million tonnes of magnesian limestone at Hawthorn Quarry). A third planning application in County Durham seeks planning permission for extraction at a previously worked quarry (2.5 million tonnes of magnesian limestone at Tuthill Quarry).

3.16 An additional planning application of note is a proposal to extend the time limit for extraction at Raisby Quarry in County Durham (submitted 10 April 2017) that would allow the remaining reserves at this site to be extracted, which was pending determination at 31 December 2019. As this application involves reserves that are already included in the landbanks by virtue of their current planning permissions and therefore have not been included as additional reserves in Table 3.11.

Table 3.11: Quantities of crushed rock subject to planning applications in North East England during 2019 (thousand tonnes)

	Granted	Refused	Pending at 31 December 2019
County Durham	3,700	0	10,250
Northumberland	3,450	0	0
Tees Valley	0	0	0
Tyne and Wear	0	0	0
North East England	6,150	0	10,250

Notes:

Reserve information collected from planning application submissions

Does not include reserves subject to applications to extend the time period for extraction

4. Primary aggregates: Land won sand and gravel

Overview

4.1 This chapter sets out information on sales and permitted reserves of sand and gravel in North East England. Information is also presented on planning applications for sand and gravel extraction for aggregate use.

Sites producing sand and gravel

4.2 In 2019 there were 10 quarries in North East England producing land-won sand and gravel for aggregate use (see Table 4.1 below). In addition to these active sites, a further three quarries were ‘inactive’⁴ in 2019. This includes quarries that have been mothballed and quarries that have gained planning consent for extraction but extraction has yet to commence. The latter is the case for Hummerbeck Quarry in County Durham. Further details of the both active and inactive sites are provided in Appendix 1.

Table 4.1: Sand and gravel aggregate quarries in North East England, 2019

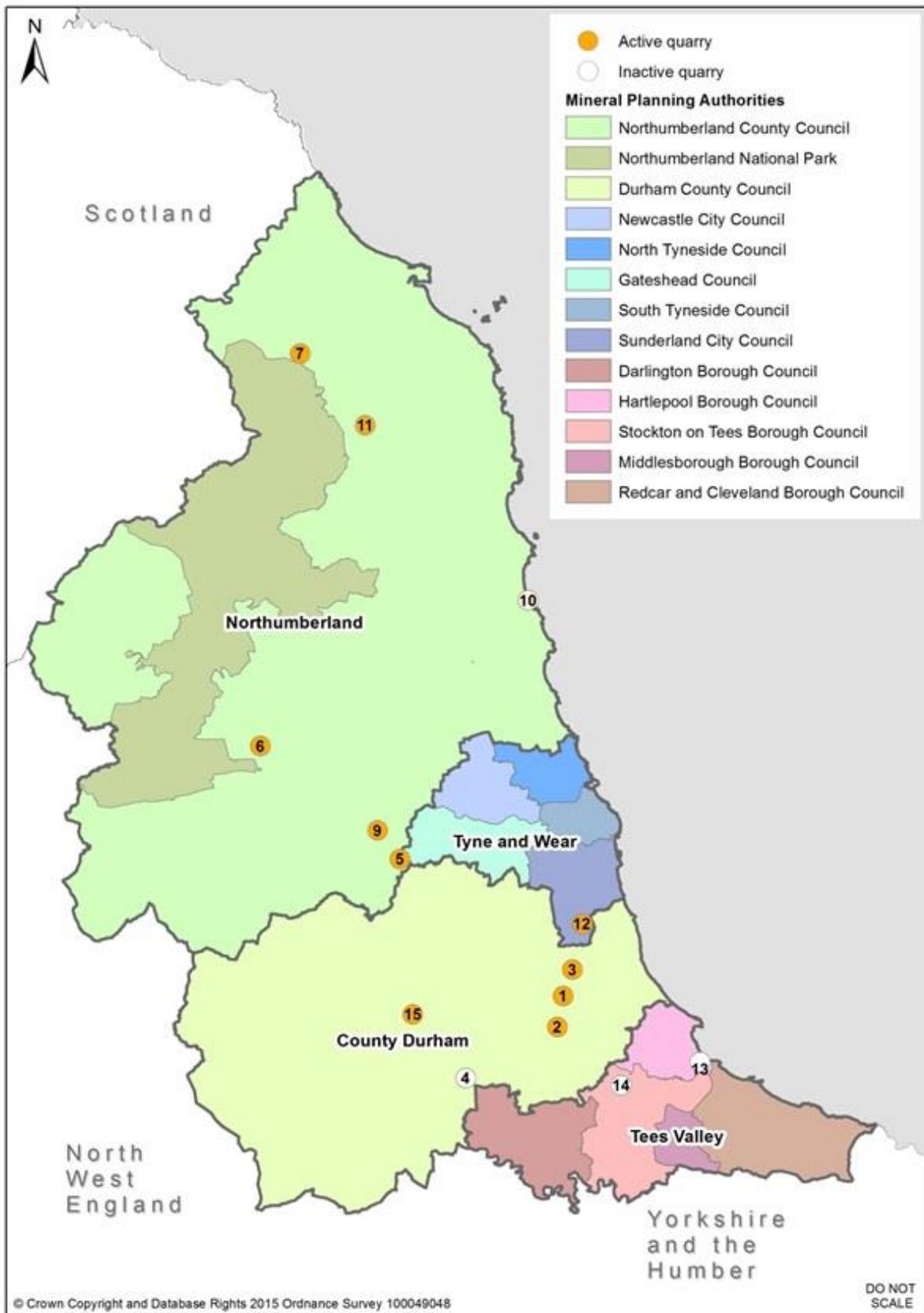
Sub-area	Active sites in 2019	Inactive sites in 2019
County Durham	<ul style="list-style-type: none"> • Crime Rigg Quarry (3) • Low Harperley Quarry (15) • Quarrington Quarry (1) • Thrislington Quarry (2) 	<ul style="list-style-type: none"> • Hummerbeck Quarry (4)
Northumberland	<ul style="list-style-type: none"> • Ebchester Quarry (5) • Haughton Strother Quarry (6) • Lanton Quarry (7) • Merryshields Quarry (9) • Wooperton Quarry (11) 	<ul style="list-style-type: none"> • Hemscott Hill Beach (10)
Tees Valley		<ul style="list-style-type: none"> • Hartlepool Beach (13)
Tyne and Wear	<ul style="list-style-type: none"> • Eppleton Quarry (12) 	

Notes:

(1) – Numbers in the brackets relate to the corresponding numbers shown on the map in Figure 4.2.

⁴ The definition of ‘inactive’ sites only includes sites that have a valid planning permission and does not include dormant sites or sites that do not have a valid planning permission.

Figure 4.2: Sand and gravel aggregate quarries in North East England



Sand and gravel sales

4.3 Information on sales of land-won sand and gravel from quarries in North East England in 2019, along with sales from previous monitoring periods, is provided in Table 4.3. Following a significant decrease in sales between 2007 and 2009, sales remained at a similar level in the period from 2009 to 2013 reflecting the economic conditions over that period. Sales have increased from 2013 to 2019 as a result of growth in construction activity in comparison to previous years.

Table 4.3: Sales of sand and gravel for aggregate use from North East England, 2010 to 2019 (thousand tonnes)

Year	County Durham	Northumberland	Tees Valley	Tyne and Wear	North East England
2010	164	402	#	#	757
2011	237	450	#	#	869
2012	199	349	0	#	713
2013	218	320	0	#	716
2014	276	361	0	#	873
2015	256	420	0	#	917
2016	322	436	0	#	972
2017	330	405	0	#	955
2018	446	352	0	#	1,046
2019	625	312	0	#	1,187
Ten year sales average (2010-19)	307	381	Figure not available	Figure not available	901
Three year sales average (2017-19)	467	356	0	Figure not available	1,063

Notes:

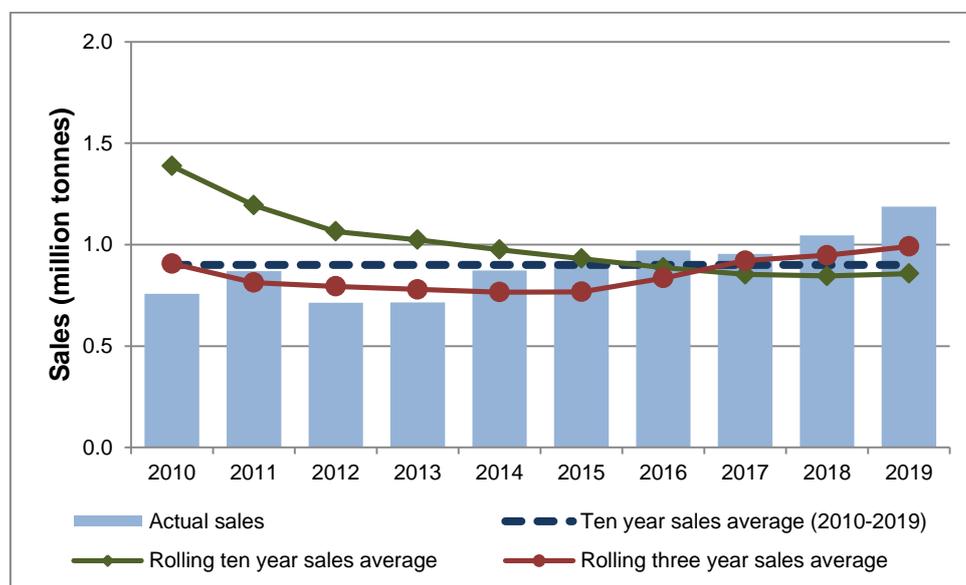
Confidential figure included in the sales figure for North East England.

4.4 A comparison between actual sales of land-won sand and gravel in North East England and the ten year sales average is shown in Figure 4.4. The ten year average sales of land-won sand and gravel from North East England for the period from 2010 to 2019 is 901,000 tonnes. Also shown are the rolling three years sales averages and rolling ten years sales, which illustrate how demand has changed.

4.5 The ten year sales average has generally decreased over the period from 2010 to 2019 due to this including a period (2010 to 2013) where there were

depressed sales. The three year sales average for North East England (1.063 million tonnes) is above the ten year sales average (901,000 tonnes) and the rolling three years sales average has increased year-on-year since 2013, which indicates that demand has increased for sand and gravel in comparison to the previous years.

Figure 4.4: Comparison of actual sales of land-won sand and gravel from North East England and the ten year sales average, 2010 to 2019



4.6 The sales of land-won sand and gravel by broad end-use product categories are shown in Table 4.5. These end-use figures should be treated with some degree of caution as, although operators know what products they sell, they cannot always be certain what the products will ultimately be used for. Sand for use in mortar (43.5%) and concreting sand (40.0%) were the largest products for land won sand and gravel sales in 2019.

Table 4.5: Sales of land-won sand and gravel for aggregates by end-use from North East England in 2019 (tonnes)

End-use	Land won sand and gravel sales (tonnes)
Sand for asphalt	20,054
Sand for use in mortar	516,808
Concreting and sharp sand	475,396
Gravel for asphalt	23,403
Gravel for concrete aggregate	61,431
Other screened/graded gravel	67,286
Other sand and gravel	22,961
Total sand and gravel	1,187,339

4.7 The national aggregate minerals survey, usually undertaken every 4 years, collects information on sales of aggregate minerals by destination. This provides information on flows of sand and gravel for aggregate use to other mineral planning authority areas within North East England as well as flows to areas outside North East England. The figures should be treated with some degree of caution as the operators cannot always be sure where their products have been sold. This is particularly the case with 'collect' sales. Where it has not been possible to allocate sales to a particular area but it is known that they were sold within North East England the sales destination has been allocated as unknown but somewhere in the North East England (i.e. unknown North East). Table 4.6 shows a high proportion of sand and gravel from sites in North East England was consumed within North East England. The most significant flows from North East England to other areas involved those to Yorkshire and the Humber.

Table 4.6: Destination of sand and gravel for aggregate uses from quarries in North East England by sub-area and region, 2019

Destination	Source sub-area				North East England
	County Durham	Northumberland	Tees Valley	Tyne and Wear	
County Durham	22.5%	5.8%	-	20.0%	17.5%
Northumberland	1.3%	47.6%	-	-	13.2%
Tees Valley	18.9%	0.7%	-	8.0%	11.8%
Tyne and Wear	15.9%	45.7%	-	30.0%	26.7%
Unknown North East England	3.3%	0.1%	-	-	1.8%
Total North East England	61.8%	99.9%	-	58.0%	71.0%
North West England	1.4%	-	-	-	0.8%
Yorkshire / Humber	30.8%	-	-	42.0%	25.0%
East Midlands	5.9%	-	-	-	3.1%
West Midlands	-	-	-	-	-
East of England	-	-	-	-	-
London	-	-	-	-	-
South East England	-	-	-	-	-
South West England	-	-	-	-	-
Scotland	<0.1%	<0.1%	-	-	<0.1%
Wales	-	-	-	-	-

Permitted reserves of sand and gravel

4.8 The permitted reserves of sand and gravel for aggregate use in North East England at 31 December 2019 were 16.8 million tonnes (Table 4.7).

Table 4.7: Permitted reserves of sand and gravel at quarries in North East England, 2010 to 2019 (thousand tonnes)

Year	County Durham	Northumberland	Tees Valley	Tyne and Wear	North East England
2010	3,483	9,538	#	#	16,507
2011	4,607	8,969	#	#	16,173
2012	6,679	8,331	#	#	17,551
2013	8,924	7,728	#	#	20,220
2014	8,651	7,414	#	#	18,198
2015	8,354	7,337	#	#	23,571
2016	7,610	6,045	#	#	21,315
2017	7,113	5,410	#	#	19,956
2018	6,474	5,104	#	#	18,752
2019	5,600	5,585	#	#	16,830

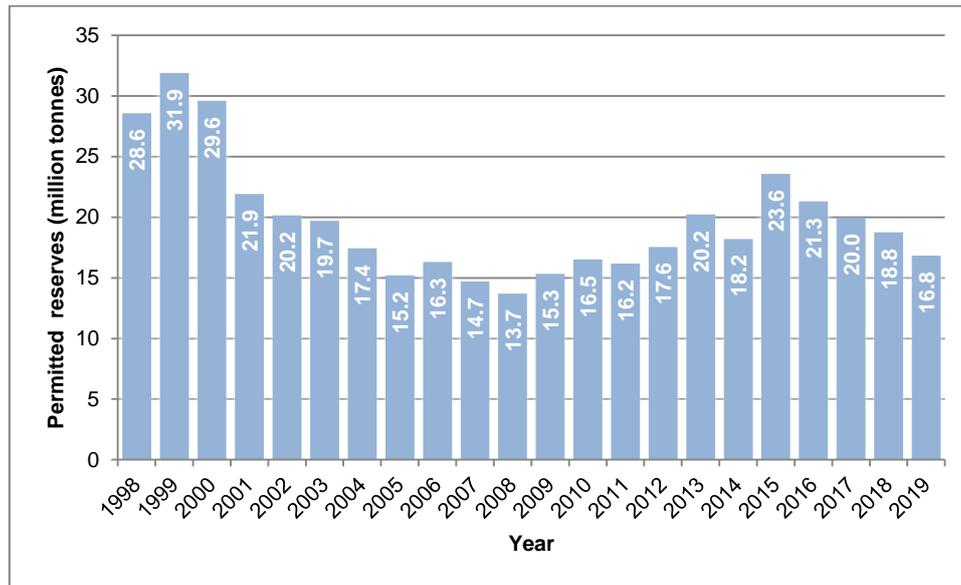
Notes:

Confidential figure included in the figure for North East England

Reserve figures do not include those reserves identified for non-aggregate end-uses.

4.9 A comparison of the level of permitted reserves over the monitoring periods since 1998 is shown in Figure 4.8. There has been a general decline in level of permitted reserves at quarries in North East England over the longer term but it is also observed from Figure 4.8 that reserves have increased from a low of 13.7 million tonnes in 2008.

Figure 4.8: Comparison of permitted reserves of sand and gravel at quarries in North East England, 31 December 1998 to 31 December 2019



Sand and gravel landbank

4.10 Landbanks of aggregate mineral reserves should be used by Mineral Planning Authorities principally as an indicator of the security of aggregate minerals supply, and to indicate the additional provision that needs to be made for new aggregate extraction and alternative supplies in mineral plans (NPPF, Paragraph 207, e). It specifies that the landbank indicator is at least 7 years should be maintained for sand and gravel (NPPF, Paragraph 207, f).

4.11 The landbanks for sand and gravel have been calculated using both the provision set out in the most up-to-date Local Aggregates Assessments or adopted Local Plans and the ten year sales average. The landbank of permitted reserves in North East England at 31 December 2019 and the landbanks for the four sub-regions are shown in Table 4.9. For North East England as a whole, the landbanks are above the landbank indicator of at least 7 years as set out in the National Planning Policy Framework.

Table 4.9: Landbank of permitted sand and gravel reserves in North East England as at 31 December 2019

	County Durham	Northumberland	Tees Valley	Tyne and Wear	North East England
Reserves at 31 December 2019 (tonnes)	5,600,000	5,584,560	#	#	16,830,560
Annual provision in LAAs (tonnes)	366,000+	398,000+	175,000*	228,000+	1,167,000
Ten year sales average (tonnes)	307,300	380,800	#	#	900,600
Landbank based on LAA provision (years)	15.3	14.0	#	#	14.4
Landbank based on ten year sales average (years)	18.2	14.7	#	#	18.7

Notes:

- Sales, reserve and landbank figures for Tees Valley and Tyne and Wear have not been published due to the small number of sites in these areas and the requirement not to disclose confidential individual site information.

+ - Figure from Joint LAA for County Durham, Northumberland and Tyne and Wear (version using 2018 data)

* - Figure from Joint LAA for Tees Valley (version using 2018 data)

Planning applications for sand and gravel extraction

4.12 The North East England Aggregates Working Party monitors the nature and outcome of planning applications for aggregates extraction in North East England on an annual basis. Table 4.10 details the quantities of sand and gravel granted or refused planning permission for extraction between 1 January 2019 and 31 December 2019 and the quantities subject to planning applications that were pending determination at 31 December 2019. Further detail on each of the planning applications is shown in Appendix 3.

4.13 Between 1 January 2019 and 31 December 2019, no planning applications for the extraction of sand and gravel were granted planning permission. One planning application was pending determination at 31 December 2019 and this relates to an extension to Crawcrook Quarry in Gateshead (550,000 tonnes)⁵. No planning

⁵ Crawcrook Quarry: It is understood that the applicant will no longer be proceeding with an application to extend Crawcrook Quarry. A decision on this has yet to be confirmed formally.

applications for sand and gravel extraction were refused planning permission in North East England during 2019.

Table 4.10: Quantities of sand and gravel subject to planning applications in the North East England during 2019 (thousand tonnes)

	Granted	Refused	Pending at 31 December 2019
County Durham	0	0	0
Northumberland	0	0	0
Tees Valley	0	0	0
Tyne and Wear	0	0	550
North East England	0	0	550

Notes:

Reserve information collected from Mineral Planning Authorities and planning application submissions
Does not include reserves subject to applications to extend the time period for extraction.

5. Primary aggregates: Marine sand and gravel

Overview

5.1 This chapter sets out information on sales of marine dredged sand and gravel landed at sites in North East England.

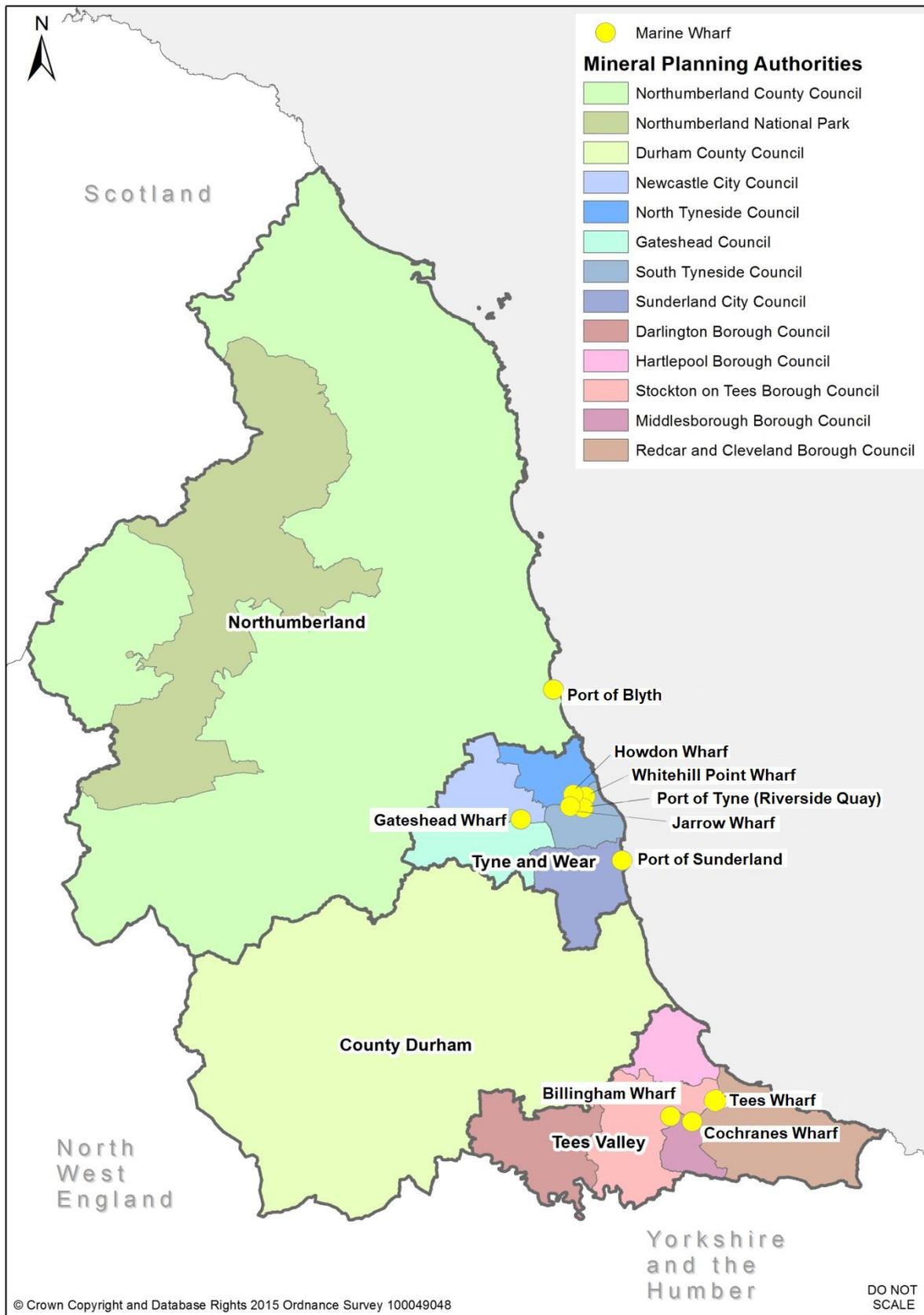
Marine sand and gravel landing locations

5.2 In 2019 there were four sites in North East England where marine dredged sand and gravel was landed for aggregate use (see Table 5.1 below). These sites are located at Battleship Wharf at the Port of Blyth in Northumberland, the River Tyne in Tyne and Wear and on the River Tees in Tees Valley. Four other landing locations North East England were inactive during 2019. This includes Billingham Wharf on the River Tees (inactive since 2010), Gateshead Wharf (inactive since 2012) and Howdon Wharf (inactive since 2014) on the River Tyne and Greenwells Quay at the Port of Sunderland. Further details of the both active and inactive sites are provided in Appendix 1. There are no active wharves importing sand and gravel for aggregate use in County Durham.

Table 5.1: Sites in North East England for the importation of sand and gravel aggregate, 2019

Sub-area	Active sites in 2019	Inactive sites in 2019
County Durham		
Northumberland	Port of Blyth (Battleship Wharf)	
Tees Valley	Cochranes Wharf Tees Wharf	Billingham (Able) Wharf
Tyne and Wear	Jarrow Wharf	Gateshead Wharf Howdon Wharf Port of Sunderland (Greenwells Quay Wharf)

Figure 5.2: Landing locations for mineral sand and gravel in North East England



Marine sand and gravel sales

5.3 Information on sales of marine-dredged sand and gravel from sites in North East England in 2019, along with sales in previous monitoring periods, is provided in Table 5.3.

5.4 Sales of sand and gravel from sites in North East England where marine-dredged sand and gravel was landed and processed were 632,927 tonnes in 2019. These sales levels are well below the levels that were observed prior to the economic downturn where sales in excess of 1 million tonnes were recorded in 2007. While the economic conditions post-2007 resulted in a decrease in demand for primary aggregates, sales of sand and gravel landed at the wharves in North East England have not increased to the same extent as sales from quarries in North East England have in more recent years. A significant factor in this is that a number of the sites that have previously been operational were inactive in 2019 with Billingham Wharf (since 2012) on the River Tees and both Gateshead Wharf (since 2010) and Howdon Wharf (since 2014) on the River Tyne being mothballed by their operators, for example. An additional wharf on the River Tees operated by Shire Aggregates has been identified and included in the 2019 survey and a large part of the increase in recorded sales in 2019 compared to 2018 is accounted for by this.

Table 5.3: Sales of marine dredged sand and gravel for aggregate use from North East England, 2010 to 2019 (thousand tonnes)

Year	County Durham	Northumberland	Tees Valley	Tyne and Wear	North East England
2010	0	0	#	#	678
2011	0	0	#	#	509
2012	0	0	#	#	491
2013	0	#	#	#	451
2014	0	#	#	#	537
2015	0	#	#	#	595
2016	0	#	#	#	499
2017	0	#	#	#	535
2018	0	#	#	#	525
2019	0	#	#	#	633
Ten year sales average (2010-2019)	0	#	#	#	545
Three year sales average (2017-2019)	0	#	#	#	564

Notes: # Confidential figure included in the figure for North East England

5.5 The Crown Estate publishes annual statistics relating to the dredging of marine minerals and landings of dredged materials. Table 5.4 presents information on the tonnages of marine dredged sand and gravel landed at locations in North East England. These statistics refer to sand and gravel removed under licence from The Crown Estate Commissioners and relate to royalty returns for the relevant calendar year. Removals from areas not in The Crown Estate ownership are not included in these statistics. The figures relate to landings and differ from the sales reported in the aggregates survey and summarised in Table 5.3. In 2019 the marine dredged sand and gravel delivered to landing locations in North East England was sourced from licenced dredging areas in the Humber dredging region off the coast of Yorkshire, Lincolnshire and North Norfolk.

Table 5.4: Marine dredged aggregate landed at wharves in North East England (tonnes)

	Port of Blyth	River Tees wharves	River Tyne wharves	Total landings in North East England
2010	-	257,062	362,223	619,285
2011	4,046	181,346	247,407	432,799
2012	11,156	99,452	337,173	447,871
2013	27,489	133,711	265,293	426,493
2014	22,946	198,710	292,646	514,302
2015	37,452	245,860	287,018	570,330
2016	29,904	215,142	312,469	557,515
2017	37,406	297,387	296,624	631,417
2018	11,012	281,908	288,992	581,912
2019	18,045	354,643	258,081	630,769

Source: The Crown Estate

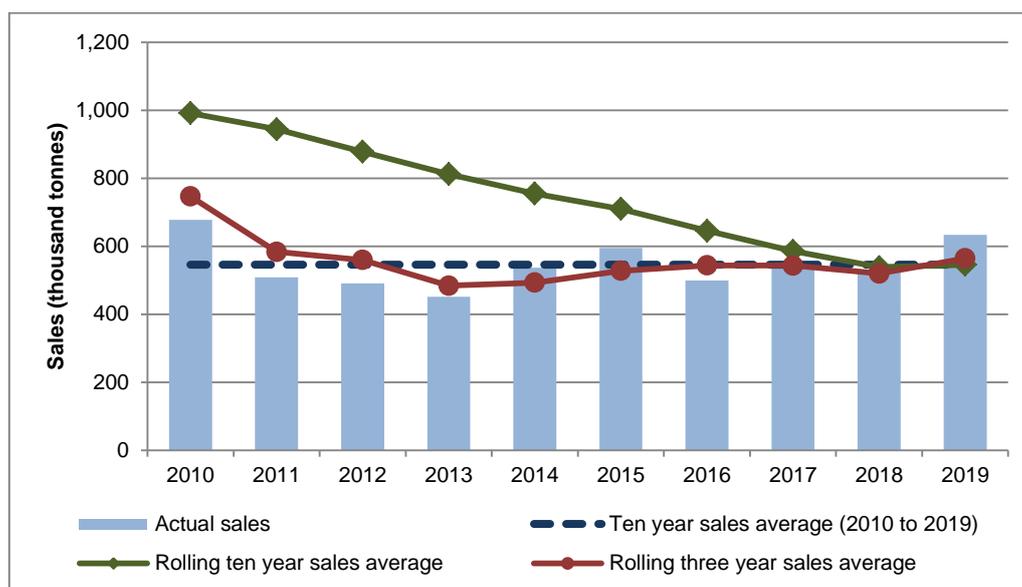
Notes: Figures are for landings, not sales so differ from the figures for sales presented in Table 5.3.

These statistics refer to sand and gravel removed under licence from The Crown Estate

Commissioners and relate to royalty returns for the relevant calendar year. Removals from areas not in The Crown Estate ownership are not included in these statistics.

5.6 A comparison between the ten year sales average and actual sales is shown in Figure 5.5. The ten year marine sand and gravel sales average from North East England is 545,300 tonnes.

Figure 5.5: Comparison of actual sales of marine sand and gravel and the ten year sales average for North East England, 2010 to 2019



5.5 The sales of marine sand and gravel by broad end-use product categories are shown in Table 5.6. These end-use figures should be treated with some caution as, although operators know what products they sell, they cannot always be certain what the products will ultimately be used for. Concreting sand was the largest product for marine dredged sand and gravel sales in 2019, accounting for 70.5% of sales for aggregate use. The other main products were sand for use in mortar (3.1%) and other screened or graded gravel (2.69%).

Table 5.6: Sales of marine-dredged sand and gravel from North East England for aggregate use by end-use in 2019 (tonnes)

End-use	Marine sand and gravel sales (tonnes)
Sand for asphalt	0
Sand for use in mortar	20,105
Sand for concreting and sharp sand	446,416
Gravel for asphalt	0
Gravel for concrete aggregate	0
Other screened/graded gravel	16,406
Other sand and gravel	0
Sand and gravel with unknown end-use	150,000
Total marine sand and gravel	632,927

5.6 The national aggregate minerals survey, usually undertaken every 4 years, collects information on sales of aggregate minerals by destination. This provides information on flows of marine dredged sand and gravel for aggregate use to other mineral planning authority areas within North East England as well as flows to areas outside North East England. The figures should be treated with some degree of caution as the operators cannot always be sure where their products have been sold. This is particularly the case with 'collect' sales. Where it has not been possible to allocate sales to a particular area but it is known that they were sold within North East England the sales destination has been allocated as unknown but somewhere in the North East England (i.e. unknown North East). Table 5.7 shows that over 99% of marine dredged sand and gravel from sites in North East England was consumed within North East England.

Table 5.7: Destination of marine dredged sand and gravel for aggregate uses from landing locations in North East England by sub-area and region, 2019

Destination	Source sub-area				North East England
	County Durham	Northumb.	Tees Valley	Tyne and Wear	
County Durham	-	32.4%	-	26.2%	26.4%
Northumberland	-	35.3%	-	6.1%	7.1%
Tees Valley	-	-	100%	-	53.8%
Tyne and Wear	-	32.4%	-	66.9%	30.4%
Total North East England	-	100%	100%	99.2%	99.6%
North West England	-	-	-	-	-
Yorkshire / Humber	-	-	-	0.8%	0.4%
East of England	-	-	-	-	-
East Midlands	-	-	-	-	-
West Midlands	-	-	-	-	-
East of England	-	-	-	-	-
London	-	-	-	-	-
South East England	-	-	-	-	-
South West England	-	-	-	-	-
Scotland	-	-	-	-	-
Wales	-	-	-	-	-

6. Primary aggregates: Crushed rock imports by sea

Overview

6.1 This chapter sets out information on crushed rock for aggregate use imported by sea via sites in North East England.

Landing locations for crushed rock

6.2 In 2019 there were three sites in North East England where crushed rock was landed for aggregate use (see Table 6.1 below). This included two sites on the River Tyne and one on the River Tees. Rock for aggregates uses has been imported via the Port of Blyth in Northumberland and the Port of Sunderland in previous years but not during the 2019 survey period. Further details of the both active and inactive sites are provided in Appendix 1. There are no active wharves importing crushed rock for aggregate use in County Durham.

Table 6.1: Sites in North East England for the importation of crushed rock aggregate, 2019

Sub-area	Active sites in 2019	Inactive sites in 2019
County Durham		
Northumberland		Port of Blyth (Battleship Wharf)
Tyne and Wear	Port of Tyne (Riverside Quay) Whitehill Point Wharf	Port of Sunderland (Greenwells Quay)
Tees Valley	Teesport Wharf	

Sales of crushed rock imported by sea

6.3 Information on sales of crushed rock for aggregate use imported via wharves in North East England in 2019, along with sales in previous monitoring periods, is provided in Table 6.2. In 2019 the crushed rock was imported from Norway and Scotland.

6.4 Sales of crushed rock landed at wharves in North East England were 244,005 tonnes in 2019. This represents a slight rise from the sales recorded in both 2017 and 2018 but is at a similar level to those recorded in 2016. As there are only a small number of sites where crushed rock is imported in North East England, an increase or decrease in landings or sales at one site could have a significant effect on overall sales from this source.

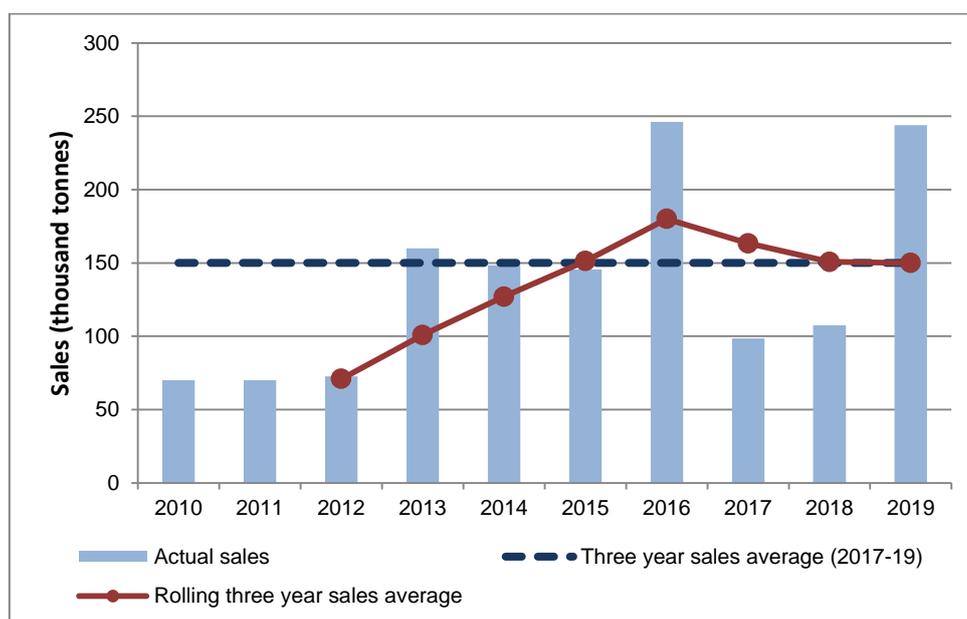
Table 6.2: Sales of crushed rock imported by sea for aggregate use from North East England, 2012 to 2019 (thousand tonnes)

Year	County Durham	Northumberland	Tees Valley	Tyne and Wear	North East England
2012	0	0	0	73	73
2013	0	#	0	#	160
2014	0	#	0	#	148
2015	0	#	0	#	145
2016	0	0	0	#	246
2017	0	0	0	#	98
2018	0	0	0	#	107
2019	0	0	#	#	244
Three year sales average (2017-2019)	0	0	#	#	150

Notes: # Confidential figure included in the figure for North East England

6.5 A comparison between the three year sales average for 2017 to 2019 and actual sales is shown in Figure 6.3. The three year average of crushed rock sales average from North East England is 150,000 tonnes. The higher level of sales recorded in 2019 mean that the sales recorded in this year are higher than the three year average. From 2012 to 2019, the general pattern shows increasing sales, which is considered to be as a result of an increase in construction activity following the economic downturn and operators without igneous rock quarries in North East England supplying this mineral from other sources. The lower sales figures recorded in 2017 and 2018 are considered to be as a result of sites in North East England not importing crushed rock as they had done in either previous or subsequent years.

Figure 6.3: Comparison of actual sales of crushed rock imported by sea and the three year sales average for North East England



6.6 The sales of crushed rock imported by sea by broad end-use product categories are shown in Table 6.4. These end-use figures should be treated with some caution as, although operators know what products they sell, they cannot always be certain what the products will ultimately be used for.

Table 6.4: Sales of crushed rock imported by sea for aggregate use in North East England by mineral resource and end-use, 2019 (tonnes)

	Total crushed rock
Coated roadstone	82,632
Roadstone to be coated	44,282
Uncoated roadstone (Type 1 and Type 2)	135
Uncoated roadstone (surface chippings)	0
Rail ballast	0
Concrete aggregate	16,706
Other screened/graded	100,300
Armour/gabion stone	0
Other constructional use	0
Total	244,505

6.7 The national aggregate minerals survey, usually undertaken every 4 years, collects information on sales of aggregate minerals by destination. This provides information on flows of crushed rock imported by sea for aggregate use to other mineral planning authority areas within North East England as well as flows to areas outside North East England. The figures should be treated with some degree of caution as the operators cannot always be sure where their products have been sold. This is particularly the case with 'collect' sales. Where it has not been possible to allocate sales to a particular area but it is known that they were sold within North East England the sales destination has been allocated as unknown but somewhere in the North East England (i.e. unknown North East). Table 6.5 shows that all sales of crushed rock imported via sites in North East England were apparently consumed within North East England.

Table 6.5: Destination of crushed rock imported by sea for aggregate uses from landing locations in North East England by sub-area and region, 2019

Destination	Source sub-area				North East England
	County Durham	Northumb.	Tees Valley	Tyne and Wear	
County Durham	-	-	75.0%	23.3%	35.9%
Northumberland	-	-	-	11.9%	9.0%
Tees Valley	-	-	25.0%	3.6%	8.8%
Tyne and Wear	-	-	-	61.2%	46.3%
Total North East England	-	-	100%	99.2%	100.0%

7. Recycled and secondary aggregates

7.1 National planning policy, as set out in the National Planning Policy Framework (Paragraph 204), encourages the use of alternatives to primary aggregates. The guidelines for the provision of aggregates over the period from 2005 to 2020, published in June 2009, assume a significant portion of the supply will be met from recycled and secondary aggregates (see Table 2.1).

7.2 In North East England, recycled aggregates are produced primarily from materials sourced from construction and demolition wastes but also include sources such as bituminous materials from road planings. Secondary aggregates are produced from industrial by-products, including pulverised fuel ash and furnace bottom ash. Historically secondary aggregates have been produced from the Energy from Waste Plant at Haverton Hill on Teesside, the Redcar Steelworks site on Teesside and at Lynemouth Power Station in Northumberland. Following the closure of the Redcar Steelworks the use of slag to produce a secondary aggregate has now ceased, although materials from this site are expected to be used as a cement substitute until the end of 2020 after which time the site will be redeveloped. Secondary aggregates have not been produced from the Lynemouth Power Station site since 2016 but a planning permission does allow for the extraction of ash in the lagoons for aggregate uses. A list of sites is included in Appendix 2 of this report.

7.3 The 2019 aggregates monitoring survey collected data on sales of recycled and secondary materials for aggregate use. This involved surveying the operators of fixed construction and demolition recycling sites, and secondary aggregate producers in North East England. For the sites producing recycled aggregates that did not provide a return to the survey, estimates of production in 2019 have been derived from the Waste Data Interrogator published by the Environment Agency⁶.

7.4 The figures for the production of recycled and secondary aggregates in North East presented in Table 7.1 should be treated with a degree of caution. The figures do not include production from mobile crushers and screens which are known to make a significant contribution in terms of the quantities of construction and demolition waste recycled for aggregate uses. As explained above, the figures also include estimates of production from those fixed sites where survey returns have not been received and the method to derive estimated figures from the Environment Agency's Waste Data Interrogator make assumptions that certain materials have utilised to produce recycled aggregates.

7.5 The figures for the production of recycled aggregates show an increase compared to the previous year. This is most significantly as a result of a change in approach to use the Environment Agency's Waste Data Interrogator to estimate

⁶ Estimates of recycled aggregate production using the Environment Agency's Waste Data Interrogator were derived through identifying sites that were receiving waste materials that could potentially be used for recycled aggregates; specifically the EWC sub-chapter waste types of 'Concrete, bricks, tiles and ceramics,' 'Bituminous materials' and 'Other construction and demolition wastes'. Total tonnages of these types of waste received at each site were calculated. Tonnages of these types which were removed from each site were subtracted, as were materials whose fate was not specified as recovery to produce a final total for each site.

production from sites that either previously did not provide a response to the survey or sites that were previously not included. Most notably this has included a number of small and medium scale sites in the Tees Valley and Tyne and Wear sub-areas. In previous years, secondary aggregates have been produced at three sites, one of which uses materials derived from the steelworks site at Redcar. No survey return for this site was received in response to the survey for 2019 and there is some uncertainty about this site due to the closure of the steelworks. This has resulted in a significant reduction in the production of secondary aggregates compared to previous years.

Table 7.1: Sales of recycled and secondary aggregates in North East England, 2019 (thousand tonnes)

	County Durham	Northumber-land	Tees Valley	Tyne and Wear	North East England
Recycled aggregates					
Construction, demolition and excavation wastes*	67.1	107.1	174.1	277.7	526.0
Road planings / bituminous materials**	0.7	23.1	5.3	37.2	66.3
Secondary aggregates					
Incinerator Bottom Ash (Energy from Waste)	0.0	0.0	153.0	0.0	153.0
Pulverised Fuel Ash	0.0	0.0	0.0	0.0	0.0
Slag from steel production	0.0	0.0	0.0	0.0	0.0
Total	67.8	130.2	332.4	314.9	845.3

Notes:

* Includes estimates of production derived from the Environment Agency Waste Data Interrogator comprising EWC sub-chapters 'Concrete, bricks, tiles and ceramics' and 'Other construction and demolition wastes' and survey returns where aggregates were identified as originating from construction, excavation and demolition wastes.

** Includes estimates of production derived from the Environment Agency Waste Data Interrogator comprising EWC sub chapter 'Bituminous materials' and survey returns where aggregates were identified as originating from road planings

8. Major developments that have a greater than local influence on aggregates demand

8.1 The purpose of this section of the report is to identify major construction projects and significant developments that will have a significant influence on the demand for primary aggregates and recycled and secondary aggregates from sites in North East England. Table 8.1 provides a summary of current and planned projects that are considered to be of significance.

Table 8.1: Major construction projects and significant developments of note that could influence demand for aggregates

Project	Location	Details	Timeframe
Completed projects or underway as of 2019:			
A1 upgrade at Lobley Hill	Gateshead	Upgrade of two junctions to include new parallel road links between the junctions and three lanes in each direction.	Construction commenced in summer 2014 and was completed in summer 2016.
Morpeth Northern Bypass	Morpeth, Northumberland	3.8 km of new single carriageway road.	Construction commenced in spring 2015 and was completed in April 2017.
A1 Leeming to Barton	North Yorkshire	12 mile section of dual carriageway to be replaced with a new three lane motorway.	Construction commenced in 2014 and completed in 2018.
A19 Silverlink junction improvements	North Tyneside	Upgrading of A19/A1058 junction to provide a three level interchange.	Construction commenced in 2016. Completion by March 2019.
International Advanced Manufacturing Park (IAMP)	South Tyneside and Sunderland	Development of manufacturing site on 100 hectares of land to the north of the Nissan car manufacturing plant.	Phase One underway
A19 Testos and Downhill junction improvements	South Tyneside	It is planned to raise the A19 above the A184 on a flyover.	Construction commenced in Spring 2019 and due for completion by Summer 2021.
Potash Harbour Facilities	Redcar and Cleveland	Construction of wharf facilities to handle polyhalite from a planned mine in North Yorkshire.	Consent granted. Construction commenced in 2019.

Project	Location	Details	Timeframe
Planned projects or projects yet to commence as of 2019:			
A1 dualling in Northumberland	Northumberland	Upgrade 13 miles of existing single carriageway to dual carriageway between Morpeth and Felton and Alnwick and North Charlton.	Development Consent Order application submitted July 2020. Construction could start in 2022 if Development Consent Order granted.
A66 dualling	North Yorkshire, County Durham and Cumbria	Upgrade 18 miles of existing single carriageway to dual carriageway between A1(M) at Scotch Corner and M6 at Penrith.	Public consultation on options in July 2019 and preferred route announcement in Spring 2020. Further public consultation planned for Summer 2021 before the Development Consent Order application is submitted in 2022. Construction to start in 2024/25.
A1 Birtley to Coal House widening	Gateshead	Widening of A1 to provide three lane carriageway and replacement of railway bridge.	Development Consent Order granted 19 January 2021. Construction expected to commence Summer 2021.
A1 Brunton to Scotswood widening	Newcastle upon Tyne	Widening to create three narrow lanes.	Construction commenced in 2020.
A19 Norton to Wynyard widening	Stockton on Tees	Widening of existing carriageway to provide additional lane in both directions.	Work commenced in March 2020 and is due to be completed in 2022.
Teesside Combined Cycle Power Plant	Redcar and Cleveland	Construction of a gas fired power station with an output of up to 1,700 MWe.	Development Consent Order granted 5 April 2019.
Teesside Cluster Carbon Capture and Usage project	Redcar and Cleveland	Combined cycle gas turbine electricity generating station with output of up to 2,000MW.	Development Consent Order application expected to be submitted in 2021.

8.2 The projects or developments that were taking place from 2014 onwards have contributed to the overall increase in sales when compared to sales in 2013. The scale of the projects identified in Table 8.1 are considered to be of a similar scale to projects that have taken place during the previous ten year period and in turn are considered to have a similar demand to that experienced over that period. Nonetheless it is considered that these projects or developments will contribute to

sales over and above those experienced during the recent economic downturn. Projects such as the A1 dualling in Northumberland and the A66 dualling in North Yorkshire, County Durham and Cumbria are likely to result in increased supply from quarries in the north of Northumberland and the south of County Durham respectively during construction.

8.3 Outside of North East England, work to upgrade a 12 mile section of dual carriageway on the A1 road between Leeming and Barton in North Yorkshire to a new three lane motorway commenced in 2014 and was completed in 2018. This major road scheme has been partially supplied by quarries in the south of County Durham, including those on the A66 corridor, which are geographically close to this infrastructure project in North Yorkshire.

9. Local Aggregate Assessments

9.1 Mineral Planning Authorities are required to prepare an annual Local Aggregate Assessment. This section of the monitoring report reports on the status of the LAAs for each of the Mineral Planning Authorities in North East England and the provision for aggregates made within them.

Purpose of a Local Aggregate Assessment

9.2 Planning Practice Guidance advises that a Local Aggregate Assessment should contain three elements:

- A forecast of the demand for aggregates based on the rolling average of ten years sales data and other relevant local information;
- an analysis of all aggregate supply options, including land-won resources, recycled aggregates, secondary aggregates, marine aggregates and imports/exports; and
- an assessment of the balance between demand and supply, and the economic and environmental opportunities and constraints that might influence the situation.

The LAA should then conclude if there is a shortage or a surplus of supply to meet demand and, if the former, how this is being addressed.

Local Aggregate Assessments in North East England

9.3 A summary of Local Aggregate Assessments in North East England is provided in Table 9.1. The Mineral Planning Authorities in County Durham, Northumberland and Tyne and Wear have worked together to produce a Joint Local Aggregate Assessment and the five Tees Valley authorities have also worked together to produce a Joint Local Aggregate Assessment, which are updated on an annual basis.

Provision for aggregates in the Local Aggregates Assessments for North East England

9.4 The provision for aggregates that is detailed in the Local Aggregate Assessments is summarised in Table 9.1 below. For the Mineral Planning Authorities in County Durham, Northumberland and Tyne and Wear, the suggested provision has been based on a three year sales average recognising the increase in demand in recent years compared to the period pre-2013. In Tees Valley the level of provision is as set out in the Tees Valley Joint Minerals and Waste Core Strategy (adopted September 2011).

Table 9.1: Local Aggregate Assessment progress and provision for aggregates supply in North East England

Sub-area	Mineral Planning Authority	LAA version	LAA figure		Calculation method
			Crushed rock	Sand and gravel	
County Durham	Durham County Council	Updated using 2018 data	3,037,000 tonnes	366,000 tonnes	Three year sales average (2016 to 2018)
Northumberland	Northumberland County Council	Updated using 2018 data	1,706,000 tonnes	398,000 tonnes	Three year sales average (2016 to 2018)
	Northumberland National Park Authority				
Tees Valley	Darlington Borough Council	Updated using 2017 data	187,500 tonnes	175,000 tonnes	Based on recommended sub-regional apportionment of the national and regional guidelines for aggregates provision (2005 to 2020)
	Hartlepool Borough Council				
	Middlesbrough Borough Council				
	Redcar and Cleveland Borough Council				
	Stockton on Tees Borough Council				
Tyne and Wear	Gateshead Council	Updated using 2018 data	483,000 tonnes	228,000 tonnes	Three year sales average (2016 to 2018)
	Newcastle City Council				
	North Tyneside Council				
	South Tyneside Council				
	Sunderland City Council				
North East England	-	-	5,413,500 tonnes	1,167,000 tonnes	Total annual provision in LAAs in North East England

Contribution to meeting local and national needs

9.5 For North East England, the combined figures in Local Aggregate Assessments make provision for 5.4 million tonnes of crushed rock per annum and 1.12 million tonnes of sand and gravel per annum.

9.6 When compared with the published sub-national guidelines for North East England (see Table 2.1), the combined provision in the LAAs is 22% (333,000 tonnes) below the guideline for sand and gravel and 12.5% (774,000 tonnes) below the guideline for crushed rock.

9.7 The combined figures for provision in the LAAs have also been compared with the ten year sales averages. The provision figures have been found to exceed the ten year sales average figures. For crushed rock the provision would exceed the ten year sales average by 23.9% and for sand and gravel such provision would exceed the ten year sales average by 29.6%. Based upon the provision set out in the Local Aggregate Assessments, the landbank of permitted reserves at 31 December 2019 for sand and gravel is 14.4 years and 36.5 years for crushed rock.

9.8 The North East Aggregates Working Party therefore recognises that the contribution from North East England is currently below the levels of provision in the most recently published sub-national guidelines. However, the monitoring data available indicates that there is no undue reliance on imports of aggregates and a contribution is made to meeting wider needs and, when taken as a whole, the landbanks do not indicate a shortfall in supply.

10. Development Plans

10.1 Local Planning Authorities are required to prepare 'Local Plans' for their areas, which set out the planning policies to guide and assess development proposals. This includes policies for minerals development prepared by these authorities in their role as a Mineral Planning Authority. Progress with the preparation local development plan documents in North East England is discussed in more detail below and the key milestones for preparation of plans are shown in Appendix 4.

County Durham

10.2 **Durham County Council**, a unitary authority, adopted a Local Plan for County Durham (The 'County Durham Plan') on 21 October 2020. The plan incorporates strategic policies on minerals extraction and strategic mineral site allocations. A complimentary Minerals and Waste Policies and Allocations document is also to be prepared. This document will contain detailed development management policies for minerals and potentially non-strategic mineral site allocations. Early engagement work on this document commenced in January 2021 and it is anticipated that a consultation on a draft document will take place in Summer 2021.

Northumberland

10.4 There are two Mineral Planning Authorities in the Northumberland sub-area. The Northumberland National Park Authority is the Mineral Planning Authority for the Northumberland National Park area and Northumberland County Council, a unitary authority, is the Mineral Planning Authority for the area of Northumberland outside the Northumberland National Park. These authorities have responsibility for preparing Local Plans for their respective areas, which will incorporate policies on minerals extraction.

10.5 **Northumberland County Council** is currently preparing a Local Plan. This was submitted to the Secretary of State for Communities and Local Government for independent examination on 29 May 2019. The examination hearings have been held in a number of phases with those on the minerals matters being held in February 2020. It is anticipated that a consultation on proposed main modifications to the plan will take place in 2021 and the plan will be adopted in September 2021.

10.6 **Northumberland National Park Authority** adopted a new Local Plan in July 2020. This supersedes the Core Strategy and Development Policies document that was adopted in March 2009. The Local Plan includes a policy for minerals development and a policy for mineral safeguarding.

Tees Valley

10.7 The five mineral planning authorities in the Tees Valley sub-area (**Darlington Borough Council, Hartlepool Borough Council, Middlesbrough Borough Council, Redcar and Cleveland Borough Council** and **Stockton on Tees Borough Council**) have produced Joint Minerals and Waste Development Plan Documents for the Tees Valley area. The Tees Valley Joint Minerals and Waste Core

Strategy Development Plan Document and the Tees Valley Joint Minerals and Waste Policies and Sites Development Plan Document were adopted in September 2011. There are currently no proposals to undertake a review of these documents.

Tyne and Wear

10.8 The Tyne and Wear sub-area contains five metropolitan borough councils (Gateshead, Newcastle, North Tyneside, South Tyneside and Sunderland), which are the Mineral Planning Authorities for their respective areas. A summary of progress with Local Plans for each of these authorities is provided below:

- **Gateshead Council** adopted a Joint Core Strategy and Urban Core Plan document in March 2015 and an allocations and development management policies document titled 'Making Spaces for Growing Places' on 1 February 2021. The latter document includes policies for minerals development and a policy to safeguard the wharf on the River Tyne at Gateshead. Work is now starting to review the Joint Core Strategy with Newcastle City Council.
- **Newcastle City Council** adopted a Joint Core Strategy and Urban Core Plan document in March 2015 and the Development and Allocations Plan on 24 June 2020. Work is now starting to review the Joint Core Strategy with Gateshead Council.
- **North Tyneside Council** adopted a Local Plan in July 2017. The plan includes a strategic minerals policy.
- **South Tyneside Council** adopted a Core Strategy in June 2007, a document containing criteria-based policies for development management in December 2011 and a Site Allocations document in April 2012. Work is underway to review these documents as part of Local Plan document. A draft Local Plan was published for consultation in August 2019.
- **Sunderland City Council** adopted a Core Strategy and Development Plan document, which includes strategic policies, allocations and development management policies, on 30 January 2020. Consultation on a draft allocations and designations document commenced on 18 January 2020.

Appendix 1: Primary aggregates producing sites included in the Monitoring Report

This appendix details the sites that have been included in the aggregates sales and/or reserve figures in this report. The sites included are those that were active during 2019 (i.e. were in production during 2019) or were inactive during 2019 (i.e. not in production during 2019 but have a valid planning permission for extraction). Dormant sites or sites that do not have a valid planning permission are not included and have not been included in the figures in this report. The planning status of the quarries can be summarised as follows:

- Active: In production, including from stockpiles, at some point during 2019; and
- Inactive: Not in production during 2019 but has either been worked in the past or has yet to be worked and has a valid planning permission for extraction.

The site operator details are correct as at 31 December 2019.

QUARRIES

Quarries in County Durham sub-area

Site	Location and Grid Reference	Mineral Planning Authority	Operator in 2019	Mineral	Operational status in 2019
Bishop Middleham Quarry	Ferryhill NZ 328 326	Durham County Council	Thompsons of Prudhoe	Magnesian limestone	Active
Broadwood Quarry	Frosterley NZ 035 365	Durham County Council	Breedon	Carboniferous limestone	Active
Cornforth Quarry (East and West)	West Cornforth NZ 325 344	Durham County Council	Tarmac	Magnesian limestone	Inactive
Crime Rigg Quarry	Sherburn Hill NZ 346 416	Durham County Council	Breedon	Magnesian limestone and Permian sand	Active
Force Garth (Middleton) Quarry	Middleton in Teesdale NY 872 282	Durham County Council	CEMEX	Igneous rock	Active
Heights Quarry	Westgate NY 925 388	Durham County Council	Aggregate Industries UK	Carboniferous limestone	Active
Hulands Quarry	Bowes NZ 016 140	Durham County Council	Aggregate Industries UK	Carboniferous limestone	Active
Hummerbeck Quarry	West Auckland NZ 194 259	Durham County Council	Hall Construction	Sand and gravel	Inactive (yet to begin)
Kilmond Wood Quarry	Bowes NZ 024 134	Durham County Council	Kearton Farms	Carboniferous limestone	Active
Low Harperley Quarry	Wolsingham NZ 112 356	Durham County Council	Breedon	Sand and gravel	Active

Site	Location and Grid Reference	Mineral Planning Authority	Operator in 2019	Mineral	Operational status in 2019
Quarrington Quarry	Bowburn NZ 330 380	Durham County Council	Tarmac	Magnesian limestone and Permian sand	Active
Raisby (Coxhoe) Quarry	Coxhoe NZ 347 352	Durham County Council	Breedon	Magnesian limestone	Active
Running Waters Quarry	Bowburn NZ 334 403	Durham County Council	Breedon	Magnesian limestone	Inactive
Thrislington Quarry (East and West)	Ferryhill NZ 317 322	Durham County Council	Tarmac	Magnesian limestone and Permian sand	Active
Witch Hill Quarry	Bowburn NZ 345 397	Durham County Council	Breedon	Magnesian limestone	Inactive

Quarries in Northumberland sub-area

Site	Location and Grid Reference	Mineral Planning Authority	Operator in 2019	Mineral	Operational status in 2019
Barrasford Quarry	Barrasford NY 913 743	Northumberland County Council	Tarmac	Igneous rock and Carboniferous limestone	Active
Belford (Easington) Quarry	Belford NU 130 343	Northumberland County Council	Tarmac	Igneous rock	Inactive
Cocklaw Quarry	Wall NY 931 701	Northumberland County Council	Tynedale Roadstone	Carboniferous limestone	Inactive (yet to begin)
Cragmill Quarry	Belford NU 108 346	Northumberland County Council	CEMEX	Igneous rock	Active
Divethill Quarry	Great Bavington NY 978 795	Northumberland County Council	CEMEX	Igneous rock	Active
Ebchester (Broadoak) Quarry	Ebchester NZ 100 564	Northumberland County Council	Tarmac	Sand and gravel	Active
Houghton Strother Quarry	Humshaugh NY 897 740	Northumberland County Council	Thompsons of Prudhoe	Sand and gravel	Active
Harden Quarry	Biddlestone NY 959 086	Northumberland National Park Authority	Tarmac	Igneous rock	Active
Hemscott Hill Beach	Widdrington NZ 931 703	Northumberland County Council	Mr W Bell	Sand and gravel	Inactive
Howick Quarry	Longhoughton NU 238 169	Northumberland County Council	Tarmac	Igneous rock	Active
Keepersfield Quarry	Humshaugh NY 895 727	Northumberland County Council	Hanson	Igneous rock and Carboniferous limestone	Active

Site	Location and Grid Reference	Mineral Planning Authority	Operator in 2019	Mineral	Operational status in 2019
Lanton (Cheviot) Quarry	Milfield NT 954 311	Northumberland County Council	Tarmac	Sand and gravel	Active
Longhoughton Quarry	Longhoughton NU 232 153	Northumberland County Council	KW Purvis	Igneous rock	Active
Merryshields Quarry	Stocksfield NZ 063 617	Northumberland County Council	Thompsons of Prudhoe	Sand and gravel	Active
Mootlaw Quarry	Matfen NZ 018 755	Northumberland County Council	North Tyne Roadstone	Carboniferous limestone	Inactive
Swinburne Quarry	Colwell NZ 021 791	Northumberland County Council	Hanson	Igneous rock	Inactive
Wooperton Quarry	Wooperton NU 048 204	Northumberland County Council	North East Concrete	Sand and gravel	Active

Quarries in Tees Valley sub-area (Darlington, Hartlepool, Middlesbrough, Redcar and Cleveland and Stockton on Tees)

Site	Location and Grid Reference	Mineral Planning Authority	Operator in 2019	Mineral	Operational status in 2019
Hart Quarry	Hartlepool NZ 475 345	Hartlepool Borough Council	Breedon	Magnesian limestone	Active
Hartlepool Beach	Hartlepool NZ 540 270	Hartlepool Borough Council	Unknown	Sand	Inactive

Quarries in Tyne and Wear sub-area (Gateshead, Newcastle, North Tyneside, South Tyneside and Sunderland)

Site	Location and Grid Reference	Mineral Planning Authority	Operator in 2019	Mineral	Operational status in 2019
Marsden Quarry	Whitburn NZ 406 642	South Tyneside Council	O'Brien Aggregate Marsden	Magnesian limestone	Active
Eppleton Quarry	Hetton-le-Hole NZ 360 482	Sunderland City Council	Eppleton Quarry Products	Magnesian limestone and sand	Active

WHARVES

Wharves in the Northumberland sub-area

Site	Location and Grid Reference	Mineral Planning Authority	Operator in 2019	Mineral	Operational status in 2019
Port of Blyth (Battleship Wharf)	Cambois NZ 309 827	Northumberland County Council	Breedon	Sand and gravel	Active

Wharves in the Tees Valley sub-area (Darlington, Hartlepool, Middlesbrough, Redcar and Cleveland and Stockton on Tees)

Site	Location and Grid Reference	Mineral Planning Authority	Operator in 2019	Mineral	Operational status in 2019
Cochranes Wharf	Middlesbrough NZ 509 202	Middlesbrough Borough Council	Tarmac	Sand and gravel	Active
Billingham (Able) Wharf	Billingham NZ 479 214	Stockton on Tees Borough Council	CEMEX	Sand and gravel	Inactive
Tees Wharf	Middlesbrough NZ 526 216	Redcar and Cleveland Borough Council	Shire Aggregates	Sand and gravel	Active
Teesport Wharf	Grangetown NZ 551 226	Redcar and Cleveland Borough Council	Aggregate Industries	Igneous rock	Active

Wharves in the Tyne and Wear sub-area (Gateshead, Newcastle, North Tyneside, South Tyneside and Sunderland)

Site	Location and Grid Reference	Mineral Planning Authority	Operator in 2019	Mineral	Operational status in 2019
Gateshead Wharf	Gateshead NZ 265 638	Gateshead Council	Tarmac	Sand and gravel	Inactive
Howdon Wharf	North Shields NZ 335 661	North Tyneside Council	Tarmac	Sand and gravel	Inactive
Jarrow Wharf	South Shields NZ 335 657	South Tyneside Council	CEMEX	Sand and gravel	Active
Port of Sunderland (Greenwells Quay)	Sunderland NZ 409 579	Sunderland City Council	Northumbrian Roads	Sand and gravel and igneous rock	Inactive
Port of Tyne (Riverside Quay)	South Shields NZ 350 655	South Tyneside Council	Aggregate Industries	Igneous rock	Inactive
Whitehill Point (Hayhole Road) Wharf	North Shields NZ 344 661	North Tyneside Council	Northumbrian Roads / Stema Shipping	Igneous rock	Active

Appendix 2: List of fixed sites producing recycled and secondary aggregates

The fixed recycled and secondary aggregates sites included in the recycled and secondary aggregates figures from the 2019 aggregates monitoring survey are detailed below.

Sub-area	Site	Location and Grid Reference	Operator in 2019	Status in 2019	Materials
County Durham:	Aycliffe Quarry	Aycliffe NZ 290 222	John Wade Group	Active	Construction, demolition and excavation waste
	Constantine Farm	Crook NZ 172 336	W Marley	Active	Construction, demolition and excavation waste
	Dean and Chapter Waste Recycling	Ferryhill NZ 282 330	Bishop Middleham Plant and Recycling Ltd	Active	Construction, demolition and excavation waste
	Esh Construction Recycling	Tursdale NZ 302 360	Esh Construction Ltd	Active	Construction, demolition and excavation waste
	Heights Quarry	Westgate NY 925 388	Aggregate Industries	Active	Construction, demolition and excavation waste
	Hulands Quarry	Bowes NZ 016 140	Aggregate Industries	Active	Construction, demolition and excavation waste
	Old Brickworks	Tanfield NZ 194 548	Ken Thomas	Active	Construction, demolition and excavation waste
	Quarrington Quarry	Bowburn NZ 330 380	Tarmac	Inactive	Construction, demolition and excavation waste
	Shaw Bank Waste Transfer Station	Barnard Castle NZ 062 174	F and RD Jackson	Active	Construction, demolition and excavation waste

Sub-area	Site	Location and Grid Reference	Operator in 2019	Status in 2019	Materials
	Thrislington Quarry	West Cornforth NZ 317 322	Tarmac	Active	Construction, demolition and excavation waste
	Westline Transfer Station	Birtley NZ 267 549	Remondis	Active	Construction, demolition and excavation waste
Northumberland:	Barrington Industrial Estate	Bedlington NZ 264 836	Remondis	Active	Construction, demolition and excavation waste
	N B Clark – Lynefield Park	Lynemouth NZ 291 901	Clark Homes Ltd	Active	Construction, demolition and excavation waste Bituminous materials
	HFF – West Sleekburn	Bedlington NZ 277 847	HFF Civil Engineering	Active	Construction, demolition and excavation waste
	Howford Quarry	Acomb NY 919 663	Howford Recycling Ltd	Active	Construction, demolition and excavation waste Bituminous materials
	Linton Transfer Station	Linton NZ 262 914	R Thornton	Active	Construction, demolition and excavation waste
	Longhoughton Quarry	Longhoughton NU 232 153	KW Purvis	Inactive	Construction, demolition and excavation waste
	Lynemouth Power Station	Lynemouth NZ 305 901	Lynemouth Power	Active	Power station waste – furnace bottom ash and pulverised fuel ash
	Moscrop Bros	West Sleekburn NZ 277 847	James Moscrop	Active	Construction, demolition and excavation waste
	N B Clark – Coopies Lane	Morpeth NZ 213 853	Clark Homes Ltd	Active	Construction, demolition and excavation waste

Sub-area	Site	Location and Grid Reference	Operator in 2019	Status in 2019	Materials
	Old Stone Road	East Cramlington NZ 286 759	East Cramlington Recycled Aggregates Ltd	Active	Concrete, demolition and excavation waste
	Plot E2, Lynefield Park	Lynemouth NZ 290 898	Sincera Ltd	Active	Concrete, demolition and excavation waste
	Powburn Bridges Depot	Powburn NU 054 169	Northumberland County Council	Active	Concrete, demolition and excavation waste Bituminous materials
	S A Waste and Groundworks	Blyth NZ 285 820	S A Waste and Groundworks Ltd	Active	Construction, demolition and excavation waste Bituminous materials
	Sanders Plant and Waste Management	Pegswood NZ 231 873	Sanders Plant and Waste Management Ltd	Active	Construction, demolition and excavation waste
	Thornbrough Quarry	Corbridge NZ 008 635	W & M Thompson	Active	Construction, demolition and excavation waste
Tees Valley:	Broken Scar WTP Transfer Station	Darlington NZ 256 139	Northumbrian Water Ltd	Active	Construction, demolition and excavation waste
	Cochranes Wharf - Middlesbrough Recycling	Middlesbrough NZ 514 206	Tarmac	Active	Construction, demolition and excavation waste Bituminous material
	Cowpen Bewley Landfill Site	Stockton-on-Tees NZ 491 245	Highfield Environmental Ltd	Active	Construction, demolition and excavation waste
	Drinkfield Waste Transfer Station	Darlington NZ 285 174	Stonegrave Aggregates Ltd	Active	Construction, demolition and excavation waste
	Faverdale Recycling Centre	Darlington NZ 278 166	T M Ward (Darlington) Ltd	Active	Construction, demolition and excavation waste

Sub-area	Site	Location and Grid Reference	Operator in 2019	Status in 2019	Materials
	Haverton Hill EfW Facility	Stockton on Tees NZ 480 225	SUEZ	Active	Incinerator bottom ash
	Hillside Autos	Saltburn NZ 709 191	Garbutt Brothers	Active	Construction, demolition and excavation waste
	Holden Close	Middlesbrough NZ 545 207	Scott Bros Ltd	Active	Construction, demolition and excavation waste
	ICI No 2 (Teesport) Landfill Site	Grangetown NZ 542 220	Highfield Environmental Ltd	Active	Construction, demolition and excavation waste
	Inter Terminals	Billingham NZ 476 212	Shire Aggregates Bulk Limited	Active	Construction, demolition and excavation waste Bituminous material
	J and B Recycling	Hartlepool NZ 512 316	J and B Recycling Ltd	Active	Construction, demolition and excavation waste
	Morton Road	Darlington NZ 321 144	Stan Robinson	Active	Construction, demolition and excavation waste Bituminous material
	Niramax Transfer Station	Hartlepool NZ 514 310	Niramax Group Ltd	Active	Construction, demolition and excavation waste
	Normanby Wharf	Middlesbrough NZ 517 206	CL.Prosser and Co Ltd	Active	Construction, demolition and excavation waste Bituminous material
	Norton Bottoms	Billingham NZ 463 210	Scott Bros Ltd	Active	Construction, demolition and excavation waste Bituminous material.
	Scott Bros Recycling	Billingham NZ 483 225	Scott Bros Recycling Ltd	Active	Construction, demolition and excavation waste Bituminous material

Sub-area	Site	Location and Grid Reference	Operator in 2019	Status in 2019	Materials
	Teesport	Redcar NZ 538 228	Tarmac	Inactive	Blast furnace slag
	Teesside Recycling Facility	Hartlepool NZ 518 283	Biffa Waste Services Ltd	Active	Construction, demolition and excavation waste Bituminous material
	Teward Recycling	Darlington NZ 297 157	Teward Recycling Ltd	Active	Construction, demolition and excavation waste
Tyne and Wear:	5b Freezemore Road	Houghton-le-Spring NZ 336 526	Grab and Deliver Ltd	Active	Construction, demolition and excavation waste
	Atkinson Skip Hire & Waste Management	Pelaw NZ 292 619	Albert Atkinson	Active	Construction, demolition and excavation waste
	Bells Group Services	Newcastle NZ 191 643	Trojan Skips Ltd	Active	Construction, demolition and excavation waste
	Former Blaydon Metal Company	Blaydon NZ 186 635	Trojan Skips Ltd	Active	Construction, demolition and excavation waste
	Hadrian Yard Central	Wallsend NZ 319 663	Biffa Waste Services Ltd	Active	Construction, demolition and excavation waste
	Hetton Moor Farm Quarry	Hetton le Hole NZ 371 463	J Husband	Active	Construction, demolition and excavation waste
	Hudson Dock	Sunderland NZ 414 572	Northumbrian Roads	Active	Construction, demolition and excavation waste; Road planings
	Leechmere Waste Transfer Facility	Sunderland NZ 404 541	Gentoo Group Ltd	Active	Construction, demolition and excavation waste

Sub-area	Site	Location and Grid Reference	Operator in 2019	Status in 2019	Materials
	Longshank Lane	Birtley NZ 263 565	North East Concrete	Active	Construction, demolition and excavation waste
	Marsden Quarry	Whitburn NZ 406 642	O'Brien Aggregate Marsden	Active	Construction, demolition and excavation waste
	MGL Demolition	Newburn NZ 183 643	MGL Demolition Ltd	Active	Construction, demolition and excavation waste
	Monument Park	Washington NZ 328 559	Veolia ES (UK) Ltd	Active	Construction, demolition and excavation waste
	Newburn	Newcastle NZ 185 643	MGL Group	Active	Construction, demolition and excavation waste
	North Tyneside Transfer Station	Wallsend NZ 333 673	Suez Recycling and Recovery (NE) Ltd	Active	Construction, demolition and excavation waste
	Springwell Quarry	Washington NZ 283 586	W & M Thompson	Active	Construction, demolition and excavation waste
	Stephenson Street	Willington Quay NZ 324 661	G O'Brien	Active	Construction, demolition and excavation waste
	Sunderland Recycling Centre	Washington NZ 320 555	Biffa Waste Services Ltd	Active	Construction, demolition and excavation waste
	Thompson Waste	Sunderland NZ 408 563	Thompson Waste Ltd	Active	Construction, demolition and excavation waste
	Unit 15, The Yard	North Shields NZ 353 676	NWH Waste Services Ltd	Active	Construction, demolition and excavation waste

Sub-area	Site	Location and Grid Reference	Operator in 2019	Status in 2019	Materials
	Wilden Road Recycling Centre	Washington NZ 319 554	O'Brien Waste Recycling Solution Ltd	Active	Construction, demolition and excavation waste

Appendix 3: Planning applications for primary aggregates extraction

The planning applications granted, refused or withdrawn in North East England during 2019 and the planning applications awaiting a decision at 31 December 2019 are detailed below.

The table includes those applications seeking consent for reserves that currently do not have planning permission for extraction and are therefore not currently included in the landbank. Further applications of note are provided below the table and this includes, for example, applications to extend the time limits of current extraction or periodic reviews of existing permissions. These applications involve sites with reserves that are already included in the landbanks by virtue of their current planning permissions.

Site name and location	Mineral Planning Authority	Operator / Applicant	Mineral	Additional reserve for aggregate use (tonnes)	Type of application	Submitted	Decision
County Durham:							
Hawthorn Quarry Seaham (NZ 435 464)	Durham County Council	Tarmac	Magnesian limestone	4,000,000 (and 9,000,000 for non-aggregate uses)	Determination of modern conditions for a dormant site	10 May 2000	Pending at 31 December 2019
Harrow and Ashy Bank Quarry Eastgate (NY 956 395)	Durham County Council	Tarmac	Carboniferous limestone	3,750,000	Determination of modern conditions for a dormant site	24 May 2007	Pending at 31 December 2019
Tuthill Quarry Haswell (NZ 390 424)	Durham County Council	Owen Pugh	Magnesian limestone	2,500,000 (and 2,500,000 for non-aggregate uses)	New site (reopening of previously worked quarry)	8 February 2017	Pending at 31 December 2019
Heights Quarry Westgate (NY 925 388)	Durham County Council	Aggregate Industries	Carboniferous Limestone	3,700,000	Consolidation of existing permission and extension to existing site	16 August 2018	Granted June 2019

Site name and location	Mineral Planning Authority	Operator / Applicant	Mineral	Additional reserve for aggregate use (tonnes)	Type of application	Submitted	Decision
Northumberland:							
Divet Hill Quarry Great Bavington (NY 978 794)	Northumberland County Council	CEMEX UK	Igneous rock (dolerite)	700,000	Extension to existing site	22 December 2017	Granted May 2019
Longhoughton Quarry Longhoughton (NU 232 153)	Northumberland County Council	K W Purvis	Igneous rock (dolerite and Carboniferous limestone)	1,750,000 (1,600,000 tonnes of dolerite and 125,000 tonnes of limestone)	Extension to existing site	10 April 2018	Granted November 2019
Tees Valley:							
No relevant planning applications were either granted or refused in 2019 or were pending a decision at 31 December 2019. See note on Thorpe Thewles (Stockton) Quarry below.							
Tyne and Wear:							
Crawcrook Quarry Gateshead (NZ 138 637)	Gateshead Council	SITA UK and CEMEX	Sand and gravel	550,000	Extension to existing site	26 September 1997	Pending at 31 December 2019

Other planning applications of note:

- Durham County Council – An application to extend the time for extraction at Raisby (Coxhoe) Quarry (submitted 10 April 2017) until 2042 was pending at 31 December 2019. In addition, there were periodic reviews for Middleton (Force Garth) Quarry (submitted November 2011), Running Waters Quarry (submitted 18 September 2012) and Witch Hill (submitted December 2015) pending determination by Durham County Council at 31 December 2019.

- Northumberland County Council – A periodic review at Hemscott Hill (submitted 22 February 2012) was pending determination at 31 December 2019.
- Stockton on Tees Borough Council – An application to extend the time limit at Thorpe Thewles (Stockton) Quarry was submitted on 24 July 2015 and was pending determination at 31 December 2019. The existing planning permission requires extraction to cease and the site to be restored by 27 July 2015. It is understood that this site contains sand and gravel reserves of 1.28 million tonnes.

Appendix 4: Key milestones and progress with local minerals plan documents

The key milestones for the preparation of local minerals plan documents in North East England, as at 31 March 2021 are detailed below. This is based on the latest information supplied by the Mineral Planning Authorities and in a number of cases the milestones are subject to final agreement.

Mineral Planning Authority	Development Plan Document (DPD)	Early Engagement	Publication	Submission	Examination Hearings	Adoption	Comments
Durham County Council	County Durham Plan	Issues and options – June and July 2016 Preferred options – July 2018	25 January 2019 to 5 March 2019	Submitted 29 June 2019	October to December 2019	Adopted 21 October 2020	Revised Local Development Scheme approved in December 2020.
	Minerals and Waste Policies and Allocations	January and February 2021	December 2021	July 2022	Autumn 2022	May 2023	
Northumberland County Council	Local Plan	Spring 2018 consultation – 28 March to 2 May 2018 Draft Local Plan – July to August 2018.	January 2018 (30 January 2019 to 13 March 2019)	May 2019 (Submitted 29 May 2019)	September 2019 (Phase 1 – commenced October 2019, Minerals – February 2020, Phase 2 – October 2020)	September 2021	Revised Local Development Scheme approved in March 2021. Core Strategy withdrawn from examination on 7 July 2017. The Council are preparing a Local Plan as detailed and are no longer proceeding with the Core Strategy.

Mineral Planning Authority	Development Plan Document (DPD)	Early Engagement	Publication	Submission	Examination Hearings	Adoption	Comments
Northumberland National Park Authority	Local Plan	Issues – February to April 2017 Policy Options – October to December 2017 Preferred Options – July to September 2018	31 May 2019 to 12 July 2019	30 September 2019	30 and 31 January 2020	Adopted 15 July 2020	Adopted Local Plan replaces the Core Strategy and Development Policies document adopted in March 2009.
Tees Valley authorities (Darlington, Hartlepool, Middlesbrough, Redcar and Cleveland and Stockton-on-Tees Borough Councils)	Joint Minerals and Waste Core Strategy	Complete (Issues and Options – May 2007; Preferred Options – February 2008)	Complete (August 2009 and August 2010)	Complete (November 2010)	Complete (February 2011)	Complete (September 2011)	Joint Minerals and Waste DPDs have been prepared by the five Mineral Planning Authorities in Tees Valley. These DPDs were adopted in September 2011. No current proposals to review these DPDs.
	Joint Minerals and Waste Site Allocations	Complete (Issues and Options – May 2007; Preferred Options – February 2008)	Complete (August 2009 and August 2010)	Complete (November 2010)	Complete (February 2011)	Complete (September 2011)	
Gateshead Council	Joint Core Strategy and Urban Core Plan	Early engagement – January 2011, September 2011 and June 2012.	September 2013	February 2014	June to July 2014 and reconvened in October 2014	26 March 2015	Gateshead and Newcastle councils have prepared a joint Core Strategy and Urban Core Plan. Strategic policies for minerals are included in this document.

Mineral Planning Authority	Development Plan Document (DPD)	Early Engagement	Publication	Submission	Examination Hearings	Adoption	Comments
	Allocations and Policies Document ('Making Spaces for Growing Places')	Draft Plan – October to December 2017.	October to December 2018	Submitted 12 April 2019	June 2019	Adopted 1 February 2021	
Newcastle City Council	Joint Core Strategy and Urban Core Plan	Early engagement – January 2011, September 2011 and June 2012.	September 2013	February 2014	June to July 2014 and reconvened in October 2014	26 March 2015	Gateshead and Newcastle councils have prepared a joint Core Strategy and Urban Core Plan. Strategic policies for minerals are included in this document.
	Development and Allocations Document	Early engagement – January 2017 Draft Plan – October to November 2017	October to November 2018	Submitted 13 March 2019	July 2019	Adopted 24 June 2020	
North Tyneside Council	Local Plan	Issues and Options – December 2006; Preferred Options – July 2010; Consultation draft – November 2013.	2 November to 14 December 2015	30 June 2016	November 2016	Adopted 20 July 2017	

Mineral Planning Authority	Development Plan Document (DPD)	Early Engagement	Publication	Submission	Examination Hearings	Adoption	Comments
South Tyneside Council	Local Plan	Draft Plan consultation – August to October 2019	To be confirmed	To be confirmed	To be confirmed	To be confirmed	<p>The Core Strategy was adopted in June 2007, the Development Management Policies DPD in December 2011 and the Site Specific Allocations DPD in March 2012.</p> <p>Work is now taking place to review these documents as a single Local Plan document. The Local Development Scheme is currently being reviewed and the milestones for Publication through to adoption will be confirmed in due course.</p>
Sunderland City Council	Core Strategy and Development Plan	Draft Plan – 7 August to 4 October 2017	15 June to 27 July 2018	December 2018	May 2019	Adopted January 2020	Revised Local Development Scheme approved July 2020.
	Allocations and Designations Plan	Draft Plan consultation – 18 December 2020 to 12 February 2021	Spring 2021	Autumn 2021	2022	2022	

Source: Mineral Planning Authorities

Appendix 5: North East Aggregates Working Party – List of Members

Chair:

Claire Teasdale

Technical secretary:

Kevin Tipple

Central Government representative:

Ministry of Housing, Communities and Local Government – Hannah Henderson

Mineral Planning Authority representatives:

Darlington Borough Council – David Nelson

Durham County Council – Jason Mckewon

Gateshead Council – Chris Carr

Hartlepool Borough Council – Helen Smith

Middlesbrough Borough Council – Charlton Gibben

Newcastle City Council – Jon Rippon

North Tyneside Council – Claire Dobinson-Booth

Northumberland County Council – Kevin Tipple

Northumberland National Park Authority – Susannah Buylla

Redcar and Cleveland Borough Council – Rebecca Wren

South Tyneside Council – Rachel Cooper

Sunderland City Council – Jamie Simpson

Stockton on Tees Council – David Bage

Marine planning representative:

Marine Management Organisation – TBC

Aggregates industry representatives:

Aggregates Industries UK – Geoff Storey

British Aggregates Association (and Breedon) – Michael Hodges

CEMEX UK Marine – Graham Singleton

CEMEX UK Operations – Mark Kelly

Hanson Aggregates – Tom Brown

Mineral Products Association – Nick Horsley

Tarmac – Neil Beards

The Crown Estate representative:

The Crown Estate – Nick Everington

Membership as at 31 March 2021. Full contact details are available on request from the technical secretary.

Category	Click on the link to go to the tab
Landfill	Landfill inputs 2019
Landfill	Landfill input trends from 2000 to 2019
Landfill	Landfill capacity 2019
Landfill	Landfill capacity trends from 2000 to 2019
Transfer, Treatment and MRS	Transfer, treatment and MRS inputs 2019
Transfer, Treatment and MRS	Transfer, treatment and MRS input trends from 2000 to 2019
Incineration	Incineration inputs and capacity 2019
Land disposal	Land disposal inputs 2019
Use of waste	Use of waste inputs 2019
Hazardous waste	Hazardous waste management and deposits 2019
Hazardous waste	Hazardous waste deposits by fate 2019
Hazardous waste	Hazardous waste: trends data from 2000 to 2019

North East: Landfill inputs 2019

All figures are provided in 000s tonnes

Landfill Type	Sub-Region				NORTH EAST
	County Durham	Northumberland	Tees Valley Unitary Authorities	Tyne & Wear	
Hazardous Merchant			217		217
Hazardous Restricted					-
Non Hazardous with SNRHW cell	152	176	4		332
Non Hazardous	105		606	795	1,506
Non Hazardous Restricted					-
Inert	623	136		379	1,138
Total	880	312	827	1,174	3,193

Table Notes:

Data since 2005 has been reclassified into categories used under the PPC permitting of landfills and because of the ban on the co-disposal of waste in landfills in July 2004.

From 16 July 2004, hazardous landfills have only been able to accept wastes classified as hazardous under the Hazardous Waste Directive.

Some non-hazardous sites can accept some Stable Non Reactive Hazardous Wastes (SNRHW) into a dedicated cell, but this is usually a small part of the overall capacity of the site.

The above data do not include waste received by closed landfills for restoration purposes.

North East: Waste deposit trends: Landfill deposits by site type, waste type and sub-region from 2000/1 to 2019

All figures are provided in 000s tonnes

Year	Site Type	Waste type	Sub Region				NORTH EAST
			Durham	Northumberland	Tees Valley Unitary Authorities	Tyne & Wear	
2000/1	Co disposal	Inert/C&D	610	-	72	149	830
		HIC	790	-	339	270	1,398
		Hazardous	25	-	17	54	96
	Co disposal Total		1,425	-	427	473	2,324
	Non-inert	Inert/C&D	328	390	12	61	811
		HIC	90	291	118	394	894
		Hazardous	-	-	-	-	-
	Non-inert Total		418	682	131	475	1,704
	Inert only	Inert/C&D	293	1	4	21	318
		HIC	-	-	-	-	-
Hazardous		-	-	-	-	-	
Inert only Total		293	1	4	21	318	
Restricted-user	Inert/C&D	12	17	80	-	109	
	HIC	30	4	50	-	84	
	Hazardous	-	2	-	-	2	
Restricted-user Total		42	23	130	-	195	
2000/1 Total			2,477	705	692	968	4,542
2002/3	Co disposal	Inert/C&D	392	-	36	135	563
		HIC	617	-	326	416	1,359
		Hazardous	17	-	19	43	79
	Co disposal Total		1,026	-	381	594	2,001
	Non-inert	Inert/C&D	312	257	18	44	631
		HIC	98	448	77	202	825
		Hazardous	-	-	-	-	-
	Non-inert Total		410	705	95	246	1,456
	Inert only	Inert/C&D	-	284	-	-	284
		HIC	-	-	-	-	-
Hazardous		-	-	-	-	-	
Inert only Total		-	284	-	-	284	
Restricted-user	Inert/C&D	-	-	14	-	14	
	HIC	16	1	35	-	51	
	Hazardous	-	4	11	-	15	
Restricted-user Total		16	4	60	-	80	
2002/3 Total			1,452	993	536	840	3,821
2004/5	Hazardous	Inert/C&D	13	-	4	-	16
		HIC	129	-	29	-	158
		Hazardous	-	-	59	-	59
	Hazardous Total		142	-	91	-	233
	Non-inert	Inert/C&D	840	346	76	205	1,467
		HIC	461	332	678	612	2,083
		Hazardous	7	-	28	40	75
	Non-inert Total		1,309	678	782	856	3,625
	Inert only	Inert/C&D	-	519	-	-	519
		HIC	-	-	19	-	19
Hazardous		-	-	-	-	-	
Inert only Total		-	519	19	-	538	
Restricted-user	Inert/C&D	-	-	1	-	1	
	HIC	1	0	1	-	1	
	Hazardous	-	3	-	-	3	
Restricted-user Total		1	3	2	-	6	
2004/5 Total			1,451	1,201	894	856	4,402
2005	Hazardous	Inert/C&D	-	-	-	-	-
		HIC	-	-	-	-	-
		Hazardous	-	-	190	-	190
	Hazardous Total		-	-	190	-	190
	Non-inert	Inert/C&D	751	247	70	149	1,219
		HIC	553	333	1,041	407	2,334
		Hazardous	4	96	49	0	149
	Non-inert Total		1,308	676	1,161	556	3,701
	Inert only	Inert/C&D	473	556	0	113	1,142
		HIC	0	-	1	0	1
Hazardous		-	-	0	-	0	
Inert only Total		473	556	1	113	1,144	
Restricted-user	Inert/C&D	-	-	1	-	1	
	HIC	-	-	1	-	1	
	Hazardous	-	2	-	-	2	
Restricted-user Total		-	2	2	-	3	
2005 Total			1,782	1,233	1,353	670	5,038
2006	Hazardous	Inert/C&D	-00	-00	-00	-00	-
		HIC	-00	-00	0	-00	0
		Hazardous	-00	-00	168	-00	168
	Hazardous Total		-	-	168	-	168
	Non-inert	Inert/C&D	529	329	135	239	1,232
		HIC	439	365	920	418	2,142
		Hazardous	2	0	59	-	60
	Non-inert Total		969	694	1,114	657	3,434
	Inert only	Inert/C&D	440	466	-	335	1,241
		HIC	-	-	-	1	1
Hazardous		-	-	-	-	-	
Inert only Total		440	466	-	336	1,242	
Restricted-user	Inert/C&D	-	-	0	-	0	
	HIC	-	-	1	-	1	
	Hazardous	-	-	-	-	-	
Restricted-user Total		-	-	2	-	2	
2006 Total			1,409	1,160	1,284	993	4,846
2007	Hazardous	Inert/C&D	-	-	-00	-	-
		HIC	-	-	-00	-	-
		Hazardous	-	-	107	-	107
	Hazardous Total		-	-	107	-	107
	Non-inert	Inert/C&D	398	161	453	292	1,304
		HIC	351	331	824	536	2,042
		Hazardous	3	0	64	-	67
	Non-inert Total		751	492	1,342	828	3,414
	Inert only	Inert/C&D	525	382	-	288	1,195
		HIC	13	-	-	2	15
Hazardous		-	-	-	-	-	
Inert only Total		538	382	-	290	1,210	
Restricted-user	Inert/C&D	-	-	-	-	-	
	HIC	-	-	1	-	1	
	Hazardous	-	-	-	-	-	
Restricted-user Total		-	-	1	-	1	
2007 Total			1,289	874	1,450	1,118	4,731
2008	Hazardous	Inert/C&D	-	-	-	-	1
		HIC	-	-	-00	-	-
		Hazardous	-	-	178	-	178
	Hazardous Total		-	-	179	-	179
	Non-inert	Inert/C&D	296	48	198	397	939
		HIC	219	357	415	529	1,520
		Hazardous	1	-	36	-	37
	Non-inert Total		516	405	649	926	2,496
	Inert only	Inert/C&D	450	220	-	301	971
		HIC	2	-	-	0	2
Hazardous		-	-	-	-	-	
Inert only Total		452	220	-	301	973	
Restricted-user	Inert/C&D	-	-	-	-	-	
	HIC	-	-	1	-	1	
	Hazardous	-	-	-	-	-	
Restricted-user Total		-	-	1	-	1	
2008 Total			968	625	830	1,228	3,650

2009	Hazardous	Inert/C&D	-	-	2	-	2
		HIC	-	-	-00	-	-
		Hazardous	-	-	53	-	53
	Hazardous Total		-	-	55	-	55
	Non-inert	Inert/C&D	135	16	248	257	656
		HIC	230	235	449	504	1,418
		Hazardous	1	-	6	0	7
	Non-inert Total		366	251	702	761	2,081
	Inert only	Inert/C&D	563	139	-	308	1,010
		HIC	-	-	-	0	0
	Hazardous	-	-	-	-	-	
Inert only Total		563	139	-	309	1,011	
Restricted-user	Inert/C&D	-	-	-	-	0	
	HIC	-	-	-	-	0	
	Hazardous	-	-	-	-	-	
Restricted-user Total		-	-	0	-	0	
2009 Total		929	391	758	1,070	3,147	
2010	Hazardous	Inert/C&D	-	-	45	-	45
		HIC	-	-	0	-	0
		Hazardous	-	-	61	-	61
	Hazardous Total		-	-	107	-	107
	Non-inert	Inert/C&D	14	73	212	369	668
		HIC	125	249	498	443	1,315
		Hazardous	1	-	6	0	7
	Non-inert Total		140	322	716	813	1,991
	Inert only	Inert/C&D	717	47	-	336	1,099
		HIC	-	-	-	0	0
	Hazardous	-	-	-	-	-	
Inert only Total		717	47	-	336	1,100	
Restricted-user	Inert/C&D	-	-	-	-	-	
	HIC	-	-	-	-	-	
	Hazardous	-	-	-	-	-	
Restricted-user Total		-	-	-	-	-	
2010 Total		857	369	823	1,149	3,197	
2011	Hazardous	Inert/C&D	-	-	18	-	18
		HIC	-	-	2	-	2
		Hazardous	-	-	63	-	63
	Hazardous Total		-	-	83	-	83
	Non-inert	Inert/C&D	28	79	335	365	807
		HIC	144	273	395	270	1,082
		Hazardous	2	-	7	-	9
	Non-inert Total		173	352	737	635	1,898
	Inert only	Inert/C&D	518	6	-	259	783
		HIC	-	-	-	1	1
	Hazardous	-	-	-	-	-	
Inert only Total		518	6	-	259	784	
Restricted-user	Inert/C&D	-	-	-	-	-	
	HIC	-	-	-	-	-	
	Hazardous	-	-	-	-	-	
Restricted-user Total		-	-	-	-	-	
2011 Total		691	358	820	895	2,765	
2012	Hazardous	Inert/C&D	-	-	53	-	53
		HIC	-	-	3	-	3
		Hazardous	-	-	102	-	102
	Hazardous Total		-	-	157	-	157
	Non-inert	Inert/C&D	3	11	265	564	843
		HIC	145	66	401	315	927
		Hazardous	2	-	10	-	12
	Non-inert Total		149	77	677	879	1,782
	Inert only	Inert/C&D	565	-	-	285	850
		HIC	34	-	-	0	35
	Hazardous	-	-	-	-	-	
Inert only Total		599	-	-	285	885	
Restricted-user	Inert/C&D	-	-	-	-	-	
	HIC	-	-	-	-	-	
	Hazardous	-	-	-	-	-	
Restricted-user Total		-	-	-	-	-	
2012 Total		748	77	834	1,164	2,824	
2013	Hazardous	Inert/C&D	-	-	3	-	3
		HIC	-	-	-	-	-
		Hazardous	-	-	102	-	102
	Hazardous Total		-	-	105	-	105
	Non-inert	Inert/C&D	50	-	224	704	977
		HIC	76	-	310	292	678
		Hazardous	3	-	16	-	19
	Non-inert Total		129	-	550	996	1,675
	Inert only	Inert/C&D	483	-	-	403	886
		HIC	23	-	-	-	23
	Hazardous	-	-	-	-	-	
Inert only Total		506	-	-	403	909	
Restricted-user	Inert/C&D	-	-	-	-	-	
	HIC	-	-	-	-	-	
	Hazardous	-	-	-	-	-	
Restricted-user Total		-	-	-	-	-	
2013 Total		635	-	655	1,398	2,689	
2014	Hazardous	Inert/C&D	-	-	-	-	-
		HIC	-	-	-	-	-
		Hazardous	-	-	163	-	163
	Hazardous Total		-	-	163	-	163
	Non-inert	Inert/C&D	1	41	397	697	1,136
		HIC	48	5	278	266	596
		Hazardous	3	-	14	-	17
	Non-inert Total		52	46	689	963	1,749
	Inert only	Inert/C&D	660	-	-	434	1,093
		HIC	-	-	-	-	-
	Hazardous	-	-	-	-	-	
Inert only Total		660	-	-	434	1,093	
Restricted-user	Inert/C&D	-	-	-	-	-	
	HIC	-	-	-	-	-	
	Hazardous	-	-	-	-	-	
Restricted-user Total		-	-	-	-	-	
2014 Total		711	46	853	1,396	3,006	
2015	Hazardous	Inert/C&D	-	-	-	-	-
		HIC	-	-	-	-	-
		Hazardous	-	-	126	-	126
	Hazardous Total		-	-	126	-	126
	Non-inert	Inert/C&D	7	3	295	755	1,061
		HIC	56	9	329	315	710
		Hazardous	2	0	23	0	26
	Non-inert Total		66	13	647	1,071	1,796
	Inert only	Inert/C&D	719	-	-	535	1,254
		HIC	-	-	-	-	-
	Hazardous	0	-	-	-	0	
Inert only Total		719	-	-	535	1,254	
Restricted-user	Inert/C&D	-	-	-	-	-	
	HIC	-	-	-	-	-	
	Hazardous	-	-	-	-	-	
Restricted-user Total		-	-	-	-	-	
2015 Total		785	13	773	1,606	3,176	
2016	Hazardous	Inert/C&D	-	-	-	-	-
		HIC	-	-	-	-	-
		Hazardous	-	-	107	-	107
	Hazardous Total		-	-	107	-	107
	Non-inert	Inert/C&D	229	1	285	761	1,277
	HIC	84	-	288	285	657	
	Hazardous	3	-	12	-	15	
Non-inert Total		316	1	585	1,046	1,948	

	Inert only	Inert/C&D	352	216	-	508	1,076
		HIC	-	-	-	0	0
		Hazardous	-	-	-	-	-
	Inert only Total		352	216	-	508	1,077
2016 Total	Restricted-user	Inert/C&D	-	-	-	-	-
		HIC	-	-	-	-	-
		Hazardous	-	-	-	-	-
	Restricted-user Total		-	-	-	-	-
			668	218	692	1,554	3,132
2017	Hazardous	Inert/C&D	-	-	0	-	0
		HIC	-	-	-	-	-
		Hazardous	-	-	109	-	109
	Hazardous Total		-	-	110	-	110
	Non-inert	Inert/C&D	294	135	216	512	1,155
		HIC	72	177	270	168	688
		Hazardous	2	-	10	-	12
	Non-inert Total		368	312	495	680	1,855
	Inert only	Inert/C&D	726	219	-	441	1,385
		HIC	-	-	-	1	1
		Hazardous	12	-	-	-	12
	Inert only Total		738	219	-	442	1,399
Restricted-user	Inert/C&D	-	-	-	-	-	
	HIC	-	-	-	-	-	
	Hazardous	-	-	-	-	-	
Restricted-user Total		-	-	-	-	-	
			1,407	531	605	1,122	3,364
2018	Hazardous	Inert/C&D	-	-	-	-	-
		HIC	-	-	-	-	-
		Hazardous	-	-	160	-	160
	Hazardous Total		-	-	160	-	160
	Non-inert	Inert/C&D	175	41	-	613	829
		HIC	103	151	-	368	622
		Hazardous	2	-	-	0	3
	Non-inert Total		280	192	-	982	1,453
	Inert only	Inert/C&D	756	51	328	204	1,338
		HIC	-	-	276	3	279
		Hazardous	-	-	11	-	11
	Inert only Total		756	51	614	207	1,628
Restricted-user	Inert/C&D	-	-	-	-	-	
	HIC	-	-	-	-	-	
	Hazardous	-	-	-	-	-	
Restricted-user Total		-	-	-	-	-	
			1,035	243	774	1,189	3,241
2019	Hazardous	Inert/C&D	-	-	-	-	-
		HIC	-	-	-	-	-
		Hazardous	-	-	217	-	217
	Hazardous Total		-	-	217	-	217
	Non-inert	Inert/C&D	151	66	276	483	976
		HIC	104	110	323	312	849
		Hazardous	2	-	11	-	13
	Non-inert Total		257	176	610	795	1,838
	Inert only	Inert/C&D	623	136	-	-	759
		HIC	-	-	-	2	2
		Hazardous	-	-	-	377	377
	Inert only Total		623	136	-	379	1,138
Restricted-user	Inert/C&D	-	-	-	-	-	
	HIC	-	-	-	-	-	
	Hazardous	-	-	-	-	-	
Restricted-user Total		-	-	-	-	-	
			880	312	827	1,174	3,193

North East: Landfill capacity 2019

All figures are provided in 000s cubic metres

Landfill Type	Sub-Region				NORTH EAST
	County Durham	Northumberland	Tees Valley Unitary Authorities	Tyne & Wear	
Hazardous Merchant	-	-	6,852	-	6,852
Hazardous Restricted	-	-	-	-	-
Non Hazardous with SNRHW cell*	1,721	920	546	-	3,187
Non Hazardous	1,832	187	3,084	597	5,700
Non Hazardous Restricted	-	-	-	-	-
Inert	8,019	159	-	1,203	9,381
Total	11,572	1,266	10,482	1,800	25,120

*Some non-hazardous sites can accept some Stable Non Reactive Hazardous Wastes (SNRHW) into a dedicated cell, but this is usually a small part of the overall capacity of the site.

Table Notes:

Data for 2019 is classified into Landfill Directive categories..

2019 landfill capacity data was obtained from environmental monitoring reports required by permits or directly from the operator.

North East: Landfill capacity trends from 1998/99 to 2019

All figures are provided in 000s cubic metres

Year	Site Type	Sub Region				NORTH EAST
		Durham	Northumberland	Tees Valley Unitary Authorities	Tyne & Wear	
1998/99	Inert	100	50	50	-	200
	Non-Inert	8,450	4,500	20,723	5,300	38,973
	Restricted User	1,750	500	1,829	-	4,079
		10,300	5,050	22,602	5,300	43,252
2000/01	Inert	2,260	850	149	31	3,290
	Non-Inert	15,810	4,217	13,645	6,167	39,839
	Restricted User	90	141	917	-	1,148
		18,160	5,208	14,711	6,198	44,277
2004	Inert	1,810	814	358	1,350	4,332
	Non-Inert	11,700	2,898	19,563	9,289	43,450
	Restricted User	-	55	18	-	73
		13,510	3,766	19,939	10,639	47,855
2005	Inert	2,461	584	-	4,061	7,106
	Non-Inert	10,393	5,418	20,174	13,051	49,037
	Restricted User	-	-	17	-	17
		12,854	6,002	20,191	17,112	56,159
2006	Inert	4,175	392	-	3,834	8,402
	Non-Inert	16,048	5,419	26,537	12,261	60,265
	Restricted User	-	-	13	-	13
		20,223	5,811	26,550	16,095	68,679
2007	Inert	4,569	14	-	3,516	8,099
	Non-Inert	9,544	5,930	18,740	10,983	45,197
	Restricted User	-	-	11	-	11
		14,113	5,944	18,751	14,500	53,308
2008	Inert	4,384	-	-	3,398	7,783
	Non-Inert	8,644	5,724	17,084	10,324	41,775
	Restricted User	-	-	10	-	10
		13,028	5,724	17,094	13,722	49,568
2009	Inert	6,382	-	-	3,147	9,529
	Non-Inert	4,407	4,770	16,790	9,823	35,789
	Restricted User	-	-	-	-	-
		10,789	4,770	16,790	12,970	45,319
2010	Inert	5,891	3,000	-	2,943	11,834
	Non-Inert	4,860	1,626	15,075	9,245	30,806
	Restricted User	-	-	-	-	-
		10,751	4,626	15,075	12,188	42,640
2011	Inert	8,488	886	-	2,774	12,147
	Non-Inert	5,301	1,327	15,829	8,747	31,204
	Restricted User	-	-	-	-	-
		13,788	2,213	15,829	11,521	43,352
2012	Inert	8,110	871	-	2,589	11,570
	Non-Inert	4,226	1,302	14,977	8,260	28,764
	Restricted User	-	-	-	-	-
		12,336	2,172	14,977	10,849	40,334
2013	Inert	7,860	848	-	2,351	11,060
	Non-Inert	4,100	1,382	14,208	7,154	26,844
	Restricted User	-	-	-	-	-
		11,960	2,230	14,208	9,505	37,904
2014	Inert	8,008	848	-	2,338	11,194
	Non-Inert	4,100	1,363	13,876	6,834	26,174
	Restricted User	-	-	-	-	-
		12,108	2,212	13,876	9,173	37,368
2015	Inert	8,035	784	-	1,965	10,785
	Non-Inert	3,608	1,236	13,300	5,939	24,083
	Restricted User	-	-	-	-	-
		11,644	2,020	13,300	7,904	34,868
2016	Inert	7,340	1,205	-	1,692	10,237
	Non-Inert	3,765	1,235	11,548	5,483	22,030
	Restricted User	-	-	-	-	-
		11,105	2,440	11,548	7,174	32,267
2017	Inert	8,523	801	-	1,413	10,737
	Non-Inert	3,691	1,039	11,132	2,148	18,010
	Restricted User	-	-	-	-	-
		12,214	1,840	11,132	3,561	28,747
2018	Inert	7,623	764	-	1,336	9,723
	Non-Inert	3,477	1,121	10,906	1,174	16,678
	Restricted User	-	-	-	-	-
		11,101	1,884	10,906	2,510	26,401
2019	Inert	8,019	159	-	1,203	9,381
	Non-Inert	3,553	1,107	10,482	597	15,739
	Restricted User	-	-	-	-	-
		11,572	1,266	10,482	1,800	25,120

Non-Inert: Non hazardous landfill sites, non-hazardous landfill sites with a Stable Non Reactive Hazardous Waste Cell(SNHRW), merchant hazardous landfill sites
 Restricted User: Non-hazardous and hazardous restricted landfill sites.

North East: Transfer, treatment and metal recycling site inputs 2019

All figures are provided in 000s tonnes

Site Type	Sub-Region				NORTH EAST
	County Durham	Northumberland	Tees Valley Unitary Authorities	Tyne & Wear	
Hazardous waste	2	-	78	258	338
HIC	369	416	416	733	1,934
Clinical	2	-	-	111	113
Civic amenity site	36	35	76	87	234
Non Biodegradable	1	5	-	119	125
Transfer Total	410	456	570	1,308	2,744
Material recovery	116	108	364	58	646
Physical	101	235	1,001	387	1,724
Physico-chemical	-	-	204	42	246
Chemical	-	-	-	89	89
Composting	35	22	150	27	234
Biological	85	3	360	360	808
Treatment Total	337	368	2,079	963	3,747
Vehicle depollution	28	3	28	31	90
Metal recycling site	28	1	358	223	610
Metal Recycling Sector Total	56	4	386	254	700

North East: Waste deposit trends: Transfer & treatment deposits by site type, waste type and sub-region from 2000/1 to 2019

All figures are provided in 000s tonnes

Year	Site Type	Durham	Northumberland	Tees Valley Unitary Authorities	Tyne & Wear	NORTH EAST
2000/1	Transfer	418	166	352	1,212	2,148
		54	22	48	31	155
	Transfer Total	472	188	400	1,243	2,303
	Treatment	-	-	36	-	36
		-	119	73	77	269
		-	-	-	-	-
		-	6	-	-	6
	-	-	2	15	17	
Treatment Total	-	125	111	92	328	
MRS	13	14	97	173	296	
MRS Total	13	14	97	173	296	
2000/1 Total		485	326	608	1,508	2,927
2002/3	Transfer	336	169	247	1,137	1,889
		72	27	70	73	243
	Transfer Total	409	196	317	1,210	2,132
	Treatment	190	-	-	-	190
		-	-	3,095	114	3,209
		-	-	-	-	-
		5	16	-	-	21
	-	-	1	-	1	
Treatment Total	195	16	3,096	114	3,421	
MRS	11	4	170	156	340	
MRS Total	11	4	170	156	340	
2002/3 Total		615	216	3,584	1,479	5,893
2004/5	Transfer	353	248	391	1,411	2,402
		82	44	25	92	243
	Transfer Total	435	292	416	1,503	2,646
	Treatment	205	-	21	-	226
		-	0	7,055	126	7,182
		-	-	-	-	-
		5	27	-	10	42
	9	-	-	-	9	
Treatment Total	220	27	7,077	136	7,460	
MRS	3	4	3	8	18	
	11	1	294	257	562	
MRS Total	14	4	297	265	580	
2004/5 Total		669	324	7,789	1,904	10,686
2005	Transfer	364	210	488	1,373	2,434
		58	41	33	85	216
	Transfer Total	421	250	520	1,458	2,649
	Treatment	214	-	31	-	245
		-	10	7,772	141	7,923
		-	-	-	-	-
		21	35	0	12	68
	6	-	-	-	6	
Treatment Total	242	45	7,804	152	8,243	
MRS	10	5	4	9	28	
	12	1	299	193	505	
MRS Total	22	6	303	203	533	
2005 Total		685	301	8,627	1,813	11,425
2006	Transfer	404	205	580	1,251	2,441
		97	62	47	141	346
	Transfer Total	501	267	628	1,391	2,787
	Treatment	204	-	806	-	1,010
		-	9	6,612	132	6,752
		-	-	-	-	-
		51	59	9	15	134
	10	-	-	-	10	
Treatment Total	266	68	7,426	146	7,906	
MRS	11	3	4	22	40	
	14	1	308	215	538	
MRS Total	25	4	312	237	578	
2006 Total		792	340	8,366	1,775	11,272
2007	Transfer	391	232	532	1,463	2,618
		88	63	51	143	345
	Transfer Total	479	295	583	1,606	2,963
	Treatment	239	-	442	-	682
		-	29	5,804	105	5,937
		-	1	-	7	8
		59	70	19	15	163
	12	-	-	-	12	
Treatment Total	310	100	6,265	126	6,801	
MRS	16	3	4	23	47	
	14	1	142	203	360	
MRS Total	30	4	146	226	406	
2007 Total		820	399	6,994	1,958	10,171
2008	Transfer	368	241	528	1,365	2,503
		87	41	52	140	320
	Transfer Total	455	282	580	1,505	2,823
	Treatment	255	3	150	13	421
		-	29	63	104	196
		-	18	-	-	18
		56	65	24	17	163
	12	-	3,087	-	3,099	
Treatment Total	323	115	3,325	134	3,897	
MRS	12	3	7	9	31	
	11	2	205	212	430	
MRS Total	23	5	212	221	461	
2008 Total		801	401	4,118	1,860	7,180
2009	Transfer	324	190	397	1,334	2,246
		57	104	66	250	477
	Transfer Total	381	295	464	1,583	2,723
	Treatment	217	73	158	10	458
		104	56	55	113	328
		-	3	45	33	81
		-	-	-	21	21
	38	73	19	15	145	
	10	-	1,511	-	1,520	
Treatment Total	369	204	1,787	192	2,553	
MRS	10	10	6	29	55	
	11	3	318	194	526	
MRS Total	21	13	324	223	581	
2009 Total		771	512	2,574	1,999	5,857

2010	Transfer	Transfer	349	190	437	1,042	2,018	
		Civic amenity	70	57	56	168	350	
	Transfer Total		419	247	492	1,210	2,367	
	Treatment	Material recovery		141	82	206	48	478
		Physical		108	93	186	148	536
		Physico-chemical		-	0	103	30	134
		Chemical		-	3	-	29	32
		Composting		64	63	10	18	156
		Biological		10	-	1,345	43	1,398
	Treatment Total		324	241	1,851	317	2,733	
MRS	Vehicle depollution		7	2	9	9	28	
	Metal recycling		26	2	402	211	641	
MRS Total		33	4	411	221	669		
2010 Total			776	492	2,755	1,747	5,769	
2011	Transfer	Transfer	310	284	471	1,277	2,343	
		Civic amenity	77	40	53	82	252	
	Transfer Total		387	324	525	1,360	2,595	
	Treatment	Material recovery		107	87	250	73	517
		Physical		160	98	158	391	808
		Physico-chemical		-	0	152	39	192
		Chemical		-	5	-	-	5
		Composting		46	77	-	39	162
		Biological		7	-	2,699	130	2,836
	Treatment Total		320	267	3,260	672	4,519	
MRS	Vehicle depollution		6	2	30	5	43	
	Metal recycling		25	2	500	270	796	
MRS Total		31	3	530	275	839		
2011 Total			738	594	4,315	2,307	7,953	
2012	Transfer	Transfer	282	347	506	1,431	2,566	
		Civic amenity	70	42	62	88	262	
	Transfer Total		351	390	568	1,519	2,829	
	Treatment	Material recovery		142	113	276	59	589
		Physical		99	124	229	409	860
		Physico-chemical		-	0	137	32	170
		Chemical		-	4	-	-	4
		Composting		43	95	-	40	179
		Biological		8	-	2,433	154	2,595
	Treatment Total		291	336	3,076	694	4,397	
MRS	Vehicle depollution		13	19	31	4	66	
	Metal recycling		18	1	442	259	721	
MRS Total		31	20	473	263	787		
2012 Total			674	746	4,117	2,476	8,012	
2013	Transfer	Transfer	304	272	542	1,318	2,436	
		Civic amenity	54	42	58	79	233	
	Transfer Total		358	314	600	1,397	2,669	
	Treatment	Material recovery		73	129	229	52	483
		Physical		136	81	417	398	1,032
		Physico-chemical		-	-	178	45	222
		Chemical		-	-	-	-	-
		Composting		40	88	46	24	198
		Biological		13	-	2,307	191	2,511
	Treatment Total		263	297	3,177	710	4,446	
MRS	Vehicle depollution		18	17	30	13	78	
	Metal recycling		23	0	360	282	666	
MRS Total		41	17	390	295	744		
2013 Total			662	628	4,167	2,402	7,859	
2014	Transfer	Transfer	338	298	688	1,305	2,629	
		Civic amenity	58	46	95	83	283	
	Transfer Total		397	344	783	1,388	2,912	
	Treatment	Material recovery		5	158	380	57	599
		Physical		145	62	469	470	1,146
		Physico-chemical		-	-	201	54	256
		Chemical		-	-	-	-	-
		Composting		48	133	89	24	294
		Biological		36	-	1,371	226	1,632
	Treatment Total		234	353	2,509	831	3,926	
MRS	Vehicle depollution		12	2	29	32	76	
	Metal recycling		18	-	343	291	652	
MRS Total		30	2	372	323	728		
2014 Total			661	699	3,665	2,542	7,566	
2015	Transfer	Transfer	387	400	541	1,296	2,624	
		Civic amenity	48	43	67	89	247	
	Transfer Total		435	443	608	1,385	2,871	
	Treatment	Material recovery		118	137	355	63	673
		Physical		89	91	810	493	1,483
		Physico-chemical		-	-	69	59	128
		Chemical		-	-	-	-	-
		Composting		40	46	71	19	176
		Biological		59	4	726	206	995
	Treatment Total		306	278	2,030	840	3,454	
MRS	Vehicle depollution		27	3	27	6	63	
	Metal recycling		17	-	304	224	546	
MRS Total		44	3	331	230	608		
2015 Total			785	724	2,969	2,455	6,934	
2016	Transfer	Transfer	359	406	494	1,387	2,646	
		Civic amenity	67	39	73	99	277	
	Transfer Total		425	445	567	1,486	2,924	
	Treatment	Material recovery		151	160	284	56	651
		Physical		97	159	788	466	1,509
		Physico-chemical		1	-	32	61	94
		Chemical		-	-	-	-	-
		Composting		43	42	24	31	140
		Biological		94	4	586	233	917
	Treatment Total		385	366	1,715	846	3,312	
MRS	Vehicle depollution		22	3	24	31	80	
	Metal recycling		15	3	334	221	572	
MRS Total		37	5	358	252	652		
2016 Total			847	816	2,640	2,584	6,887	
2017	Transfer	Transfer	376	366	557	1,291	2,590	
		Civic amenity	60	40	76	104	280	
	Transfer Total		436	407	632	1,395	2,870	
	Treatment	Material recovery		138	133	280	68	619
		Physical		404	264	340	470	1,477
		Physico-chemical		165	-	26	64	255
		Chemical		-	-	-	82	82
		Composting		40	39	93	30	201
		Biological		219	4	622	405	1,250
	Treatment Total		966	440	1,361	1,120	3,886	
MRS	Vehicle depollution		23	3	26	37	90	
	Metal recycling		15	1	384	228	627	
MRS Total		37	4	410	265	716		
2017 Total			1,439	850	2,403	2,780	7,472	
	Transfer	Transfer	336	279	468	1,357	2,440	
		Civic amenity	58	40	82	102	281	
	Transfer Total		394	319	550	1,459	2,721	

2018	Treatment	Material recovery	130	131	318	57	636
		Physical	91	117	1,153	342	1,703
		Physico-chemical	203	-	23	63	288
		Chemical	-	-	-	70	70
		Composting	1	24	161	36	223
		Biological	88	4	362	437	891
	Treatment Total		513	276	2,017	1,005	3,811
	MRS	Vehicle depollution	27	4	23	30	85
		Metal recycling	13	0	374	240	627
	MRS Total		40	4	397	270	712
2018 Total		947	599	2,964	2,735	7,244	
2019	Transfer	Transfer	374	421	494	1,221	2,510
		Civic amenity	36	35	76	87	234
	Transfer Total	410	456	570	1,308	2,744	
	Treatment	Material recovery	116	108	364	58	646
		Physical	101	235	1,001	387	1,724
		Physico-chemical	-	-	204	42	246
		Chemical	-	-	-	89	89
		Composting	35	22	150	27	234
	Biological	85	3	360	360	808	
	Treatment Total		337	368	2,079	963	3,747
MRS	Vehicle depollution	28	3	28	31	90	
	Metal recycling	28	1	358	223	610	
MRS Total		56	4	386	254	700	
2019 Total		803	828	3,035	2,525	7,191	

North East: Incineration throughput 2019

All figures provided in 000s tonnes

Incineration Type	Sub-Region				NORTH EAST
	County Durham	Northumberland	Tees Valley Unitary Authorities	Tyne & Wear	
Animal By-Product	-	-	-	-	-
Animal Carcasses	-	-	-	-	-
Clinical	-	-	-	-	-
Co-Incineration of Hazardous Waste	-	-	-	-	-
Co-Incineration of Non Hazardous Waste	-	-	-	-	-
Hazardous	-	-	23	-	23
Municipal and/or Industrial & Commercial	-	-	1,102	-	1,102
Sewage Sludge	-	-	-	-	-
Biomass/Waste Wood	116	-	476	-	592
Total	116	-	1,601	-	1,717

Table Notes:

This datatable is for operational incineration facilities that accepted waste from off-site sources. It does not include facilities that burned waste from their own in-house processes or were non or pre-operational.

North East: Incineration capacity 2019

All figures provided in 000s tonnes

Incineration Type	Sub-Region				NORTH EAST
	County Durham	Northumberland	Tees Valley Unitary Authorities	Tyne & Wear	
Animal By-Product	-	-	-	-	-
Animal Carcasses	-	-	-	-	-
Clinical	-	-	-	-	-

Co-Incineration of Hazardous Waste	-	-	-	-
Co-Incineration of Non Hazardous Waste	-	-	-	-
Hazardous	-	-	48	48
Municipal and/or Industrial & Commercial	-	-	1,256	1,256
Sewage Sludge	-	-	-	-
Biomass/Waste Wood	125	-	550	675
Total	-	-	1,854	1,979

Table Notes:

This datatable is for operational incineration facilities that accepted waste from off-site sources. It does not include facilities that burned waste from their own in-house processes or were non or pre-operational.

North East: Borehole and lagoon inputs 2019

All figures are provided in 000s tonnes

Site Type	Sub-Region				NORTH EAST
	County Durham	Northumberland	Tees Valley Unitary Authorities	Tyne & Wear	
Borehole	-	-	-	-	-
Lagoon	-	-	-	-	-
Total	-	-	-	-	-

North East: Deposit in landfill for recovery inputs 2019

All figures are provided in 000s tonnes

Site Type	Sub-Region				NORTH EAST
	County Durham	Northumberland	Tees Valley Unitary Authorities	Tyne & Wear	
Deposit in landfill for recovery	23	1	102	-	126
Total	23	1	102	-	126

Note: This activity is the deposit of waste in land for benefit and recovery purposes. Landfilling is the deposit in land for the purposes of final disposal. Both activities require an environmental permit under the Environmental Permitting Regulations.

North East: Use of waste inputs 2019

All figures provided in 000s tonnes

Site Type	Sub Region				NORTH EAST
	County Durham	Northumberland	Tees Valley Unitary Authorities	Tyne & Wear	
Use of waste in construction	-	-	-	-	-
Use of waste in reclamation	-	-	-	-	-
Use of waste for timber manufacturing	9	-	-	-	9
Total	9	-	-	-	9

Note: These activities are for use of waste permitted under Standard Rules Permits for waste operations.

North East: Hazardous waste managed by EWC chapter and former planning sub-region 2019 (tonnes)

EWC Chapter	EWC Chapter Description	County Durham	Northumberland	Tees Valley Unitary Authorities	Tyne & Wear	NORTH EAST
01	Mining and Minerals	-	0	5,550	319	5,869
02	Agricultural and Food Production	0	4	350	18	372
03	Wood and Paper Production	-	-	1	14	14
04	Leather and Textile Production	-	-	55	-	55
05	Petrol, Gas and Coal Refining/Treatment	0	22	78	0	101
06	Inorganic Chemical Processes	829	253	711	290	2,083
07	Organic Chemical Processes	4,114	3,884	179,578	11,948	199,523
08	MFSU Paints, Varnish, Adhesive and Inks	1,016	739	1,721	3,931	7,407
09	Photographic Industry	9	8	74	43	135
10	Thermal Process Waste (Inorganic)	1,020	3,175	21,238	72	25,505
11	Metal Treatment and Coating Processes	737	147	262	2,763	3,909
12	Shaping/Treatment of Metals and Plastics	610	94	2,253	945	3,901
13	Oil and Oil/Water Mixtures	3,924	2,900	23,817	11,568	42,209
14	Solvents	242	1,009	965	511	2,727
15	Packaging, Cloths, Filter Materials	1,129	595	3,263	3,415	8,402
16	Not Otherwise Specified*	4,208	1,210	15,016	7,458	27,892
17	C&D Waste and Asbestos	5,429	3,308	23,229	14,731	46,697
18	Healthcare	1,393	440	1,277	2,486	5,597
19	Waste Treatment /Water Treatment and Water Industry	5,301	1,770	229,761	158	236,991
20	Municipal and Similar Commercial Wastes	3,437	1,161	4,333	4,375	13,106
Total		33,399	20,718	513,532	64,846	632,496

Notes:

The Environment Agency is required to monitor registered hazardous waste movements. The data published here is a summary of these movements. The same waste may be moved between multiple facilities and each separate movement is recorded. This double counting should be taken into account when using this data.

EWC Chapter 16 contains a mix of coded wastes including wastes from end-of-life vehicles, waste electrical and electronic equipment, batteries, spent catalysts and aqueous solutions

North East: Hazardous waste deposited by EWC chapter and former planning sub-region 2019 (tonnes)

EWC Chapter	EWC Chapter Description	County Durham	Northumberland	Tees Valley Unitary Authorities	Tyne & Wear	NORTH EAST
01	Mining and Minerals	-	78	7,392	0	7,469
02	Agricultural and Food Production	-	1	193	0	194
03	Wood and Paper Production	-	-	1	-	1
04	Leather and Textile Production	-	-	55	-	55
05	Petrol, Gas and Coal Refining/Treatment	-	132	69	-	201
06	Inorganic Chemical Processes	-	2,032	1,211	125	3,368
07	Organic Chemical Processes	-	411	174,297	47,045	221,753
08	MFSU Paints, Varnish, Adhesive and Inks	-	6	1,833	575	2,415
09	Photographic Industry	1	-	3	12	15
10	Thermal Process Waste (Inorganic)	-	357	25,465	54	25,875
11	Metal Treatment and Coating Processes	-	2,548	1,318	3,380	7,246
12	Shaping/Treatment of Metals and Plastics	-	3	4,889	598	5,490
13	Oil and Oil/Water Mixtures	0	346	35,624	4,186	40,157
14	Solvents	-	-	509	128	637
15	Packaging, Cloths, Filter Materials	0	12	5,977	491	6,479
16	Not Otherwise Specified*	989	796	14,490	15,186	31,461
17	C&D Waste and Asbestos	2,292	3	99,590	1,118	103,004
18	Healthcare	1,346	0	1	1,555	2,902
19	Waste Treatment /Water Treatment and Water Industry	-	2,123	288,141	471	290,736
20	Municipal and Similar Commercial Wastes	72	414	2,019	6,911	9,417
Total		4,700	9,264	663,076	81,836	758,876

Notes:

The Environment Agency is required to monitor registered hazardous waste movements. The data published here is a summary of these movements. The same waste may be moved between multiple facilities and each separate movement is recorded. This double counting should be taken into account when using this data.

EWC Chapter 16 contains a mix of coded wastes including wastes from end-of-life vehicles, waste electrical and electronic equipment, batteries, spent catalysts and aqueous solutions

North East: Hazardous waste deposited by fate and former planning sub-region 2019 (tonnes)

Waste Fate	County Durham	Northumberland	Tees Valley Unitary Authorities	Tyne & Wear	NORTH EAST
Incineration with energy recovery	-	-	7	-	7
Incineration without energy recovery	-	-	19,978	-	19,978
Landfill	2,281	-	227,426	0	229,707
Long term storage	-	-	-	-	-
Other Fate	-	-	-	-	-
Recovery	867	2,600	50,603	45,752	99,823
Rejected	-	-	83	37	120
Transfer (D)	1,360	5,752	10,294	3,031	20,437
Transfer (R)	191	884	16,797	10,223	28,095
Treatment	-	28	337,888	22,792	360,707
Total	4,700	9,264	663,076	81,836	758,875

Notes:

The Environment Agency is required to monitor registered hazardous waste movements. The data published here is a summary of these movements. The same waste may be moved between multiple facilities and each separate movement is recorded. This double counting should be taken into account when using this data.

Transfer (D) means transfer before disposal, Transfer (R) means transfer before recovery.

In previous years Recovery was called Recycling/reuse.

In previous years the Landfill category included deep injection, land treatment and surface impoundment. These are now included in Other Fate.

North East: Hazardous waste trends from 1998 to 2019

The Environment Agency is required to monitor registered hazardous waste movements. The data published here is a summary of these movements. The same waste may be moved between multiple facilities and each separate movement is recorded. This double counting should be taken into account when using this data. EWC Chapter 16 contains a mix of coded wastes including wastes from end-of-life vehicles, waste electrical and electronic equipment, batteries, spent catalysts and aqueous solutions. 2005 data is not included in the above tables; a new hazardous waste management system and database was introduced in mid 2005 to coincide with the introduction of the new Hazardous Waste Regulations, classification and data collection changes introduced some inconsistency and some data was lost as new systems took a little time to become fully operational. In previous years Recovery was called Recycling/Reuse. In previous years the Landfill category included deep injection, land treatment and surface impoundment. These are now included in Other Fate.

North East: Hazardous waste managed by EWC chapter from 1998 to 2019 (tonnes)

EWC Chapter	EWC Chapter Description	1998/9	2000	2001	2002	2003	2004	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
01	Mining and Minerals	4,834	6,375	4,634	6,391	7,617	7,121	19,852	12,697	5,547	5,776	10,693	3,911	4,897	8	50	2	40	48	71	5,869
02	Agricultural and Food Production	1,091	1,757	1,215	873	454	385	276	253	356	397	656	53	50	18	26	10	23	274	569	372
03	Wood and Paper Production	141	97	51	210	324	227	175	48	21	44	32	23	59	1	2	1	-	2	0	14
04	Leather and Textile Production	7	120	5	2	6	0	18	7	8	3	0	1	5	1	27	-	0	2	15	55
05	Petrol, Gas and Coal Refining/Treatment	11,690	14,277	7,368	7,907	9,525	11,908	15,899	2,176	957	1,484	880	1,535	472	343	630	184	4,407	1,509	92	101
06	Inorganic Chemical Processes	16,048	17,545	11,513	12,939	8,738	8,226	14,053	15,860	16,625	13,752	15,172	21,037	19,827	2,295	2,092	4,284	3,498	3,482	2,873	2,083
07	Organic Chemical Processes	31,292	36,391	43,767	43,841	29,561	28,412	18,135	17,626	19,500	19,333	16,781	17,646	18,063	58,713	162,075	196,622	215,102	195,225	212,637	199,523
08	MFSU Paints, Varnish, Adhesive and Inks	11,377	10,618	9,061	9,729	7,894	8,124	7,204	7,715	10,178	8,750	9,828	8,962	8,403	5,189	5,813	5,967	5,909	7,555	7,727	7,407
09	Photographic Industry	1,646	1,644	1,617	1,862	1,821	1,429	2,193	1,834	1,613	1,216	997	863	838	346	273	221	191	172	158	135
10	Thermal Process Waste (Inorganic)	1,503	1,576	2,714	4,233	5,027	2,864	2,113	1,757	1,512	962	1,413	1,486	1,465	13,468	28,000	19,888	21,899	20,292	27,576	25,505
11	Metal Treatment and Coating Processes	9,647	5,915	9,620	10,352	9,057	9,060	6,687	8,405	10,912	6,063	5,074	5,615	6,505	4,458	4,428	3,943	4,572	4,187	3,689	3,909
12	Shipping/Treatment of Metals and Plastics	4,798	3,845	4,760	3,793	5,105	5,236	2,551	3,275	2,931	4,455	3,918	3,569	4,418	3,104	3,102	3,139	2,833	4,272	4,066	3,901
13	Oil and Oil/Water Mixtures	82,371	94,520	109,152	107,207	86,078	80,423	113,481	91,112	88,823	79,016	79,727	81,279	76,310	40,945	31,789	32,469	33,253	38,069	42,491	42,209
14	Solvents	3,999	2,370	3,133	2,341	2,068	2,510	1,844	1,798	1,748	1,062	1,199	1,722	2,130	2,203	2,323	2,553	1,442	3,554	3,761	4,277
15	Packaging, Cloths, Filter Materials	3,580	4,800	3,609	3,984	3,576	4,968	5,568	5,652	5,407	5,937	5,875	6,274	6,755	4,405	5,292	5,660	6,318	7,591	7,886	8,402
16	Not Otherwise Specified*	122,082	28,343	38,757	38,921	22,444	20,313	44,997	52,105	50,523	53,233	49,885	62,182	69,784	34,536	26,230	35,354	34,480	36,325	30,076	27,882
17	C&D Waste and Asbestos	93,057	171,067	237,563	142,691	153,907	212,402	70,370	86,201	57,362	42,382	58,403	68,927	74,232	31,910	30,354	58,374	38,742	35,508	46,697	46,697
18	Healthcare	1,465	1,629	1,274	1,351	1,260	2,174	11,825	13,964	13,159	15,562	13,377	17,723	18,408	8,082	8,345	8,871	9,203	8,801	7,141	5,597
19	Waste/Water Treatment and Water Industry	14,842	21,134	20,992	17,438	7,576	10,895	36,716	46,039	25,957	22,184	15,564	16,370	13,589	88,206	110,626	99,852	111,516	134,978	189,839	236,991
20	Municipal and Similar Commercial Wastes	24,979	2,842	4,533	3,584	2,758	2,726	18,265	24,823	25,230	27,067	22,774	25,190	23,606	8,364	14,592	15,535	14,234	12,036	14,025	13,106
99	Unclassified	6,650	4,851	5,583	5,515	13,020	2,605	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		447,100	431,797	520,920	425,164	377,816	422,110	392,220	393,247	338,367	308,679	312,047	344,369	349,816	306,593	436,071	488,498	527,296	517,918	590,001	632,496

North East: Hazardous waste deposited by EWC chapter from 1998 to 2019 (tonnes)

EWC Chapter	EWC Chapter Description	1998/9	2000	2001	2003	2004	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
01	Mining and Minerals	6,460	8,940	5,952	5,079	2,498	4,232	17,878	15,004	10,706	10,523	12,863	3,600	6,031	16,090	4	18,546	7,950	16,841	10,356	7,469
02	Agricultural and Food Production	1,120	261	295	339	291	271	215	107	20	22	42	16	19	6	474	10	29	260	444	194
03	Wood and Paper Production	307	293	177	123	42	60	1	11	15	22	3	8	38	21	14	5	1	2	1	1
04	Leather and Textile Production	88	321	236	113	9	2	17	6	19	2	44	-	2	1	27	-	-	-	14	55
05	Petrol, Gas and Coal Refining/Treatment	15,756	10,779	10,476	8,667	5,150	9,014	11,905	1,395	368	573	681	3,328	1,459	1,686	2,496	733	3,258	804	71	201
06	Inorganic Chemical Processes	23,456	19,504	19,342	17,943	13,399	11,601	15,127	14,500	1,122	599	392	571	2,786	5,730	7,990	19,231	8,077	8,947	6,113	3,368
07	Organic Chemical Processes	83,488	85,824	98,044	75,026	34,262	16,566	9,035	18,919	13,142	11,496	3,859	2,794	3,308	95,037	206,356	217,349	230,703	209,164	229,023	221,753
08	MFSU Paints, Varnish, Adhesive and Inks	15,294	12,993	12,940	10,380	6,906	4,851	3,232	4,265	4,612	4,787	4,103	4,404	4,176	1,506	1,792	1,741	2,525	2,497	2,317	2,415
09	Photographic Industry	3,381	5,065	5,975	2,187	2,031	1,267	869	734	725	548	543	525	431	25	39	11	9	9	12	15
10	Thermal Process Waste (Inorganic)	576	1,479	3,860	4,677	6,542	2,843	498	207	418	133	222	198	115	22,519	16,410	12,835	17,157	13,026	25,270	25,875
11	Metal Treatment and Coating Processes	12,576	14,788	17,505	18,181	13,531	13,818	16,949	17,008	5,679	6,006	4,080	3,900	3,937	3,338	3,799	3,497	5,474	4,757	6,220	7,246
12	Shipping/Treatment of Metals and Plastics	7,781	8,168	8,847	6,589	5,524	2,725	3,371	3,439	3,142	2,658	1,796	1,680	1,680	3,396	3,610	3,978	3,916	5,754	5,901	5,490
13	Oil and Oil/Water Mixtures	107,843	101,339	124,370	122,497	111,910	141,493	129,877	99,099	104,536	96,081	78,904	79,045	84,049	30,334	28,616	27,734	30,295	35,707	38,400	40,157
14	Solvents	31,993	14,336	7,235	3,968	2,161	2,088	919	723	726	639	813	880	928	631	557	471	694	1,892	2,041	637
15	Packaging, Cloths, Filter Materials	6,146	6,921	5,581	5,162	2,860	3,607	4,514	4,628	4,839	6,003	5,693	5,320	4,928	1,459	3,433	2,462	4,612	4,833	4,615	6,479
16	Not Otherwise Specified*	226,910	83,249	50,196	47,492	27,458	27,938	37,652	47,326	41,021	43,490	29,578	32,463	32,343	25,382	16,656	31,332	36,412	38,012	27,471	31,461
17	C&D Waste and Asbestos	342,786	336,339	471,702	500,012	243,574	260,456	69,393	74,283	52,226	52,075	27,445	46,410	55,493	93,102	131,435	138,227	133,314	65,035	68,974	103,004
18	Healthcare	609	623	666	1,843	555	915	5,986	8,375	7,439	10,526	7,111	11,007	10,786	8,174	8,617	8,880	9,894	8,999	6,974	2,922
19	Waste/Water Treatment and Water Industry	35,125	31,229	35,694	35,122	14,172	24,409	40,325	58,796	65,853	42,823	27,655	25,265	35,832	87,340	107,377	118,428	123,789	155,015	218,053	290,736
20	Municipal and Similar Commercial Wastes	30,021	9,915	8,458	5,552	2,135	1,604	9,942	11,233	14,348	12,164	8,223	11,686	12,134	8,120	21,461	10,356	6,468	4,663	6,463	9,417
99	Unclassified	13,279	10,277	12,845	7,117	20,528	1,728	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		964,985	792,643	900,496	878,070	515,540	531,488	378,770	381,458	330,956	303,169	314,152	231,100	240,476	404,096	563,163	616,427	623,817	576,217	658,933	758,975

North East: Hazardous waste deposited by fate from 1998 to 2019 (tonnes)

Year	Incineration with energy recovery	Incineration without energy recovery	Landfill	Long term storage	Recovery	Transfer (Short term)	Treatment	Other	Total
1998/9	23,131	82	-	60	22,901	22,319	260,289	6,272	335,054
2000	21,008	128	487,630	2	21,265	26,121	216,191	0	772,354
2001	23,182	132	614,983	6	27,138	43,715	178,364	-	887,520
2002	18,469	152	582,251	1	23,392	47,306	206,49		

Remaining landfill capacity: England as at end 2019

Version 1

This data is provided by operators of permitted landfill sites.

Use of the data

This data is provided under a conditional licence that can be found at:

<https://www.gov.uk/government/publications/environment-agency-conditional-licence/environment-agency-conditional-licence>**Total remaining landfill capacity 371,257,946**

Original Permit Reference	Operator Name	Facility Name	Facility Address	EA Area	Former Planning Region	Former Planning Sub Region	Local Authority	Site Type	Remaining Capacity end 2019 (cubic metres)
10264	HH AND DE DREW LTD	LOWER FARM LANDFILL	Lower Farm, Lower Pennington, New Milton SO41 8DF	Solent and South Downs	South East	Hampshire	New Forest	L05 - Inert Landfill	0
10285	Westridge Developments Ltd	Lynn Pit Landfill	Briddlesford Road, Down End PO30 2PD	Solent and South Downs	South East	Lynn	Isle of Wight	L05 - Inert Landfill	27,326
19737	Inert Waste Recycling Limited	Boxgrove Landfill	Tinwood Lane, Eartham, Chichester, West Sussex, PO18 0NB	Solent and South Downs	South East	West Sussex	Chichester	L05 - Inert Landfill	230,000
21785	Leese's Limited	Kenbury Wood Landfill	Kenbury Wood, Exminster EX6 7XD	Devon & Cornwall	South West	Devon	Teignbridge	L05 - Inert Landfill	106,957
23517	Harley Jack	Chitterne Waste Management Facility	Valley Farm, Chitterne, Warmminster, Wiltshire, BA12 0LT,	Wessex	South West	Wiltshire	Wiltshire	L05 - Inert Landfill	0
27007	Phillips David	Willow Farm Landfill Site	Willow Farm, Wellow, Bath, Avon, BA2 8PU, Shireoak Quarry, Chester Road, Shire Oak, Walsall, Staffordshire, WS9 9PE,	Wessex	South West	Bath, Bristol and S Glo	Bath and North East Somerset	L05 - Inert Landfill	0
40059	Tarmac Ltd	Shireoak Quarry	Shireoak Quarry, Chester Road, Shire Oak, Walsall, Staffordshire, WS9 9PE,	Staffs Warks and West Mids	West Midlands	Staffordshire	Tamworth	L05 - Inert Landfill	1,251,278
42901	RMC Aggregates (Western) Ltd	Aldridge Quarry	Birch Lane, Aldridge WS9 0NF	Staffs Warks and West Mids	West Midlands	West Midlands Met Districts	Walsall	L05 - Inert Landfill	0
43566	Acresford Sand and Gravel Ltd	Huncote Quarry	Huncote Quarry, Forest Road, Huncote, Leicester LE9 3LE	Derbys Notts and Leics	East Midlands	Leicestershire	Blaby	L05 - Inert Landfill	0
43762	WRG Waste Services Ltd	SERLBY LANDFILL	Serlby Sand Quarry, Doncaster DN10 6BP	Derbys Notts and Leics	East Midlands	Nottinghamshire	Bassetlaw	L05 - Inert Landfill	1,350,000
43765	Walsall Concrete Ltd	Cranebrook Landfill	A5 Watling Street, Muckley Corner, Brownhills WS14 0BD	Staffs Warks and West Mids	West Midlands	Staffordshire	Lichfield	L05 - Inert Landfill	609,714
46134	Seisdon U K Ltd	Seisdon Landfill	Seisdon Landfill Site, Ebstree Road, Seisdon, Staffordshire, WV5	Staffs Warks and West Mids	West Midlands	Staffordshire	South Staffordshire	L05 - Inert Landfill	31,200
47190	Blockleys Brick Limited	New Acres Landfill Site	Somerfeld Road, Trench Lock TF1 5RY	Shrops Heref Worns and Glos	West Midlands	Shropshire	Telford and Wrekin	L05 - Inert Landfill	750,000
50490	Gaskell Bros (WM. & C) Ltd	Southworth Quarry Landfill Site	Southworth Quarry, Winwick Lane, Croft WA3 7BW	Gr Mancs Mersey and Ches	North West	Cheshire	Warrington	L05 - Inert Landfill	760,000
54488	Inglenorth Limited	Round 'O' Quarry	Cobbs Brow Lane, Wigan WN8 7ND	Cumbria and Lancashire	North West	Lancashire	West Lancashire	L05 - Inert Landfill	0
64063	Owen Pugh & Co Ltd	Marsden Quarry Landfill	Coast Road, Whitburn, Sunderland SR6 7NG	Northumberland Durham and Tees	North East	Tyne & Wear	South Tyneside	L05 - Inert Landfill	854,967
64158	AMC Reclamation Ltd	Field House Quarry	Field House Farm, Houghton-le-Spring DH5 8AJ	Northumberland Durham and Tees	North East	Tyne & Wear	Sunderland	L05 - Inert Landfill	347,785
65203	Flappit Tipping And Recycling Limited	Hallas Rough Quarry	Black Moor, Cullingworth, Bradford BD13 5DE	Yorkshire	Yorkshire & Humber	West Yorkshire	Bradford	L05 - Inert Landfill	950,000
66067	Land Regeneration & Development Ltd	Smaws Quarry	Land/premises At, Rudgate, Toulston, Tadcaster, North Yorkshire, LS24 9LY,	Yorkshire	Yorkshire & Humber	North Yorkshire	Selby	L05 - Inert Landfill	0
66206	W & M Thompson (Quarries) Ltd	Bishop Middleham Quarry 2	Bishop Middleham DL17 9EB	Northumberland Durham and Tees	North East	Durham	County Durham	L05 - Inert Landfill	4,083,594
71266	S Walsh & Son Ltd	EAST TILBURY QUARRY LANDFILL	Princess Margaret Road, Grays RM18 8PH	Essex Norfolk and Suffolk	East of England	Essex	Thurrock	L05 - Inert Landfill	490,000
72012	Harmston Waste Management Ltd	Harmston Quarry	Harmston Quarry, Harmston Heath, Lincoln, Lincolnshire, LN4 2JA,	Lincs and Northants	East Midlands	Lincolnshire	North Kesteven	L05 - Inert Landfill	100,000
73153	Barton Plant Limited	Long Drowpits	The Boughton Estate, Kettering NN16 9UX	Lincs and Northants	East Midlands	Northamptonshire	Kettering	L05 - Inert Landfill	849,779
73156	Mick George Haulage Ltd	Rectory Farm Quarry	Rectory Farm, Titchmarsh Road, Thrapston, Kettering NN14 4NJ	Lincs and Northants	East Midlands	Northamptonshire	East Northamptonshire	L05 - Inert Landfill	0
73235	Kirton Lindsey Ltd	KIRTON LINDSEY LANDFILL SITE	Gainsthorpe Road, Gainsborough Dn21 4JH	Lincs and Northants	Yorkshire & Humber	Former Humberside	North Lincolnshire	L05 - Inert Landfill	12,750,000
73278	Harlestone Quarry Landfill Site	Harlestone Quarry	Harlestone Road, Harlestone, Northampton NN7 4EJ	Lincs and Northants	East Midlands	Northamptonshire	Daventry	L05 - Inert Landfill	0
73280	Peter Bennie Limited	Boughton Quarry Landfill	Boughton Quarry, Brampton Lane, Boughton NN6 8AA	Lincs and Northants	East Midlands	Northamptonshire	Daventry	L05 - Inert Landfill	0
73281	Lafarge Aggregates Limited	Husbands Bosworth Landfill Site	Welford Road, Husbands Bosworth LE17 6JH	Lincs and Northants	East Midlands	Leicestershire	Harborough	L05 - Inert Landfill	21,019
73340	Mick George Limited	Southorpe Quarry	Sutton Road, Nr Peterborough PE9 3BZ	Lincs and Northants	East of England	Cambridgeshire	Peterborough	L05 - Inert Landfill	0
75015	Hall Brothers Ltd	Whitsundoles Farm	Land At Whitsundoles Farm, Broughton Road, Salford, Milton Keynes, Buckinghamshire,	Cambs and Bedfordshire	East of England	Bedfordshire	Central Bedfordshire	L05 - Inert Landfill	0
75113	Mick George Haulage Ltd	Witcham Meadlands Landfill	Block Fen Drive, Mepal CB6 2AY	Cambs and Bedfordshire	East of England	Cambridgeshire	Fenland	L05 - Inert Landfill	0
75204	RMC Materials Limited	Passenham Landfill	Passenham Quarry, Deanshanger MK19 1RN	Cambs and Bedfordshire	East Midlands	Northamptonshire	South Northamptonshire	L05 - Inert Landfill	40,000
75213	Carr and Bircher Limited	Widdington Pit Inert landfill	Hollow Road, Widdington CB11 3SL	Cambs and Bedfordshire	East of England	Essex	Uttlesford	L05 - Inert Landfill	200,244
75219	Ian Smith Construction Ltd	Whitsundoles Farm Landfill	Broughton Road, Salford MK17 8BU	Cambs and Bedfordshire	East of England	Bedfordshire	Central Bedfordshire	L05 - Inert Landfill	0

UNCLASSIFIED

75223	Ian Smith Construction Limited	Lodge Farm Landfill	Broughton Road, Salford MK17 8BU	Cambs and Bedfordshire	East of England	Bedfordshire	Central Bedfordshire	L05 - Inert Landfill	0
80066	Henry Streeter (Sand and Ballast) Ltd	The Gravel Pit, Highstreet Harlington		Herts and North London	South East	Surrey	Spelthorne	L05 - Inert Landfill	180,000
80127	Brett Ltd & Tarmac Ltd	Fairlop Area A&B	Fairlop Quarry, Hainault Road, Little Heath, Redbridge	Herts and North London	London	East London Waste Authority	Redbridge	L05 - Inert Landfill	0
80524	Havering Aggregates Limited	South Hall Farm	South Hall Farm, New Road, Rainham, Essex, RM13 9EW,	Herts and North London	London	East London Waste Authority	Havering	L05 - Inert Landfill	0
80547	The Anstey Quarry Company Ltd	Anstey Chalk Quarry	Anstey Chalk Quarry, Anstey, Buntingford, Hertfordshire, SG9 0BU,	Herts and North London	East of England	Hertfordshire	East Hertfordshire	L05 - Inert Landfill	0
80594	Henry Streeter (Sand and Ballast) Ltd	Sipson Lane Combined Inert Landfill	Off Sipson Road, Sipson, West Drayton UB7 0JG	Herts and North London	London	West London Waste Authority	Hillingdon	L05 - Inert Landfill	4,000
80737	Tarmac Trading Ltd	Tythenhanger Landfill Site	Tythenhanger House, Coursers Road, Colney Heath AL4 0PG	Herts and North London	East of England	Hertfordshire	Hertsmere	L05 - Inert Landfill	7,055,846
80760	Ingrebourne Valley Ltd	Hoddesdon Quarry Landfill	Cock Lane, Hoddesdon EN11 8LS	Herts and North London	East of England	Hertfordshire	Broxbourne	L05 - Inert Landfill	0
83100	Brett Aggregates Ltd	Lower Mill Farm	Lower Mill Farm, Hithermoor Road, Stanwell Moor, Stanwell, Middlesex, TW19 7AZ	Herts and North London	South East	Surrey	Spelthorne	L05 - Inert Landfill	40,000
83532	Summerlease Limited	Beechwood Nurseries Landfill	Farnham Lane, Farnham Royal, Berkshire SL2 3SD	West Thames	South East	Berkshire	Slough	L05 - Inert Landfill	165,000
83596	J & J Franks Ltd	Betchworth Sand Quarry Landfill	Reigate Road Quarry, Reigate Road, Betchworth RH3 7HB	Kent and South London	South East	Surrey	Reigate and Banstead	L05 - Inert Landfill	100,000
86298	Multi - Agg Limited	Shellingford Quarry Landfill	Stanford-in-the-Vale SN7 8HE	West Thames	South East	Oxfordshire	Vale of White Horse	L05 - Inert Landfill	960,000
86386	S Grundon (Waste) Ltd	EWELME 2	Wallingford OX10 6PJ	West Thames	South East	Oxfordshire	South Oxfordshire	L05 - Inert Landfill	133,300
86408	Lafarge Aggregates Ltd	Little Marlow Landfill Site	Little Marlow SL7 3SB	West Thames	South East	Buckinghamshire	Wycombe	L05 - Inert Landfill	0
86416	Raymond Brown Minerals & Recycling Ltd	Cophold Farm Landfill	Priors Court Road, Curridge RG16 9DR	West Thames	South East	Berkshire	West Berkshire	L05 - Inert Landfill	5,650
100480	Braithwaite Excavations Ltd	Rudd Quarry	Newlands Lane, Altofts, Normanton, West Yorkshire WF6 2ID	Yorkshire	Yorkshire & Humber	West Yorkshire	Wakefield	L05 - Inert Landfill	33,170
100561	Frimstone Ltd	Mepal Airfield Inert Landfill	Mepal Road (A142), Mepal, Sutton, Cambs, CB6 2PZ	Cambs and Bedfordshire	East of England	Cambridgeshire	East Cambridgeshire	L05 - Inert Landfill	65,568
100565	Mick George Ltd	Kennett Hall Farm	Dane Hill Road, Kennett, Cambs CB8 7QX	Cambs and Bedfordshire	East of England	Cambridgeshire	East Cambridgeshire	L05 - Inert Landfill	49,582
100587	Neil Price Construction Services Limited	Goldmire Quarry	Goldmire Quarry, Thwaite Flat, Dalton In Furness, Cumbria, LA15 8BG,	Cumbria and Lancashire	North West	Cumbria	Barrow-in-Furness	L05 - Inert Landfill	825,378
100602	S A Storey Ltd	Hard Rock Quarry Landfill	College Road, Up Holland, Skelmersdale, Lancs, WN8 0QE,	Cumbria and Lancashire	North West	Lancashire	West Lancashire	L05 - Inert Landfill	0
100613	W Clifford Watts Limited	Swinescaife Quarry	Swinescaife Quarry, South Cave, Brough, North Humbersid, HU15 2BE,	Yorkshire	Yorkshire & Humber	Former Humberside	East Riding of Yorkshire	L05 - Inert Landfill	2,000,000
100616	Raymond Brown Minerals & Recycling Ltd	Hunts Farm Landfill Site	Hunts Farm, Rudd Lane, Timbury, Hampshire, SO51 0NU	Solent and South Downs	South East	Hampshire	Test Valley	L05 - Inert Landfill	0
100648	P Casey Enviro (Clockface) Ltd	Clockface Quarry Inert Site	Saddleworth Road, Barkisland, Halifax HX4 0DY	Yorkshire	Yorkshire & Humber	West Yorkshire	Calderdale	L05 - Inert Landfill	480,818
100801	Jayflex (Aggregates) Ltd	Horton Brook Quarry	Horton, Slough, Berkshire SL3 0LP	Herts and North London	South East	Berkshire	Slough	L05 - Inert Landfill	405,110
100826	Alan Hadley Limited	Shipton Quarry	Shipton Quarry, Shipton On Cherwell, Oxfordshire, OX5 3EL,	West Thames	South East	Oxfordshire	Cherwell	L05 - Inert Landfill	630,000
100954	Weldon Plant Ltd	Princewood Road	Princewood Road, Earlstrees Ind Est, Corby, Northants, NN17 4AP,	Lincs and Northants	East Midlands	Northamptonshire	Corby	L05 - Inert Landfill	0
101016	Ingrebourne Valley Ltd	Spring Farm Landfill	New Road, Rainham, Essex RM13 9GF	Herts and North London	London	East London Waste Authority	Havering	L05 - Inert Landfill	0
101194	Betaland Ltd	Golding Barn Quarry	Golding Barn Quarry, Henfield Road, Small Dole, West Sussex, BN5 9XH,	Solent and South Downs	South East	West Sussex	Horsham	L05 - Inert Landfill	0
101303	Mone Brothers Excavations Ltd	Eggborough Sandpit	Weeland Road, Hensall, Near Goole DN14 0RL	Yorkshire	Yorkshire & Humber	North Yorkshire	Selby	L05 - Inert Landfill	1,032,738
101312	Fox (Owmbly) Ltd	Stone Lane Quarry	Stone Lane Quarry, Woburn Road, Heath & Reach, Leighton Buzzard, Beds, LU7 0AP,	Cambs and Bedfordshire	East of England	Bedfordshire	Central Bedfordshire	L05 - Inert Landfill	758,240
101357	Hollings Hill Developments Ltd	Hollings Hill Quarry Landfill	Shotley Low Quarter, Consett DH8 9HQ	Northumberland Durham and Tees	North East	Durham	County Durham	L05 - Inert Landfill	532,583
101535	R F Aggregates (South West) Ltd	Yalberton Tor Quarry Landfill	Yalberton Road, Paignton, Devon TQ4 7PD	Devon & Cornwall	South West	Devon	Torbay	L05 - Inert Landfill	323,373
101644	John Mould, Jay Thomas Mould & Jodie Samantha Mould	Reading Quarry Landfill	Berry's Lane, Burghfield Bridge, Reading, Berkshire, RG30 3XA,	West Thames	South East	Berkshire	West Berkshire	L05 - Inert Landfill	0
101771	Terra Firma (Gloucestershire) L L P	Former Sand Quarry	Ryton Road, Bromesberrow Heath, Ledbury, Gloucestershire, HR8 1PB,	Shrops Heref Worcs and Glos	South West	Gloucestershire	Forest of Dean	L05 - Inert Landfill	0
101803	Wight Building Materials Limited	St Georges Down Quarry	Newport, Isle Of Wight, PO30 3BX,	Solent and South Downs	South East	Isle of Wight	Isle of Wight	L05 - Inert Landfill	300,000

UNCLASSIFIED

UNCLASSIFIED

101840	Shepperton Aggregates	Home Farm Extension Landfill Site	Home Farm Extension Landfill Site, Laleham Road, Shepperton, Middlesex, TW17 0NF,	Herts and North London	South East	Surrey	Spelthorne	L05 - Inert Landfill	0
102171	Opes Industries Limited	Finnmere Quarry Landfill Site	Finnmere Quarry Landfill Site, Banbury Road, Finnere, Buckingham, Bucks, MK18 4AJ	Cambs and Bedfordshire	South East	Oxfordshire	Cherwell	L05 - Inert Landfill	0
102405	Brett Aggregates Limited	Sandon Quarry Southern Void	Sandon, Chelmsford, Essex CM2 7RL	Essex Norfolk and Suffolk	East of England	Essex	Chelmsford	L05 - Inert Landfill	156,200
102641	J & V Kelly Ltd	Pinches 3 Landfill	Pinches 3 Quarry, Wildmoor Lane, Wildmoor, Bromsgrove, Worcestershire, B61	Shrops Heref Wors and Glos	West Midlands	Worcestershire	Bromsgrove	L05 - Inert Landfill	21,420
103418	Thomas Brothers Excavations (Luton) Ltd	Cainhoe Quarry	Cainhoe Quarry, Shefford, Beds, SG17 5PJ,	Cambs and Bedfordshire	East of England	Bedfordshire	Central Bedfordshire	L05 - Inert Landfill	11,360
103648	Mick George Ltd	Mepal Landfill Extension	Mepal Landfill Extension, Block Fen Drove, Mepal, Chatteris, Cambs, CB6 2AY,	Cambs and Bedfordshire	East of England	Cambridgeshire	Fenland	L05 - Inert Landfill	64,099
103865	Danbury Haulage (Oak Landfill) Ltd	Royal Oak Quarry	Royal Oak Quarry, Maldon Road, Woodham Mortimer, Essex, CM9 6TJ,	Essex Norfolk and Suffolk	East of England	Essex	Maldon	L05 - Inert Landfill	70
103912	W C L Quarries Ltd	Ketley Quarry Landfill	Ketley Quarry, Dudley Road, Kingswinford, West Midlands, DY6 8WT,	Staffs Warks and West Mids	West Midlands	West Midlands Met Districts	Dudley	L05 - Inert Landfill	0
104152	M C A Group (U K) Ltd	Bank End Quarry Landfill	Bank End Quarry, Bank End Road, Blaxton, Finningley, South Yorks, DN9 3AN,	Derbys Notts and Leics	Yorkshire & Humber	South Yorkshire	Doncaster	L05 - Inert Landfill	0
104159	N R S Waste Care Ltd	Saredon Hill Quarry	Saredon Hill Quarry, Great Saredon Road, Saredon, Staffs, WV10 7LL,	Staffs Warks and West Mids	West Midlands	Staffordshire	South Staffordshire	L05 - Inert Landfill	773,716
104536	Mick George Limited	Ringstead Grange Quarry	Ringstead Grange Quarry, Ringstead, Kettering, Northants, NN14 4DT,	Lincs and Northants	East Midlands	Northamptonshire	East Northamptonshire	L05 - Inert Landfill	650,000
104817	J A Jackson Contractors (Leyland) Limited	Lydiat Lane Quarry	Lydiat Lane Quarry, Lydiat Lane, Leyland, Lancs, PR25 4UB,	Cumbria and Lancashire	North West	Lancashire	South Ribble	L05 - Inert Landfill	100,000
104954	Downland Trading (Kent) Limited	Manor Farm Barn Landfill And Recovery Operation	Manor Farm Barn Landfill, Parsonage Lane, Frindsbury, Kent, ME2 4UT,	Kent and South London	South East	Kent	Medway	L05 - Inert Landfill	682,023
210000	KMR Waste Management Ltd	Hensall Quarry	New Road, Hensall DN14 0RD	Yorkshire	Yorkshire & Humber	Former Humberside	East Riding of Yorkshire	L05 - Inert Landfill	0
210001	Brett Lafarge Limited	Marks Warren Quarry Landfill	Warren Farm, Whalebone Lane North, Essex RM6 6RB	Herts and North London	London	East London Waste Authority	Barking and Dagenham	L05 - Inert Landfill	0
210002	D E Talbot	Summerway Landfill	Hilary Road, Walden, Stourport-on-Severn DY13 9JP	Shrops Heref Wors and Glos	West Midlands	Worcestershire	Wyre Forest	L05 - Inert Landfill	732,940
210005	J Clubb Limited	Perry's Farm	Grain Road, Isle of Grain, Rochester ME3 0AW	Kent and South London	South East	Kent	Medway	L05 - Inert Landfill	0
210006	Sherburn Stone company Ltd	Crime Rigg Quarry	Shadforth, County Durham DH6 1LA	Northumberland Durham and Tees	North East	Durham	County Durham	L05 - Inert Landfill	1,673,118
210007	Cemex UK Ltd	Bleak Hill 1 Landfill Site	Nea Road, Ringwood BH24 3PL	Wessex	South East	Hampshire	New Forest	L05 - Inert Landfill	1,335,075
210008	Henry Streeter (Sand and Ballast) Ltd	Hengrove Farm Landfill Site	London Road, Staines TW 18 4JX	Herts and North London	South West	Dorset	Purbeck	L05 - Inert Landfill	0
210009	Portland Stone Ltd	Broadcroft Quarry Landfill	Portland DT5 1HY	Wessex	South West	Dorset	Weymouth and Portland	L05 - Inert Landfill	102,419
210010	Lafarge Aggregates Limited	Harrycroft Quarry Landfill Site	Lindrick Dale S81 8BD	Derbys Notts and Leics	East Midlands	Nottinghamshire	Bassetlaw	L05 - Inert Landfill	688,653
210011	Churngold Waste Management Ltd	Lulsgate Quarry	West Lane, Felton B540 9UP	Wessex	South West	Bath, Bristol and S Glo	Bristol, City of	L05 - Inert Landfill	0
210012	J Coles Contractors	Holmacott Landfill Site	Instow, Bideford EX39 4LR	Devon & Cornwall	South West	Devon	North Devon	L05 - Inert Landfill	1,070,793
210015	Smiths Concrete Ltd	Glebe Farm Landfill Site	Weston Lane, Bubbenhall, Coventry, West Midlands, CV8 3BN,	Staffs Warks and West Mids	West Midlands	Warwickshire	Warwick	L05 - Inert Landfill	51,494
210016	F.G.DAVIS & Sons (Contractors) LTD	Enville Road Landfill	Enville Road, Kingswinford, Nr Dudley DY6 0AS	Staffs Warks and West Mids	West Midlands	Staffordshire	South Staffordshire	L05 - Inert Landfill	0
210018	G. B. Foot Ltd	Manor Farm Landfill Site	Manor Farm, Tadley RG26 5HW	West Thames	South East	Hampshire	Basingstoke and Deane	L05 - Inert Landfill	223,000
210019	G Crook & Sons Ltd	Old Heath Farm Landfill	Old Heath Farm, Crossways, Dorchester DT2 8DY	Wessex	South West	Dorset	West Dorset	L05 - Inert Landfill	0
210020	FWS Carter and Sons Ltd	Greendale Landfill, nr Exeter, Devon	Greendale Barton, Woodbury Salterton EX5 1EW	Devon & Cornwall	South West	Devon	East Devon	L05 - Inert Landfill	0
210021	Cappagh Public Works Limited	stanwell III landfill	Staines TW19 7XT	Herts and North London	South East	Surrey	Spelthorne	L05 - Inert Landfill	101,154
210022	A.E. STUART & SONS	Hill Barton Landfill	Stuart Road, Exeter EX5 1SB	Devon & Cornwall	South West	Devon	East Devon	L05 - Inert Landfill	170,000
210023	BT Jenkins Ltd	Trood Lane	Trood Lane, Exeter EX2 8XX	Devon & Cornwall	South West	Devon	Teignbridge	L05 - Inert Landfill	275,756
210024	Lafarge Aggregates Limited	Lockington Quarry Landfill Site	Lockington Quarry, Warren Lanem Lockington DE74 2RG	Derbys Notts and Leics	East Midlands	Leicestershire	North West Leicestershire	L05 - Inert Landfill	173,931
210026	Aggregates industries UK Ltd	Hulland Ward Landfill	Smith Hall Lane, Hulland Ward DE6 3ET	Derbys Notts and Leics	East Midlands	Derbyshire	Derby	L05 - Inert Landfill	24,000
210027	Whiteball Landfill Ltd	Whiteball Landfill Site	Whiteball Hill, Near Wellington TA21 0LT	Wessex	South West	Somerset	Taunton Deane	L05 - Inert Landfill	0
210028	H Evason and Company	Dorrington Quarry Landfill Site	Dorrington, Shrewsbury SY5 7EE	Shrops Heref Wors and Glos	West Midlands	Shropshire	Shropshire	L05 - Inert Landfill	8,150
210029	Bliss Sand and Gravel Company	Branton Lane Quarry	30a Branton Hill Lane, Aldridge WS9 0NS	Staffs Warks and West Mids	West Midlands	West Midlands Met Districts	Walsall	L05 - Inert Landfill	0

UNCLASSIFIED

UNCLASSIFIED

210030	Marrington Reclamation Ltd	Egstow Quarry Landfill	Egstow Quarry Landfill, Brassington Lane, Clay Cross S45 9NE	Yorkshire	East Midlands	Derbyshire	Derby	L05 - Inert Landfill	0
210031	Naylor Industries Plc	Banks Wood Quarry	South Lane, Cawthorne, Nr	Yorkshire	Yorkshire & Humber	South Yorkshire	Barnsley	L05 - Inert Landfill	0
210032	Seer Restoration Ltd	Stone Pit II, Dartford	St James Lane, Stone, Dartford DA9 9DT	Kent and South London	South East	Kent	Dartford	L05 - Inert Landfill	250,000
210033	Reynard (Excavations) Ltd	Myton Lane Landfill	Myton Lane, Tholthorpe, York YO61 1SN	Yorkshire	Yorkshire & Humber	North Yorkshire	Hambleton	L05 - Inert Landfill	0
210034	Woods	Weights Farm Landfill	Weights Lane, Redditch B97 6RG	Staffs Warks and West Mids	West Midlands	Worcestershire	Redditch	L05 - Inert Landfill	711,317
210036	J E & H J Gilbertson	WHITEHOUSE FARM LANDFILL	Broadacres, High Catton YO41 1EP	Yorkshire	Yorkshire & Humber	Former Humberside	East Riding of Yorkshire	L05 - Inert Landfill	0
210037	British Sugar Plc	Cantley Landfill Site, British Sugar Plc	Cantley Sugar Factory, Cantley NR13 3ST	Essex Norfolk and Suffolk	East of England	Norfolk	Broadland	L05 - Inert Landfill	49,680
210038	Slinter Mining Company Ltd	SLINTER TOP QUARRY	Chestnut House, Cromford DE6 3QU	Derbys Notts and Leics	East Midlands	Derbyshire	Derby	L05 - Inert Landfill	0
210039	Cemex UK Materials Limited	Slip Inn Quarry	Slip Inn Quarry, Leicester Road, Lutterworth LE17 4LT	Derbys Notts and Leics	East Midlands	Leicestershire	Harborough	L05 - Inert Landfill	0
210040	Gallagher Aggregates Ltd	Workhouse Quarry Inert Landfill	Workhouse Road, Ryarsh, West Malling ME19 5UJ	Kent and South London	South East	Kent	Tonbridge and Malling	L05 - Inert Landfill	0
210041	Cemex UK Materials Limited	Pendean Landfill	Oaklands Lane, Midhurst GU29 0ER	Solent and South Downs	South East	West Sussex	Chichester	L05 - Inert Landfill	0
210042	Ibstock Brick (Nostell) Ltd	Nostell Quarry Landfill	Swine Lane, Nostell, Nr Wakefield WF4 1QH	Yorkshire	Yorkshire & Humber	West Yorkshire	Wakefield	L05 - Inert Landfill	807,299
210043	Frimstone Ltd	Cow Lane Inert Landfill	Brickyard Farm, Cow Lane, Godmanchester PE29 2EJ	Camb and Bedfordshire	East of England	Cambridgeshire	Huntingdonshire	L05 - Inert Landfill	225,500
210044	Cemex UK Materials Limited	Coldharbour Lane Landfill	Norlands Lane, Thorpe, Egham TW20 8SS	West Thames	South East	Surrey	Runnymede	L05 - Inert Landfill	0
210045	R. H. Ovenden Limited	Bramling Quarry Landfill	Bramling Road, Bekesbourne CT3 1NR	Kent and South London	South East	Kent	Canterbury	L05 - Inert Landfill	0
210046	Brett Aggregates Ltd	Shrublands Quarry	Shrubland Park, Coddenham IP6 9QJ	Essex Norfolk and Suffolk	East of England	Suffolk	Mid Suffolk	L05 - Inert Landfill	771,500
210047	Cemex UK Materials Limited	Wickwar Landfill	The Downs, Wickwar, Wooton-under-Edge GL12 8LF	Wessex	South West	Bath, Bristol and S Glo	South Gloucestershire	L05 - Inert Landfill	4,608,000
210048	R A Newman & Sons	Cross Hands Quarry Landfill Site	Moreton in Marsh GL56 0SL	West Thames	West Midlands	Warwickshire	Stratford-on-Avon	L05 - Inert Landfill	0
210049	Kent Land Reclamation Ltd	Lower Twydall Chalk Pit	Lower Rainham Road, Gillingham ME7 2XH	Kent and South London	South East	Kent	Medway	L05 - Inert Landfill	0
210050	TJ Landfill	Stock Farm Stone Quarry	Hyde Lane, Farnham GU10 2LP	West Thames	South East	Surrey	Waverley	L05 - Inert Landfill	0
210051	Brett Aggregates Limited; Tarmac Limited	Home Farm South Landfill	Home Farm South Landfill, Home Farm, Laleham Road, Shepperton, Middlesex, TW17 0NF	Herts and North London	South East	Surrey	Spelthorne	L05 - Inert Landfill	0
210052	Earthline Limited	Warren Farm Landfill	Chalfont St. Peter SL9 0QY	Herts and North London	South East	Buckinghamshire	Chiltern	L05 - Inert Landfill	0
210053	Cemex UK Materials Limited	Manor Pit Landfill	Baston Outgang Road, Peterborough PE6 9PT	Lincs and Northants	East Midlands	Lincolnshire	South Kesteven	L05 - Inert Landfill	119
210054	Mr James Brown and Mr Melvyn Brown	Flixton Quarry Waste Disposal	Main Street, Flixton YO11 3UD	Yorkshire	Yorkshire & Humber	North Yorkshire	Scarborough	L05 - Inert Landfill	0
210055	BULLIMORES SAND AND GRAVEL LTD	Collyweston Quarry	Collyweston Quarry, Stamford PE9 3QA	Lincs and Northants	East Midlands	Northamptonshire	East Northamptonshire	L05 - Inert Landfill	381,600
210056	Sherburn Stone company Ltd	Barton Landfill Site	Barton DL10 6NF	Yorkshire	Yorkshire & Humber	North Yorkshire	Richmondshire	L05 - Inert Landfill	0
210057	Tarmac Trading Ltd	All Souls Farm Quarry	Wexham Park Lane. Wexham SL3 6LX	Herts and North London	South East	Buckinghamshire	South Bucks	L05 - Inert Landfill	0
210058	Bournewood Sand and Gravel Limited	Bournewood Inert Landfill Site	Off A20 By Pass, Swanley, Kent BR8 7DP	Kent and South London	London	South London	Bromley	L05 - Inert Landfill	36,897
210059	Johnsons Wellfield Quarries Limited	Wellfield Quarry	Blackmoorfoot Road, Huddersfield HD4 7AB	Yorkshire	Yorkshire & Humber	West Yorkshire	Kirklees	L05 - Inert Landfill	322,623
210060	BULLIMORES SAND AND GRAVEL LTD	Woolfax Quarry	Wood Lane, Greetham, Rutland	Lincs and Northants	East Midlands	Leicestershire	Rutland	L05 - Inert Landfill	400,525
210061	Dispit Limited	Little Weighon Cutting	Albion Lane, Willerby, Nr Hull HU10 6DP	Yorkshire	Yorkshire & Humber	Former Humberside	East Riding of Yorkshire	L05 - Inert Landfill	0
210062	L and W Wilson (Endmoor) Ltd	Roan Edge Landfill		Cumbria and Lancashire	North West	Cumbria	South Lakeland	L05 - Inert Landfill	225,841
210063	Raymond Brown Eco Bio Limited	Rookery Farm Landfill	Botley Road, Burr ridge SO31 1BL	Solent and South Downs	South East	Hampshire	Fareham	L05 - Inert Landfill	879,885
210065	Southern Gravel Limited	Oxted Quarry Landfill	Chalk Pit Lane, Oxted RH8 0QW	Kent and South London	South East	Surrey	Tandridge	L05 - Inert Landfill	2,010,012
210067	Hanson Quarry Products Europe Ltd	Middleton Site	Bodymoor Heath Lane, Middleton B78 2BB	Staffs Warks and West Mids	West Midlands	Warwickshire	North Warwickshire	L05 - Inert Landfill	55,000
210068	Raymond Brown Eco Bio Limited	Holmsley Landfill Site	Black Lane, Bransgore BH23 8EA	Wessex	South East	Hampshire	New Forest	L05 - Inert Landfill	0
210069	Lafarge Aggregates Ltd	Wivenhoe Landfill Site	Keelars and Sunnymead Extension, Elmstead Road, Wivenhoe CO7 9JZ	Essex Norfolk and Suffolk	East of England	Essex	Tendring	L05 - Inert Landfill	0
210070	Offerton Sand & Gravel Ltd	Offerton Sand & Gravel Landfill	Marple Road, Offerton SK2 5EU	Gtr Mancs Mersey and Ches	North West	Greater Manchester	Stockport	L05 - Inert Landfill	0
210071	Multi - Agg Limited	Kempsford Quarry	Stubbs Farm, Washpool Lane,	West Thames	South West	Gloucestershire	Cotswold	L05 - Inert Landfill	0
210072	Gallagher Aggregates Limited	Hermitage Quarry Inert Landfill	Hermitage Lane, Maidstone ME16 9NT	Kent and South London	South East	Kent	Tonbridge and Malling	L05 - Inert Landfill	296,184
210073	Tarmac Ltd	FENTON MANOR QUARRY LANDFILL	Lordship Lane, Fenton, Stoke on Trent ST4 2RR	Staffs Warks and West Mids	West Midlands	Staffordshire	Stoke-on-Trent	L05 - Inert Landfill	175,341
210074	Brett Aggregates Ltd	Chartham Extension	Deanery Farm, Bolts Hill, Chartham CT4 7LD	Kent and South London	South East	Kent	Canterbury	L05 - Inert Landfill	0
210075	Tarmac Ltd	LINFORD LANDFILL	Buckingham Hill Road, Linstead SS17 0PY	Essex Norfolk and Suffolk	East of England	Essex	Thurrock	L05 - Inert Landfill	64,780
210076	Reynolds and Read Ltd	Lower Knighton Landfill	Lower Knighton Road, Newchurch PO30 0NS	Solent and South Downs	South East	Isle of Wight	Isle of Wight	L05 - Inert Landfill	157,093
210077	Tarmac Ltd	Old Quarrington Quarry Landfill	Bowburn DH6 5NN	Northumberland Durham and Tees	North East	Durham	County Durham	L05 - Inert Landfill	1,729,698
210078	D.A.Bird Ltd	Pury End Quarry	Pury End, Towcester NN12 7NX	Camb and Bedfordshire	East Midlands	Northamptonshire	South Northamptonshire	L05 - Inert Landfill	35,064

UNCLASSIFIED

210079	R E Richardson (Chilton) Limited	Chilton Railway Cutting Landfill	Prospect Farm, Chilton OX11 0ST	West Thames	South East	Oxfordshire	Vale of White Horse	L05 - Inert Landfill	0
210080	Blackthorn Recycling Limited	Coal Pit Lane Landfill Site	Coal Pit Lane, Upper Denby HD8 8UF	Yorkshire	Yorkshire & Humber	West Yorkshire	Kirklees	L05 - Inert Landfill	0
210081	Lafarge Aggregates Limited	Swarkestone Landfill Site	New Swarkestone Quarry, Twyford Road, Barrow upon Trent DE73 7HA	Derbys Notts and Leics	East Midlands	Derbyshire	South Derbyshire	L05 - Inert Landfill	162,674
210082	Carlton Main Brickworks Limited	Carlton Brick Landfill Site	High Street, Grimethorpe S72 7BG	Yorkshire	Yorkshire & Humber	South Yorkshire	Barnsley	L05 - Inert Landfill	4,001,508
210083	Knighon Sandpit Limited	Knighon Sandpit Landfill	Newchurch PO36 0NS	Solent and South Downs	South East	Isle of Wight	Isle of Wight	L05 - Inert Landfill	364,901
210084	Lafarge Aggregates Limited	Whitemoor Haye Landfill Site	Alrewas Quarry, Barley Green Lane, Alrewas DE13 7DL	Staffs Warks and West Mids	West Midlands	Staffordshire	Lichfield	L05 - Inert Landfill	0
210085	Aggregate Recycling (UK) Ltd	WILBERFOSS QUARRY LANDFILL SITE	Rear of Newton Lodge Farm, York YO41 4DB	Yorkshire	Yorkshire & Humber	Former Humberside	East Riding of Yorkshire	L05 - Inert Landfill	500,000
210086	Cliffords Ltd	Cell 5, Land at Pratts Farm Lane	Pratts Farm Lane, Chelmsford CM3 3PR	Essex Norfolk and Suffolk	East of England	Essex	Chelmsford	L05 - Inert Landfill	0
210087	British Sugar Plc	Borrow Pits Landfill	Newark Sugar Factory, Great North Road, Newark NG24 1DL	Derbys Notts and Leics	East Midlands	Nottinghamshire	Newark and Sherwood	L05 - Inert Landfill	398,971
210089	Brett Aggregates Limited	Park Lodge Landfill	Park Lodge, Pinewood Road, Iver SL0 0NE	Herts and North London	South East	Buckinghamshire	South Bucks	L05 - Inert Landfill	0
210091	Midland Landfill Limited	Vale Road Quarry	Vale Road, Mansfield Woodhouse NG19 8DP	Derbys Notts and Leics	East Midlands	Nottinghamshire	Mansfield	L05 - Inert Landfill	1,510,269
210092	Cemex UK Materials Limited	Colehill Landfill	Gorse Lane, Off Station Road, Colehill B46 1JU	Staffs Warks and West Mids	West Midlands	Warwickshire	North Warwickshire	L05 - Inert Landfill	0
210093	Lafarge Aggregates Ltd	Darmsden Hall Landfill	Nr Needham Market IP6 8RA	Essex Norfolk and Suffolk	East of England	Suffolk	Mid Suffolk	L05 - Inert Landfill	0
210094	Yorwaste Limited	Tancred Landfill Site	Tancred Quarry, Scorton, Richmond DL10 6AA	Yorkshire	Yorkshire & Humber	North Yorkshire	Richmondshire	L05 - Inert Landfill	0
210095	Lafarge Aggregates Limited	Octagon Farm North Landfill	Octagon Farm North, Willington Quarry, Cople MK44 3PG	Cambs and Bedfordshire	East of England	Bedfordshire	Bedford	L05 - Inert Landfill	0
210096	RMC MATERIALS LTD	Addlestone Quarry Landfill	Addlestone Quarry, Byfleet Road, Weybridge KT15 3LA	West Thames	South East	Surrey	Runnymede	L05 - Inert Landfill	551,145
210097	L B SILICA SAND LTD	Sheepcote Quarry	Heath and Reach, Leighton Buzzard LU7	Cambs and Bedfordshire	East of England	Bedfordshire	Central Bedfordshire	L05 - Inert Landfill	0
210098	Hills Minerals and Waste Limited	Tubney Wood	Tubney Wood Sand Pit, Tubney Wood OX13 5QU	West Thames	South East	Oxfordshire	Vale of White Horse	L05 - Inert Landfill	0
210099	Brett Aggregates Ltd	Ham Farm Landfill	Ham Road, Faversham ME13 7TS	Kent and South London	South East	Kent	Swale	L05 - Inert Landfill	0
210100	Middleton Aggregates Ltd	East Winch Landfill	Mill Drove, Blackborough End, Kings Lynn PE32 1SW	Cambs and Bedfordshire	East of England	Norfolk	King's Lynn and West Norfolk	L05 - Inert Landfill	534,189
210101	Tarmac Ltd	Holme Hall Quarry Landfill	Holme Hall Lane, Stainton S66 7RD	Derbys Notts and Leics	Yorkshire & Humber	South Yorkshire	Doncaster	L05 - Inert Landfill	1,742,024
210102	Clearserve Ltd	Rainbow Shaw Quarry	Rainbow Shaw Tip, Holford Road, Linford S517 0PJ	Essex Norfolk and Suffolk	East of England	Essex	Thurrock	L05 - Inert Landfill	56,457
210103	Western Skip Hire Ltd	Lime Kiln Hill Quarry Landfill Site	Lime Kiln Hill Quarry, Frome BA11 3PH	Wessex	South West	Somerset	Mendip	L05 - Inert Landfill	0
210104	Brauncewell Quarries	Brauncewell Quarry	Brauncewell Quarry, Brauncewell NG34 8RL	Lincs and Northants	East Midlands	Lincolnshire	North Kesteven	L05 - Inert Landfill	1,230,832
210105	Stoneledge Plant and Transport Limited	Riplingham Landfill	Riplingham Cutting, Riplingham HU20 3UP	Yorkshire	Yorkshire & Humber	Former Humberside	East Riding of Yorkshire	L05 - Inert Landfill	90,239
210106	J Clubb Limited	Arnolds Lodge Landfill	Hale Street, East Peckham, Tonbridge TN12 5HL	Kent and South London	South East	Kent	Tonbridge and Malling	L05 - Inert Landfill	5,000
210108	Brett Aggregates Ltd	Waldringfield Landfill	Brightwell, Ipswich IP10 0BL	Essex Norfolk and Suffolk	East of England	Suffolk	Suffolk Coastal	L05 - Inert Landfill	0
210109	Cemex UK Materials Limited	Great Westwood	Fir Tree Hill, Staines WD3 4LY	Herts and North London	East of England	Hertfordshire	Three Rivers	L05 - Inert Landfill	0
210113	Borough Green Sand Pits Ltd	BOROUGH GREEN INERT LANDFILL (PLATT)	Borough Green Sand Pit, Sevenoaks TN15 8HJ	Kent and South London	South East	Kent	Tonbridge and Malling	L05 - Inert Landfill	830,000
210114	Chambers Runfold Plc	Homefield Landfill Site	Homefield Sandpit, Guildford Road, Farnham GU10 1PG	West Thames	South East	Surrey	Waverley	L05 - Inert Landfill	994,298
210115	Brett Aggregates Limited	Laleham Quarry	Littleton Lane, Shepperton TW17 0NF	Herts and North London	South East	Surrey	Spelthorne	L05 - Inert Landfill	979,000
210116	John Craxford (Plant Hire) Limited	Yannon Lane Landfill	Old Newton Road, Kingskerswell, Devon TQ12 5LB	Devon & Cornwall	South West	Devon	Teignbridge	L05 - Inert Landfill	17,000
210117	Brett Aggregates Ltd	Allens Bank, Lydd	Allens Bank, Lydd	Kent and South London	South East	Kent	Shepway	L05 - Inert Landfill	709,000
210118	Water Hall (England) Ltd	Bunkers Landfill Quarry	Waterhall Quarry, Lower Hatfield Road, Hertfordshire SG13 8LF	Herts and North London	East of England	Hertfordshire	East Hertfordshire	L05 - Inert Landfill	0
210119	Robert Body Haulage Limited	Borough Green Landfill	Wrotham Road, Sevenoaks TN15 8DN	Kent and South London	South East	Kent	Tonbridge and Malling	L05 - Inert Landfill	1,775,826
210120	Brett Aggregates Limited	Layham Quarry Landfill	Rands Road, Layham, Hadleigh IP7 5RW	Essex Norfolk and Suffolk	East of England	Suffolk	Babergh	L05 - Inert Landfill	0
210121	Cormac	Tiscott Depot Landfill Site	New Road, Bude EX23 9LE	Devon & Cornwall	South West	Cornwall	Cornwall	L05 - Inert Landfill	19,297
210122	Cormac County Council	Tregoneeves Quarry Landfill	St Mewan PL26 7DS	Devon & Cornwall	South West	Cornwall	Cornwall	L05 - Inert Landfill	2,410
210123	Portsmouth Water Ltd	Bedhampton Landfill	Meyrick Road, Bedhampton PO9 1NN	Solent and South Downs	South East	Hampshire	Havant	L05 - Inert Landfill	0
210125	Sirom Ltd	Hythe End Farm Landfill	Hythe End Road, Wraysbury TW19 5AW	Herts and North London	South East	Berkshire	Windsor and Maidenhead	L05 - Inert Landfill	60,000
210126	Astley Sand & Aggregates Ltd	Morley Quarry Landfill	Morleys Lane, Astley, Tyldesley	Gtr Mancs Mersey and Ches	North West	Greater Manchester	Wigan	L05 - Inert Landfill	499,490
210127	Tarmac Ltd	Avon Common Landfill	Off A338, Avon Common,	Wessex	South West	Dorset	Christchurch	L05 - Inert Landfill	690,000
210128	Mone Brothers Ltd	Blackhill Quarry Landfill	Kings Road, Bramhope, Leeds LS16 9JN	Yorkshire	Yorkshire & Humber	West Yorkshire	Leeds	L05 - Inert Landfill	136,783

UNCLASSIFIED

210129	Holeworks (management) Ltd	Wilbraham Chalk Quarry	Wilbraham Chalk Quarry, Great Wilbraham, Cambridgeshire, CB21 4HH,	Cambs and Bedfordshire	East of England	Cambridgeshire	South Cambridgeshire	L05 - Inert Landfill	0
210130	Danbury Haulage Ltd	Inworth Grange Quarry Landfill	Tiptree, Colchester CO5 0QQ	Essex Norfolk and Suffolk	East of England	Essex	Colchester	L05 - Inert Landfill	0
210131	Asenby Quarry Landfill	Asenby Quarry Ltd	Land/premises At, Asenby Quarry Landfill, Asenby, Thirsk, North Yorkshire, YO7 3RB,	Yorkshire	Yorkshire & Humber	North Yorkshire	Hambleton	L05 - Inert Landfill	225,636
210132	G. Crook & Sons Ltd.	Admiralty Quarry	Admiralty Quarry, Easton Lane, Fortuneswell, Isle Of Portland, Dorset, DT5 1DB,	Wessex	South West	Dorset	Weymouth and Portland	L05 - Inert Landfill	181,903
210133	Roods Landfill Ltd	Roodscroft Landfill Site	Land/premises At, Hatt, Salthash, Cornwall, PL12 6PJ,	Devon & Cornwall	South West	Cornwall	Cornwall	L05 - Inert Landfill	272,181
210134	L B Silica Sand Ltd	Reach Lane Quarry Landfill	Reach Lane Quarry Heath And Rach Leighton Buzzard Beds LU7 9LD	Cambs and Bedfordshire	East of England	Bedfordshire	Central Bedfordshire	L05 - Inert Landfill	9,366
210135	Raymond Brown Minerals & Recycling Ltd	Brickworth Quarry	Harestock, Whiteparish, Wiltshire SP5 2QE	Solent and South Downs	South West	Wiltshire	Wiltshire	L05 - Inert Landfill	31,468
400153	W C L Quarries Limited	Griff No4 Quarry Landfill	Griff Quarry, Gipsy Lane, Nuneaton, Warks, CV10 7PH,	Staffs Warks and West Mids	West Midlands	Warwickshire	Nuneaton and Bedworth	L05 - Inert Landfill	3,265,860
400345	Sewells Reservoir Construction Limited	Highwood Quarry Inert Landfill	Highwood Quarry, Little Easton, Great Dunmow, Essex, CM6 2SN,	Herts and North London	East of England	Essex	Uttlesford	L05 - Inert Landfill	638,859
400391	Ingrebourne Valley Ltd	Denham Park Farm	Denham Park Farm, Denham Green, Buckinghamshire, UB9 5DL,	Herts and North London	South East	Buckinghamshire	South Bucks	L05 - Inert Landfill	1,610,799
400427	Sita U K Limited	Kingsley Quarry	Sandybridge Farm, Main Road, Kingsley, Hants, GU35 9NQ,	West Thames	South East	Hampshire	East Hampshire	L05 - Inert Landfill	0
400532	Armstrongs Aggregates Limited	Pilkington Quarry	Pilkington Quarry, Makinson Lane, Horwich, Bolton, Lancs, BL6 6RX,	Gtr Mancs Mersey and Ches	North West	Greater Manchester	Bolton	L05 - Inert Landfill	892,962
400588	Hills Quarry Products Limited	Upwood Quarry	Upwood Quarry, Besselsleigh, Abingdon, Oxfordshire, OX13 5DW,	West Thames	South East	Oxfordshire	Vale of White Horse	L05 - Inert Landfill	0
400631	Aggmax Limited	Lawn Farm Quarry	Lawn Farm Quarry, Old Bury Road, Wetherden, Stowmarket, Suffolk,	Cambs and Bedfordshire	East of England	Suffolk	Mid Suffolk	L05 - Inert Landfill	1,330,000
400860	Earthline Limited	Alton Road Sand Pit	Alton Road Sand Pit, Alton Road, Wrecclesham, Farnham, Surrey, GU10 5EL,	West Thames	South East	Surrey	Waverley	L05 - Inert Landfill	2,290,000
400986	Grundy And Co Excavations Limited	Cronton Quarry	Cronton Quarry, Dacre's Bridge Lane, Tarbock, Prescot, Merseyside, L35 1OZ,	Gtr Mancs Mersey and Ches	North West	Merseyside	Knowsley	L05 - Inert Landfill	514,199
401082	Cemex UK Materials Limited	Kingsmead Landfill	Kingsmead Landfill, Stanwell Road, Horton, Berkshire, SL3 9PA	Herts and North London	South East	Berkshire	Windsor and Maidenhead	L05 - Inert Landfill	3,063,711
401185	Hope Construction Materials Limited	Dairy Farm	Willington Quarry, St Neots Road, Renhold, Bedfordshire, MK41 0JF,	Cambs and Bedfordshire	East of England	Bedfordshire	Bedford	L05 - Inert Landfill	0
401214	Cemex U K Cement Ltd	Barrington Cement Works	Barrington Cement Works, Barrington, Cambridge, Cambs, CB2 5RG,	Cambs and Bedfordshire	East of England	Cambridgeshire	South Cambridgeshire	L05 - Inert Landfill	545,795
401508	Churchill Enviro Ltd	Hutch Bank Quarry	Hutch Bank Quarry, Hutch Bank Road, Haslingden, Rossendale, Lancashire, BB4 5EJ,	Cumbria and Lancashire	North West	Lancashire	Rossendale	L05 - Inert Landfill	1,055,577
401847	Mick George Limited	Thornhaugh Quarry II	Leicester Road, Peterborough, PE8	Lincs and Northants	East of England	Cambridgeshire	Peterborough	L05 - Inert Landfill	0
402022	Tarmac Trading Ltd	Spixworth Quarry	Grange Farm, Buxton Road, Spixworth, Norwich, NR10 3PR,	Essex Norfolk and Suffolk	East of England	Norfolk	Broadland	L05 - Inert Landfill	266,385
402047	Tarmac Trading Ltd	Phase F And H At Panshanger Quarry	Panshanger Lane, Hertford, Hertfordshire, SG14	Herts and North London	East of England	Hertfordshire	East Hertfordshire	L05 - Inert Landfill	1,036,814
402102	Brett Aggregates Limited	Brightlingsea Inert Landfill	Brightlingsea Inert Landfill, Moverons Lane, Brightlingsea, Colchester, Essex, CO7 0SB,	Essex Norfolk and Suffolk	East of England	Essex	Tendring	L05 - Inert Landfill	470,000
402105	Mick George Limited	Ellistown Quarry Inert Landfill	Ellistown Quarry Inert Landfill, Ellistown Terrace Road, Ellistown, Leicestershire, LE67 1ET,	Staffs Warks and West Mids	East Midlands	Leicestershire	North West Leicestershire	L05 - Inert Landfill	300,000
402107	Tarmac Trading Limited	Brooksby Quarry	Brooksby Quarry, Melton Road, Brooksby, Melton Mowbray, Leicestershire, LE14 2LJ,	Derbys Notts and Leics	East Midlands	Leicestershire	Melton	L05 - Inert Landfill	310,658
402113	Restoration to Agriculture Ltd	Rudgwick Landfill Site	Rudgwick Brickworks, Lynwick Street, Rudgwick, West Sussex, RH12 3DH	Solent and South Downs	South East	West Sussex	Horsham	L05 - Inert Landfill	65,175
402195	Chorley Sand & Aggregates Limited	Sandons Farm Inert Landfill Site	Off Wigan Lane, Adlington, Chorley, Lancashire, PR7 4DL,	Cumbria and Lancashire	North West	Lancashire	Chorley	L05 - Inert Landfill	624,887

UNCLASSIFIED

UNCLASSIFIED

402326	N R S Waste Management Services Ltd	N R S Waste Management Services Ltd	Meriden Quarry Landfill Site Area G, Birmingham Road, Meriden, Solihull, West Midlands, CV7 7JT,	Staffs Warks and West Mids	West Midlands	West Midlands Met Districts	Solihull	L05 - Inert Landfill	1,351,567
402413	Summerlease Limited	Hindhay Quarry	Hindhay Quarry, Furze Platt Road, Pinkneys Green, Maidenhead, Ber, SL6 6NL,	West Thames	South East	Berkshire	Windsor and Maidenhead	L05 - Inert Landfill	250,000
402485	T A G Industries Ltd	Willow Hall Quarry And Landfill	Willow Hall Farm, Thorney, Peterborough, PE6	Lincs and Northants	East of England	Cambridgeshire	Peterborough	L05 - Inert Landfill	1,009,215
402564	Ingrebourne Valley Limited	Pynesfield Inert Landfill	Pynesfield Inert Landfill, Tilehouse Lane, Maple Cross, Rickmansworth, Hertfordshire, WD3 9YB,	Herts and North London	East of England	Hertfordshire	Three Rivers	L05 - Inert Landfill	0
402604	Brett Aggregates Limited	Chalk Lake Landfill	North Sea Terminal, Cliffe, Rochester, Kent, ME3 7SX,	Kent and South London	South East	Kent	Medway	L05 - Inert Landfill	400,000
402723	Land Logical Thorney Limited	Land At Pasture House Farm	Land At Pasture House Farm, The Causeway, Thorney, Peterborough, Cambs,	Lincs and Northants	East of England	Cambridgeshire	Peterborough	L05 - Inert Landfill	1,961,108
402901	Thompsons Of Prudhoe Limited	Merrysields Quarry	Merrysields Quarry, Stocksfield, Northumberland, NE43 7NS,	Northumberland Durham and Tees	North East	Northumberland	Northumberland	L05 - Inert Landfill	158,819
402936	Brett Aggregates Ltd	George Green Landfill	George Green Landfill, Uxbridge Road, Slough, Buckinghamshire, SL2 5NH	Herts and North London	South East	Buckinghamshire	South Bucks	L05 - Inert Landfill	508,880
402985	Mick George Limited	Kennett Phase 2 A	Kennett Phase 2 A, Dane Hill Road, Kennett, Cambridgeshire, CB8 7QX,	Cambs and Bedfordshire	East of England	Cambridgeshire	East Cambridgeshire	L05 - Inert Landfill	125,902
403015	Simpson Quarries Limited	Little Weighton Cutting Landfill	Little Weighton Cutting Landfill, C/o Dispit Ltd, Albion Lane, Willerby, Hull, E Yorks, HU10 6DP,	Yorkshire	Yorkshire & Humber	Former Humberside	East Riding of Yorkshire	L05 - Inert Landfill	0
403159	Himley Environmental Limited	Oak Farm Quarry North East Inert Landfill	Oak Farm Quarry North East Inert Landfill, Crooked House Lane, Himley, Dudley, West Midlands, DY3 4DA,	Staffs Warks and West Mids	West Midlands	West Midlands Met Districts	Dudley	L05 - Inert Landfill	0
403263	Brett Aggregates Limited	Alpha Lake	Brett Aggregates, North Sea Terminal, Salt Lane, Cliffe, Kent, ME3 7SX,	Kent and South London	South East	Kent	Medway	L05 - Inert Landfill	1,000,000
403268	G. & B. Finch Limited	Asheldham Quarry	Tillingham Road, Asheldham, Southminster, Essex, CM0 7DZ,	Essex Norfolk and Suffolk	East of England	Essex	Maldon	L05 - Inert Landfill	24,200
403322	Brett Aggregates Limited	East Hall Farm Inert Landfill	East Hall Farm, New Road, Wennington, Rainham, Essex, RM13 9DS,	Herts and North London	London	East London Waste Authority	Havering	L05 - Inert Landfill	611,240
403438	Mick George Limited	Mepal Landfill Southern Extension	Mepal Landfill Southern Extension, Block Fen Drove, Mepal, Chatteris, Cambridgeshire, CB6 2AY,	Cambs and Bedfordshire	East of England	Cambridgeshire	Fenland	L05 - Inert Landfill	335,661
403439	Cemex U K Materials Limited	Cut Field Landfill	Oaklands Lane, Hatfield, Hertfordshire, AL4 0HL,	Herts and North London	East of England	Hertfordshire	Welwyn Hatfield	L05 - Inert Landfill	0
403604	Tarmac Trading Limited	Phases 1 And 2 At Alrewas Quarry	Croxhall Road, Burton On Trent, Staffordshire, DE13 7LR,	Staffs Warks and West Mids	West Midlands	Staffordshire	Lichfield	L05 - Inert Landfill	695,736
403620	Moorhead Excavations Limited	Howley Park Quarry 3	Howley Park Quarry 3, Quarry Lane, Woodkirk, Morley, Leeds, West Yorkshire,	Yorkshire	Yorkshire & Humber	West Yorkshire	Leeds	L05 - Inert Landfill	0
403698	Mckenna Environmental Limited	Woodeaton Quarry	Mckenna Environmental Limited, Woodeaton Quarry, Noke, Woodeaton, Oxfordshire, OX3 9TJ,	West Thames	South East	Oxfordshire	Cherwell	L05 - Inert Landfill	406,810
403733	Raymond Brown Minerals And Recycling	Roke Manor Quarry	Shootash, Romsey, Hampshire, SO51 6GA,	Solent and South Downs	South East	Hampshire	Test Valley	L05 - Inert Landfill	0
403761	Wicken Lime And Stone Company Ltd	Dimmocks Cote Quarry Restoration & Aggregate Recycling Facility	Stretham Road, Wicken, Ely, Cambridgeshire, CB7 5XL,	Cambs and Bedfordshire	East of England	Cambridgeshire	East Cambridgeshire	L05 - Inert Landfill	0
403792	Tarmac Trading Limited	Durnford Quarry	Durnford Quarry, Longwood Lane, Long Ashton, Bristol, Avon, BS41 9DW,	Wessex	South West	Bath, Bristol and S Glo	North Somerset	L05 - Inert Landfill	3,748,108
403832	Brett Aggregates Limited	Hatfield Aerodrome - Inert Landfill, Waste Treatment & Mining Waste Operations	Hatfield Aerodrome, Hatfield Road, Hertfordshire, AL4 0HN,	Herts and North London	East of England	Hertfordshire	St Albans	L05 - Inert Landfill	1,559,250
403913	Earl Shilton Recycling Ltd	Barrow Hill Quarry	Barrow Hill Quarry, Mill Lane, Earl Shilton, Leicestershire, LE9 7AW,	Derbys Notts and Leics	East Midlands	Leicestershire	Hinckley and Bosworth	L05 - Inert Landfill	52,000
403948	Ferns Surfacing Limited	Wrotham Quarry At Addington	Wrotham Quarry, Trottscliffe Road, Addington Wrotham, Kent, ME19 5DL,	Kent and South London	South East	Kent	Tonbridge and Malling	L05 - Inert Landfill	0

UNCLASSIFIED

UNCLASSIFIED

403968	Mick George Limited	Park Farm	Park Farm, St Ives Road, Somersham, St Ives, Cambridgeshire, PE28 3ET,	Cambs and Bedfordshire	East of England	Cambridgeshire	Huntingdonshire	L05 - Inert Landfill	433,416
404004	Cemex Uk Materials Limited	Cartwrights Covert Landfill	Cartwrights Covert Landfill, Flixton Road, Bungay, Suffolk, NR35 1NN,	Essex Norfolk and Suffolk	East of England	Suffolk	Waveney	L05 - Inert Landfill	178,000
404127	Buffalo Crow Limited	Hadleigh Quarry	Aldham Mill Hill, Hadleigh, Suffolk, IP7 6LE,	Essex Norfolk and Suffolk	East of England	Suffolk	Babergh	L05 - Inert Landfill	0
404155	Mick George Limited	Colne Fen Quarry	Chatteris Road, Earith, Cambridgeshire, PE28 3DE,	Cambs and Bedfordshire	East of England	Cambridgeshire	Huntingdonshire	L05 - Inert Landfill	394,204
404492	Sewells Reservoir Construction Limited	Barton Mills Chalk Quarry	Barton Mills Chalk Quarry, Barton Mills, Bury St Edmunds, Suffolk, IP28 6BN,	Cambs and Bedfordshire	East of England	Suffolk	Forest Heath	L05 - Inert Landfill	1,050,000
404583	Soil Hill Quarries (Yorkshire) Limited	The Far Shay	Brighouse And Denholm Road, Thornton, Bradford, West Yorkshire, BD13 4HF,	Yorkshire	Yorkshire & Humber	West Yorkshire	Bradford	L05 - Inert Landfill	400,000
404812	Breedon Southern Limited	Willington Quarry Plant Site	Bedford Road, Willington, Bedford, Bedfordshire, MK44 3PG,	Cambs and Bedfordshire	East of England	Bedfordshire	Bedford	L05 - Inert Landfill	0
404944	J & J Franks Limited	Mercers South Landfill	Mercers South Landfill, Mercers South, Nutfield, Redhill, Surrey, RH1 4HP,	Kent and South London	South East	Surrey	Tandridge	L05 - Inert Landfill	2,600,000
406424	Escrick Environmental Services Limited	Escrick Soil Landfill Site	Escrick Environmental Services Ltd, The Old Brick And Tile Works, Riccal Rd, Escrick, York, YO19 6ED,	Yorkshire	Yorkshire & Humber	North Yorkshire	Selby	L05 - Inert Landfill	0
AP3238GH	Veolia ES (UK) Limited	Bostock Landfill	Jack Lane, Bostock, Middlewich CW10 9JQ	Gtr Mancs Mersey and Ches	North West	Cheshire	Vale Royal	L01 - Hazardous Merchant Landfill	1,460,442
AP3638SX	York Recycling (Processing) Ltd	Aine Brickworks Landfill Site	Forest Lane, Aine, North Yorkshire YO61 1TU	Yorkshire	Yorkshire & Humber	North Yorkshire	Hambleton	L04 - Non Hazardous	0
BJ6003IF	Veolia ES Landfill Limited	New Albion Landfill Site	Occupation Road, Spring Cottage, Albert Village, Swadlincote DE11 8HA	Staffs Warks and West Mids	East Midlands	Leicestershire	North West Leicestershire	L04 - Non Hazardous	0
BJ7824IK	SITA Environment Limited	Path Head Landfill Site	Path Head Quarry, Path Head, Gateshead NE21 4SP	Northumberland Durham and Tees	North East	Tyne & Wear	Gateshead	L04 - Non Hazardous	0
BJ8952IH	Amec Capital Projects Limited	Rye Loaf Hill Landfill	Bingley, Bradford BD16 1TU	Yorkshire	Yorkshire & Humber	West Yorkshire	Bradford	L04 - Non Hazardous	0
BJ9339IF	Biffa Waste Services Ltd	Skelton Grange Landfill Site	Pontefract Lane, Rothwell, Leeds LS15 9AD	Yorkshire	Yorkshire & Humber	West Yorkshire	Leeds	L02 - Non Hazardous Landfill With SNRHW cell	0
BK0418IS	Hills Waste Solutions Limited	Parkgate Farm Landfill Site	Purton SN5 9HG	West Thames	South West	Wiltshire	North Wiltshire	L02 - Non Hazardous Landfill With SNRHW cell	882,313
BK0507IB	Yorwaste Limited	Harewood Whin Landfill	Tinker Lane, Rufforth, York YO2 3RR	Yorkshire	Yorkshire & Humber	North Yorkshire	York	L04 - Non Hazardous	600,000
BK1244IA	SITA Southern Limited	Fair Oak Landfill	Off Mortimers Lane, Fair Oak, Eastleigh SO50 7EA	Solent and South Downs	South East	Hampshire	Eastleigh	L04 - Non Hazardous	0
BK1449IK	Lafarge Aggregates Ltd	Cotesbach Landfill	Cotesbach Landfill, Gibbet Lane, Shawell, Lutterworth LE17 6AA	Staffs Warks and West Mids	East Midlands	Leicestershire	Harborough	L02 - Non Hazardous Landfill With SNRHW cell	9,952,095
BK2348IU	SITA (Lancashire) Limited	Clifton Marsh Landfill Site	Lytham Road, Clifton, Preston PR4 0XE	Cumbria and Lancashire	North West	Lancashire	Preston	L02 - Non Hazardous Landfill With SNRHW cell	1,089,752
BK5037IQ	AmeyCespa (East) Ltd	Waterbeach Waste Management Facility	Ely Road, Waterbeach, Cambridge CB5 9PG	Cambs and Bedfordshire	East of England	Cambridgeshire	South Cambridgeshire	L04 - Non Hazardous	2,141,935
BK6785IE	Viridor Waste (Somerset) Ltd	Walpole Landfill	Pawlett, Somerset TA6 4TF	Wessex	South West	Somerset	Sedgemoor	L02 - Non Hazardous Landfill With SNRHW cell	1,105,312
BK6858ID	Viridor Waste Management Ltd	Sands Farm Landfill	Sands Farm, Sand Pit Road, Calne SN11 8TR	Wessex	South West	Wiltshire	North Wiltshire	L04 - Non Hazardous	0
BL4940IU	Catplant Quarry Ltd	Hazel Lane Quarry and Landfill	Hazel Lane, Hampole, Doncaster DN6 7EX	Yorkshire	Yorkshire & Humber	South Yorkshire	Doncaster	L04 - Non Hazardous	231,128
BL9500IJ	SITA (Lancashire) Limited	Whinney Hill (Phase 2) Landfill Site	Whinney Hill Road, Accrington BB5 5EN	Cumbria and Lancashire	North West	Lancashire	Hyndburn	L04 - Non Hazardous	1,244,595
BL9518IE	SITA (Lancashire) Limited	Jameson Road (Phase 2) Landfill Site	Jameson Road, Fleetwood FY7 8TW	Cumbria and Lancashire	North West	Lancashire	Wyre	L04 - Non Hazardous	1,043,664
BM4635IH	FCC Waste Services (UK) Limited	Bletchley Landfill Site	Bletchley, Milton Keynes MK17 0AB	Cambs and Bedfordshire	South East	Buckinghamshire	Milton Keynes	L02 - Non Hazardous Landfill With SNRHW cell	10,409,626
BM5941IH	Lakeland Waste Management	Flusco Pike Landfill Site	Newbiggin, Nr Penrith CA11 0JB	Cumbria and Lancashire	North West	Cumbria	Eden	L02 - Non Hazardous Landfill With SNRHW cell	832,685
BM6026IB	Cumbria Waste Management Ltd	Hespin Wood Landfill Site	Rockcliffe, Cumbria CA6 4BJ	Cumbria and Lancashire	North West	Cumbria	Carlisle	L04 - Non Hazardous	1,304,861
BM6093IS	FCC Waste Services (UK) Limited	Bennett Bank Landfill	Thwaite Flat, Barrow in Furness, Cumbria LA14 4QH	Cumbria and Lancashire	North West	Cumbria	Barrow-in-Furness	L04 - Non Hazardous	36,715
BP3032SG	Anti-Waste Ltd	Aldeby Landfill	Oaklands Gravel Pit, Common Road, Aldeby, Beccles NR34 0BL	Essex Norfolk and Suffolk	East of England	Norfolk	South Norfolk	L04 - Non Hazardous	29,137
BP3334YQ	Sewells Reservoir Construction Limited	SRC Martells Quarry	Martells Quarry, Slough Lane, Ardleigh, Essex, CO7 7RUJ,	Essex Norfolk and Suffolk	East of England	Essex	Tendring	L04 - Non Hazardous	825,000
BP3436VS	Biffa Waste Services Limited	Poplars PFA Landfill Site	Lichfield Road, Cannock WS11 3EQ	Staffs Warks and West Mids	West Midlands	Staffordshire	Cannock Chase	L04 - Non Hazardous	298,000
BP3534YL	Cemex U K Materials Limited	Frampton Landfill Site	The Perry Way, Whiteminster, Gloucester GL2 7PU	Shrops Heref Wors and Glos	South West	Gloucestershire	Stroud	L04 - Non Hazardous	0
BP3537PP	Biffa Waste Services Ltd	Eye North Eastern Landfill	Eyebury Road, Peterborough PE6 7TH	Lincs and Northants	East of England	Cambridgeshire	Peterborough	L04 - Non Hazardous	580,780

UNCLASSIFIED

UNCLASSIFIED

BP3633LN	INEOS ChlorVinyls Limited	Randle Landfill Site	Runcorn, Cheshire WA7 4QF	Gtr Mancs Mersey and Ches	North West	Cheshire	Halton	L01 - Hazardous Merchant Landfill	2,811,636
BP3635SB	Yorkshire Water Services Ltd	Holmes Farm Landfill, Blackburn Meadows	Blackburn Meadows WWTW, Alsing Road, Tinsley S9 1LH	Yorkshire	Yorkshire & Humber	South Yorkshire	Sheffield	L04 - Non Hazardous	0
BP3637AF	FCC Waste Services (UK) Limited	Calvert Landfill Site pit 6	Brackley Lane, Calvert, Buckingham, MK18 2HF	Thames	South East	Buckinghamshire	Aylesbury Vale	L02 - Non Hazardous Landfill With SNRHW cell	5,943,903
BR4713IV	Cory Environmental (Gloucestershire) Ltd	Shortwood Quarry Landfill Site	Shortwood, Pucklechurch, Bristol BS16 9NN	Wessex	South West	Bath, Bristol and S Glo	South Gloucestershire	L04 - Non Hazardous	243,089
BR6791IJ	Keadby Generations Ltd	Fiddlers Ferry Ash Lagoons	Widness Road, Cuedley, Cheshire WA5 2UT	Gtr Mancs Mersey and Ches	North West	Cheshire	Warrington	L04 - Non Hazardous	2,199,359
BS7340IH	Biffa Waste Services Ltd	Clifton Hall Landfill Site	Lumms Lane, Clifton, Swinton M27 8LN	Gtr Mancs Mersey and Ches	North West	Greater Manchester	Salford	L04 - Non Hazardous	0
BS7668IH	3C Waste Limited	Arpley Landfill Site	Off Liverpool Road, Sankey Bridges, Warrington WA4 6YZ	Gtr Mancs Mersey and Ches	North West	Cheshire	Warrington	L04 - Non Hazardous	0
BS7722ID	3C Waste Limited	Maw Green Landfill Site	Maw Green Lane, Crewe CW 15NG	Gtr Mancs Mersey and Ches	North West	Cheshire	Crewe and Nantwich	L04 - Non Hazardous	144,835
BS7951IB	Viridor Waste Management Ltd	Pilsworth South Landfill	Pilsworth Quarry, Pilsworth Road, Bury BL9 8QZ	Gtr Mancs Mersey and Ches	North West	Greater Manchester	Bury	L02 - Non Hazardous Landfill With SNRHW cell	4,442,145
BS8605IQ	FCC Waste Services (UK) Limited	Calvert Landfill Site	Brackley Lane, Calvert, Buckingham MK18 2HF	Thames	South East	Buckinghamshire	Aylesbury Vale	L02 - Non Hazardous Landfill With SNRHW cell	2,186,371
BS9989IJ	Singleton Birch Limited	Campwood Landfill Site	Melton Ross Quarries, Barnetby DN38 6AE	Lincs and Northants	Yorkshire & Humber	Former Humberside	North Lincolnshire	L04 - Non Hazardous	3,706,353
BT7272IW	Viridor Waste Exeter Limited	Yanley Landfill (Southern Extension)	Bridgewater Road, Bristol BS13 8AF	Wessex	South West	Bath, Bristol and S Glo	North Somerset	L02 - Non Hazardous Landfill With SNRHW cell	0
BU0834IP	Waste Recycling Group (Central) Limited	Edwin Richards Landfill Site	Portway Road, Rowley Regis, Warley B65 9BT	Staffs Warks and West Mids	West Midlands	West Midlands Met Districts	Sandwell	L04 - Non Hazardous	10,637,117
BU2373IA	Derbyshire Waste Limited	Staveley Landfill	Staveley Landfill Site, Hall Lane, Staveley S43 3TP	Yorkshire	East Midlands	Derbyshire	Bolsover	L04 - Non Hazardous	0
BU2381IE	Veolia ES Landfill Limited	Ling Hall Landfill	Coalpit Lane, Lawford Heath CV23 9HH	Staffs Warks and West Mids	West Midlands	Warwickshire	Rugby	L02 - Non Hazardous Landfill With SNRHW cell	3,966,691
BU3671IY	S Grundon (Waste) Ltd	Wingmoor Farm	Stoke Orchard Road, Cheltenham GL52 4DG	Shrops Heref Wors and Glos	South West	Gloucestershire	Tewkesbury	L01 - Hazardous Merchant Landfill	1,051,993
BU5208IJ	Veolia ES Landfill Limited	Blue Haze Landfill	Somerley BH24 3QE	Wessex	South East	Hampshire	New Forest	L04 - Non Hazardous	780,880
BU5801ID	Hills Waste Solutions Ltd	Lower Compton Landfill	Compton Bassett, Calne SN11 8RE	Wessex	South West	Wiltshire	North Wiltshire	L04 - Non Hazardous	3,350,000
BU5992IT	Shropshire Waste Management Limited	Barnsley Lane Landfill Site	Lodge Farm, Barnsley Lane, Bridgnorth WV15 5HG	Shrops Heref Wors and Glos	West Midlands	Shropshire	Bridgnorth	L04 - Non Hazardous	0
BU6000IL	SITA UK Limited	Beacon Hill	Old Wareham Road, Corfe Mullen, Dorset BH21 3RZ	Wessex	South West	Dorset	Poole	L04 - Non Hazardous	400,000
BU6018ID	Hills Waste Solutions Limited	Purton Landfill Site	New Road, Purton, Swindon SN5 9HG	West Thames	South West	Wiltshire	North Wiltshire	L01 - Hazardous Merchant Landfill	0
BU7090IZ	SITA UK Limited	Alkerton Landfill Site	Alkerton, Banbury OX15 6NL	West Thames	South East	Oxfordshire	Cherwell	L04 - Non Hazardous	0
BU7901IP	Biffa Waste Services Ltd	Colnbrook Landfill	Colnbrook Lane, Sutton Lane, Colnbrook SL3 8AB	Herts and North London	South East	Berkshire	Slough	L04 - Non Hazardous	0
BU8045IR	Biffa Waste Services Ltd	Houghton-Le-Spring Landfill Site	The Quarry, Quarry Row, Houghton-le-Spring, Durham DH4 5AU	Northumberland Durham and Tees	North East	Tyne & Wear	Sunderland	L04 - Non Hazardous	25,000
BU8126IY	Biffa Waste Services Ltd	Redhill Landfill (North East Quadrant)	Cormongers Lane, Redhill RH1 4ER	Kent and South London	South East	Surrey	Reigate and Banstead	L02 - Non Hazardous Landfill With SNRHW cell	3,661,509
BU9068IM	Viridor Waste Management Ltd	Pilsworth North Landfill Site	Pilsworth Road, Bury BL9 8QZ	Gtr Mancs Mersey and Ches	North West	Greater Manchester	Bury	L02 - Non Hazardous Landfill With SNRHW cell	0
BU9084IJ	Veolia ES Landfill Limited	Candles Landfill	Dog Lane, Little Wenlock TF6 5AR	Shrops Heref Wors and Glos	West Midlands	Shropshire	Telford and Wrekin	L02 - Non Hazardous Landfill With SNRHW cell	0
BU9726IH	Caird Peckfield Limited	PECKFIELD LANDFILL	Ridge Road, Micklefield, Leeds LS25 4DW	Yorkshire	Yorkshire & Humber	West Yorkshire	Leeds	L04 - Non Hazardous	247,000
BU9947IA	SITA UK Limited	New Crosby Landfill	Crosby Warren, Off Dawes Lane, Scunthorpe DN16 6UR	Derbys Notts and Leics	Yorkshire & Humber	Former Humberside	North Lincolnshire	L04 - Non Hazardous	0
BV0627IL	NORTH LINCOLNSHIRE COUNCIL	CONESBY QUARRY PHASE III	Normanby Road, Scunthorpe DN15 8QZ	Lincs and Northants	Yorkshire & Humber	Former Humberside	North Lincolnshire	L04 - Non Hazardous	3,750,000
BV1020IS	SITA UK Limited	ALBURY LANDFILL	Shere Road, Guildford GU5 9BW	West Thames	South East	Surrey	Guildford	L04 - Non Hazardous	0
BV1046IV	SITA UK Limited	Sidegate Lane Landfill	Sidegate Lane Landfill, Wellingborough NN8 1RN	Lincs and Northants	East Midlands	Northamptonshire	Wellingborough	L04 - Non Hazardous	0
BV1364ID	Quercia Ltd	CLAYTON HALL LANDFILL SITE	Sand Quarry, Dawson Lane, Chorley PR6 7DT	Cumbria and Lancashire	North West	Lancashire	Chorley	L04 - Non Hazardous	470,029
BV1372IW	Cory Environmental (Central) Ltd	LORD ST HELENS LANDFILL SITE	Lea Green Road, St Helens WA9 4QQ	Gtr Mancs Mersey and Ches	North West	Merseyside	St Helens	L04 - Non Hazardous	0
BV1399IT	Augean North Limited	Port Clarence landfill Site (Haz)	Off Huntsman Drive, Stockton on Tees TS2 1UE	Northumberland Durham and Tees	North East	Tees Valley Unitary Authorities	Stockton on Tees	L01 - Hazardous Merchant Landfill	4,827,252
BV1402IC	Augean North Limited	Port Clarence Non-Hazardous Landfill Site	Off Huntsman Drive, Stockton on Tees TS2 1UE	Northumberland Durham and Tees	North East	Tees Valley Unitary Authorities	Stockton on Tees	L04 - Non Hazardous	352,152
BV1437IB	Lincwaste Limited	COLSTERWORTH LANDFILL SITE	Crabtree Road, Grantham NG33 5QT	Lincs and Northants	East Midlands	Lincolnshire	South Kesteven	L04 - Non Hazardous	3,531,782
BV1453IR	Castle Cement Limited	Grange Top Quarry Landfill	Ketton Works, Stamford PE9 3SX	Lincs and Northants	East Midlands	Leicestershire	Rutland	L06 - Hazardous Restricted Landfill	7,550
BV1461IV	Cemex UK Cement Ltd	BARRINGTON WORKS LANDFILL	Barrington Works, Haslingfield Road, Cambridge CB2 5RQ	Camb and Bedfordshire	East of England	Cambridgeshire	South Cambridgeshire	L04 - Non Hazardous	545,795
BV1470IE	Darrington Quarries Ltd	SKELBROOKE LANDFILL SITE	Straight Lane, Doncaster DN6 8LX	Yorkshire	Yorkshire & Humber	South Yorkshire	Doncaster	L04 - Non Hazardous	0
BV1593IB	Brock PLC	EARDSWICK HALL LANDFILL SITE	Eardswick Lane, Minshull Vernon, Crewe CW1 4RQ	Gtr Mancs Mersey and Ches	North West	Cheshire	Crewe and Nantwich	L01 - Hazardous Merchant Landfill	16,745

UNCLASSIFIED

BV1674IL	Pinden Limited	PINDEN QUARRY	Dartford, Kent DA2 8EB	Kent and South London	South East	Kent	Dartford	L01 - Hazardous Merchant Landfill	181,315
BV1763IS	Cemex UK Cement Ltd	South Ferriby Works Landfill	South Ferriby Works, Barton upon Humber DN18 6JL	Lincs and Northants	Yorkshire & Humber	Former Humberside	North Lincolnshire	L04 - Non Hazardous	14,000
BV1844IM	3C Waste Limited	GOWY LANDFILL SITE	Ince Lane, Chester CH2 4JP	Gtr Mancs Mersey and Ches	North West	Cheshire	Chester	L04 - Non Hazardous	281,630
BV2204IZ	Viridor Waste Management Ltd	LEAN QUARRY LANDFILL	Horningtops, Liskeard PL14 3QD	Devon & Cornwall	South West	Cornwall	Caradon	L04 - Non Hazardous	1,501,933
BV2263IW	Biffa Waste Services Ltd	Redhill Landfill (South West Area)	Cormongers Lane, Redhill RH1 4ER	Kent and South London	South East	Surrey	Reigate and Banstead	L04 - Non Hazardous	0
BV2999IJ	Cory Environmental (Central) Ltd	Vigo Utopia Landfill Site	Coppice Lane, Walsall Wood, Walsall WS9 8TB	Staffs Warks and West Mids	West Midlands	West Midlands Met Districts	Walsall	L04 - Non Hazardous	0
BV3740ID	FCC Waste Services (UK) Limited	Dogsthorpe Landfill Site	Welland Road, Dogsthorpe, Peterborough PE1 3TD	Lincs and Northants	East of England	Cambridgeshire	Peterborough	L02 - Non Hazardous Landfill With SNRHW cell	0
BV3766IH	FCC Waste Services (UK) Limited	BROGBOROUGH LANDFILL	Woburn Road, Bedford MK43 0TN	Cambs and Bedfordshire	East of England	Bedfordshire	Mid Bedfordshire	L04 - Non Hazardous	0
BV4410IC	Lincwaste Limited	MIDDLEMARSH LANDFILL	Burgh-le-Marsh, Skegness PE24 SAD	Lincs and Northants	East Midlands	Lincolnshire	East Lindsey	L04 - Non Hazardous	0
BV4428IU	BDR Waste Disposal Ltd	Bootham Lane Landfill	Bootham Lane-Doncaster DN7 4JT	Derbys Notts and Leics	Yorkshire & Humber	South Yorkshire	Doncaster	L04 - Non Hazardous	1,007,135
BV4444IQ	FCC Recycling (UK) Limited	DORKET HEAD LANDFILL	Woodbridge Lane, Nottingham NG5 8PU	Derbys Notts and Leics	East Midlands	Nottinghamshire	Gedling	L04 - Non Hazardous	0
BV4452ID	FCC Recycling (UK) Limited	Bilthorpe Landfill Site	Bilthorpe Landfill Site, Brailwood Road, Newark NG22 8UA	Derbys Notts and Leics	East Midlands	Nottinghamshire	Newark and Sherwood	L04 - Non Hazardous	0
BV4495IX	Biffa Waste Services Ltd	Attlebridge Landfill Site	Reepham Road, Attlebridge, Norwich NR9 5TD	Essex Norfolk and Suffolk	East of England	Norfolk	Broadland	L04 - Non Hazardous	0
BV4509IG	Viridor Waste Management Ltd	WANGFORD LANDFILL	Beccles NR34 8AR	Essex Norfolk and Suffolk	East of England	Suffolk	Waveney	L02 - Non Hazardous Landfill With SNRHW cell	0
BV4517IM	Viridor Waste Management Ltd	MASONS LANDFILL	Great Blakenham, Ipswich IP6 0NW	Essex Norfolk and Suffolk	East of England	Suffolk	Mid Suffolk	L02 - Non Hazardous Landfill With SNRHW cell	2,490,000
BV4525IB	FCC Waste Services (UK) Limited	WELDON LANDFILL SITE	Kettering Road, Corby NN17 3JG	Lincs and Northants	East Midlands	Northamptonshire	Corby	L02 - Non Hazardous Landfill With SNRHW cell	1,335,123
BV4541IR	Severn Trent Water Ltd	MINWORTH LANDFILL	Minworth Sewage Treatment Works, Kingsbury Road, Sutton Coldfield B76 9DP	Staffs Warks and West Mids	West Midlands	West Midlands Met Districts	Birmingham	L06 - Hazardous Restricted Landfill	195,048
BV4576IK	FCC Environment (UK) Limited	Stewartby Landfill Site	Green Lane, Bedford MK43 9LY	Cambs and Bedfordshire	East of England	Bedfordshire	Bedford	L04 - Non Hazardous	0
BV4584IU	East Waste Limited	MILTON LANDFILL	Butt Lane, Cambridge CB4 6DG	Cambs and Bedfordshire	East of England	Cambridgeshire	South Cambridgeshire	L04 - Non Hazardous	204,625
BV4592IS	East Waste Limited	March Landfill Site	Hundred Road, March PE15 8QN	Cambs and Bedfordshire	East of England	Cambridgeshire	Fenland	L04 - Non Hazardous	1,077,604
BV4967IW	Biffa Waste Services Ltd	MEECE LANDFILL 1	Swinnerton, Stone ST15 0QF	Staffs Warks and West Mids	West Midlands	Staffordshire	Stafford	L04 - Non Hazardous	637,940
BV4975IN	Biffa Waste Services Ltd	Wilnecote Landfill	Rush Lane, Dosthill, Tamworth B77 1LT	Staffs Warks and West Mids	West Midlands	Staffordshire	Tamworth	L04 - Non Hazardous	2,700,000
BV5165IJ	FCC Waste Services (UK) Limited	Arlesley Landfill Site	Mill Lane, High Street, Arlesley SG15 6RP	Cambs and Bedfordshire	East of England	Bedfordshire	Mid Bedfordshire	L04 - Non Hazardous	0
BV6994IV	Devon Waste Management Ltd	DEEPMOOR LANDFILL	High Bullen, Devon EX38 7JA	Devon & Cornwall	South West	Devon	Torridge	L02 - Non Hazardous Landfill With SNRHW cell	94,545
BV7001IK	Waste Recycling Group (Central) Limited	SUTTON COURTENAY	Appleford Sidings, Sutton Courtenay, Abingdon OX14 4PW	West Thames	South East	Oxfordshire	Vale of White Horse	L04 - Non Hazardous	2,505,012
BV7028IP	Viridor Waste Management Limited	Heathfield North Landfill Site	John Acres Lane, Newton Abbott TQ12 3GP	Devon & Cornwall	South West	Devon	Teignbridge	L04 - Non Hazardous	569,042
BV7168IX	Cleansing Service Group Ltd	Poundbottom Landfill Site	Forest Road, Salisbury SP5 2PU	Solent and South Downs	South West	Wiltshire	Salisbury	L02 - Non Hazardous Landfill With SNRHW cell	0
BV7214IR	Waste Recycling Group (Central) Limited	Dix Pit Landfill Site	Linch Hill, Stanton Harcourt OX29 5BJ	West Thames	South East	Oxfordshire	West Oxfordshire	L04 - Non Hazardous	137,687
BV7222IV	Summerlease Limited	Hurst Landfill Site	Whistley Court and Lea Farm, Mohawk Way, Reading RG5 4UE	West Thames	South East	Berkshire	Wokingham	L04 - Non Hazardous	0
BV7265IS	Cory Environmental (Central) Ltd	Himley Quarry Landfill Site	Kingswinford DY6 7YS	Staffs Warks and West Mids	West Midlands	West Midlands Met Districts	Dudley	L02 - Non Hazardous Landfill With SNRHW cell	418,953
BV7346IM	Viridor Waste Management Ltd	ARDLEY LANDFILL SITE	Ardley Fields Farm, Ardley OX27 7PH	West Thames	South East	Oxfordshire	Cherwell	L02 - Non Hazardous Landfill With SNRHW cell	0
BV7877IR	Biffa Waste Services Ltd	RISLEY LANDFILL SITE	Silver Lane, Warrington WA3 6BY	Gtr Mancs Mersey and Ches	North West	Cheshire	Warrington	L04 - Non Hazardous	0
BV7907IN	3C Waste Limited	Rigby Landfill	Wigan WN1 2XJ	Cumbria and Lancashire	North West	Lancashire	Chorley	L04 - Non Hazardous	0
BV8725IT	Cumbria Waste Management Ltd	DISTINGTON LANDFILL SITE	Pitwood Road, Workington CA14 4JP	Cumbria and Lancashire	North West	Cumbria	Copeland	L04 - Non Hazardous	5,136
BV8741IL	Booth Ventures Limited	HARWOOD QUARRY LANDFILL SITE	Brookfold Lane, Harwood, Bolton BL2 4LT	Gtr Mancs Mersey and Ches	North West	Greater Manchester	Bolton	L04 - Non Hazardous	1,336,188
BV9756IE	BAE Systems Properties Ltd	BAE SYSTEMS LANDFILL	Royal Ordnance Landfill, Euxton Lane, Chorley PR7 6TF	Cumbria and Lancashire	North West	Lancashire	Chorley	L01 - Hazardous Merchant Landfill	0
BV9896IY	Biffa Waste Services Ltd	BROOKHURSTWOOD LANDFILL SITE	Langhurstwood Road, Horsham RH12 4QD	Solent and South Downs	South East	West Sussex	Horsham	L04 - Non Hazardous	0
BV9900IS	Viridor Waste Management Ltd	HORTON LANDFILL SITE	Henfield, West Sussex BN5 9XH	Solent and South Downs	South East	West Sussex	Horsham	L02 - Non Hazardous Landfill With SNRHW cell	0
BW0037IA	Waste Recycling Group (Central) Limited	BUBBENHALL LANDFILL SITE	Weston Lane, Warwick CV8 3BN	Staffs Warks and West Mids	West Midlands	West Midlands Met Districts	Coventry	L04 - Non Hazardous	1,288,882
BW0096IJ	Biffa Waste Services Ltd	Meece II Landfill Site	Westgate, Swinnerton, Stobe ST15 0GN	Staffs Warks and West Mids	West Midlands	Staffordshire	Stafford	L01 - Hazardous Merchant Landfill	251,555
BW0231IH	Water Hall (England) Ltd	Southfield Wood Landfill Site	Waterhall Quarry, Lower Hatfield Road, Hertford SG13 8LF	Herts and North London	East of England	Hertfordshire	East Hertfordshire	L04 - Non Hazardous	0
BW0240IT	Waste Recycling Group (Central) Limited	Hermitage Landfill	Bradley Court Road, Newbury RG18 9XZ	West Thames	South East	Berkshire	West Berkshire	L04 - Non Hazardous	0
BW0509IU	FCC Recycling (UK) Limited	Bradgate Landfill Site	Leicester Road, Field Head, Leicester LE67 9RH	Derbys Notts and Leics	East Midlands	Leicestershire	Hinckley and Bosworth	L04 - Non Hazardous	0

BW0533ID	SITA UK Limited	PACKINGTON LANDFILL	Little Packington, Coventry CV7 7HF	Staffs Warks and West Mids	West Midlands	Warwickshire	North Warwickshire	L02 - Non Hazardous Landfill With SNRHW cell	0
BW0584IL	Biffa Waste Services Ltd	Poplars Landfill Site	Lichfield Road, Cannock WS11 3EQ	Staffs Warks and West Mids	West Midlands	Staffordshire	Cannock Chase	L04 - Non Hazardous	4,158,951
BW0983IT	Viridor Waste Management Ltd	Parkwood Road Landfill Site	Parkwood Road, Sheffield S3 8AG	Yorkshire	Yorkshire & Humber	South Yorkshire	Sheffield	L04 - Non Hazardous	0
BW0991IX	Viridor Limited	ERIN LANDFILL	Markham Lane, Duckmanton, Chesterfield S44 5HS	Yorkshire	East Midlands	Derbyshire	Chesterfield	L02 - Non Hazardous Landfill With SNRHW cell	5,393,913
BW1009ID	Darrington Quarries Limited	Barnsdale Bar Landfill	Long Lane, Kirk Smeaton WF8 3IX	Yorkshire	Yorkshire & Humber	North Yorkshire	Selby	L04 - Non Hazardous	0
BW1416IQ	P. Casey Enviro (Arden) Limited	ARDEN QUARRY LANDFILL	Oven Hill, Birch Vale, High Peak, Derbyshire SK22 1BY	Gtr Mancs Mersey and Ches	East Midlands	Derbyshire	High Peak	L04 - Non Hazardous	1,908,533
BW1785IH	Integrated Waste Management Ltd	Winterton South Landfill	Coley Road, West Halton, Scunthorpe DN15 9AP	Lincs and Northants	Yorkshire & Humber	Former Humberside	North Lincolnshire	L01 - Hazardous Merchant Landfill	834,596
BW1807IK	Biffa Waste Services Ltd	NORTH HERTS LANDFILL	Bedford Road, Hitchin SG5 3RT	Cams and Bedfordshire	East of England	Hertfordshire	North Hertfordshire	L02 - Non Hazardous Landfill With SNRHW cell	0
BW2072IN	Augean North Limited	MARKS QUARRY LANDFILL SITE	Pit house Lane, Houghton-le-Spring DH4 6QQ	Northumberland Durham and Tees	North East	Tyne & Wear	Sunderland	L04 - Non Hazardous	0
BW2145IR	S.W.S. Limited	Longhill Landform	Thomlinson Road, Hartlepool TS25 1NS	Northumberland Durham and Tees	North East	Tees Valley Unitary Authorities	Hartlepool	L04 - Non Hazardous	0
BW2188IU	Waste Recycling Group (Yorkshire) Limited	Allerton Park Landfill Site	HGS OSD	Yorkshire	Yorkshire & Humber	North Yorkshire	Harrogate	L04 - Non Hazardous	2,161,472
BW2277IM	Viridor Waste Management Ltd	Whitehead Landfill Site	Lower Green Lane, Wigan M29 7JZ	Gtr Mancs Mersey and Ches	North West	Greater Manchester	Salford	L04 - Non Hazardous	0
BW2811IU	East Waste Ltd	Grunty Fen Landfill Site	Grunty Fen, Ely CB6 3RQ	Cams and Bedfordshire	East of England	Cambridgeshire	East Cambridgeshire	L04 - Non Hazardous	246,314
BW2838IN	Anti Waste Limited	Feltwell Landfill Site	The Oakery, Lodge Road, Thetford IP26 4DL	Cams and Bedfordshire	East of England	Norfolk	King's Lynn and West Norfolk	L04 - Non Hazardous	1,204,035
BW2862IU	SITA UK Limited	Somersham Landfill Site	Long Drove, Somersham PE17 3HJ	Cams and Bedfordshire	East of England	Cambridgeshire	Huntingdonshire	L04 - Non Hazardous	0
BW2943IG	Viridor Waste Management Limited	FOXHALL LANDFILL SITE	Foxhall Road, Brightwell IP10 0HT	Essex Norfolk and Suffolk	East of England	Suffolk	Suffolk Coastal	L04 - Non Hazardous	0
BW2951IM	Biffa Waste Services Ltd	Roxy Landfill Site	Winterton Road, Scunthorpe DN15 0BD	Lincs and Northants	Yorkshire & Humber	Former Humberside	North Lincolnshire	L04 - Non Hazardous	3,619,867
BW2978ID	Lincwaste Limited	Whisby Landfill	Thorpe Road, Whisby LN6 9BT	Lincs and Northants	East Midlands	Lincolnshire	North Kesteven	L04 - Non Hazardous	2,595,652
BW2986IW	Lincwaste Limited	NORTH HYKEHAM LANDFILL SITE	Whisby Road, Lincoln LN6 3QZ	Lincs and Northants	East Midlands	Lincolnshire	North Kesteven	L04 - Non Hazardous	334,011
BW3125IA	FCC Recycling (UK) Limited	Staple Quarry Landfill Site	Grange Lane, Nottingham NG23 5JZ	Derbys Notts and Leics	East Midlands	Nottinghamshire	Newark and Sherwood	L04 - Non Hazardous	58,847
BW9395IF	Drax Power Limited	Barlow Mound Ash Disposal Site	Drax Power Station, North Yorkshire YO8 8PQ	Yorkshire	Yorkshire & Humber	North Yorkshire	Selby	L04 - Non Hazardous	6,756,380
BW9549IA	Outokumpu Stainless Ltd	Tinsley Park Works Landfill Site	Tinsley Park Works, Sheffield S9 1TR	Yorkshire	Yorkshire & Humber	South Yorkshire	Sheffield	L04 - Non Hazardous	232,786
BX0792IX	Biffa Waste Services Ltd	KILSBY PHASE VII LANDFILL SITE	Grove Farm, Daventry Road, Daventry CV23 8XF	Lincs and Northants	East Midlands	Northamptonshire	Daventry	L04 - Non Hazardous	0
BX1942IX	Sandfield Gravel Company Ltd	Milegate Extension Landfill Site	Catwick Lane, Driffield YO25 8SA	Yorkshire	Yorkshire & Humber	Former Humberside	East Riding of Yorkshire	L04 - Non Hazardous	708,788
BX2388IF	Veolia ES Landfill Limited	CROFT FARM LANDFILL SITE	Askern Road, Doncaster DN6 8DE	Yorkshire	Yorkshire & Humber	South Yorkshire	Doncaster	L04 - Non Hazardous	0
BX4054ID	Viridor Waste Management Ltd	Trigon Landfill Site	Bere-Regis to Wareham Road, Nr Wareham Road, Wareham BH20 7PB	Wessex	South West	Dorset	Purbeck	L04 - Non Hazardous	0
BX7886IJ	Cory Environmental (Central) Ltd	Lyme and Wood Pits Landfill	Vista Road, Newton-le-Willows WA11 0RN	Gtr Mancs Mersey and Ches	North West	Merseyside	St Helens	L04 - Non Hazardous	0
CP3033LL	Biffa Waste Services Ltd	Pebsham Landfill - Northern Quadrant	Freshfields, Bexhill Road, St Leonards on Sea TN38 8AY	Solent and South Downs	South East	East Sussex	Rother	L04 - Non Hazardous	0
CP3035PF	Hills Waste Solutions Ltd	Chapel Farm Phase 2 Landfill Site	Blunsdon SN26 4DD	West Thames	South West	Wiltshire	Swindon	L02 - Non Hazardous Landfill With SNRHW cell	0
CP3036AJ	British Steel Ltd	Crosby North Landfill	Daws Lane, Scunthorpe	Derbys Notts and Leics	Yorkshire & Humber	Former Humberside	North Lincolnshire	L04 - Non Hazardous	1,641,736
CP3232FQ	City Plant Limited	Gilberdyke Landfill	Leatherdog Lane, Brough HU15 2RF	Yorkshire	Yorkshire & Humber	Former Humberside	East Riding of Yorkshire	L04 - Non Hazardous	0
CP3238YX	Swanscombe Development LLP	South Pit Phase 3 Landfill	Manor Way, Swanscombe, Kent DA10 0LL	Kent and South London	South East	Kent	Dartford	L06 - Hazardous Restricted Landfill	0
CP3435PR	S Grondon (Waste) Ltd	Star Works Landfill Site	Star Lane, Twyford RG10 9YB	West Thames	South East	Berkshire	Wokingham	L04 - Non Hazardous	0
CP3531RE	Commercial Recycling (Southern) Limited	Southwood Landfill Site	Southwood, Evercreech B14 6LX	Wessex	South West	Somerset	Mendip	L01 - Hazardous Merchant Landfill	0
CP3536GX	Mick George Ltd	Rushton Landfill Site	Oakley Road, Rushton, Kettering NN14 1RS	Lincs and Northants	East Midlands	Northamptonshire	Kettering	L04 - Non Hazardous	200,000
CP3735SM	Lidsey Landfill Limited	Lidsey Landfill Site	Lidsey Road, Bognor Regis PO22 9PL	Solent and South Downs	South East	West Sussex	Arun	L04 - Non Hazardous	0
CP3935PU	Viridor Waste Management Limited	Squabb Wood Landfill Site	Salisbury Road, Shootash SO51 6GA	Solent and South Downs	South East	Hampshire	Test Valley	L04 - Non Hazardous	0
CP3936QK	BDR Property Limited	Thurcroft Landfill	Kingsforth Lane, Thurcroft, Rotherham S66 9AB	Derbys Notts and Leics	Yorkshire & Humber	South Yorkshire	Rotherham	L04 - Non Hazardous	184,614
DB3804UP	Summerleaze Limited	New Denham Quarry Northern Extension	Land at Denham, Uxbridge, Buckinghamshire, UB9 4EH	Herts and North London	South East	Buckinghamshire	South Bucks	L05 - Inert Landfill	950,000
DP3036QE	St Modwen Developments Ltd	Kingsweston Landfill	Kingsweston Lane, Avonmouth, Bristol BS11 8HT	Wessex	South West	Bath, Bristol and S Glo	Bristol, City of	L02 - Non Hazardous Landfill With SNRHW cell	0
DP3038QR	Harworth Estates Investments Limited	Ironbridge "A" Power Station Landfill	Buildwas Road, Ironbridge TF8 7BL	Shrops Heref Worcs and Glos	West Midlands	Shropshire	Shrewsbury and Atcham	L04 - Non Hazardous	0
DP3238SB	SITA UK Limited	Ellington Road Landfill Site	Ellington Road, Ashington NE63 9XS	Northumberland Durham and Tees	North East	Northumberland	Wansbeck	L02 - Non Hazardous Landfill With SNRHW cell	920,009
DP3331DJ	Highfield Environmental Limited	ICI NO 3 TEESPORT	Teesport TS6 6UG	Northumberland Durham and Tees	North East	Tees Valley Unitary Authorities	Redcar and Cleveland	L01 - Hazardous Merchant Landfill	2,025,194

UNCLASSIFIED

DP3333KT	BPB United Kingdom Limited	Kirkby Thore Works Landfill Site	Kirkby Thore Gypsum Works, Kirkby Thore CA10 1XU	Cumbria and Lancashire	North West	Cumbria	Eden	L02 - Non Hazardous Landfill With SNRHW cell	0
DP33345R	M.B. Wilkes Ltd	Henbury Landfill	Old Market Road, Corfe Mullen BH21 3QZ	Wessex	South West	Dorset	East Dorset	L05 - Inert Landfill	140,000
DP3335ME	Cemex UK Cement Ltd	Southam Landfill	Southam Road, Long Itchington, Southam CV47 9RA	Staffs Warks and West Mids	West Midlands	Warwickshire	Stratford upon Avon	L06 - Hazardous Restricted Landfill	340,000
DP3431PC	Biffa Waste Services Ltd	Westmill II Waste Management Facility	Westmill Road, Ware SG12 0ES	Herts and North London	East of England	Hertfordshire	East Hertfordshire	L04 - Non Hazardous	132,697
DP3639LM	Whitemoss Landfill Ltd	WHITEMOSS LANDFILL	Whitemoss Road South, Skelmersdale WN8 8BW	Cumbria and Lancashire	North West	Lancashire	West Lancashire	L01 - Hazardous Merchant Landfill	1,711,261
DP3734DC	Red Industries Ltd	Walleys Quarry	Cemetery Road, Silverdale, Newcastle under Lyme ST5 6DH	Staffs Warks and West Mids	West Midlands	Staffordshire	Newcastle Under Lyme	L02 - Non Hazardous Landfill With SNRHW cell	1,868,167
DP3836LS	FCC Recycling (UK) Limited	Carlton Forest Landfill Site	Blyth Road, Carlton Forest S81 0TT	Derbys Notts and Leics	East Midlands	Nottinghamshire	Bassetlaw	L04 - Non Hazardous	0
EP3035JG	Land & Water Remediation Limited	Silt Lagoons, Rainham and Wennington Marshes	Silt Lagoons, Rainham and Wennington Marshes, Cold Harbour Lane, Rainham, RM13 9YQ	Herts and North London	London	East London Waste Authority	Havering	L04 - Non Hazardous	28,294
EP3135PE	Tilfen Land Limited	Tripcock Point	Facility 3, Off Central Way, London SE28 0AB	Kent and South London	London	South East London	Greenwich	L01 - Hazardous Merchant Landfill	0
EP3136GK	Veolia ES Landfill Ltd	Rainham Landfill	Coldharbour Lane, Rainham RM13 9DA	Herts and North London	London	East London Waste Authority	Havering	L04 - Non Hazardous	1,142,042
EP3830LE	ALAB ENVIRONMENTAL SERVICES LIMITED	SEATON MEADOWS	Tofts Farm Industrial Estate, Brenda Road, Hartlepool TS25 2BS	Northumberland Durham and Tees	North East	Tees Valley Unitary Authorities	Hartlepool	L02 - Non Hazardous Landfill With SNRHW cell	546,579
EP3936GP	Veolia ES Landfill Limited	Pitsea Landfill	Pitsea Hall Lane, Pitsea SS16 4UH	Essex Norfolk and Suffolk	East of England	Essex	Basildon	L04 - Non Hazardous	0
FB3301CV	Opes MRF 2013 Limited	Finmere Quarry Landfill	Banbury Road, Finmere MK18 4AJ	Camb and Bedfordshire	South East	Oxfordshire	Cherwell	L04 - Non Hazardous	437,182
FP3136AL	Longs Steel UK Limited	Yarborough Quarry	Crosby North Landfill, Brigg Road, Scunthorpe DN16 1BP	Derbys Notts and Leics	Yorkshire & Humber	Former Humberside	North Lincolnshire	L04 - Non Hazardous	5,224,655
FP3435PJ	Biffa Waste Services Ltd	Studley Grange Farm	Studley Grange Farm, Hay Lane, Swindon SN4 9QT	Wessex	South West	Wiltshire	Swindon	L02 - Non Hazardous Landfill With SNRHW cell	0
FP3437CZ	Lymouth Power Limited	Alcan Ash Lagoons 1-4	Lynemouth Smelter, Lynemouth, Ashington NE63 9YH	Northumberland Durham and Tees	North East	Northumberland	Wansbeck	L04 - Non Hazardous	187,000
FP3733BH	SITA UK Limited	Godmanchester Landfill Site	Rectory Farm, Cow Lane, Godmanchester PE18 8EJ	Camb and Bedfordshire	East of England	Cambridgeshire	Huntingdonshire	L04 - Non Hazardous	0
GP3037SJ	FCC Recycling (UK) Limited	Lillyhall Stage 3 Landfill Site	Dixon House, Joseph Noble Road, Workington CA14 4JH	Cumbria and Lancashire	North West	Cumbria	Allerdale	L02 - Non Hazardous Landfill With SNRHW cell	891,040
GP3334XL	British Salt Ltd	Hilltop Farm Brinefields	Hilltop Brinefield, Warmingham CW10 0HQ	Gtr Mancs Mersey and Ches	North West	Cheshire	Crewe and Nantwich	L04 - Non Hazardous	616,409
GP3538VY	Knapton Quarry Limited	KNAPTON GRAVEL QUARRY	Malton, North Yorkshire YO17 8JA	Yorkshire	Yorkshire & Humber	North Yorkshire	Ryedale	L04 - Non Hazardous	0
GP3733FE	Churchill Enviro Ltd	Fletcher Bank Landfill Site	Fletcher Bank, Ramsbottom, Bury BL0 0DD	Gtr Mancs Mersey and Ches	North West	Lancashire	Rosendale	L04 - Non Hazardous	2,500,000
GP3739BQ	RWE nPower Plc	Tilbury Ash Disposal Site	Tilbury Power Station, Fort Road, West Tilbury, Tilbury RM18 8UJ	Essex Norfolk and Suffolk	East of England	Essex	Thurrock	L04 - Non Hazardous	1,249,141
GP3831GN	Norfolk County Council	Edgefield Landfill Site	Holt Road, Off B1149, Holt, Norfolk NR24 2RS	Essex Norfolk and Suffolk	East of England	Norfolk	North Norfolk	L04 - Non Hazardous	29,754
HP3530BS	Thompsons Of Prudhoe Limited	Springwell Quarry	Springwell Road, Wrekenton NE9 7XW	Northumberland Durham and Tees	North East	Tyne & Wear	Sunderland	L04 - Non Hazardous	6,328
HP3690CF	Hanson Quarry Products Europe Ltd	Shardlow Quarry Landfill	Shardlow Quarry, Acre Lane, Aston-on-Trent, Derby DE72 2SP	Derbys Notts and Leics	East Midlands	Derbyshire	South Derbyshire	L04 - Non Hazardous	240,551
JP3033YQ	Crown Waste Limited	Judkins Landfill Phase 3	Tuttle Hill, Nuneaton CV10 0JQ	Staffs Warks and West Mids	West Midlands	Warwickshire	Nuneaton and Bedworth	L04 - Non Hazardous	2,300,000
JP3139SG	Rugeley Power Limited	Rugeley Power Station	Station Road, Rugeley WS15 1PR	Staffs Warks and West Mids	West Midlands	Staffordshire	Lichfield	L04 - Non Hazardous	107,902
JP3338ST	Woods Waste Limited	Westby Landfill Site	Peel Road, Blackpool FY4 5JX	Cumbria and Lancashire	North West	Lancashire	Blackpool	L04 - Non Hazardous	347,350
JP3434RS	Saint-Gobain Construction Products UK Limited	Welby Tip	Holwell Works, Welby Road, Asfordby Hill LE14 3RE	Derbys Notts and Leics	East Midlands	Leicestershire	Melton	L04 - Non Hazardous	23,792
JP3992NH	Anti-Waste Limited	Blackborough End Landfill (Green Land)	Mill Drove, East Winch, Blackborough End, Norfolk PE32 1SW	Camb and Bedfordshire	East of England	Norfolk	King's Lynn and West Norfolk	L04 - Non Hazardous	3,862,191
KP3539BQ	Castle Cement Limited	Ribblesdale Works	West Bradford Road, Clitheroe BB7 4QF	Cumbria and Lancashire	North West	Lancashire	Ribble Valley	L06 - Hazardous Restricted Landfill	150,000
KP3734LL	WRG Waste Services Ltd	Deerplay Landfill	Bacup Road, Burnley BB11 3RL	Cumbria and Lancashire	North West	Lancashire	Burnley	L04 - Non Hazardous	1,490,898
LP3032UR	Biffa Waste Services Ltd	Waresley Landfill Site	Hartlebury Trading Estate, Hartlebury, Kidderminster DY10 4JA	Shrops Heref Wors and Glos	West Midlands	Worcestershire	Wychavon	L04 - Non Hazardous	2,503,000
LP3039LP	Collier Industrial Waste Ltd	Rixton Landfill	Moss Side and Fir Tree Farms, Rixton, Warrington WA3 6EN	Gtr Mancs Mersey and Ches	North West	Cheshire	Warrington	L04 - Non Hazardous	1,193,880
LP3133FK	Booth Ventures Limited	Britannia Quarry	Rein Road, Morley, Leeds LS27 0JA	Yorkshire	Yorkshire & Humber	West Yorkshire	Leeds	L04 - Non Hazardous	0
LP3330XP	Demex Limited	Thornhill Quarry Landfill Site	Calder Road, Ravensthorpe, Dewsbury WF12 9EA	Yorkshire	Yorkshire & Humber	West Yorkshire	Kirklees	L02 - Non Hazardous Landfill With SNRHW cell	0
LP3434HA	Bradley Park Waste Management Ltd	Bradley Park Landfill	Occupation Road, Off Lower Quarry Road, Huddersfield HD2 1FF	Yorkshire	Yorkshire & Humber	West Yorkshire	Kirklees	L01 - Hazardous Merchant Landfill	1,815,001
LP3530BX	Integrated Waste Management Ltd	Carnaby Landfill Site	Moor Lane, Carnaby YO16 4UU	Yorkshire	Yorkshire & Humber	Former Humberside	East Riding of Yorkshire	L04 - Non Hazardous	1,981,815
LP3832NM	Durham County Council	Joint Stocks Landfill Phase 2	Joint Stocks Quarry, Durham DH6 4RT	Northumberland Durham and Tees	North East	Durham	Durham City	L04 - Non Hazardous	1,832,398
MP3234SS	Elementis UK Ltd	Coatham Stob Quarry (Area 6)	Area 6 Coatham Stob Quarry, Durham Lane, Eaglescliffe TS16 0PS	Northumberland Durham and Tees	North East	Tees Valley Unitary Authorities	Stockton on Tees	L04 - Non Hazardous	164,076

UNCLASSIFIED

MP3435KP	Viridor Waste Management Ltd	Elsenham Landfill	Hall Road, Elsenham, Bishops Stortford CM22 6DJ	Herts and North London	East of England	Essex	Uttlesford	L04 - Non Hazardous	1,333,000
MP3933CJ	Cemex UK Materials Limited	Burghfield Landfill	Island Road, Reading RG2 0RR	West Thames	South East	Berkshire	Slough	L04 - Non Hazardous	0
NP3036KR	Mick George Limited	Witcham Meadlands Landfill	Block Fen Drove, Mepal CB6 2AY	Camb and Bedfordshire	East of England	Cambridgeshire	Fenland	L04 - Non Hazardous	592,053
NP3135SL	Cory Environmental Ltd	Highfields South Landfill Site	Lichfield Road, Walsall WS9 9AH	Staffs Warks and West Mids	West Midlands	West Midlands Met Districts	Walsall	L04 - Non Hazardous	1,029,284
NP3139PK	SUEZ Ltd	Harmondsworth Landfill Site	Holloway Lane, Sipson UB7 0AE	Herts and North London	London	West London Waste Authority	Hillingdon	L04 - Non Hazardous	0
NP3235SU	Cory Environmental (Gloucestershire) Ltd	Hempsted Landfill Site	Hempsted Lane, Gloucester GL2 5JA	Shrops Heref Wors and Glos	South West	Gloucestershire	Gloucester	L04 - Non Hazardous	0
NP3333LD	William Lee Ltd	William Lee Landfill Site	Callywhite Lane, Sheffield S18 2XU	Yorkshire	East Midlands	Derbyshire	North East Derbyshire	L04 - Non Hazardous	0
NP3435PX	Biffa Waste Services Ltd	Ufton Farm Landfill Site	Southam Road, Leamington Spa CV33 9PP	Staffs Warks and West Mids	West Midlands	Warwickshire	Stratford upon Avon	L02 - Non Hazardous Landfill With SNRHW	0
NP3538MF	FCC Recycling (UK) Limited	Daneshill Landfill Site	Lound DN22 8RB	Derbys Notts and Leics	East Midlands	Nottinghamshire	Bassetlaw	L04 - Non Hazardous	0
NP3538YQ	London Green Resources Limited	Land at Meadhams Farm Brickworks	,Land at Meadhams Farm Brickworks ,Ley Hill,CHESHAM,CHESHAM,Buckinghamshire HP5 1UW	Herts and North London	South East	Buckinghamshire	Chiltern	L02 - Non Hazardous Landfill With SNRHW cell	243,600
NP3635JM	EDF Energy (West Burton Power) Ltd	Cottam Ash Lagoons	Cottam Power Station, PO Box 4, Retford DN22 0ET	Derbys Notts and Leics	East Midlands	Nottinghamshire	Bassetlaw	L04 - Non Hazardous	1,567,774
NP3635S2	Biffa Waste Services Ltd	Kingsbury Landfill	Rush Lane, Tamworth B77 1LT	Staffs Warks and West Mids	West Midlands	Warwickshire	North Warwickshire	L04 - Non Hazardous	2,751,584
NP3736DS	Cory Environmental (Gloucestershire) Limited	Bellhouse Landfill Site	Warren Lane, Colchester CO3 5NN	Essex Norfolk and Suffolk	East of England	Essex	Colchester	L04 - Non Hazardous	4,088,210
NP3736GU	Veolia ES Landfill Limited	Ockendon Area II & III Landfill	Medebridge Road, Grays RM16 5TZ	Essex Norfolk and Suffolk	East of England	Essex	Castle Point	L04 - Non Hazardous	3,401,109
NP3934LH	Hills Waste Solution Limited	Parkgate Farm Hazardous waste landfill	Purton SN5 4HG	West Thames	South West	Wiltshire	Swindon	L01 - Hazardous Merchant Landfill	300,000
PP3133TS	Lincwaste Limited	Leadenham Landfill	Pottergate, Leadenham, Lincolnshire LN5 0QF	Lincs and Northants	East Midlands	Lincolnshire	North Kesteven	L04 - Non Hazardous	112,267
PP3134SL	SITA UK Limited	Corby Landfill Site	Kettering Road, Weldon NN17 3JG	Lincs and Northants	East Midlands	Northamptonshire	Corby	L04 - Non Hazardous	0
PP3135SU	Lafarge Aggregates Ltd	Brittons Hall Farm Landfill site	Chignal St James CM1 4LT	Essex Norfolk and Suffolk	East of England	Essex	Chelmsford	L02 - Non Hazardous Landfill With SNRHW cell	0
PP3139DJ	Cory Environmental (Gloucestershire) Ltd	Greatness Quarry Integrated Waste Management Facility	Farm Road, Greatness, Sevenoaks TN14 5BS	Kent and South London	South East	Kent	Sevenoaks	L04 - Non Hazardous	11,855
PP3430BK	Lincwaste Limited	Kirby on Bain Landfill site	Tattershall Road, Kirby on Bain LN10 6YN	Lincs and Northants	East Midlands	Lincolnshire	East Lindsey	L04 - Non Hazardous	76,437
PP3630BC	Lincwaste Limited	Kenwick Landfill	London Road, Louth LN11 9QP	Lincs and Northants	East Midlands	Lincolnshire	East Lindsey	L04 - Non Hazardous	547,848
PP3734SE	SITA UK Limited	Cranford Landfill Site	Cranford Landfill Site, Thrapstone Road, Woodford NN14 4HY	Lincs and Northants	East Midlands	Northamptonshire	Kettering	L04 - Non Hazardous	0
PP3735SW	Biffa Waste Services Ltd	Ugley Landfill	Cambridge Road, Ugley CM22 6HT	Herts and North London	East of England	Essex	Uttlesford	L04 - Non Hazardous	0
PP3830BV	Integrated Waste Management Ltd	Immingham Landfill Site	Queens Road, Immingham DN40 1QR	Lincs and Northants	Yorkshire & Humber	Former Humberside	North East Lincolnshire	L04 - Non Hazardous	98,949
PP3935CU	Recycled In Ardleigh Limited	Martells Quarry Landfill	Martells Industrial Estate, Slough Lane, Ardleigh CO7 7RU	Essex Norfolk and Suffolk	East of England	Essex	Tendring	L04 - Non Hazardous	10,000
PP3939DN	Cory Environmental (Gloucestershire) Limited	Barling Marsh Landfill	Barling Marsh, Great Wakering SS3 0LL	Essex Norfolk and Suffolk	East of England	Essex	Rochford	L04 - Non Hazardous	0
QP3033BG	Biffa Waste Services Ltd	Bramford Landfill Site	Paper Mill Lane, Bramford IP8 4DE	Essex Norfolk and Suffolk	East of England	Suffolk	Mid Suffolk	L04 - Non Hazardous	0
QP3230LE	WESTCOMBE WASTE LTD	Whiscombe Hill Landfill	Westcombe Hill, Somerton TA11 6PZ	Wessex	South West	Somerset	South Somerset	L04 - Non Hazardous	308,000
QP3539XL	Integrated Waste Management Ltd	Winterton North Landfill	Coleby Road, West Halton, Scunthorpe DN15 9AP	Lincs and Northants	Yorkshire & Humber	Former Humberside	North Lincolnshire	L04 - Non Hazardous	2,509,476
QP3730DW	Cory Environmental (Gloucestershire) Limited	MUCKING LANDFILL	Mucking Wharf Road, Stanford-le-Thorpe SS17 0RN	Essex Norfolk and Suffolk	East of England	Essex	Castle Point	L04 - Non Hazardous	0
RP3133PP	Augean South Limited	Thornhough Landfill Site	A47, Wansford PE8 6NL	Lincs and Northants	East of England	Cambridgeshire	Peterborough	L02 - Non Hazardous Landfill With SNRHW cell	1,921,300
RP3231XX	Tudor Griffiths Ltd	Wood Lane Landfill Site	Wood Lane, Ellesmere SY12 0HY	Shrops Heref Wors and Glos	West Midlands	Shropshire	North Shropshire	L04 - Non Hazardous	880,000
RP3332KY	P Casey Enviro Ltd	Lane Side Quarry Landfill Site	Off Bellstring Lane, Kirkheaton, Huddersfield	Yorkshire	Yorkshire & Humber	West Yorkshire	Kirklees	L04 - Non Hazardous	0
RP3434HP	Sahaviriya Steel Industries UK Limited	CLE 3/8 Landfill Site	Cleveland Works, Redcar, Cleveland TS10 5QW	Northumberland Durham and Tees	North East	Tees Valley Unitary Authorities	Redcar and Cleveland	L04 - Non Hazardous	83,961
RP3530BC	Viridor Waste Management Limited	Broadpath Landfill Site	Broadpath , Uffculme EX15 3EP	Devon & Cornwall	South West	Devon	Mid Devon	L04 - Non Hazardous	211,743
RP3531DV	Highfield Environmental Limited	Cowpen Bewley Landfill	Cowpen Bewley, Billingham TS23 4HS	Northumberland Durham and Tees	North East	Tees Valley Unitary Authorities	Stockton on Tees	L04 - Non Hazardous	1,195,683
RP3539SQ	John Sheehan (Oxford) Limited	Slope Hill Landfill Site and Recycling Facility	Oxford Road, Near Woodstock OX20 1HR	West Thames	South East	Oxfordshire	West Oxfordshire	L04 - Non Hazardous	0
RP3631DA	Highfield Environmental Limited	ICI NIO 2 TEESPORT	Teesport TS6 6UG	Northumberland Durham and Tees	North East	Tees Valley Unitary Authorities	Redcar and Cleveland	L04 - Non Hazardous	1,287,907
RP3732SZ	Anti-Waste Ltd	Buckden Landfill Site	Station Farm, Brampton Road, Buckden PE18 9UH	Camb and Bedfordshire	East of England	Cambridgeshire	Huntingdonshire	L04 - Non Hazardous	1,984,026
RP3739QB	Potters (Midlands) Limited	Granville/Woodhouse Landfill Site	Grange Lane, Redhill, Telford TF2 9PB	Shrops Heref Wors and Glos	West Midlands	Shropshire	Telford and Wrekin	L02 - Non Hazardous Landfill With SNRHW cell	1,850,000
RP3930BD	Keadby Generation Ltd	Brotherton Ings Ash Disposal	High Street, Brotherton WF11 9ED	Yorkshire	Yorkshire & Humber	North Yorkshire	Selby	L04 - Non Hazardous	437,960
SP3035SX	Cory Environmental (Gloucestershire) Ltd	Wingmoor Farm Landfill Site	Stoke Orchard Road, Cheltenham GL52 4RT	Shrops Heref Wors and Glos	South West	Gloucestershire	Tewkesbury	L04 - Non Hazardous	980,507

SP3131GC	SITA UK Limited	Runfold South Landfills Areas A and C	Guildford Road, Runfold, Farnham, Surrey GU10 1PB	West Thames	South East	Surrey	Waverley	L04 - Non Hazardous	50,126
SP3236SC	Aggregate Industries UK limited	Calne Sand Pit Landfill	Sand Pit Road, Calne SN11 8TJ	Wessex	South West	Wiltshire	North Wiltshire	L04 - Non Hazardous	0
SP3239BB	Shotley Holdings Limited	Folly Farm Landfill	Ipswich IP9 2NY	Essex Norfolk and Suffolk	East of England	Suffolk	Babergh	L02 - Non Hazardous Landfill With SNRHW cell	575,639
SP3336SN	Crapper & Sons (Landfill) Ltd	Park Grounds Landfill	Brinkworth Road, Wotton Bassett SN4 7SB	Wessex	South West	Wiltshire	North Wiltshire	L04 - Non Hazardous	460,000
TP3030BM	Yorwaste Limited	Caulklands Quarry Landfill Site	Outgang Lane, Thornton-le-Dale YO18 7JA	Yorkshire	Yorkshire & Humber	North Yorkshire	Ryedale	L04 - Non Hazardous	0
TP3330AT	Waste Recycling Group (Central) Limited	Sutton Courtenay Landfill - Phase 3 EPR/TP3330AT	Sutton Courtnay Office, Appleford Sidings, Sutton Courtenay, Abingdon, Abingdon, Oxon OX14 4PW	West Thames	South East	Oxfordshire	Vale of White Horse	L04 - Non Hazardous	721,583
TP3430GW	Augean South Limited	East Northants Resource Management Facility	Stamford Road, Kingscliffe, Peterborough PE8 6XX	Lincs and Northants	East Midlands	Northamptonshire	East Northamptonshire	L01 - Hazardous Merchant Landfill	1,156,170
TP3735PA	Stonegrave Aggregates Limited	Aycliffe Quarry Landfill	Aycliffe Quarry, Durham DL5 6NB	Northumberland Durham and Tees	North East	Durham	Sedgefield	L02 - Non Hazardous Landfill With SNRHW cell	1,721,036
TP3830BD	CF Harris Ltd	Copley Lane Quarry	Tadcaster LS25 6BJ	Yorkshire	Yorkshire & Humber	North Yorkshire	Selby	L04 - Non Hazardous	0
TP3838PS	Island Waste Services Limited	Standen Heath Landfill Site	Bridlesford Road, Downend, Isle of Wight PO30 2PD	Solent and South Downs	South East	Isle of Wight	Isle of Wight	L02 - Non Hazardous Landfill With SNRHW cell	0
UP3033LY	Eggborough Power Ltd	Gale Common Ash Disposal Site	Cobcroft Lane, Cridling Stubbs, Knottingley WF11 0BB	Yorkshire	Yorkshire & Humber	North Yorkshire	Selby	L04 - Non Hazardous	7,145,797
UP3035QX	Cornwall Council	United Mines Landfill	United Downs, St Day TR16 5HU	Devon & Cornwall	South West	Cornwall	Carrick	L04 - Non Hazardous	0
UP3139BB	Viridor Waste (Somerset) Ltd	Dimmer Landfill Site	Dimmer Lane, Dimmer BA7 7NR	Wessex	South West	Somerset	South Somerset	L04 - Non Hazardous	603,931
UP3630KS	Veolia ES Landfill Ltd	Highmoor Quarry Landfill	Doctor Lane, Scouthead, Oldham OL4 3SA	Gtr Mancs Mersey and Ches	North West	Greater Manchester	Oldham	L04 - Non Hazardous	0
UP3639LY	3C Waste Limited	Danes Moss Landfill Site	Gawsworth, Macclesfield SK11 9QP	Gtr Mancs Mersey and Ches	North West	Cheshire	Macclesfield	L04 - Non Hazardous	0
UP3830NT	Himley Environmental Limited	Oak Farm Quarry Landfill	Oak Farm Quarry Landfill, Crooked House Lane, Himley, West Midlands, DY3 4DA	Staffs Warks and West Mids	West Midlands	West Midlands Met Districts	Dudley	L02 - Non Hazardous Landfill With SNRHW cell	0
UP3939MM	SITA UK Limited	Cannon Bridge Landfill	East Taphouse PL14 4NP	Devon & Cornwall	South West	Cornwall	Caradon	L04 - Non Hazardous	0
VP3036GQ	Veolia ES Landfill Limited	Sandy Lane Landfill Site	Sandy Lane, Worcester B61 0QT	Shrops Heref Worcs and Glos	West Midlands	Worcestershire	Bromsgrove	L04 - Non Hazardous	0
VP3039SW	Viridor Waste Management Ltd	Beddington Farmlands Landfill Site	105 Beddington Lane, Croydon CR0 4TD	Kent and South London	London	South London	Sutton	L04 - Non Hazardous	10,000
VP3130BK	ALAB ENVIRONMENTAL SERVICES LIMITED	Nettleton Bottom Quarry	Nettleton Bottom Quarry, Rothwell LN7 6SR	Lincs and Northants	East Midlands	Lincolnshire	West Lindsey	L04 - Non Hazardous	114,123
VP3230BH	Integrated Waste Management Ltd	Gallymoor Landfill	Market Weighton Road, Holme-on-Spalding Moor YO43 4ED	Yorkshire	Yorkshire & Humber	Former Humberside	East Riding of Yorkshire	L02 - Non Hazardous Landfill With SNRHW cell	1,243,333
VP3838YZ	Himley Environmental Limited	Oak Farm Quarry NE Landfill	Oak Farm Quarry Landfill, Crooked House Lane, Himley, DUDLEY, West Midlands, DY3 4DA	Shrops Heref Worcs and Glos	West Midlands	Staffordshire	South Staffordshire	L04 - Non Hazardous	0
WP3130XG	Cory Environmental (Central) Ltd	Kinderton Landfill Site	Land Nr Kinderton Lodge Farm, off Pochin Way, Middlewich, Cheshire	Gtr Mancs Mersey and Ches	North West	Cheshire	Chester	L04 - Non Hazardous	2,300,000
WP3139LZ	Biffa Waste Services Ltd	Shakespeare Farm	Shakespeare Farm Road, Rochester ME3 8RN	Kent and South London	South East	Kent	Medway	L04 - Non Hazardous	0
WP3330BZ	Welbeck Waste Management Ltd	Welbeck Landfill Site	Boundary Lane, Wakefield WF6 2JA	Yorkshire	Yorkshire & Humber	West Yorkshire	Wakefield	L04 - Non Hazardous	1,005,550
WP3434TW	Woodford Waste Management Services Limited	Warboys Landfill Site	Puddock Hill, Warboys, Huntingdon PE28 2TX	Cams and Bedfordshire	East of England	Cambridgeshire	Cambridge	L04 - Non Hazardous	0
WP3438KV	Veolia ES Landfill Ltd	Springfield Farm Landfill	Broad Lane, Beaconsfield HP9 1XD	Herts and North London	South East	Buckinghamshire	South Bucks	L04 - Non Hazardous	9,317,863
WP3439SS	Waste Recycling Group (Central) Limited	Norwood Farm Landfill (East)	Lower Road, Isle of Sheppey ME12 3AJ	Kent and South London	South East	Kent	Swale	L06 - Hazardous Restricted Landfill	139,809
WP3537ZG	Octagon Green Solutions Limited	Blaydon Quarry Landfill Site	Blaydon Quarry, Lead Road, Greenside, Blaydon, Gateshead, Tyne and Wear NE21 4SX	Northumberland Durham and Tees	North East	Tyne & Wear	Gateshead	L04 - Non Hazardous	565,248
WP3933RQ	Uniper UK Ltd	Ratcliffe on Soar Power Station	Radcliffe on Soar Power Station, Radcliffe on Soar, Nottingham NG11 0EE	Derbys Notts and Leics	East Midlands	Nottinghamshire	Rushcliffe	L04 - Non Hazardous	790,328
XP3232XN	Yorwaste Limited	Skibeden Quarry Landfill Site	Harrogate Road, Skibeden, Skipton BD23 6AD	Yorkshire	Yorkshire & Humber	North Yorkshire	Craven	L04 - Non Hazardous	0
XP3298NJ	Lincwaste Limited	Boston Landfill Site	Slippery Gowt Lane, Wyberton, Boston, Lincolnshire PE21 7AA	Lincs and Northants	East Midlands	Lincolnshire	Boston	L04 - Non Hazardous	0
XP3434HX	Viridor Waste Management Ltd	Shelford Landfill Site	Broad Oak Road, Kent CT2 0PR	Kent and South London	South East	Kent	Canterbury	L02 - Non Hazardous Landfill With SNRHW cell	1,734,833
XP3538YT	Speciality Steel Limited	Oxbow Lake Landfill	Aldwarke Road, Rotherham S60 1DW	Yorkshire	Yorkshire & Humber	South Yorkshire	Rotherham	L04 - Non Hazardous	58,858
XP3636KW	Veolia ES Landfill Ltd	Gerrards Cross Landfill Site E	Oxford Road, Gerrards Cross SL9 8TU	Herts and North London	South East	Buckinghamshire	South Bucks	L04 - Non Hazardous	0
XP3934SL	Ineos Enterprises Limited	Holford Brinefield Landfill Site	Holford Brinefield Offices, Lostock Gralam CW9 7TD	Gtr Mancs Mersey and Ches	North West	Cheshire	Vale Royal	L04 - Non Hazardous	884,458

UNCLASSIFIED

YP3030BT	Lincwaste Limited	Gainsborough Landfill	Lea Road, Gainsborough DN21 1AF	Derbys Notts and Leics	East Midlands	Lincolnshire	West Lindsey	L04 - Non Hazardous	1,832,419
YP3134SC	EDF Energy (West Burton Power) Ltd	Bole Ings Ash Disposal Site	West Burton Power Station, Retford DN22 8BL	Derbys Notts and Leics	East Midlands	Nottinghamshire	Bassetlaw	L04 - Non Hazardous	1,358,657
YP3439SM	Grundon Waste Management Ltd	Wingmoor Quarry Landfill	Stoke Orchard Road, Cheltenham GL52 7RT	Shrops Heref Worcs and Glos	South West	Gloucestershire	Tewkesbury	L02 - Non Hazardous Landfill With SNRHW cell	1,481,532
YP3638SX	SITA UK Limited	Seghill Landfill Site	Seghill NE23 7DY	Northumberland Durham and Tees	North East	Northumberland	Blyth Valley	L04 - Non Hazardous	0
ZP3035PH	Viridor Waste Management Limited	Tatchells Landfill Site	Seven Barrows, Coldharbour BH20 7PA	Wessex	South West	Dorset	Purbeck	L04 - Non Hazardous	0
ZP3232SF	Biffa Waste Services Ltd	Hartlebury Landfill Site	Whitleng Lane, Hartlebury DY10 4HB	Shrops Heref Worcs and Glos	West Midlands	Worcestershire	Wychavon	L02 - Non Hazardous Landfill With SNRHW cell	244,705
ZP3533GG	Aylesford Newsprint Services Ltd	Margetts Pit SNRHW Landfill	Margetts Lane, Burham, Rochester, Kent ME1 3RQ	Kent and South London	South East	Kent	Tonbridge and Malling	L02 - Non Hazardous Landfill With SNRHW cell	0
ZP3933LD	Severn Waste Services Limited	Hill and Moor Landfill	Throckmorton, Pershore, Worcester WR10 2PW	Shrops Heref Worcs and Glos	West Midlands	Worcestershire	Erewash	L04 - Non Hazardous	1,842,523

Remaining landfill capacity: England as at end 2019

No changes.

#NAME?

EAST AND WEST LAYTON AND CARKIN PARISH MEETING

Response to statutory consultation: application by Highways England for an Order granting Development Consent for the A66 Northern Trans-Pennine project: scoping consultation under the Planning Act 2008 and the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

**PCF Stage 3 Environmental Scoping Report (the Report)
HE565627-AMY-EAC-S00-RP-LX-000001**

Definitions and terms used in this response have the same meaning as in the Report

We are responding to your letter of 14 June 2021 as an identified consultation body who must be consulted before the Scoping Opinion is adopted. Our comments below are the information we consider would be provided in the ES.

We are responding in relation to the section Stephen Bank to Carkin Moor only.

General comments

Our communities are adversely impacted by this project in terms of its environmental impact, particularly visuals. The physical context of this section of the project is vital as it runs through a beautiful rural landscape which previously held protected view status and which, once affected by this project, will never revert to its current state. In particular, the village of East Layton has long standing conservation status granted by Richmondshire District Council and this status provides as follows: "Views from within the village over the open countryside beyond are important to the overall character of East Layton and should be preserved."¹ All those involved in the design and construction of this project should be mindful of their effect on an unspoilt part of our country and seek to minimise its impact.

It is difficult not to think that this project puts Highways England and all other parties involved in the project on the wrong side of history, given the current state of affairs with climate change, the UK Government's carbon emission reduction programme and how ESG is driving corporate and funding behaviour.

Specific responses

Chapter 2: project overview, paragraphs 2.5.100 – 2.5.111

The scoping assessment will need to give precedence to the communities' preference for the final route design and junction at Moor Lane which should be designed in a way to be as visually unobtrusive as possible.

Chapter 3: assessment of alternatives

¹ See page 11 of the conservation document on the Richmondshire District Council website

Paragraph 3.4.15 and 3.4.17: see above comment in relation to Chapter 2.

Chapter 4: consultation

This section describes consultation that has already occurred. The communities would like to point out that the brochure detailing the proposed routes that was used to choose the preferred option for alignment of the new dual carriageway was highly misleading in respect of the section Stephen Bank to Carkin Moor and the extent of the junctions that would be required. This misdescription and omission of detail as to the extent of the junctions and the consequential elevation of the new carriageway is a misrepresentation of plans and would have influenced respondents' choices. We would ask that this and our comments above are taken into account in the final designs and assessments and fed into the Environmental Statement, as per paragraph 4.4.7 so as to achieve a result that is as close as possible to the suggested (lower) impact of the designs contained in the above brochure.

Chapter 5: environmental assessment methodology

We refer to paragraphs 5.2.12 and 5.2.13 and the adoption of mitigation so that project design principles are adopted to prevent or avoid adverse environmental impact. The current designs will undoubtedly have a significant adverse impact on the beautiful valley of Holmedale where the Stephen Bank to Carkin Moor section lies as a result of:

- The proposed elevation of the new road
- The extent and designs of the proposed junctions

with consequential impact relating to visuals, noise and pollution.

The current designs will facilitate induced traffic and we believe double the amount of traffic travelling on the A66 at a time when the UK Government is committing to zero carbon emissions. The project should be redesigned in a way that does not encourage increase in traffic and limits the ability of through traffic to come off at junctions designed for local access. Junctions should be designed in a manner that prevents access to local villages as rat runs or easy access onto the new road. Only then will the project meet the principles referred to in these paragraphs. This is particularly the case given the proposed development of a large retail park at Scotch Corner which Richmondshire District Council has approved and which (according to their website scotchcornerdesignervillage.com and the corporate brochure linked on that site) will provide 2,000 car parking spaces and a projected footfall of 4 million people in the first phase. The increase in traffic that will result from this development should not be allowed to use the local access roads to our communities and the design needs to take this into account to meet the mitigation principles of the Report.

With reference to paragraph 5.3, traffic modelling should be undertaken to encompass traffic travelling through East Layton from the villages to the north and not just through Melsonby or Scotch Corner. See also the requirement for modelling with the proposed retail development at Scotch Corner.

The above should be built into the significance criteria referred to at paragraph 5.4.

Chapter 6: air quality

Our responses are:

- There are no safe levels for humans of particulates (reference the Coroner's report into the death of Ella Adoo-Kissi-Debrah April 2021).
- This should be taken into account rather than assessment based on levels of population in our communities.
- This is particularly the case given the likelihood of increased traffic (see comments to Chapter 5).
- Induced traffic and the proposed Scotch Corner development needs also to inform your study area referred to in paragraph 6.3. We note that your consultation to date on this has not included the impact of the matters we refer to in respect of Chapter 5. Receptors you place now will not produce data that takes into account these matters.
- Your focus on designated ecological sites is too narrow and the focus should be on the entire habitat of this section, as likely to be destroyed or impacted by the project. Limiting impact to 200m as per paragraph 6.5.14 is too narrow.
- In terms of potential impact during construction, no construction traffic should be permitted through the villages of East and West Layton. During construction "local access only" signs should be used.
- The assessment referred to in paragraph 6.8.2 will need to take into account the proposed development at Scotch Corner and induced traffic. The studies already done will not have taken this into account. See paragraph 6.8.5: we do not believe that it is possible to make this statement. We do not agree with paragraph 6.8.6 as our communities will be adversely affected even if Ravensworth is improved and this should be taken into account in design and mitigation.
- The principle at paragraph 6.10.1 is insufficient because it will not take into account induced and increased traffic as a result of the road widening and the Scotch Corner development.

Chapter 7: biodiversity

Our responses to the key questions are:

- the biodiversity assessment needs to be undertaken on a larger geographical area and to take into account the impact of littering that will increase with road usage

- the focus on designated sites is too narrow. As referred to above, the project cuts through a renowned dale whose beauty will be impacted negatively not just by the scope of the project but by associated lighting and the encouragement of development at the junctions
- the 250metre study area proposal at paragraph 7.3.12 is insufficient
- the bodies you have consulted (Table 7-2) are outside agencies with little local knowledge
- the focus should be on all wildlife affected and not just those with conservation status or rare or endangered species and on all woodland and field patterns and not just ancient woodland.
- we note the comment at paragraph 7.7.1 on post-construction planting but the planting should not just be in the vicinity of the project but undertaken with a view to maintaining as far as possible the views of the dale by planting to shield road and junction from view. The metric referred to in this paragraph is likely to be insufficient for these purposes.
- we do not agree with the descriptions at paragraphs 7.8.23-25. The proposed plans take out various plantations and the elevation of the road cannot be described as having an impact which is either moderate adverse or neutral or slight.

Chapter 8: climate

Our response to the key questions are:

- We note at paragraph 8.7.2 the quote “Projects shall seek to minimise GHG emissions in all cases to contribute to the UK’s target for net reduction in carbon emissions”. See our opening general comments. Whereas there is support for making the existing road safe, the current designs are over-engineered for the solution required and will encourage increase in traffic
- We note at paragraph 8.9.1 that no assessment was taken at option selection which is a significant omission as the assessment would have been important to local views and their responses to consultation
- The scoping report will need to take into account how the project meets UK Government and local authority climate change plans and if it does not facilitate these, be designed in a way to minimise increase in emissions
- See above comments on air quality: there is no safe limit for particulates
- The proposed development at Scotch Corner will have a consequential impact on local road use and this needs to be taken into account and mitigated

- Hoping that electric cars will solve the problem is wishful thinking, given that proposals for phasing out petrol/diesel cars do not cover HGVs etc
- Paragraphs 8.6.3 on in respect of emissions needs to take into account the above development
- The options for mitigation do not sufficiently address road use: the suggestion at paragraph 8.7.7 is woefully insufficient
- We note that Richmondshire District Council responded to offer files relating to flooding. They should also be asked to respond in terms of how the development at Scotch Corner will impact climate policy and change and consequential impact on road use through this section, particularly given their recent approval of another extension to the retail park development at Scotch Corner to allow a large new garden centre.

Chapter 9 : cultural heritage

Our responses to the key questions are:

- The proposed scope of the cultural heritage assessment is too narrow and the plans attached incorrect. They are too narrowly focussed on designated areas and properties whereas the assessment should be wider to refer to the beauty of the whole valley
- The proposed study area is therefore too small. We do not agree with the statement at paragraph 9.3.1
- East Layton is a conservation area sited on a hill ridge above the existing road (although this conservation area and the listed properties within this village are omitted from the accompanying plans and maps). The project will therefore have a significant detrimental impact visually on this area because of the topography and proposed elevation of the new road. For this reason, the buffer area of 1km is insufficient
- The focus on designated cultural heritage resources is too narrow. Our villages are virtually unspoilt, irrespective of conservation areas or Grade II listings (although these include these as well)
- The noise model and Zone of Theoretical Visibility should not just be reviewed against known designated heritage resources of very high and high value. Heritage significance is too narrow a gauge
- We are pleased to see that Historic England are engaged. The communities are appalled that the project will destroy the Roman fortlet and go through a field where there is evidence of Iron Age settlement. A siting of the new road to the south of the existing road would preserve this heritage

- We do not agree with the statements of positive impact at paragraph 9.6.4 in respect of the Stephen Bank to Carkin Moor section

Chapter 10: geology and soils

No comment

Chapter 11: landscape and visual

Our response to your key questions are:

- The proposed scope must be widened, including the proposed study area. The communities of East and West Layton must be part of the assessment because of the topography of the land and the assessment must not be limited to designated sites or conservation areas, although these designations should drive the design and mitigating actions
- The emphasis on conservation areas and other classified sites should not however be at the expense of the general scenic value of this section. Equal efforts and resources should be applied to mitigate all visual impacts wherever they occur
- This section of the project should not be given lower priority because of the above, nor impact taken as a given simply because of the topography of the land
- We note your consultations to date in paragraph 11.4. This does not include local communities who live in this area but is limited to outside agencies. This should be rectified in the scope
- The conservation areas identified at paragraph 11.5.15 fails to mention the conservation area of East Layton which is directly affected by the proposal. This is a significant omission and should be scoped in. The conservation status of East Layton was in large part granted because of the views: see quote from the conservation document in the opening general comments of this response.²
- Visual amenity and key viewpoints at paragraph 11.5.19 should include the views from East and West Layton, including the land between the two villages where the views open out and will be significantly impacted by the new road
- Paragraphs 11.7 are light on detail
- Mitigation should be to require design to reduce height of road wherever possible by use of cuttings and no street lighting and minimal road signage in this section

² “Views from within the village over the open countryside beyond are important to the overall character of East Layton and should be preserved”: page 11 of Richmondshire District Council’s conservation document for villages within its remit granted this status

- We agree the principles set out in paragraph 11.7.5
- Paragraph 11.8.5 should be worked up into concrete proposals and local communities asked for input and influence
- The impact should not be assessed solely by reference to the buffer zone referred to in paragraph 11.8.6
- We note paragraphs 11.8.39-41 describe the negative material impact on the Stephen Bank to Carkin Moor section without any suggestion as to how these will be mitigated or how the design will reduce this impact. It confirms that operational effects are likely to be significant but the scoping assessment needs to come up with solutions to this and not just leave it as a fait accompli
- Elevation will result in further problems in respect of high winds which are common in this area from a usual westerly direction, particularly for high sided commercial vehicles and caravans. Design should reduce this issue by reducing elevation

Chapter 12: materials and waste

No comment, other than:

- Proposals should be included as to how to prevent littering along the new carriageway
- Run off of water needs to take into account local drains and fields (including flooding at Collier Lane) and ensure this problem is not made worse by either construction or operation

Chapter 13: noise and vibration

Our responses to your key questions are:

- The proposed study area should take into account noise levels at East and West Layton at an operational level
- This will need to take into account induced and increased traffic and not just assess at current levels. See above comments for Scotch Corner development and the potential for traffic increase in this respect
- We require mitigation of noise levels via planting and sound barriers placed at road edge
- Elevation of the proposed road will be a major factor. Cuttings and placing junctions in cuttings should be considered

- Considering impact on dwellings (see paragraph 13.9.1) does not take into account impact of noise on villagers as a whole eg the area as an amenity. Noise levels should not be judged by someone sitting inside
- We note Richmondshire District Council have yet to respond to your request for comment

Chapter 14: population and human health

Our responses to your key questions are:

- The proposed scope needs to take into account that there is no safe level for particulate pollution on humans. It is not relevant that the area is not heavily populated (as per the suggestions at paragraph 14.9). This impact should not be downplayed because there is less population than a built up area
- This is particularly the case for West Layton which is within 200m of the proposed road
- Both of the above should be within scope
- There should be equal focus on everyone likely to be adversely impacted: an asthma sufferer in a rural area deserves the same priority for protection from pollution as a village hall or primary school
- We disagree with the comment at paragraph 14.8.5 that there are no anticipated significant residual effects upon population
- We disagree with the statement at paragraph 14.8.6 that “significant health effects during operation will be mainly beneficial due to a reduction in traffic congestion and improved journey times” as this does not take into account induced or increased traffic or the siting of the project closer to our communities

Chapter 15: road drainage and the water environment

Our responses to your key questions are:

- There is no mention of the impact of the project on fields and road drains. Drainage needs to take into account consequential impact on local roads and fields, particularly Collier Lane, irrespective of the 1km radius
- Construction should not exacerbate drainage problems at West Layton, Waitlands Lane/Ravensworth and fields that drain towards West Layton
- There should be liaison with NYCC to ensure design does not have negative impact on local roads

- Scoping should include a requirement to survey and modify drainage systems where necessary to avoid local flooding problems, even in areas of generally low flood risk

Chapter 16: assessment of cumulative effects

Our responses to your key questions are:

- We agree with the statement at paragraph 16.4.1
- Your assessments undertaken so far and referred to in paragraph 16.4 do not refer to the Scotch Corner development and this needs to be taken into account

Figures and maps

The viewpoints shown on the map 11.5 Zone of Theoretical Visibility do not take into account the viewpoints to the west of East Layton and between East and West Layton where the topography opens out

Claire Stewart
Chair of East and West Layton and Carkin Parish Meeting
Date 5 July 2021

Your Reference: DG
Our Reference: A66 NTP
Enquiries to: David Green
Direct Dial: [REDACTED]
Email: [REDACTED]
Date: 12th July 2021



Mansion House, Friargate, Penrith, CA11 7YG
Tel: 01768 817817

The Planning Inspectorate
The Square,
Temple Quay,
Room 3 O/P,
Temple Quay House, 2,
Bristol
BS1 6PN

Via Email

Dear Sir/Madam

Re: A66 North Trans Pennine Express Scoping Response Report

I write in respect of the above Scoping Request that was submitted to the Planning Inspectorate on behalf the Applicant, Highways England, on 14 June 2021.

I attach a Scoping Response document that has been prepared by WSP on behalf of both Eden District Council and Cumbria County Council as two of the prospective host authorities for the Scheme. The attached Scoping Response comprises Eden District Council's formal response to the Applicant's Scoping request. I also summarise, below, the conclusions of the Scoping Response for each topic area.

The Council is broadly in agreement with the approach to the assessments that has been presented. but where the Councils disagree, justification for why further assessment is necessary has been provided.

AIR QUALITY

It is welcomed that during the construction phase any mitigation measures that are needed to reduce construction dust and emissions are secured via the Environmental Management Plan. However, at this stage, and with the information presented within the scoping report, the degree of mitigation for each scheme has not been provided and greater detail will be required within the Environmental Statement (ES) so that Eden District Council can ensure that amenity and human health are protected.

Operational road traffic emissions from the Project have the potential to harm human health and ecologically designated sites. It is therefore imperative that adequate

monitoring is implemented so that the baseline conditions can be fully understood. Of particular concern is the potential impact of Scheme 1 on traffic flows in the AQMA to be declared on Castlegate in Penrith.

BIODIVERSITY

Considerable survey effort for protected species will be required along the route of the project and in the Scoping Report, the Applicant has not identified any survey findings or identified any likely mitigation measures and therefore it is not possible to comment upon the likely significant effects of the Project in any detail.

The assessment of nitrogen and acid deposition from road traffic emissions is also of concern and Eden District Council believes that ammonia emissions should be included within any modelling of the effects upon designated sites.

CLIMATE

The assessment approach is adequate although it could be strengthened through the adoption of the IEMA guidance for assessing the significance of greenhouse gas emissions. Similarly, it is also recommended that the ES includes the potential sources of GHG emissions associated with the Project using the *PAS 2080* lifecycle stages and provides justification for which lifecycle stages are scoped in or out for further assessment.

CULTURAL HERITAGE

Considerable survey effort for unknown archaeological remains will be required and no baseline site specific survey findings have been provided by the Applicant within the Scoping Report. Of particular importance is where the route deviates from the current A66, as there is potential for considerable impacts on as yet unknown archaeological resources and it is important that these assets are considered early within the process as there is potential for remains to be present that are worthy of statutory designation. The cumulative effect of the individual schemes on the historic landscape character does not appear to have been considered.

GEOLOGY AND SOILS

Potential impacts have been identified in relation to agricultural soils, human health, and groundwater and surface water quality. It is agreed with that these potential impacts are considered appropriate, although Eden District Council would encourage the Applicant to liaise with them to discuss and agree the approach and scope of any proposed Ground Investigation. This should be preceded by a Preliminary Sources Study Report which would assist in determining where this Ground Investigation should be targeted.

The Councils also draw the attention of the Applicant to the potential for foot and mouth burial sites, Ministry of Defence related remains and ground stability issues that are present along the corridor of the Project.

LANDSCAPE AND VISUAL

The extent of the study area for the landscape and visual impact assessment is uncertain and it is important that the study area is broad enough to ensure that all sensitive receptors that could experience significant effects are appropriately assessed. The presence of ancient and veteran trees should also be identified through a site-specific survey and likely significant effects upon them should be provided in the ES.

Insufficient information has been provided in the ES on the scenarios that are to be assessed within the ES. This should by default include; construction at its peak, daytime and night-time scenarios as well as the winter year 1 (opening) and summer and winter year 15 (design year).

The Landscape and visual impacts both external to, and within the highway corridor, should be assessed in the context of the route running between two national parks, (one of which is a World Heritage Site) and an AONB, in order to maintain the quality of the environment currently present in this location which supports a strong tourism and leisure economy .

I understand that a formal Scoping Response was submitted by North Pennines AONB Partnership on Friday 9 July. As one of the host authorities (and also a member of the AONB Partnership) we would like to endorse these comments and ask that the Applicant pay particular regard to policies of the National Policy Statement on National Networks (NPSNN) in relation to the importance of conserving landscape and scenic beauty within nationally designated areas such as the AONB.

MATERIAL ASSETS AND WASTE

The cut and fill balance of the Project is not yet known. Should the Applicant wish to balance earth movements across the schemes of the Project, then the consequential environmental impacts of doing so (traffic, noise, contamination etc) should be included within the assessment in the ES.

NOISE AND VIBRATION

The potential impacts identified in the Environmental Scoping Report are considered appropriate at this stage although further information on the construction and operational noise will be required within the ES.

POPULATION AND HUMAN HEALTH

The potential impacts identified in the Environmental Scoping Report are considered appropriate at this stage. However, to ensure a robust assessment of population and human health effects, it is recommended that the Applicant includes physical activity as a health determinant to be assessed during construction and operational phases.

With the existing A66 being used by cyclists and crossed by pedestrians, further detail should be provided on the provision of footpaths and cycling infrastructure and how the Council's aspirations for increased provision in this area can be facilitated, this is important to the settled communities as well as the significant numbers of tourist visitors the area attracts each year. The potential impact the Project is likely to have on road safety and associated health outcomes should also be considered within the ES.

Of particular note and concern is the Annual Horse Fair that takes place in Appleby with many of the surrounding transport routes both major and minor heavily used by horse drawn vehicles and a clear plan will need to be in place before hand and communicated with the travelling community on how their needs will be addressed during and after the construction phase.

As one of the host authorities, Eden District Council would like to see the Population and Human Health Chapter specifically address the impacts of the Scheme on Public Rights of Way (PROW). The Chapter should demonstrate how the impacts of the Scheme on PROWs have been assessed and how any impacts will be mitigated.

The Chapter should also assess the issues of community severance as well as the impacts of the Scheme on agricultural holding severance and viability.

ROAD DRAINAGE AND THE WATER ENVIRONMENT

The potential impacts identified for both the construction and operation stage are satisfactory, given the information available to inform the Scoping Report. However, there may be an impact on fluvial geomorphology and an impact to flood risk (surface water and groundwater) from ordinary watercourses. With respect to the construction phase, it is recommended that the potential hydrogeological impacts on buried archaeology is considered.

CONCLUSION

Eden District Council is keen to work constructively with the Applicant, and we would be very happy to discuss any of the issues raised above.

Yours faithfully



Oliver Shimell
Assistant Director Development



Cumbria County Council and Eden District
Council

A66 NORTHERN TRANS-PENNINE PROJECT

Technical Review of the Environmental Scoping
Report



Cumbria County Council and Eden District Council

A66 NORTHERN TRANS-PENNINE PROJECT

Technical Review of the Environmental Scoping Report

FINAL ISSUE

PUBLIC

PROJECT NO. 70081489

OUR REF. NO. 7081489_001

DATE: JULY 2021

WSP

8 First Street

Manchester

M15 4RP

Phone: +44 161 200 5000

WSP.com



QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	Draft for Client comment	2 nd draft for Client comment	Final	
Date	9 th June	29 th June	7 th July	
Prepared by	Various	Various	Various	
Checked by	Hywel Roberts	Hywel Roberts	Hywel Roberts	
Authorised by	Marcus Wood	David Hoare	John Leggett	
Project number	70081489	70081489	70081489	

CONTENTS

1	INTRODUCTION	1
1.2	SCHEME DETAIL	2
1.3	CONSULTATION WITH THE APPLICANT	2
2	GENERAL COMMENTS	3
2.1	TOPICS FOR INCLUSION IN THE EIA	3
2.2	SCHEME DETAIL	4
2.3	CONSTRUCTION INFORMATION	5
2.4	ENVIRONMENTAL MANAGEMENT PLAN	6
2.5	DETERMINATION OF SIGNIFICANCE	6
2.6	ASSOCIATED DEVELOPMENT	6
2.7	NOMENCLATURE	6
2.8	ALTERNATIVES	6
2.9	MAJOR ACCIDENTS AND DISASTERS	7
2.10	DIGITAL EIA	7
2.11	MITIGATION TERMINOLOGY	8
3	AIR QUALITY	9
3.1	STUDY AREA AND ASSESSMENT METHODOLOGY	9
3.2	BASELINE CONDITIONS	11
3.3	POTENTIAL IMPACTS	12
3.4	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	13
3.5	ASSUMPTIONS AND LIMITATIONS	13
4	BIODIVERSITY	14

4.1	INTRODUCTION AND POLICY CONTEXT	14
4.2	STUDY AREA AND ASSESSMENT METHODOLOGY	14
4.3	BASELINE CONDITIONS	17
4.4	POTENTIAL IMPACTS	17
4.5	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	18

5 CLIMATE **21**

CLIMATE RESILIENCE		21
5.2	STUDY AREA	21
5.3	BASELINE CONDITIONS	21
5.4	POTENTIAL IMPACTS	21
5.5	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	22
5.6	DESCRIPTION OF THE LIKELY SIGNIFICANT EFFECTS	22
5.7	ASSESSMENT METHODOLOGY	22
5.8	ASSUMPTIONS AND LIMITATIONS	22
GREENHOUSE GASES		22
5.9	STUDY AREA	22
5.10	BASELINE CONDITIONS	22
5.11	POTENTIAL IMPACTS	23
5.12	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	23
5.13	DESCRIPTION OF LIKELY SIGNIFICANT EFFECTS	23
5.14	ASSESSMENT METHODOLOGY	23
5.15	ASSUMPTIONS AND LIMITATIONS	23

6 CULTURAL HERITAGE **24**

6.1	INTRODUCTION AND POLICY CONTEXT	24
6.2	STUDY AREA AND ASSESSMENT METHODOLOGY	24
6.3	BASELINE CONDITIONS	25
6.4	POTENTIAL IMPACTS	27
6.5	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	27
6.6	ASSUMPTIONS AND LIMITATIONS	27

7	GEOLOGY AND SOILS	29
7.1	INTRODUCTION AND POLICY CONTEXT	29
7.2	STUDY AREA AND ASSESSMENT METHODOLOGY	29
7.3	BASELINE CONDITIONS	30
7.4	POTENTIAL IMPACTS	31
7.5	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	31
8	LANDSCAPE AND VISUAL	32
8.1	STUDY AREA AND ASSESSMENT METHODOLOGY	32
8.2	BASELINE CONDITIONS	32
8.3	POTENTIAL IMPACTS	33
8.4	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	34
8.5	DESCRIPTION OF LIKELY SIGNIFICANT EFFECTS	34
8.6	ASSESSMENT METHODOLOGY	35
8.7	CUMULATIVE EFFECTS	35
8.8	ASSUMPTIONS AND LIMITATIONS	35
9	MATERIAL ASSETS AND WASTE	37
9.1	INTRODUCTION AND POLICY CONTEXT	37
9.2	STUDY AREA AND ASSESSMENT METHODOLOGY	38
9.3	BASELINE CONDITIONS	38
9.4	POTENTIAL IMPACTS	38
9.5	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	39
9.6	ASSUMPTIONS AND LIMITATIONS	39
10	NOISE AND VIBRATION	40
10.1	INTRODUCTION AND POLICY CONTEXT	40
10.2	STUDY AREA	40
10.3	BASELINE CONDITIONS	41
10.4	POTENTIAL IMPACTS	41

10.5	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	41
10.6	DESCRIPTION OF THE LIKELY SIGNIFICANT EFFECTS	41
10.7	ASSESSMENT METHODOLOGY	42
10.8	ASSUMPTIONS AND LIMITATIONS	42
11	POPULATION AND HUMAN HEALTH	43
11.2	STUDY AREA AND ASSESSMENT METHODOLOGY	43
11.3	BASELINE CONDITIONS	43
11.4	POTENTIAL IMPACTS	44
11.5	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	45
12	ROAD DRAINAGE AND THE WATER ENVIRONMENT	46
12.1	STUDY AREA	46
12.2	OVERVIEW OF CONSULTATION TO DATE	46
12.3	BASELINE CONDITIONS	46
12.4	POTENTIAL IMPACTS	48
12.5	DESIGN, MITIGATION AND ENHANCEMENT MEASURES	48
12.6	ASSESSMENT METHODOLOGY	48
12.7	ASSUMPTIONS AND LIMITATIONS	49
13	ASSESSMENT OF CUMULATIVE EFFECTS	50
13.1	STUDY AREA AND ASSESSMENT METHODOLOGY	50
13.2	BASELINE CONDITIONS	50
13.3	POTENTIAL IMPACTS	50

APPENDICES

APPENDIX A

CCC AND LEP CONSULTATION RESPONSE

1

INTRODUCTION



1 INTRODUCTION

- 1.1.1. WSP has been appointed by Cumbria County Council (CCC) and Eden District Council (EDC) (collectively, “the Councils”) to provide technical advice to help inform their response to the Planning Inspectorate (PINS) to the Environmental Scoping Report prepared by Highways England (the Applicant) for the A66 Northern Trans-Pennine (NTP) Project (the Project).
- 1.1.2. The Project is to be considered for consent via the Development Consent Order (DCO) process because it is a Nationally Significant Infrastructure Project (NSIP) as defined in the Planning Act 2008 and therefore the Councils’ role is that of host authorities rather than as consenting authorities. This response has been prepared in the context of PINS Advice Note 2: The Role of Local Authorities in the Development Consent Process.
- 1.1.3. The technical review of the Environmental Scoping Report has followed a chapter by chapter approach mirroring the topics that the Applicant has proposed for inclusion within the Environmental Statement (ES).
- 1.1.4. Where it is identified in this technical note that further information is required within the ES, it should be noted that this information would be beneficial at an earlier stage within the Preliminary Environmental Information Report (PEIR) where appropriate to do so.

CCC AND LEP RESPONSE

- 1.1.5. This technical review responds to the proposed scope for the EIA of the Project with consideration of CCCs and the Cumbria Local Enterprise Partnership’s (LEP) response to HE’s Non Statutory consultation to the Project in July 2019 (referred to as the CCC and LEP Response, a copy of which is included in Appendix A to this report).
- 1.1.6. The CCC and LEP Response identifies 10 Key Tests that were identified as necessary in order for the strongest schemes to emerge through the design of the Project. These Key Tests are:
- Clear and effective junction strategies;
 - No loss of connectivity for local communities;
 - An effective solution for Kemplay Bank; M6 Junction 40 and Skirsgill Depot for all users;
 - A clear strategy for sections of the A66 that are ‘de-trunked’;
 - An “off A66” route for walking and cycling between M6 and A1(M);
 - More and smarter technology to bolster resilience;
 - Meeting wider service and infrastructure needs;
 - Environmental mitigation to minimise harm and boost benefit;
 - A clear strategy for the establishment of alternative/diversion routes; and
 - Even further and stronger joint working.
- 1.1.7. This technical review therefore identifies opportunities for how the Key Tests can be met in the development of the Project as well as commenting upon where further information to allow them to be demonstrated would be beneficial. The Key Tests’ aims are to enable Highways England to allow for the strongest possible scheme to emerge, providing adequate environmental and social value be to woven in as a ‘golden thread’ of excellence in the A66 scheme. This technical review of the Environmental Scoping Report identifies where elements of the review align to these Key Tests, although not all references to mitigation measures are cross referenced to the Key Tests and

wherever reference to mitigation is made it should be accepted that this is compliant with the proposals of the relevant Key Test.

1.2 SCHEME DETAIL

- 1.2.1. The Project consists of 10 Schemes and six of these Schemes are within Cumbria (Schemes 1-6). These have been further aggregated by the Applicant as Package A (Schemes 1-3) and Package B (Schemes 4-6). In this response to the Environmental Scoping Report, this technical note predominantly comments upon matters that relate to the six Schemes within Cumbria, and whilst no comment has been made specifically about Schemes 7-11, any assessment presented within the ES should draw holistic conclusions about the likely significant effects of the entire Project.

1.3 CONSULTATION WITH THE APPLICANT

- 1.3.1. As part of this technical review, we are aware that the Councils have liaised with the Applicant on a number of matters relating to the Project prior to publication of the Environmental Scoping Report.
- 1.3.2. WSP would endorse and advise the Councils that ongoing liaison with the Applicant throughout the development of the Project will assist in developing a solution that is consistent with the Key Tests.
- 1.3.3. Reference within this technical review is made to the knowledge that the Councils hold about the baseline environment within Cumbria. The sharing of baseline information between the Councils and the Applicant is encouraged to improve understanding and identify how the Project's effects upon the environment can be appropriately mitigated. This is particularly important to allow for the necessary depth of understanding of the area for guiding the proposed development that Environmental Impact Assessment alone does not achieve, ensuring adequate design and legacy from the HE proposals.

2 GENERAL COMMENTS

2.1 TOPICS FOR INCLUSION IN THE EIA

2.1.1. This technical review of HE's Environmental Scoping Report has identified that the proposed format of the ES is acceptable, assuming that the technical chapters of the Environmental Scoping Report are the chapters that will be carried forward to the ES. The chapters are:

- Air Quality
- Biodiversity
- Climate
- Cultural Heritage
- Geology and Soils
- Landscape and Visual
- Material Assets and Waste
- Noise and Vibration
- Population and Human Health
- Road Drainage and the Water Environment
- Cumulative Impact Assessment.

2.1.2. A technical review of each topic chapter is presented in Chapters 3-13 of this report, and where sub-components to the topics have been scoped out, but with insufficient justification for doing so, then this is addressed individually in the relevant chapter.

TRAFFIC AND TRANSPORT

2.1.3. In addition to these assessments it is noted that traffic and transport matters relating to the Project have not been proposed as an assessment within the ES which is inconsistent with the approach proposed in paragraph 5.206 of the National Policy Statement for National Networks. A dedicated chapter within the ES that considers the impact of the Project upon traffic and transport in both the construction and operational phase is considered to be necessary as insufficient information has been provided in the Environmental Scoping Report to justify the exclusion of this topic from the EIA. Without such an assessment being included, the assessment of likely significant effects upon the population of Cumbria would not be included within the scope of the EIA.

2.1.4. The scope of the traffic and transport chapter should be informed by suitable guidance such as the 'Guidelines for the Environmental Assessment of Road Traffic' produced by the Institute of Environmental Management and Assessment (IEMA) and should consider:

- Severance (including new pedestrian severance from community facilities and relief from severance for pedestrians);
- Driver stress and delay;
- Pedestrian and cyclist amenity, journey times and delay;
- Collisions and safety; and
- Fear and intimidation.

2.1.5. The assessment within the Traffic and Transport chapter should also consider the likely effects upon public transport and propose mitigation measures that are needed in order to ensure that communities are not disrupted and affected by significant changes to the public transport system. Opportunities to promote and facilitate increased public transport usage should be identified by the

Applicant and discussed with the Councils so that the Project doesn't solely benefit private car users.

- 2.1.6. Furthermore, having a clear position on the requirements for the scheme design will assist HE with making the Case for the Scheme for DCO by being able to demonstrate where the first four Key Tests have been developed in agreement with the local authorities.
- 2.1.7. This is considered to be necessary acknowledging that the Covid-19 pandemic has disrupted patterns of work and travel across the country creating potential changes in behaviour and demand for, or use of infrastructure, potentially different to that envisaged at the time of publications of RIS1 and 2.
- 2.1.8. Within a Traffic and Transport Chapter, the Applicant should draw upon how the Project will help to deliver the three broad objectives of the Cumbria Transport Infrastructure Plan (CTIP). The CTIP is currently being prepared but a draft will be presented to the CCC Cabinet in late July 2021 and will be adopted in full 2022. The three broad objectives are:
- Clean and Healthy Cumbria – promoting the role of active travel and digital infrastructure as an enabler of inclusive economic growth and in supporting the health and well-being of our communities;
 - Connected Cumbria – making the case for improved transport networks across and into Cumbria to connect our places and support economic growth and opportunities for businesses and communities; and
 - Community Cumbria – promoting integrated approaches to transport, supporting opportunity and renewal within towns and communities across Cumbria.
- 2.1.9. It is also of note for the Applicant to be aware that the draft CTIP states that CCC proposes to “*work closely with Highways England to support delivery of this proposal [the A66] and ensuring the effecting integration of existing communities, sites and transport modes*”.
- 2.1.10. The Applicant should therefore be aware that emerging local transport planning policy mirrors some of Cumbria County Council's Key Tests.

ASSOCIATED ASSESSMENTS

- 2.1.11. The inclusion of a Habitats Regulations Assessment (HRA), a Water Framework Directive (WFD) assessment and a Transport Assessment in support of the DCO is appropriate. It will be important that the scope and conclusions of the ES are consistent and integrated with any mitigation measures that are proposed within these associated assessments.

2.2 SCHEME DETAIL

- 2.2.1. The Applicant has provided sufficient detail that, in our view, meets the requirements of Regulation 10(1) of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations) although at this stage, there remains considerable uncertainty as to what the precise boundary of the project proposals will be. This is particularly the case in the Kirkby Thore area where the orange, red and blue routes could all lead to different significant effects upon the environment.
- 2.2.2. Further to comments in Section 1, it is therefore recommended that the Applicant discuss in more detail with the Councils the proposals for Schemes 1-6 including how it could impact upon the Councils' statutory functions and highway assets. We would recommend that a collaborative

approach, focussing on the Key Tests would mean that fuller knowledge of the area brings maximum benefit to the design, reduces the need for future design changes and ensure the impacts from the proposed change would be minimal in negative impact or would give opportunity to maximise benefits.

- 2.2.3. The Applicant should be encouraged to consider the Key Tests identified in Paragraph 1.1.6 when further developing their designs and proposals for the Project and it is recommended that within the Statement of Common Ground (SoCG) the Applicant should detail how the Key Tests have been met.

LIMITS OF DEVIATION

- 2.2.4. Any Limits of Deviation that the Applicant wishes to include within the DCO should be clearly presented within the ES so that it is possible to identify that the worst-case scenario of what consent is sought for has been considered in the EIA process. This is particularly relevant for any ecological surveys that will not have been completed by the submission of the DCO application because the extent of mitigation needed may not have been fully identified.
- 2.2.5. It is noted that in Section 1.3 of the Environmental Scoping Report, that the Applicant draws attention to 'Project Speed' and that the submission of the DCO application will be made in early 2022 (paragraph 1.1.3 of the Environmental Scoping Report).
- 2.2.6. The Applicant identifies that therefore not all survey information may be available within the ES and a 'highly precautionary worst-case approach' will be undertaken. This is an acceptable approach, but it would be beneficial for the Applicant to identify as soon as possible to the Councils, and certainly at the S42 stage, what surveys will not be available within the ES and the approach that they will be taking to address this knowledge gap and what deficiencies and limitations this presents.

2.3 CONSTRUCTION INFORMATION

- 2.3.1. The Environmental Scoping Report does not include sufficient information on the approach to the construction of the Project and how the Applicant proposes to phase or programme the constituent Schemes. In Paragraph 2.6.2 the Applicant states that it is presently assumed that there will be a phased approach to construction across the four packages of work (although as stated previously in Paragraph 1.2.1 only two of these packages of work will be in Cumbria).
- 2.3.2. The ES should include as a minimum further information on the following aspects of the construction process:
- Construction start, duration and end dates for each Scheme clearly shown to understand whether the Schemes will be under construction in parallel or not;
 - The location of construction compounds, including satellite compounds, haul roads and storage and soil handling areas;
 - Proposed construction hours as well as the need for any night time or weekend working, where this would be, and for what duration;
 - Proposed construction employment numbers broken down into skill types and skill sets of the employees required;
 - The need for the transfer of material (e.g. soil) between Schemes so that the impacts of construction related traffic, traffic diversions, and the potential for the re-use of site won material can be fully understood.

- 2.3.3. The Applicant should provide further justification and explanation of what they mean in Paragraph 2.7.2 of the Environmental Scoping Report when it is stated that “*it is likely that a risk-based approach will be taken...*”. The Applicant needs to identify what *will* be the approach to the EIA rather than what is *likely* to be the approach to the EIA so that certainty can be provided regarding the methods of assessment that are proposed. The “*risk-based approach*” should also be defined so that it can be understood what this means in practice.

2.4 ENVIRONMENTAL MANAGEMENT PLAN

- 2.4.1. The need for an Environmental Management Plan (EMP) has been identified within the Environmental Scoping Report, and the Applicant has committed to providing a draft alongside the DCO application. It is recommended that the draft DCO should allow for, as a requirement to the DCO, an EMP to be produced for each Scheme as appropriate prior to construction commencing.

2.5 DETERMINATION OF SIGNIFICANCE

- 2.5.1. The common approach to the determination of significance, that is presented in Table 5-1 of the Environmental Scoping Report, is based on the matrix in LA104 and is considered to be appropriate. Any deviation from the use of this matrix should be justified accordingly in the ES.
- 2.5.2. However, the Environmental Scoping Report does not always identify on an individual topic by topic basis what would constitute a negligible, minor, moderate or major impact and what defines the value of each receptor identified for assessment. Reference is made within the topic chapters to the appropriate document within the Design Manual for Roads and Bridges (DMRB) but these matrices should be included in the ES documentation so that it is clear to the reader how a determination of significance has been reached.

2.6 ASSOCIATED DEVELOPMENT

- 2.6.1. It is noted that the Environmental Scoping Report does not reference Associated Development. Should the Applicant wish to include any Associated Development, such as off-route works and utility diversions, within the DCO application, then this should be included at the S42 stage of the application so that any environmental effects can be understood and consulted upon.

2.7 NOMENCLATURE

- 2.7.1. It is suggested that the Applicant adopt in the ES the terminology that describes the stages of the DCO process that is aligned to the Planning Act (2008) and PINS guidance notes. The use of terms such as “PCF Stage 3” is less accessible to the public and consultees alike and does not give clarity on what stage the Project is presently at and when further information will be available.
- 2.7.2. It is also of note that in Paragraphs 1.1.2 and 1.1.3 of the Environmental Scoping Report refers to the Applicant undertaking the EIA whereas as defined in Paragraph 5(1) of the EIA Regulations, the EIA process is not completed solely by an Applicant and that in fact EIA is a three stage process for which the Applicant only fulfils part a) of Paragraph 5(1) namely the preparation of an ES.

2.8 ALTERNATIVES

- 2.8.1. The information in the Environmental Scoping Report details the approach taken to the consideration of alternatives undertaken to date. This is a useful introduction to how the Project has evolved at this stage. As the Project progresses to the detail required to support an application for development consent, the alternatives chapter of the ES should detail all the main alternatives that

have been considered to the Applicant and the reasons for the choices made. This will be particularly important for understanding the decision making process around the options presented for alternative route alignments around Kirkby Thore.

2.9 MAJOR ACCIDENTS AND DISASTERS

- 2.9.1. The approach to the assessment of major events is supported and it is welcomed that this has been aligned with the IEMA Primer on Major Accidents and Disasters in EIA¹ and DMRB LA104². The use of the Applicant's preferred term of 'major events' rather than 'major accidents and disasters' is also acceptable.
- 2.9.2. It is noted that a three-stage approach has been proposed to identify major events with the potential to lead to significant effects. It is also noted that Stage 3 was not considered to be required by the Applicant as a result of the conclusions from Stage 2.
- 2.9.3. A study area of the DCO boundary plus a 500m buffer is considered sufficient to:
- capture internal and external influencing factors which may have high adverse consequences on the project; and
 - identify receptors which may be impacted by a major event.
- 2.9.4. It is welcomed that the UK National Risk Register of Civil Emergencies has been used in the development of the "Long List", however, it should be noted that the 2017 edition referenced has been withdrawn and replaced by the 2020 edition³ which was published on 18th December 2020.
- 2.9.5. Although we generally agree with the major event types carried forward from Stage 1 to Stage 2, there does not appear to have been specific consideration of ground instability risks associated with the Gypsum mines at Kirkby Thore. In addition, the Long List states that "No railways located within the study area directly interface with the project" however, as illustrated in Figure 2.1 of the Environmental Scoping Report, the Settle to Carlisle line crosses the DCO boundary and the Evolved Preferred Route (blue route) appears to pass beneath the railway.
- 2.9.6. The Applicant's attention should also be drawn to two pipelines that currently cross under the A66 to the south east of Penrith. These do not appear to have been considered in the assessment to date.
- 2.9.7. It is understood that the major event types identified at Stage 2 will be addressed within the specific topic chapters of the ES or other documentation associated with the design, construction and maintenance of the Project. However, further consideration needs to be given in the ES to major events that could be associated with ground instability and the proximity of the railway to the Project.

2.10 DIGITAL EIA

- 2.10.1. It is noted that the Applicant is considering digital-led solutions to the ES (Paragraph 5.5.7 of the Environmental Scoping Report) and the opportunity for the Applicant to use digital EIA techniques to

¹ IEMA, Major Accidents and Disasters in EIA: A Primer, September 2020.

² Design Manual for Roads and Bridges LA 104 - Environmental assessment and monitoring, Revision 1, August 2020.

³ Cabinet Office, National Risk Register 2020 edition, 18 December 2020.

facilitate the understanding of the topics assessed in the ES is welcomed. Digital approaches to the Non-Technical Summary of the ES should also be encouraged to facilitate understanding and distribution of the information. This could also include the use of digital tools at consultation to reduce the need for paper copies of the application.

2.11 MITIGATION TERMINOLOGY

- 2.11.1. The Applicant is encouraged to identify in the ES the approach and terminology that will be used to identify the type of mitigation that is to be employed. It is noted that the terms ‘embedded mitigation’, ‘additional mitigation’ and ‘further mitigation’ are used within the Environmental Scoping Report. The Applicant should provide a description and definition in the ES of what these terms mean. This is important to meet the Key Test of ‘Environmental mitigation to minimise harm and boost benefit’. As noted by the National Infrastructure Commission (NIC): *“It is vital that major infrastructure projects consider their impact on the environment at every stage of their planning and design, as reflected in our design principles for national infrastructure”*. NIC design principles are: climate, people, places and value. NIC also state that major infrastructure construction and operation *“can actively contribute⁴ to the protection of the country’s natural resources and environment.”*

⁴ e.g. not merely mitigate.

3 AIR QUALITY

3.1 STUDY AREA AND ASSESSMENT METHODOLOGY

- 3.1.1. The Applicant should confirm that the latest available version of DMRB LA105: *Air Quality* will be followed in the ES.

Study Area

- 3.1.2. It is stated that the study area will be defined by applying the DMRB LA105: *Air Quality* criteria on roads within the Traffic Reliability Area, which relate to changes in traffic flow, changes in HDVs, speed band and carriageway alignment. All roads which trigger the criteria, and adjoining roads within 200m, will define the Affected Road Network (ARN). We agree with this approach and welcome the commitment to review the ARN as options are considered.
- 3.1.3. We note the study area highlighted in Figure 6.1 to Figure 6.21 is not always consistent with the definition in Section 6.2 as follows:
- The 200m study area buffer does not correspond to the ARN in all areas and should include the existing and proposed alignment;
 - The proposed Air Quality Management Area (AQMA) at Castlegate in Penrith, which is a compliance link for the purpose of national reporting under the EU Directive 2008/50/EC, is not shown on Figure 6.22;
 - Several ancient woodland and veteran tree sites are not included across the preferred route corridor; and
 - County wildlife sites are the responsibility of Cumbria County Council and the assessment of impacts of the Project on these sites is not addressed.
- 3.1.4. The ES should show the extent of the study area based on the draft order limits. This should be shown in a series of figures including specific human and ecological receptors in relation to the study area and order limits for the preferred option. The Applicant should ensure that the study area is sufficient to encompass all sensitive human and ecological receptors which may experience significant effects from each scheme.
- 3.1.5. The Applicant states that the assessment will use data from the traffic model for future years including future committed developments which is considered appropriate. The Applicant should also confirm which committed developments have been identified within the study area. This should include how the committed developments have been identified and assessed and how they may impact both the construction and operational phases.

Construction Phase

- 3.1.6. It is agreed that the impact of construction activities on air quality cannot be assessed without sufficient information on construction activities and vehicle/plant movements and this is unlikely to be available in its entirety at the scoping stage. However, more detail on the methodology for the assessment of construction phase impacts would be beneficial. For example, there is a lack of information on how construction phase road traffic impacts will be screened and subsequently assessed and how the level of mitigation required for the control of dust emissions will be determined. The construction phase assessment methodology should be presented in the ES accordingly.

- 3.1.7. It is noted there may be a temporal element to the construction phase study area depending on the proposed phasing of the schemes which could yield overlapping or single study areas at different times. These could be subject to different baseline conditions as datasets are updated. It would be helpful if this could be explored in the PEIR if phasing information is available. This would allow construction activities to be reconciled with live local action plan measures contained within the local air quality action plan.

Operational Phase

- 3.1.8. The Environmental Scoping Report proposes the application of 'simple' or 'detailed' assessment specific to each scheme to provide a proportionate assessment and this is agreed. However, the requirements for simple and detailed assessments should be defined in the PEIR so the council can review and provide comment.
- 3.1.9. The methodology described in the Environmental Scoping Report is a broadly accurate representation of the Highways England LA105: *Air Quality* method. However, application of the ADMS-Roads v5.0.0.1 is described in broad terms and lacks detail and justification in the following areas:
- The specific assessment years representing the Do-Minimum (DM), Opening Year (OY) and the Do-Something (DS) scenarios;
 - The method for estimating vehicle emissions where detailed modelling using ADMS-Roads v5.0.0.1 is required;
 - The method to be applied to model verification, including justification for using 2018 as the model verification year;
 - The use of a single meteorological data site to represent the whole project;
 - The monitoring data to be applied;
 - The adequacy of existing monitored datasets to support model verification; and
 - The requirement for further baseline monitoring in the context of the limitations in the Defra background maps to represent local conditions where properties are either very close to the carriageway (Eden) and where concentrations are close to the Air Quality Objective level (Penrith and Eamont Bridge).
- 3.1.10. There is an absence of the assessment of PM_{2.5} (particulate matter with an aerodynamic diameter of 2.5µm or less) in the Environmental Scoping Report which is consistent with the Highways England LA105: *Air Quality* guidance. However, as detailed in Policy Guidance Local Air Quality Management; Policy Guidance 16 (2016) (Chapter 7), local authorities are expected to work towards reducing emissions and/or concentrations of PM_{2.5}. It is accepted that for the majority of the route, PM_{2.5} emissions will tend to background levels at a short distance from the route alignment. However, Eden District Council has recently purchased continuous monitoring equipment which will be suitable for providing estimates of actual levels of PM_{2.5} which could be used to inform a local assessment of this pollutant species specific to the M6 J40 Penrith scheme if these data are available. It is recommended that PM_{2.5} emissions are assessed at the M6 J40 Penrith and A1(M) J53 Scotch Corner) schemes in the ES in the presence of local sources (A66, local traffic and the A1) in light of potential changes to the particulate air quality objectives.

- 3.1.11. There is emerging evidence⁵ to show that ammonia (NH₃) provides a greater contribution to nitrogen deposition than previously understood. LA105: *Air Quality* guidance does not provide a methodology to address this emerging issue nor the impact of the deposition of nitric/sulphuric acid. However, county councils have a responsibility for the protection of the health of county designated sites within their jurisdiction. This is a potential gap in the assessment of nitrogen and acid deposition which needs to be included in the assessment. Further information is provided in Chapter 4 Biodiversity.

3.2 BASELINE CONDITIONS

- 3.2.1. The method for the definition of sensitive receptors is broadly agreed with and support the commitment to review and update the list during the determination of the ARN. In the PEIR it would be useful for these to be presented on scheme drawings, particularly for the M6 J40 Penrith and A1(M) J53 Scotch Corner schemes, which have not been assessed to date
- 3.2.2. The reassessment of receptors should incorporate the relevant receptors already shown in Figure 14.1 to Figure 14.7 and the compliance link receptors allow any overlap within Cumbria to be identified. Further information should be provided on the underlying datasets which will be used to identify the sensitive receptors (e.g. residential properties, schools and hospitals) in the ES.
- 3.2.3. For the compliance risk assessment, areas with qualifying features on the Pollution Climate Mapping (PCM) road network that meet Defra's interpretation of the Air Quality Directive will be identified. Further information on the underlying datasets that will be used to identify the qualifying features such as public access (e.g. footpath) and sensitive receptors (e.g. residential properties, schools and hospitals) within 15m of the kerbside are not within 25m of a junction, should be described in the ES. This will ensure that all potential exposures within Cumbria have been captured.
- 3.2.4. The 2020 Annual Status Report (ASR) states that an AQMA will be declared on Castlegate in Penrith because of exceedances of the NO₂ annual mean objective. In addition to the declared AQMAs by Durham Council, special attention should be afforded to changes in traffic flows in the proposed Castlegate AQMA by the Applicant in the ES and particularly the potential for increased traffic flows as a result of the Project.
- 3.2.5. The Environmental Scoping Report states that all human receptors exposed to vehicle exhaust emissions will be assigned equal sensitivity (or value) and this should therefore be included within the ES.
- 3.2.6. There are 14 ecological receptors identified within 200m of the ARN. We note 46 designated ecological sites are referenced in the Environmental Scoping Report and would advise that ecological receptors as defined in LA105: *Air Quality* be re-examined during the determination of the ARN. Ancient woodland and veteran tree sites should also be included. The approach to assess nitrogen deposition at all sites is considered acceptable, but this assessment should be expanded to assess the contribution of potential NH₃ emissions. It is also noted that the requirement to assess

⁵ Air Quality Consultants (2020). Ammonia Emissions from Roads for Assessing Impacts on Nitrogen-sensitive Habitats.

impacts at designated County Wildlife Sites which lie outside the jurisdiction of Highways England. These sites are discussed further in Chapter 4 Biodiversity.

- 3.2.7. As part of the assessment, the latest baseline information will be collected. The description of the datasets proposed should also incorporate:
- Air quality monitoring data within the ‘vicinity of the project’ that has been ratified, bias corrected and annualised by the Council ready for use rather than that reported at fixed annual intervals to Defra in the Annual Status Report. This will ensure the most recent data available to characterise the baseline and validate the model has been considered and we encourage the Applicant to consult the Councils to obtain these data; and
 - The Defra background maps corresponding to the latest available reference year, including pollutants NO₂ and PM_{2.5}. However, supplementary baseline monitoring in the context of the limitations in the Defra background maps to represent local conditions (paragraph 3.1.9) should be also described.

3.3 POTENTIAL IMPACTS

Construction Phase

- 3.3.1. It is agreed that residual construction impacts are unlikely to be significant as they will be temporary and controlled through mitigation measures secured in the EMP. However, the PEIR should describe in more detail the method used to determine the type and level of mitigation required to ensure amenity and human health protection for each scheme. The mitigation measures required for the schemes 1 and 2 could be quite different to those required for more rural schemes and generic measures may not be sufficient.
- 3.3.2. The potential for cumulative construction phase impacts should also be considered in the PEIR construction phase assessment, particularly for the schemes in more built-up areas such as Penrith, and Appleby-in-Westmorland.

Operational Phase

- 3.3.3. The assessment must demonstrate that the Project will comply with the ambient Air Quality Directive⁶, the Councils’ Local Plan and local Air Quality Action Plan measures.
- 3.3.4. The schemes assessed to date are set in a rural location and as such background air quality is generally good. It is therefore likely that judgement of significant effects at PCF Stage 3 assessment for will be the same as at Stage 2 for human and ecological health.
- 3.3.5. For the schemes to be assessed in the ES, at scheme 1 local sources of air pollution mean that air quality is likely to be poorer and the risk of non-compliance greater. Of particular concern is the potential impact of scheme 1 on traffic flows in the AQMA to be declared on Castlegate in Penrith.

⁶ Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe

- 3.3.6. It is also suggested that the description of likely significant effects should also address compliance risk receptors where they overlap with any of the Council areas.

3.4 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

Construction Phase

- 3.4.1. The robust assessment of the risks of construction phase impacts is likely to yield a series of mitigation measures which will be sufficient to protect amenity and health in Cumbria.
- 3.4.2. The preliminary mitigation measures, though not exhaustive, are best practice but may need to be supplemented in high risk areas. In Penrith, a summary of the likely increase in traffic through the Castlegate AQMA would be required to understand the potential impact of increases in construction HGV traffic on local air quality which may require a change to the construction traffic route.

Operational Phase

- 3.4.3. The commitment to implement a Project Air Quality Action Plan (PAQAP) to mitigate adverse effects in accordance with the guidance in LA105: *Air Quality* is acknowledged. It is suggested that any PAQAP is based upon the specific requirements of each scheme and is aligned with the proposed Construction Management Plans for each of the Councils.

3.5 ASSUMPTIONS AND LIMITATIONS

- 3.5.1. Uncertainties or limitations related to transport data will be discussed in the Transport chapter that has been previously identified as an omission to the ES. However, it is requested that further detail is provided in the PEIR on the limitations of the transport data specific to the air quality assessment including:
- The type of road transport model, verification and applicability of the transport model outputs to local scale impact assessment considering that traffic modelling will be completed for the project as a whole rather than schemes in isolation; and
 - The proposed approach to minimising uncertainty through the air quality model verification process.
- 3.5.2. The Applicant is requested to provide further detail on how the significance of effects (in line with the EIA Regulations) will be determined and mitigated, and how the Project will be compliant with national planning policy (i.e. NPSNN) and local planning policy (Eden Local Plan 2014 to 2032).
- 3.5.3. Further detail should be provided within the PEIR to detail how the assessment will comply with Policy ENV7 of the Eden Local Plan 2014-2032 which requires that *'All major development proposals will be required to assess the likely impacts of the development on air quality and mitigate any negative impacts by: 4. Contributing towards the improvement of the highway network where the development is predicted to result in increased congestion on the highway network.'*

4 BIODIVERSITY

4.1 INTRODUCTION AND POLICY CONTEXT

- 4.1.1. This review of the proposed assessment of effects on biodiversity is informed by Policy DEV5 of A *Plan for Eden: Eden Local Plan 2014 to 2032*⁷ which requires that “*New development will be required to demonstrate that it meets each of the following criteria:*”
- *Shows a clear understanding of the form and character of the district’s built and natural environment, complementing and enhancing the existing area.*
 - *Protects and where possible enhances the district’s distinctive rural landscape, natural environment and biodiversity....”*
- 4.1.2. Policy ENV1 of the Eden Local Plan 2014 to 2032 also gives substantial protection to the natural environment and biodiversity and states “*New development will be required to avoid any net loss of biodiversity and geodiversity, and where possible enhance existing assets....”*
- 4.1.3. Furthermore, Policy ENV2 of the Eden Local Plan requires that development “*...should contribute to landscape enhancement including the provision of new trees and hedgerows of appropriate species and in suitable locations...”*; and Policy ENV3 requires that major development within the North Pennines Area of Outstanding Natural Beauty (AONB) fully considers detrimental effect on the environment.
- 4.1.4. Policy ENV 4 of the Plan requires that “*New development should ensure that:*”
- *Opportunities for the protection and enhancement of the district’s green infrastructure network are maximised.*
 - *Proposals account for any known local deficiencies of green infrastructure identified by the Council.”*
- 4.1.5. It is therefore appropriate that the Applicant proposes to address matters relating to biodiversity within the ES so that the impacts of the Project can be fully understood.
- 4.1.6. The requirements of Paragraphs 5.22 and 5.23 of the National Policy Statement for National Networks⁸ should also form part of the assessment in the ES.

4.2 STUDY AREA AND ASSESSMENT METHODOLOGY

- 4.2.1. The biodiversity assessment methodology for the Project is described at a high level as being in line with DMRB LA108 *Biodiversity*, and also refers to Chartered Institute of Ecology and Environmental Managements; *Guidelines for Ecological Impact Assessment in the UK and Ireland* (CIEEM 2018). This is considered a suitable approach but there are a number of clarifications needed with regard to:

- Study area(s); and
-

⁷ <https://www.eden.gov.uk/media/5032/edenlocalplan2014-2032finalwithoutforeword.pdf>

⁸ National Policy Statement for National Networks

- Assessment methodology

STUDY AREA

- 4.2.2. A description of the proposed study area is divided into Desk Study and Surveys.
- 4.2.3. Desktop data search parameters are clearly presented in paragraph 7.3.3 of the Environmental Scoping Report, but there is no stated reason for the search radius of 2km from the boundary of all land required for construction for European Sites (excepting sites designated for bats at 30km). A list of data sources is provided and desktop data search for protected species, based on the general summary tables presented, appears to have been comprehensive to date. Desktop data on Priority Habitats from Natural England's Open Data and from MAGIC are presented. Reference is made to statutory sites beyond 2km from the Project, that are likely to be affected by changes in air quality and noise. However, no Biodiversity Action Plans appear to have been consulted, and no search for potential connectivity to Special Protection Areas (SPA) for geese – which in some species can mean a range of up to 20km.
- 4.2.4. For proposed field surveys, there is a brief statement on carrying out surveys up to a distance of 250m from each scheme boundary in paragraph 7.3.12 of the Environmental Scoping Report, with further brief commentary in paragraph 7.9.14 and 7.9.15. However, with the exception of reference to Phase 1 habitat survey methods in 7.9.12, no reference to relevant terrestrial survey guidance is provided. Some relevant references are provided at the back of the document, but these do not cover all the proposed surveys. There is sufficient reference to methods provided for the proposed aquatic ecology surveys.
- 4.2.5. There is no information on proposed terrestrial survey methods. Relevant survey methods for the habitat and species surveys listed can be obtained from the sources set out in *CIEEM's Competencies for Species Surveys*⁹ and elsewhere. Consultation with Natural England and other statutory bodies on survey scopes is discussed and this should continue to occur.
- 4.2.6. With regard to aquatic ecology, survey distances are not confirmed, with a suggestion that distances of 500m from any crossing points. It is noted that this is not consistent with earlier statements that otter will be surveyed for distances of 250m from the construction boundary; otters may be indirectly affected by changes in aquatic habitat quality. No survey distance for white-clawed crayfish or other aquatic invertebrates is provided.
- 4.2.7. The following items for field surveys require further clarification before the proposed field study area can be considered appropriate:
- A clear rationale for the survey distances should be provided for each survey type being proposed;
 - Survey methods should be informed by clearly referenced survey guidance within the ES. Where the Applicant intends to deviate from any standard methodology, a clear rationale for this should be provided; and

⁹ <https://cieem.net/resource/competencies-for-species-survey-css/>

- Clarification that connectivity with Special Protection Areas¹⁰ within 20km that support geese has been considered. A search for these SPA should be carried out to confirm the presence or absence of such sites and where relevant they should be screened for likely significant effects.

4.2.8. The following items need to be considered and assessed as appropriate in the ES:

- Given the importance of red squirrel in Cumbria it is recommended that the Applicant also engages with Penrith and District Red Squirrel Group, in addition to updating their desktop study using the sources that they have already obtained data from;
- The ES should also have regard to emerging Local Natural Recovery Strategies (LNRSs) and any related local habitat data available from Cumbria Biodiversity Data Centre (CBDC).
- Connectivity to wildlife corridors in Cumbria which are not directly in the zone of influence or Affected Road Network, such as Smardale Gill National Nature Reserve (NNR), should be considered.
- In accordance with DMRB LA105 *Air Quality*, the effects of nitrogen and acid deposition should be assessed for Ramsar Sites, SPA, Special Areas of Conservation (SAC), Site of Specific Scientific Interest (SSSI), Local Nature Reserves (LNR), Local Wildlife Sites (LWS), Nature Improvement Areas, ancient woodland and veteran trees. However, the Institute of Air Quality Management guidance on *Air quality impacts on nature conservation sites* defines LWS more broadly to include sites designated by local authorities. County Wildlife Sites should therefore be included in any assessment of nitrogen and acid deposition on local sites and habitats; this would include all County Wildlife Sites where these lie within 200m of the Affected Road Network.
- Inclusion of Asby Complex SAC in any combined biodiversity and air quality assessment that is made to inform the ES and Habitat Regulation Assessment, including the collection of relevant botanical data.

ASSESSMENT METHODOLOGY

- 4.2.9. The assessment methodology combines elements of DMRB LA108 *Biodiversity* and CIEEM *Guidelines for Ecological Impact Assessment in the UK and Ireland 2018*. A key point of clarification is on the statements of significance. In the CIEEM approach, the importance of an ecological feature is first determined before it is included in the detailed assessment. At that point the significance – or not – of any effects on the feature is determined. In paragraph 7.9.10 of the Environmental Scoping Report the Applicant states that, “*To retain consistency with other EIA topic chapters, whilst also ensuring compliance with DMRB LA108, an agreed approach and matrix for evaluation of relative significance of effects will be used, However it should be noted that this is not included within the CIEEM Guidelines for EclA and does not replace the CIEEM EclA guidelines.*”
- 4.2.10. Clarity on the assessment methodology is required for how significance will be determined: based on the nature of an effect on an important feature (as per CIEEM); or on a combination of a feature’s importance and the nature of the effect (as per DMRB LA108 *Biodiversity*).

¹⁰ Scottish Natural Heritage (2016). Assessing Connectivity with Special Protection Areas (SPAs). Version 3.

4.3 BASELINE CONDITIONS

- 4.3.1. The Scoping Report presents a range of baseline information, collected through desktop study and limited field survey, at an earlier stage of the Project, referred to as 'PCF2'. A list of statutory and non-statutory designated sites is provided, together with the reasons for designation and the distances from the Project. Similarly, tables of protected species records are presented with an indication of which of the schemes they were recorded in proximity to.
- 4.3.2. The Scoping Report implies that a limited amount of field survey has already been undertaken. For locations relevant to Cumbria and Eden, the Applicant has carried out a number of surveys along the River Eden SAC and tributaries including Trout Beck. However, there is no rationale provided for the types of surveys chosen, or any explanation of how the data will be used to either assess impacts within the ES or assess likely significant effects on the River Eden SAC. The Asby Complex SAC is only briefly discussed given its location within the ARN.
- 4.3.3. There is no explanation as to why Phase 1 habitat surveys were carried out at PCF2 for part but not all of the Project.
- 4.3.4. As noted under 'Study Area', no Biodiversity Action Plan appears to have been reviewed in production of the Scoping Report. The Cumbria Biodiversity Evidence Base (CBEB) provides publicly accessible species and habitat statements for UK Biodiversity Action Plan (UKBAP) Priority Habitats and Species within Cumbria and these should be consulted, in conjunction with any updated records obtained from Cumbria Biological Data Centre.
- 4.3.5. The mapping of designated sites provided is useful. Mapping for protected species records, and of locations already surveyed, would greatly improve the clarity of baseline information presented.
- 4.3.6. Mapping of local sites and veteran trees in relation to the Affected Road Network should also be carried out. Currently the figures in the Air Quality section of the report present only SSSI, European Sites and ancient woodland in relation to the ARN. Local sites and veteran trees are presented in the figures for the Biodiversity section of the report, but not in relation to the ARN.
- 4.3.7. The following clarifications and additional items are should be made available within the PEIR:
- Mapping of protected and notable species records;
 - Justification for surveys already carried out, including clarity on how it informs the proposed scope; and
 - Review and appropriate discussion of priority habitats and species statements in the Cumbria Biodiversity Evidence Base and, where relevant, Cumbria Biodiversity Action Plan.

4.4 POTENTIAL IMPACTS

CONSTRUCTION

- 4.4.1. The proposed scope of potential impacts for construction listed on paragraph 7.4.1 of the Environmental Scoping Report is reasonably comprehensive, but does not appear to be consistently followed through to the summary tables of likely significant effects in section 7.6, especially as summarised in Table 7.6.
- 4.4.2. Clarifications on the reasoning for the scoping out of the following items from construction impact assessment are required and should be scoped into the ES as appropriate:

- Asby Complex Special Area of Conservation (SAC) is noted as being within the ARN but is then scoped out from being subject to likely significant construction effects. Nitrogen deposition to this designated site and other sites is noted as a potential impact of construction in 7.6.1 of the Environmental Scoping Report – but it is not clear how the stated emissions from traffic diversions would be mitigated during construction;
- Conversely, dust deposition on a number of County Wildlife Sites is noted as a potential impact – but there is no consideration of nitrogen deposition on these sites as the aforementioned IAQM guidance on air quality impacts on nature conservation sites indicates is necessary;
- Construction effects on veteran trees are not explicitly discussed;
- It is not clear why Yanwath Wood CWS and Skirsgill Wood CWS are scoped in for construction whilst other CWSs are not; and
- Specific reference to risks to barn owl – a brief mention of barn owl is made but this species has particular vulnerabilities to traffic collisions given its hunting behaviour, and standard best practice mitigation for breeding birds in construction may not be sufficient to avoid mortality or injury to this species due to construction traffic, including any local diversions of traffic.

4.4.3. Overall, the stated construction impacts do not appear to be logically linked, through the application of the stated best practice mitigation techniques, to the likely significant effects for construction outlined in Table 7.10 of the Environmental Scoping Report.

OPERATION

4.4.4. A brief listing of operational effects is provided in paragraph 7.6.2 of the Environmental Scoping Report. The list should also include severance of foraging and commuting routes for protected species.

4.4.5. Again, a clear, logical reasoning for scoping out some effects, as presented in Table 7.9, should be provided.

4.4.6. The following items require clarification as to why they are not included in the scope of operational impacts and should be scoped into the ES as appropriate:

- Scoping out of Asby Complex SAC from operational effects despite its position relative to the Affected Road Network (adjacent to M6);
- Scoping out of County Wildlife Sites (local sites) from consideration of the effects of operational nitrogen (NO_x and NH₃) and acid deposition;
- Operational effects upon bats;
- Operational effects on veteran trees are not explicitly discussed; and
- Specific reference to risks to barn owl – this species has particular vulnerabilities to traffic collisions given its hunting behaviour.

4.5 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

DESIGN AND ENHANCEMENT

4.5.1. Any design of the Project should seek to:

- Not only avoid severance of foraging and commuting habitats for protected species, notably for mobile species such as badgers, bats and red squirrels but should seek to enhance it. There are significant opportunities to create green bridges and crossing points, avoid severing key links between existing patches of habitat, and also create habitat corridors along road verges.

Landscape level connectivity for priority species and habitats should be an overarching design principle for the Project;

- Local habitat networks, especially those in the emerging Cumbria Local Nature Recovery Strategy, should also be enhanced or protected in the design;
- Specific design for the provision of safe crossing for red squirrel, bats and barn owl should also be considered and included in the design if necessary to avoid significant effects; and
- Biodiversity Net Gain (BNG) should be aligned to seeking a 10% net gain in line with the requirements of the forthcoming Environment Bill. Discussion with the Councils, and consultation with partners including Cumbria Biodiversity Data Centre (CBDC) on the emerging Cumbria Local Nature Recovery Strategy, should inform the opportunities for BNG in Schemes 1-6, although the extent to which a project wide BNG is achieved will depend upon the degree to where the net-loss is experienced. It is therefore recommended that the Applicant liaises with the Councils in the development of the BNG proposals so that the proposals can be commented upon. The aforementioned policies from within *A Plan for Eden: Eden Local Plan 2014 to 2032* should also be considered.

CONSTRUCTION MITIGATION

- 4.5.2. The best practice mitigation techniques set out in section 7.5 of the Environmental Scoping Report should include consideration of the specific effects of noise and vibration in aquatic environments, particularly for the effects on the various fish species in the River Eden SAC.
- 4.5.3. Mitigation for increased Nitrogen and acid deposition due to traffic diversions should include local habitats and sites as discussed above.
- 4.5.4. Additional potential mitigation during construction appears limited to several bat crossing points, otter holts and creation of river habitat and replacement ponds (two for one to be lost). Given the large number of protected species noted from the desktop study, the suggested additional mitigation is limited in scale.
- 4.5.5. The PEIR and the ES should consider specific construction mitigation for:
- Birds including barn owl;
 - Badger;
 - Bats;
 - Red squirrel;
 - Other mammals (European hedgehog, brown hare, European polecat); and
 - Fish – with regard to noise and vibration within the aquatic environment and the differing requirements of the species recorded.

OPERATIONAL MITIGATION

- 4.5.6. Early descriptions of mitigation as set out in the Environmental Scoping Report are limited to construction.
- 4.5.7. The ES should include operational mitigation, taking account of:

- Design considerations, such as the BCT/ILP Bats and Artificial Lighting in the UK¹¹, and the DMRB LD118 *Biodiversity design* on mammal crossings for species such as otter and badger, should be considered as the minimum standard for mitigation of operational effects. Crossings for bats and red squirrels, and connectivity of aquatic and terrestrial habitats, should also be key factors in the mitigation of operational effects as described in Design and Enhancement above;
- Guidance from the Barn Owl Trust¹² on mitigation for barn owls and major roads should be followed, with landscaping as appropriate to increase flight heights around activity hotspots;
- Nitrogen and acid depositions on local sites within the Affected Road Network should be assessed and relevant mitigation applied; and
- Post-construction monitoring should be included in the mitigation.

¹¹ Bat Conservation Trust/Institution of Lighting Professionals (2018). Bats and Artificial Lighting in the UK. Guidance Note 08/18.

¹² Barn Owl Trust (2012). Barn Owl Conservation Handbook.

5 CLIMATE

- 5.1.1. The climate chapter of the Scoping Report is divided into two subsections covering greenhouse gas (GHG) emissions and climate change adaptation. This technical review has also therefore been divided into two, commensurate with the Scoping Report layout.

CLIMATE RESILIENCE

5.2 STUDY AREA

- 5.2.1. The study area for climate change adaptation is identified to comprise the draft DCO boundary. It is recommended that the Applicant extends the study area (such as up to 1km beyond the draft DCO boundary) to encompass any potential climate risks which may impact on both the Project and the immediate wider environment.

5.3 BASELINE CONDITIONS

- 5.3.1. The baseline for climate resilience presents historical observed data and projected climate data as advised in DMRB LA114 *Climate*. The historic data makes use of regional weather data; however, to ensure the baseline conditions align with DMRB LA114 *Climate*, the Applicant should supplement this information with local weather station data from the Met Office.
- 5.3.2. The future baseline presents UK Climate Projections (UKCP18) for RCP8.5 at the 50th percentile for time periods encompassing the construction and design life. This is considered appropriate to inform the assessment.

5.4 POTENTIAL IMPACTS

- 5.4.1. The potential impacts identified for the construction phase are considered appropriate for the scale and nature of the Project and the EIA.
- 5.4.2. The potential impacts identified for the operational phase are comprehensive in relation to impacts as a result of increased precipitation although the Applicant should consider the potential for melting and/or deterioration of road surface as a result of increased temperatures and prolonged periods of hot weather. This is currently omitted from Table 8-10 of the Scoping Report.
- 5.4.3. The potential impacts section of the Scoping Report does not identify any potential in-combination climate impacts (the extent to which climate exacerbates or ameliorates the effects of the Project on the environment). The assessment of in-combination climate impacts is outlined in the *Institute of Environmental Management and Assessment EIA Guide to Climate Change Resilience and Adaptation*.¹³ It is noted in the Scoping Report (8.1.4) that climate change has the potential to influence impacts considered under other discipline topics, and each discipline chapter will consider the potential for climate to influence the impacts identified. The discipline chapters listed do not at

¹³ *Institute of Environmental Management and Assessment (2020) EIA Guide to Climate Change Resilience and Adaptation*

present provide such consideration. Therefore, to comply with the IEMA guidance and good practice the ES should consider in-combination climate impacts.

5.5 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 5.5.1. It is noted that a detailed assessment of mitigation and enhancement measures, including resilience measures embedded within the design and additional to the design, was not undertaken within the Scoping Report and this should be included within the ES provided on the climate.

5.6 DESCRIPTION OF THE LIKELY SIGNIFICANT EFFECTS

- 5.6.1. No likely significant effects have been identified for the construction stage due to its duration. It is identified that an EMP will include adaptation measures in relation to extreme weather events during the construction stage. The assessment within the ES should provide details of such measures as a minimum and set out, with clarity on the measures themselves, as well as roles and responsibilities and a commentary on the status of the planned EMP.
- 5.6.2. The significance of impacts during the operation stage is outlined to be determined by a combination of likelihood and consequence as set out in DMRB LA114 *Climate*. It is concluded that there is potential for some receptors to be adversely affected by climate change however it is not clear how this conclusion has been reached as no assessment of likelihood and consequence is presented. The ES should clarify the likelihood and consequence of such impacts and as such, the conclusion of likely significant effects.

5.7 ASSESSMENT METHODOLOGY

- 5.7.1. The assessment methodology outlined in line with DMRB LA114 is considered acceptable.

5.8 ASSUMPTIONS AND LIMITATIONS

- 5.8.1. We do not agree with the statement on their being limited guidance relating to undertaking climate change resilience assessments in EIA (paragraph 8.10.7). IEMA's *EIA Guide to Climate Change Resilience and Adaptation* in conjunction with DMRB LA114 *Climate* should be followed to undertake the next stage of assessment in accordance with good practice.

GREENHOUSE GASES

5.9 STUDY AREA

- 5.9.1. The study area for GHG emissions is stated to be in line with DMRB LA114 *Climate* which is considered to be acceptable.

5.10 BASELINE CONDITIONS

- 5.10.1. The baseline scenario is described as advised in DMRB LA114 *Climate*. The Environmental Scoping Report has outlined the 'do minimum' scenario for the baseline and future baseline GHG emission, covering operational road user emissions in the ARN.
- 5.10.2. The baseline conditions within the ES should make reference to the future construction baseline and the assessment to be undertaken accordingly.

5.11 POTENTIAL IMPACTS

- 5.11.1. The scoped in emissions sources are considered to be appropriate for the size and nature of the Project to determine overall emissions. Although reference is made to *PAS 2080*, Table 8-10 of the Environmental Scoping Report does not make reference to *PAS 2080* when outlining emissions sources. It is recommended that the ES includes the potential sources of GHG emissions associated with the Project using the *PAS 2080* lifecycle stages and provides justification for which lifecycle stages are scoped in or out for further assessment.

5.12 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 5.12.1. The mitigation measures identified are considered appropriate for the scoping stage. It is recommended that specific mitigation measures are identified at the ES stage depending on the outcome of the assessment.

5.13 DESCRIPTION OF LIKELY SIGNIFICANT EFFECTS

- 5.13.1. The Environmental Scoping Report states that significance will be assessed in line with DMRB LA114 *Climate*, reporting on emissions that will have a material impact on the ability of Government to meet carbon reduction targets. There is no reference to the best practice guidance document, Institute of Environmental Management and Assessment (IEMA) *EIA Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance*. Although the Environmental Scoping Report states that emissions will be assessed in line with DMRB LA114 *Climate*, it is requested that the ES should refer to the IEMA guidance, acknowledging that all GHG emissions are considered significant.

5.14 ASSESSMENT METHODOLOGY

- 5.14.1. The assessment methodology is in line with DMRB LA114 *Climate* and is considered acceptable. It is however, worth noting that since this report was published the sixth carbon budget has been released by the Climate Change Committee (CCC). The ES should therefore contextualise GHG emissions from the Project against the sixth carbon budget.

5.15 ASSUMPTIONS AND LIMITATIONS

- 5.15.1. The assumptions and limitations outlined are considered acceptable.

6 CULTURAL HERITAGE

6.1 INTRODUCTION AND POLICY CONTEXT

- 6.1.1. This response to the proposed assessment upon Cultural Heritage is informed by Policy ENV3 and ENV10 of the Eden Local Plan 2014 to 2032.
- 6.1.2. *Policy ENV3 - Development within or affecting the North Pennines Area of Outstanding Natural Beauty (AONB) will only be permitted where each of the following criteria apply:*
- Individually or cumulatively it will not have a significant or adverse impact upon the special qualities or statutory purpose of the AONB;
 - It does not lessen or cause harm to the distinctive character of the area, the historic environment, heritage assets and their setting.
- 6.1.3. *Policy ENV10 - The Council will attach great weight to the conservation and enhancement of the historic environment, heritage assets and their setting, which help to make Eden a distinctive place.*
- 6.1.4. It is therefore welcome that the Applicant proposes to address matters relating to cultural heritage within the ES so that the impacts of the Project can be fully understood.
- 6.1.5. The requirements of Paragraphs 5.126 and 5.127 of the National Policy Statement for National Networks and should also form part of the assessment in the ES.

6.2 STUDY AREA AND ASSESSMENT METHODOLOGY

- 6.2.1. The approach and methodology within the Environmental Scoping Report is generally acceptable given the information available at this stage, with the understanding that the ES will present a realistic worst case scenario to enable flexibility through limits of deviation.
- 6.2.2. Study areas have been set at 300m for non-designated resources; 1km for designated resources and 2km for assessment of the Zone of Visual Influence (ZVI) for designated resources of very high and high value only. The Applicant should also consider views to and from Conservation Areas, even where they are assessed of as medium value. Eden District Council's guidance relating to Conservation Areas should be cited, and particular attention paid to matters relating to views and impacts on setting.
- 6.2.3. The Applicant should provide further clarification regarding the specific methodology to be used, particularly with regard to the assessment of setting.
- 6.2.4. Further to the proposals in Paragraph 9.9.11 of the Environmental Scoping Report, the ES should consider the principle of harm to the historic environment, and the methods for the assessment of harm needs further clarification.
- 6.2.5. It is noted, and encouraging to see, that only operational effects on buried archaeology are scoped out of the assessment at this stage. The scoping tables acknowledge the limited nature of the project design proposals and the requirement for an iterative approach to the assessment and the potential for scoping out of effects in response to design changes. It is assumed that where Table 9-14 *scoping criteria for construction* currently makes reference to the air quality assessment that this is in error. It is suggested that clarification of this should be provided by the Applicant.
- 6.2.6. The Applicant should consider and outline an appropriate strategy for the assessment of historic hedgerows and to be prepared and submitted alongside the PEIR so that comment can be provided

as appropriate. The Applicant should also include the strategy for air photography, LiDAR and geophysical survey, and for deposit modelling. An appropriate method for the assessment of potential for undisturbed archaeological deposits remaining beneath the existing carriageway should also be included within the ES assessment (see Paragraph 6.4.2 below).

- 6.2.7. The Applicant is requested to define what is meant by the “margin of forecasting error” and how this is determined.
- 6.2.8. The full assessment methodology should be presented in the PEIR and the results of this assessment should be presented in full in the ES to enable review and comment as appropriate. It is noted that a survey strategy will be prepared, in consultation with key stakeholders, in support of the assessment. The timing of this should be detailed in order to be clear at what stage of the DCO process this will be finalised.

6.3 BASELINE CONDITIONS

- 6.3.1. We note that there has been no assessment of non-designated resources to date for Schemes 1 and 2 and that all Historic Environment Records (HER) data presented in the Scoping Report is out of date and needs to be updated. As such the baseline presented for non-designated resources is incomplete and this needs to be updated in the assessment to ensure that all likely significant effects have been identified.
- 6.3.2. Non-designated resources and currently unknown archaeological resources (with the potential to be assessed as nationally significant) will be a key consideration, and assessment of the setting of non-designated assets is important within this generally cohesive landscape.
- 6.3.3. The Applicant should request the HER datasets for Schemes 1 and 2 and updated data for the other schemes from the both Cumbria County Council and Eden District Council.
- 6.3.4. Tabulated data for the Scheme 1 states that there are no designated or other heritage assets within the project boundary, and therefore no impacts. The absence of full baseline evidence means that this cannot currently be confirmed and it is not possible to agree to this scheme being scoped out of further study. The conclusion of no impact also appears to be contradicted by the information in Table 9-2 *Baseline Conditions Summary*, which suggests that assets may be expected to extend in to the DCO application boundary.
- 6.3.5. The Applicant should consider as stated in Paragraph 5.124 of the NPSNN “*Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to Scheduled Monuments, should be considered subject to the policies for designated heritage assets. The absence of designation for such heritage assets does not indicate lower significance.*”. For this reason, it would be useful to have the whole route surveyed, evaluated and assessed at the ES stage.
- 6.3.6. The Applicant is advised to consult the following
- Penrith Conservation Area Character Appraisal;
 - Temple Sowerby Conservation Area Character Appraisal and Management Plan;
 - Appleby-In-Westmorland Conservation Area Historic Area Assessment;
 - Settle to Carlisle Conservation Area Railway buildings descriptions;
 - Management of Conservation Areas in Eden Supplementary Planning Document; and
 - North Pennines AONB Management Plan 2019-2024.

- 6.3.7. The Applicant should also be aware that a Conservation Area Character Appraisal and Management Plan of Appleby in Westmorland is currently underway and is due for adoption in 2022.
- 6.3.8. A Cumbria-wide project to create a local list of built heritage assets is currently underway. The Applicant should be aware that consultations will be ongoing during 2021 and 2022. Cumbria County Council and Eden District Council can provide guidance on the selection criteria to help inform the identification of new assets during the proposed site visits.
- 6.3.9. Historic Landscape Character (HLC) data has not been comprehensively discussed and it is unclear whether this data has been included within the scope of the assessment. Further consultation regarding HLC will be required with all relevant parties.
- 6.3.10. Inter-relationships with other disciplines should be carefully considered by the Applicant. This will be especially important when assessing temporary construction impacts – for example where it is predicted that traffic will re-route through conservation areas – and where proposed ecological mitigation may impact directly upon archaeology and/or result in a change to the setting of an asset.
- 6.3.11. It is noted that a scheme numbering system has been used which assigned new Project IDs to all assets based on their classification (e.g. SM01 – scheduled monument) and a gazetteer providing concordance information is proposed to accompany the PEIR. It is suggested that the Applicant use the existing historic environment identification numbers (e.g. HER number) to reduce the chance of error or omission within the ES, but it is an acceptable system providing the concordance information is accurate and sufficient to enable identification of assets.
- 6.3.12. Should trial trenching survey information not accompany the ES, then the Applicant could fail to assess (and prepare for) as yet unknown remains of potential national importance. This could result in unanticipated large-scale mitigation excavation or redesign, with increased costs and timescale. A programme of extensive, early, geophysical survey is supported to minimise the risk of unexpected sub-surface discoveries late in the programme. The Applicant should provide detail of the evaluation strategies to be employed where geophysical survey is not possible and the locations where these strategies apply. In the absence of geophysical survey, the default position will be for intrusive evaluation. The Applicant should consult with the planning authority to develop and agree the approach to geophysical survey and other non-intrusive evaluation techniques.
- 6.3.13. The location and extent of the Conservation Areas has not been presented, yet Penrith, Temple Sowerby, Appleby-in-Westmorland, Settle to Carlisle Railway and Church Brough are affected by or in close proximity with the Project. This information is publicly available and assistance can be provided to the Applicant in locating this data by the planning authority.
- 6.3.14. The Figure 9 series plans have numbers in the small insert boxes which do not match with the Scheme shown and the Applicant should address this to ensure clarity. There are also a number of designated heritage assets which have been omitted, or incorrectly labelled on the mapping. These include, but may not be limited to:
- The Grade II* listed Hornby Hall and Barns Adjoining (LB 1326775) on the northern edge of the study area;
 - A number of listed assets in Long Marton;
 - Church Brough Conservation Area and the listed buildings within the village; and

- The Settle-Carlisle Railway is identified as a non-designated heritage asset whereas it is a conservation area and should be identified as such on the designated asset plans.

6.4 POTENTIAL IMPACTS

- 6.4.1. The Applicant should clearly present a breakdown by Scheme with a summary of key constraints (e.g. proportion of scheme requiring new land take), and which of the impacts outlined apply. Where the route deviates from the current A66 there is the potential for considerable impacts on as yet unknown archaeological resources, the assessment of which will be of particular importance.
- 6.4.2. Previous works on the A66 have identified archaeological deposits beneath the carriageway (specifically Roman burials). At present the impacts section states that “Where the project is contained within the existing road corridor and alongside areas of prior disturbance, the potential for the presence of as-yet unknown archaeological remains would have been previously removed”. Given the previous work, this should be revised to acknowledge the (albeit limited) potential that some remains are present. Cumbria County Council can provide the Applicant with further details of this work if required.
- 6.4.3. The cumulative effect of the individual schemes on the historic landscape character does not appear to have been considered, or this is not clearly articulated. At present no cumulative operational effects on the historic landscape character have been included in the tables of potential effects.
- 6.4.4. The current wording of Paragraph 9.6.5 of the Environmental Scoping Report suggests that areas of new land take adjacent to the current route is being considered as previously disturbed. We assume that this sentence was intended to refer only to the land within the existing roadway, but this requires confirmation.
- 6.4.5. The ES should also consider that cumulative loss of contemporaneous assets within the setting of those assets of high value, may result in loss of context and significance.

6.5 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 6.5.1. There is little design detail currently provided and further detail would have been appreciated at this stage. For example, construction compounds are likely to have a significant impact on currently undeveloped areas and the location of such temporary works must be considered in the assessment presented in the ES.
- 6.5.2. Clarity is needed in how the Environmental Management Plan (EMP) will be prepared so that activities at specific sensitive locations can be recognised and understood.
- 6.5.3. The Applicant should conduct consultation with the planning authority to discuss how the ES and mitigation detailed in the EMP can be informed by a Project-wide research design and local research priorities.
- 6.5.4. The Applicant should consider and include reference to opportunities for enhancement, with particular reference to the Eden Local Plan and Historic England Guidance.

6.6 ASSUMPTIONS AND LIMITATIONS

- 6.6.1. It is not clear how areas will be assessed in the absence of geophysical survey, or evaluation trenching where geophysical survey has not been undertaken. While we appreciate that this work is ongoing, the Environmental Scoping Report states ‘where it is not possible to undertake geophysical survey and/or trial trenching, professional judgement will be employed to take a precautionary



approach to the assessment' (9.11.3). It is not clear at this stage what this will entail, or what scale of area is to be treated in this way.

- 6.6.2. A Written Scheme of Investigation and adequate reporting for surveys should be submitted with the ES.

7 GEOLOGY AND SOILS

7.1 INTRODUCTION AND POLICY CONTEXT

- 7.1.1. This response to the proposed assessment of Geology and Soils effects is informed by Policy ENV8 of *A Plan for Eden: Eden Local Plan 2014 to 2032* which states:
- 7.1.2. *ENV8 - The Council will approve development on land that is contaminated or where contamination is suspected, subject to other policies if:*
- *Adequate contaminated land assessments prepared by a suitably competent person are submitted prior to any planning decision being taken, to determine whether or not unacceptable risks to human health or the environment arise from the proposals.*
 - *Where necessary, suitable remediation is carried out to ensure safe development.*
- 7.1.3. Environment Agency Guidance, Land Contamination Risk Management (LRCM) and Yorkshire and Lincolnshire Pollution Advisory Group (YALPAG) guidance are referenced in the Environmental Scoping Report with respect to the assessment of land contamination and this is considered appropriate. The Applicant should also complete the assessment in consideration of the available Local Authority Guidance 'Development of Potentially Contaminated Land and Sensitive End Uses. An Essential Guide for Developers'.

7.2 STUDY AREA AND ASSESSMENT METHODOLOGY

- 7.2.1. The study area is stated to comprise a 250m buffer either side of the draft DCO boundary. This is stated to be based on professional judgement and is also in line with other major highway and infrastructure schemes, which is considered acceptable. It is also stated that a 1km buffer will be considered in areas where sensitive groundwater receptors are present; again, this is considered acceptable.
- 7.2.2. Intrusive ground investigation (GI) and soil surveys will target areas within the DCO boundary only. At this stage this is acceptable. The extent of the GI should be reviewed as the Project progresses and consideration made to GI outwith the DCO boundary if warranted, e.g. to increase understanding of baseline conditions such as groundwater quality.
- 7.2.3. Section 10.6.6 of the Environmental Scoping Report states that an intrusive GI is currently being completed. Clarification should be provided in the ES of the extent to which the Councils have commented on the scope of the GI.
- 7.2.4. Section 10.6.7 of the Environmental Scoping Report states that the assessment of impacts on contaminated land will be primarily based on desk based sources, however, also the Environmental Scoping Report goes on to state that the desk based information will be validated using the results of the intrusive GI. Clarification is required as to whether the GI is targeting potential contaminative sources.
- 7.2.5. Section 10.7.5 of the Environmental Scoping Report discusses an initial assessment of significant effects as a result of contamination, which will be presented in the PEIR. It states that furthermore detailed assessment will be carried out and reported in the ES if contamination sources cannot be screened out in the PEIR. Clarification is required as to whether the more detailed assessment will be desk based or intrusive and if intrusive whether it be completed as part of the GI being currently completed (it is noted that it is stated in Section 10.8.5 that the GI was completed in Spring 2021).

- 7.2.6. It is stated within Section 10.2.2 of the Environmental Scoping Report that where invasive methods of GI are not possible, non invasive methods will be considered and that the findings of any additional GI which may be required as part of detailed will not be available in time to inform the EIA. The scope and methodology of additional GI should be discussed with the Councils.
- 7.2.7. The methodology is stated to follow the requirements of DMRB LA109 *Geology and Soils*; this is considered appropriate. The Environmental Scoping Report confirms that the loss of peat as a resource and the effects the loss of peat may have on climate change will be assessed in Chapter 12: Materials and Waste and Chapter 8: Climate respectively, this is in line with the DMRB guidance and considered appropriate.
- 7.2.8. The methodology notes that the PCF Stage 2 data will be reviewed and updated as appropriate and that this will include additional stakeholder engagement and intrusive GI and soil survey data. The GI and Agricultural Land Classification (ALC) soil surveys appear to have been programmed such that the findings are included within the ES.

7.3 BASELINE CONDITIONS

- 7.3.1. There is no reference to previous Phase 1 reporting or Preliminary Sources Study Report (PSSR) currently available for the Project. It is assumed that the document will be undertaken in line with DMRB guidance and used to further define the baseline conditions. The Environmental Assessment Report (EAR) is referenced, however, this has not been provided alongside the request for a scoping opinion and the level of detail contained within it is not known.
- 7.3.2. A comprehensive summary of the sources of baseline data is provided and it is highlighted that baseline information was not available within the Stage 2 EAR for Schemes 1 and 11. The methodology confirms that the baseline data for Schemes 1 and 11 has been collated from readily available information as part of the Environmental Scoping Report.
- 7.3.3. The methodology recognises that there are gaps within the existing baseline data and outlines the areas where the existing baseline is to be supplemented via further consultation with stakeholders and publicly available records. Further consultation to be completed and reason for consultation is listed in Table 4-3, this includes the Councils.
- 7.3.4. It is stated that the Animal and Plant Health Agency (APHA) have confirmed that no recorded burial sites are within the study area but have noted that their records are incomplete. The Applicant should request records held by the Councils on burial sites and burn sites as part of the consultation process.
- 7.3.5. The Councils hold records of Potable Water Sources that do not appear within available data sources due to them not having an abstraction licence. These are known as 'Spring supplies' and are common in the area. The Councils would be willing to provide records of the spring supplies where available and can provide to the Applicant as part of the consultation process.
- 7.3.6. Further information with respect of unexploded Ordnance (UXO) should be included within the ES. Data is stated to be from the Zetica Risk Maps online and it is suggested that further information (e.g. Pre-Desk Study Assessment (PDSA)) is obtained for each of the Schemes. Further detailed UXO assessment may be required, in particular in relation to the Warcop MoD facility.
- 7.3.7. For schemes which lie within Coal Authority (CA) Coal Mining Reporting Area, a CA mining report will be required.

- 7.3.8. The recognition for the requirement for further research into Warcop MoD facility, foot and mouth burial sites and Longriggs mine in particular are noted. Relevant consultees for these aspects are included within Table 4-3 of the Environmental Scoping Report.

7.4 POTENTIAL IMPACTS

- 7.4.1. Potential impacts have been identified in relation to agricultural soils, human health, and groundwater and surface water quality. It is agreed with that these potential impacts are considered relevant to this topic.

7.5 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 7.5.1. The Applicant highlights that GI has been completed in Spring 2021. Clarification is required as to whether the Councils have been given the opportunity to comment on the scope of the GI.
- 7.5.2. The Applicant's consideration of beneficial enhancement measures such as the potential exposure of potentially important geological features is noted.
- 7.5.3. Table 10-12 of the Environmental Scoping Report states; – *'4) is the project likely to disturb historical contamination?* For all schemes it is stated to be either 'Y' or 'TBC', for Route Wide it is currently stated as 'N'. The Applicant should provide clarity on the above.

8 LANDSCAPE AND VISUAL

8.1 STUDY AREA AND ASSESSMENT METHODOLOGY

- 8.1.1. Reference to requirements of DMRB *LA 107 Landscape and Visual Effects* (Highways England, 2020a), DMRB *LA 104 Environmental assessment and monitoring* (Highways, England, 2020b), and Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA3) (Landscape Institute and Institute of Environmental Management and Assessment, 2013) for the Landscape and Visual assessment is considered appropriate. It would be helpful if the Applicant could identify which aspects of the guidance are to be applied and how.
- 8.1.2. In determining the study area reference is made to a Zone of Theoretical Visibility (ZTV), that is limited to 10km. However, with the exception of the defined 7km study area for the Temple Sowerby to Appleby and Appleby to Brough (Warcop), it is unclear what the extent of the study area is for the remaining Schemes for landscape character and visual effects. Although this is subsequently defined in Table 11-1 DMRB Study area selection criteria, the preceding text suggests that for some Schemes this would be less than 7km, reference to a 2km buffer is made in relation to landscape character (refer to paragraph 11.5.8, 11.5.11, 11.5.15). In line with DMRB LA104 *Environmental assessment and monitoring*, paragraph 3.13, the ES shall clearly define the study area to be used for the purpose of landscape character and visual effects.
- 8.1.3. In defining the landscape character and visual effects study area, it is unclear where the 7km study area is being measured from. The application site (draft Order Limits) is likely to extend beyond the centreline of the relevant options by some margin to incorporate construction compounds, side road changes, haul routes and changes to accesses. In line with DMRB LA104 *Environmental assessment and monitoring*, paragraph 3.13, the ES shall clearly define the study area, and in order to do so should define from where the study area is to be measured from.

8.2 BASELINE CONDITIONS

- 8.2.1. The identification of relevant National and Regional Character Areas is satisfactory. However, Local Character Areas (LCAs), appear to have been defined within a 2km buffer which does not reflect the 7km study area in the preceding paragraphs. The Applicant should clearly define the study area and the extent to which LCAs would be assessed.
- 8.2.2. With reference to paragraph 11.5.6 of the Environmental Scoping Report, it is considered that guidance provided by Natural England within 'An Approach to Landscape Character Assessment' (2014) would also be relevant, particularly where new LCAs are to be derived from Landscape Character Types (LCTs).
- 8.2.3. The LCT, subsequently referred to as LCAs, are identified as being relevant to the study area within a 2km buffer, however reference is also made to a 7km study area. Clarity is therefore required as to the extent to which LCAs will be scoped into the assessment. With reference to Table 11-4 Landscape Character Types/Areas relevant to the project and Figure 11.4 Landscape Character, it is unclear which documents these landscape character types relate to, and how the scheme and landscape character areas relate to one another. In describing the new LCAs in Eden and Cumbria, the Applicant should refer to Natural England's guidance 'An Approach to Landscape Character Assessment' (2014)

- 8.2.4. In describing the Project's orientation and proximity in relation to the North Pennines Area of Outstanding Natural Beauty (AONB), it is not clear how these relate to the separate Schemes. Reference to the location of the Lake District National Park boundary is incorrect, the boundary lying west of the Project. Nevertheless, the reasons for scoping out the assessment of effects on this designation are appropriate. Given the rural context of the Schemes east of Penrith, and its proximity to the Yorkshire Dales National Park boundary, the scoping in of the assessment of effects on the designation is appropriate.
- 8.2.5. In relation to relevant conservation areas, the approach taken to scoping of the conservation areas set out in Table 11-5: Conservation Areas relevant to the project, is satisfactory with the exception of the Settle to Carlisle Railway Conservation Area. The ES should consider the potential impacts on the designation and its purpose, particularly in relation to potential localised impacts associated with the crossing of the A66 and a winter assessment, in the absence of foliage on trees.
- 8.2.6. Confirmation is required as to whether effects on visitors to Wetheriggs Country Park are to be scoped into the assessment within the ES.
- 8.2.7. With reference to Table 11-6: Key features relevant to the assessment of landscape and visual effects, the Environmental Scoping Report correctly identifies the features to be scoped in, although the proximity and orientation to some of the Schemes are incorrect.
- 8.2.8. The range of sensitive receptors is considered to be wider than that described in Paragraph 11.5.22 of the Scoping Report and should include clusters of dwellings that form local communities, and local roads, particularly those with scenic views, and other recreational routes. This should be fully detailed and explained within the PEIR.
- 8.2.9. In line with LA107: *Landscape and visual effects*, the Applicant should provide a list of representative, illustrative or specific viewpoints for the purpose of helping to demonstrate the visual effects of the Scheme. This should identify the locations and provide descriptions of the receptors represented through these viewpoints, describing the associated visual effects and whether they are significant or not.
- 8.2.10. In line with guidance provided in LA107: *Landscape and visual effects*, the Applicant should consider the opinions of local people and interest groups, identifying the impacts on communities, and this includes potential intervisibility between the small clusters of dwellings, that in combination form communities at a local scale.
- 8.2.11. The approach to the preparation of photomontages is considered suitable, and it is suggested that the locations of these should be agreed with the Councils prior to the photographs being taken.

8.3 POTENTIAL IMPACTS

- 8.3.1. The potential impacts identified as a result of the Project are appropriate. However, some potential impacts relating to landscape and visual impact have not been identified, as outlined below.
- Schemes 3 – 6 all lie within 5km of the North Pennines AONB. As such, potentially significant effects on the setting and special qualities of the North Pennines AONB may result from the Project. Any assessment of effects should also reflect any updates to the study area as outlined above;
 - The Applicant has identified that tranquillity may be impacted, the issue of tranquillity should be within the scope of the assessment in relation to relevant landscape character, with the exception

of Scheme 1 and Scheme 2 where it is considered that tranquillity is low, and not a contributing factor towards the perception of landscape character; and

- The Ancient Tree Inventory does not identify any ancient/veteran trees within the immediate vicinity of Schemes 1- 5. Nevertheless, there remains the potential for trees that have characteristics of ancient/veteran trees to be identified through an arboricultural survey. As such, the PEIR should describe how the presence of potential ancient/veteran trees would be addressed within the ES.

8.4 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 8.4.1. It is appropriate that the proposed mitigation strategy should reflect the guidance provided in Highways England's *The Road to Good Design* (Highways England, 2018), *LD117 Landscape Design*; The value of design in infrastructure delivery report (National Infrastructure Commission, 2018a); and Design Principles for National Infrastructure (National Infrastructure Commission, 2018b). Reference should also be made to DMRB *LD119 Roadside environmental mitigation and enhancement Revision 0* (or as current at the time of writing).
- 8.4.2. The Project mitigation measures provide a high-level approach to landscape and visual mitigation and are appropriate. In line with best practice, and *LD117 Landscape Design and LD119 Roadside environmental mitigation and enhancement*, and as mitigation measures are developed, these should be discussed with statutory bodies in order that a high-quality landscape led approach is adopted, and where appropriate this reflects local variations in the landscape character. This approach should be reflected in the Landscape Management Plan developed for each Scheme at a scale that specific measures can be readily identified.
- 8.4.3. As set out in DMRB *LD119 Roadside environmental mitigation and enhancement*, the landform should form an integral part of the landscape design associated with the Schemes and can be particularly effective in providing or reinforcing other mitigation measures such as planting blocks. As such, the design should consider suitably graded and profiled landscape earthworks that integrate embankment slopes and cuttings into the surrounding landform where this mitigates likely significant effects. Proposed landforms should not give rise to impacts but should be complementary to the existing landscape. The ES should include suitably scaled cross sections to aid understanding on the approach taken to earthworks, screening and planting as part of the mitigation design.
- 8.4.4. Further investigation into off-site enhancement measures is appropriate, however these must be supported with appropriately detailed management plans and funding for future management.
- 8.4.5. The provision of an appropriate lighting design strategy, and with the exception of safety reasons, lighting should be avoided wherever possible, both during construction and operation. The lighting design strategy should consider alternatives to standard designs to reduce potential impacts, and also any ecological constraints that may be present.
- 8.4.6. The ES needs to provide a clear description of the proposed lighting strategy, particularly given its proximity to the dark skies associated with North Pennines AONB, and this should be clarified within the PEIR.

8.5 DESCRIPTION OF LIKELY SIGNIFICANT EFFECTS

- 8.5.1. The overview description of likely significant effects on landscape character during construction and operation is suitable. However, the establishment of the study area which suggests a 7km buffer

remains unclear, and subsequent adoption of a 2km buffer in determining character areas most likely to be impacted is confusing, refer to paragraph 8.1.2 – 8.1.3 above.

- 8.5.2. The preliminary description of likely significant effects on landscape character during construction and operation and scoping of potential effects associated with the schemes are relevant and appropriate.
- 8.5.3. The overview description of likely significant effects on views during construction and operation is suitable, however as part of the assessment of operational effects the ES should set out the assumptions made on the establishment of planting as part of the mitigation strategy, taking into consideration the challenging growing conditions that will exist in exposed locations.
- 8.5.4. The approach to the qualitative assessment of the view from the road is considered appropriate.

8.6 ASSESSMENT METHODOLOGY

- 8.6.1. The approach to landscape and visual sensitivity, by describing the associated value and susceptibility, and the magnitude of effects (change), describing the size/scale, geographic extent, duration and reversibility, is appropriate and broadly reflects the guidance provided in LA107 *Landscape and visual effects*.
- 8.6.2. The Environmental Scoping Report does not explicitly set out the scenarios by which the Project would be assessed. Greater clarity should be provided in the ES as to the scenarios that are to be assessed through reference to LA107: *Landscape and visual effects*. This should by default include; construction at its peak, daytime and night-time scenarios as well as the winter year 1 (opening) and summer and winter year 15 (design year) in order that a clear understanding of the nature/form and scale of the significant effects are understood and explained. It would be appropriate that this is explained fully within the PEIR.
- 8.6.3. The Environmental Scoping Report does not explain the relationship between the principal representative viewpoints indicated on Figure 11.6: ZTV and viewpoints, and how these relate to areas of settlements or locally important specific views. It is requested that this is explained fully within the PEIR.
- 8.6.4. There is a lack of clarity in relation to the terminology used to describe the significance of effect, where this is derived from, and how a significant effect is to be determined, with different terminology being referenced. Greater clarity needs to be provided in terms of the terminology and how guidance is to be interpreted.

8.7 CUMULATIVE EFFECTS

- 8.7.1. The Applicant should draw a clear distinction between the combined effects (the different environmental effects or Schemes on a single receptor as a result of the Project) and the cumulative effects (the landscape and/or visual effects of different projects within the vicinity of the Project, alongside the Project itself).

8.8 ASSUMPTIONS AND LIMITATIONS

- 8.8.1. Assumptions made as to the growth of trees/shrubs planted in order to understand its capacity to provide mitigation in the Design Year would be appropriate to include, taking into consideration the challenging growing conditions experienced in parts of the corridor.

8.8.2. It is acknowledged that the assessment of landscape and visual effects would be made against the information available at the time. It should be clear in the ES what assumptions have been made, in order that the worst-case scenario has been assessed within the principles of the Rochdale envelope and parameters applied.

9 MATERIAL ASSETS AND WASTE

9.1 INTRODUCTION AND POLICY CONTEXT

- 9.1.1. The following policy and underpinning commitments are noted to be of relevance to the Project:
- Cumbria Minerals and Waste Local Plan 2015-2030 (adopted September 2017)**
- 9.1.2. Policy SP1 – Presumption in favour of sustainable development - *“When considering development proposals, the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. It will always work proactively with applicants to find solutions that mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area”.*
- 9.1.3. Policy SP8 – Minerals Safeguarding - *“Mineral resources, existing, planned and potential infrastructure and plant will be safeguarded from being unnecessarily sterilised by other developments by identifying existing and potential railheads and wharfs to be safeguarded and Mineral Safeguarding Areas for:*
- *the indicative sand and gravel and hard rock resources (including aggregates, high specification aggregates, industrial minerals and building stones), shallow coal and fireclay resources;*
 - *identified resources of brick clay; remaining gypsum resources; resources of slate and secondary aggregates; and*
 - *and identifying Mineral Consultation Area, which covers the resources within all the Mineral Safeguarding Areas [MSAs]”.*
- 9.1.4. Policy SP9 – Strategic areas for new mineral developments - The Applicant should ensure the areas of development do not affect the areas identified in the Local Plan.
- 9.1.5. Policy SP12 – Peat - *“Planning permission will not be granted for peat extraction from new or physically extended sites. Time extensions for existing peat extraction planning consents will be considered on a case-by-case basis, where it is demonstrated that it is necessary to enable the proper restoration of the land or to secure biodiversity, climate change or other appropriate objectives of this Plan”.*
- 9.1.6. Policy DC15 – Minerals Safeguarding - *“The Mineral Planning Authority will safeguard those mineral resources that are shown on the Policies Map. Within those areas, the Mineral Planning Authority should be consulted by the Local Planning Authorities on any planning applications they receive for non-minerals development that would be likely to affect the winning and working of minerals”.*

Eden Local Plan 2014-2032

- 9.1.7. Policy ENV5 – Environmentally Sustainable Design -*“Minimising construction waste, through for example designing out waste during the design stage, selecting sustainable and efficient building materials and reusing materials where possible”.*
- 9.1.8. *“Examples of guidance and sources of useful information at present include the Sustainable Drainage Systems (SuDS) Guide that has been prepared by Cumbria County Council, the guidance and information on minimising construction waste and increasing resource efficiency provided by WRAP, and information and case studies on renewable energy and sustainable construction provided by Cumbria Action for Sustainability”.*
- 9.1.9. The Applicant is requested to make reference to Air Quality and Noise & Vibration chapters in the ES, as the content of these topics of the EIA have a direct interrelationship with Material Assets and Waste.

9.2 STUDY AREA AND ASSESSMENT METHODOLOGY

- 9.2.1. The study area is stated correctly, as set out within DMRB LA110 *Material Assets and Waste*.
- 9.2.2. The Applicant should state within the ES whether (or not) non-landfill waste infrastructure (for example, Material Recovery Facilities) are included in the assessment, and the basis upon which such assets are considered a sensitive receptor.

9.3 BASELINE CONDITIONS

- 9.3.1. Within the ES, the Applicant is requested to update the baseline data, in accordance with the most recent available information. The Applicant should be made aware that the Local Aggregates Assessment (LAA) for 2019/2020 will be prepared by Cumbria County Council over the coming months and should be publicly available (endorsed by the North West Aggregate Working Party) by the end of 2021. The information provided in the LAA should be incorporated in future EIA deliverables for the Project.
- 9.3.2. In paragraphs 12.5.13 and 12.9.11, which reference recovery targets, the Applicant is recommended to include reference to the fact that the Waste Directive target specifically excludes naturally occurring materials (specifically European Waste Catalogue category 17 05 04 in the list of waste defined as non-hazardous soils and stones).
- 9.3.3. The Applicant also refers to the fact that there are no sites recorded as having had planning permission for commercial peat extraction. This information should be included in the ES.

9.4 POTENTIAL IMPACTS

- 9.4.1. In paragraph 12.6.5 of the Environmental Scoping Report, the Applicant is requested to confirm how waste management facilities are considered sensitive environmental receptors. If it cannot be justified why those facilities are sensitive environmental receptors, it is recommended that references to this receptor type are removed.
- 9.4.2. The cut and fill balance of the Project is not yet known. Should the Applicant wish to balance earth movements across the schemes of the Project, then the consequential environmental impacts of doing so (traffic, noise, contamination etc) should be included within the assessment in the ES although the re-use of material is to be encouraged rather than the use of virgin aggregate.

9.5 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 9.5.1. The Applicant's attention should be drawn to Paragraph 2.5 of LA110 *Material Assets and Waste*, and is requested to make suitable (proportionate) reference to the circular economy as part of the mitigation and enhancement measures proposed.
- 9.5.2. In paragraphs 12.8.2 and 12.8.3 of the Environmental Scoping Report, statements are made on the scoping out of operational effects after the first year of operation. The Applicant should make clear the bases of these assertions, through the provision of more detailed justification e.g. *"impacts will be limited to small volumes of materials required for minor surfacing repairs, which are not – using professional judgement – expected to result in significant adverse environmental effects"* (as per Table 12-13).
- 9.5.3. Notwithstanding the above, the approach to the design mitigation and enhancement measures proposed by the Applicant are considered to be adequate.

9.6 ASSUMPTIONS AND LIMITATIONS

- 9.6.1. The Applicant should provide clarity that describes what benchmarks or comparators could be used, where (for example) the exact sources and origins of materials, are not known.
- 9.6.2. It is recommended that the Applicant changes the title of "Table 12-15: Geology scoping criteria from DMRB LA 109 – operation" which should refer to "Table 12-15: Material Assets and Waste scoping criteria from DMRB LA 110 *Material Assets and Waste* – operation".

10 NOISE AND VIBRATION

10.1 INTRODUCTION AND POLICY CONTEXT

- 10.1.1. The response to the proposed assessment upon Noise and Vibration is informed by Policy ENV9 of Eden's Local Plan (2014 – 2032) which states:
- 10.1.2. *“Development proposals for development likely to experience noise, light, dust, odour or vibration from road, rail or air, or other sources must be supported by an adequate assessment to assess risks and their acceptability, and to ensure that appropriate mitigation is put in place to ensure occupiers are not adversely affected.*
- 10.1.3. *Assessments should consider both the likely level of exposure at the time of application and any increase that might be reasonably expected in the foreseeable future.*
- 10.1.4. *To safeguard the continued use of existing industrial and commercial uses and to protect amenity, noise, light, dust and contamination sensitive development, proposals will need to demonstrate that existing levels of noise and vibration, light, dust or odour from industrial, commercial, leisure or sporting facilities are not likely to give rise to an unacceptable impact on the proposed development.*
- 10.1.5. *To safeguard sensitive development from the impact of proposed industrial, commercial, leisure or sporting facilities, developers will need to demonstrate that:*
- *High levels of noise, light or dust will not occur throughout the construction phase of the development, especially at night, during the hours when people are normally sleeping.*
 - *Development proposals for development likely to cause noise, light, dust, odour or vibration sources must be supported by an adequate assessment to assess risks and their acceptability, and to ensure that appropriate mitigation is put in place to ensure existing noise sensitive premises are not adversely affected.”*
- 10.1.6. Therefore, it is expected that the ES will address matters relating to noise and vibration so that the impacts can be fully understood.
- 10.1.7. The requirements of Paragraph 5.189 of the National Policy Statement for National Networks (NPSNN) should also be noted and this approach should form part of the assessment within the ES.

10.2 STUDY AREA

- 10.2.1. It is noted that the Applicant will define the study area using the guidance in DMRB LA111: *Noise and Vibration*. The approach to this is considered to be satisfactory.
- 10.2.2. Clarification of which version (i.e. month and revision number) of LA111: *Noise and Vibration* that will be followed should be presented in the ES.
- 10.2.3. The ES should clearly describe, with the aid of a plan, the extent of the study area for both the construction and operational phases of the assessment of noise and vibration. Confirmation should be provided to ensure that the study area is sufficient to encompass all sensitive receptors which may experience significant effects from the Project in the ES.
- 10.2.4. Confirmation of how the assessment will take into account any committed developments within the study area should be provided in the ES. This should include how the committed developments have been identified and assessed.

- 10.2.5. The current methodology outlined within the Environmental Scoping Report for assessing construction traffic impacts is not considered satisfactory, and further information is required in the PEIR. To note, construction traffic is likely to have an impact on the percentage of heavy vehicles leading to a potential change in road traffic noise. Therefore, the threshold for assessment should not be determined based solely on a change in traffic flow. The assessment of construction traffic changes across the network should be based on the traffic flow, speed and percentage of heavy vehicles (rather than solely on traffic flow). The construction road traffic assessment methodology should be presented in the PEIR and the results of this assessment should be presented in full at the ES stage.
- 10.2.6. As above, the methodology for operational traffic impacts is not considered satisfactory as a change in traffic flow is not the only factor that could affect a noise level change. It is suggested that Basic Noise Levels are predicted across the network to ensure that links where a change of speed and percentage heavy vehicles may result in a change of 1dB are also captured and assessed. The operational road traffic assessment methodology should be presented in the PEIR and the results of this assessment should be presented in full in the ES.

10.3 BASELINE CONDITIONS

- 10.3.1. A plan that shows the proposed noise monitoring locations should be presented in the PEIR. Confirmation should also be provided on the noise survey methodology, including the reason for selecting each monitoring location and the duration of the survey period in the PEIR.
- 10.3.2. The ES should confirm that the identification of the Noise Important Areas (NIAs) is based on the more recent Round 3 mapping information to identify receptors that are already exposed to higher noise levels.

10.4 POTENTIAL IMPACTS

- 10.4.1. The potential impacts identified in Section 13.4 of the Environmental Scoping Report are considered appropriate at this stage.

10.5 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 10.5.1. The inclusion of Best Practicable Means (BPM) and commitment to mitigation measures during the construction phase, and which will be included in the Noise and Vibration Management Plan, is suitable. Further details should be provided in the ES once the construction noise and vibration assessment has been undertaken.
- 10.5.2. Confirmation should be provided on how the noise and vibration assessment will take the project objective to “*optimise environmental improvement opportunities*” (see Table 2-1) into account in the PEIR. This also aligns to the Key Tests of CCC and the LEP.

10.6 DESCRIPTION OF THE LIKELY SIGNIFICANT EFFECTS

- 10.6.1. Clarification and further details on the construction vibration assessment methodology for road traffic using diversion routes should be provided in the ES. This should include the assessment criteria and the options for mitigation that will be explored and implemented.
- 10.6.2. Further justification is requested for the limitation of the study area for construction phase effects along the preferred route only (Paragraph 13.6.3 of the Scoping Report) in the PEIR. The approach is not considered to be robust without further details being provided, as there may also be significant

effects at dwellings further away from the preferred route, e.g. close to diversion routes that may extend further away.

10.7 ASSESSMENT METHODOLOGY

- 10.7.1. The sensitivity (or value) of receptors should ideally be provided in the PEIR.
- 10.7.2. Values for the Lowest Observed Adverse Effect Level (LOAEL) and Significant Observed Adverse Effect Level (SOAEL) should be provided in the PEIR. The assessment methodology provided in the PEIR should also provide detail on how these values will be used to in determining significance within the assessment in the ES.
- 10.7.3. Further detail on the “*high-level commentary*” and “*risk-based consideration of construction impacts*” should be provided in the PEIR. This should include how the construction noise and vibration levels will be predicted, and how the impacts will be assessed to determine significance. The Applicant should also provide detail on whether the duration of construction noise/vibration impacts is likely to be an integral part for determining significance.
- 10.7.4. Further detail is requested on how the model will be ‘appropriately validated’. This should be presented in the ES.
- 10.7.5. It is agreed that operational vibration is scoped out of the assessment on the understanding that the road surface will be maintained to be free from irregularities as part of the project design and general maintenance.

10.8 ASSUMPTIONS AND LIMITATIONS

- 10.8.1. Further detail is required within the PEIR on how impacts relating to construction noise/vibration impacts will be assessed (including assessment criteria) and mitigated.
- 10.8.2. Further detail is required within the PEIR to detail how the assessment will determine that “*appropriate mitigation is put in place to ensure existing noise sensitive premises are not adversely affected*” by the development proposals, in line with Policy ENV9 of the Eden Local Plan 2014-2032.
- 10.8.3. Clarification should be provided for the acoustician(s) preparing the noise and vibration chapter and how they are ‘suitably qualified’, in line with Eden District Council’s National and Local Checklist Guidance.
- 10.8.4. Further detail on how the second aim of the Noise Policy Statement for England (NPSE) will be assessed and achieved should be presented in the PEIR. “*The second aim of the NPSE refers to the situation where the impact lies somewhere between LOAEL and SOAEL. It requires that all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life while also taking into account the guiding principles of sustainable development*”. More generally, further details on how significant effects will be determined and mitigated, and how the Project will be compliant with national planning policy (i.e. National Policy Statement for England (NPSE) and NPSNN) and local planning policy (Eden Local Plan) should be provided in the PEIR.

11 POPULATION AND HUMAN HEALTH

- 11.1.1. Cumbria's Local Industrial Strategy (March 2019) published by the Cumbria Local Enterprise Partnership (LEP) identified the Project as an infrastructure priority for the region, and as stated in Paragraph 2.1.9, the Project is supported in principle in the CTIP.
- 11.1.2. It is therefore to be expected that the ES will include details of how the Project will support the Cumbria's Local Industrial Strategy, in particular the strategic objective of improving connectivity across the county, which is again aligned with the Key Tests.
- 11.1.3. The LEP also identified the Project as a medium / long term priority within the Cumbria Infrastructure Plan (May 2016), and it is expected that the ES will include details of how the Project will support this Plan.
- 11.1.4. There are no planning policies within the Eden Local Plan 2014-2032 that are directly pertinent to human health although Policy DEV3 states:
- 11.1.5. *Development will not be supported where..... it would remove an existing right of way, unless there is no alternative suitable location and the benefits from the development would justify the loss, or where an acceptable diversion is provided and a legal diversion order obtained.*
- 11.1.6. It is therefore expected that the ES will include details of how the Project will achieve the aim of this Policy.
- 11.1.7. The requirements of Paragraph 5.184 of the NPSNN are deemed appropriate and this approach should form part of the assessment within the ES.

11.2 STUDY AREA AND ASSESSMENT METHODOLOGY

- 11.2.1. It is noted that the study area will be defined using the guidance in the DMRB LA112 *Population and Human Health*; this is considered to be acceptable. While significant adverse effects are not anticipated outside the 500m area (para 14.3.1 of the Environmental Scoping Report), it is expected that the ES will clarify whether effects have been identified beyond the 500m area and the study area extended (para 14.3.2 of the Environmental Scoping Report).
- 11.2.2. It is recommended that the Applicant reviews the network of Public Rights of Way (PRoW) beyond the 500m area surrounding the project boundary, to confirm there are no likely significant effects. It is noted that PRoW have been marked on Figure 14 which are outside of the 500m study area and expect the ES to confirm whether these will be included in the assessment.
- 11.2.3. It is noted that the assessment of human health effects will be undertaken using guidance in the DMRB LA112 *Population and Human Health*. However, a deviation with this guidance is noted with the determination of significance for health effects (para 14.9.11 of the Environmental Scoping Report). Further details of the methodology for determining significance should be set out in the ES.

11.3 BASELINE CONDITIONS

- 11.3.1. The Applicant is requested to show the location of Agricultural Land Holdings on appropriate figures in the ES.
- 11.3.2. The Applicant should define the sensitivity (or value) of Population receptors in the ES.

- 11.3.3. It is recommended that the Applicant use the terminology set out in DMRB LA112 *Population and Human Health* for determining the sensitivity (or value) of Human Health receptors; low, medium; or high instead of a comparison to the average (which has been assumed to be national average).
- 11.3.4. It is noted that the Applicant intends to build a more detailed baseline of demographic, social and health characteristics of the communities in the study area; this is welcomed. However, the absence of reporting on District health indicators has meant that a potential impact associated with road safety has not been identified. It is recommended that these health indicators are used to inform the baseline in the ES.
- 11.3.5. It is recommended that Cumbria's Joint Strategic Needs Assessment (JSNA) is used to further inform the baseline with details of the health and social care needs of local communities.

11.4 POTENTIAL IMPACTS

- 11.4.1. The potential impacts identified in Section 14.4 of the Environmental Scoping Report are accepted at this stage, however it is recommended that the inclusion of the assessment of impacts on Tourism and Recreation, Road safety of Walkers, Cyclists and Horse riders (WCH), and Employment Generation are also included to ensure a robust assessment of population and human health effects. It is also recommended that the Applicant includes physical activity as a health determinant to be assessed during construction and operational phases.
- 11.4.2. Tourism is an important economic driver for the region. In 2019, Cumbria welcomed almost 48 million visitors, contributing £3.13 billion to the local economy, supporting 65,500 jobs¹⁴. The Applicant is requested to provide further detail on the potential impacts that the Project is likely to have on the local economy and Tourism and Recreation in the region, beyond land take and severance of access for local businesses. This should include an assessment on the demands upon temporary accommodation during the construction phase.
- 11.4.3. The Public Health England Local Authority Health Profile (2019) for Eden District reports that the "Killed and seriously injured (KSI) rate on England's roads is significantly worse when compared to the national average"¹⁵. A review of fatal road traffic collisions (RTC) in Cumbria¹⁶ identified that 21% of RTCs occurred in Eden, and that the majority of fatal RTCs occur on A-roads (62%) including the A66. 17% of road deaths were pedestrians. The existing A66 is used by cyclists, and crossed by pedestrians. The Applicant should provide further detail on the potential impacts that the Project is likely to have on road safety, and associated health outcomes within the ES. The Applicant should also request traffic collision data as part of consultation with Cumbria County Council, to further inform the ES.

¹⁴ Cumbria Tourism, Accessed online at cumbriatourism.org

¹⁵ Public Health England, 2019. Local Authority Health Profiles, Eden District. Accessed online: <https://fingertips.phe.org.uk/profile/health-profiles>

¹⁶ Brown, Rachel E., 2015. Avoidable Mortality in Cumbria – A Review of 73 Fatal Road Traffic Collisions. Centre for Public Health, Liverpool John Moores University. Accessed online: <https://cumbria.gov.uk/elibrary/Content/Internet/536/671/4674/5359/5360/42135155438.PDF>

- 11.4.4. It is noted that potential employment benefits have been identified during the construction phase. It is recommended that the Applicant support this statement with further assessment of employment generation, including calculations, resulting from the Project and to what extent these employees can be sourced locally to the Project. The ES should also detail how the Project will benefit the local population through apprenticeships, training and upskilling of the workforce.
- 11.4.5. Relevant vulnerable groups have been identified, and it is noted that the list provided is not exhaustive. It is recommended that the Applicant includes Gypsies and Travellers as a vulnerable group, due to the large numbers of this population who visit Appleby-in-Westmorland (situated between Scheme 5 and Scheme 6) on an annual basis for the Appleby Horse Fair.
- 11.4.6. The Applicant is requested to provide further detail within the PEIR on the frequency of use of WCH provision within the study area. This may need to be supported by counts of WCH on PRoWs. It is expected this information will support the scoping out of health effects for Schemes by demonstrating the absence of sensitive receptors in the associated study areas. The Applicant should also consider the impacts of the Project upon the National Cycle Network routes both near Penrith (NCN 71) and Appleby-in-Westmorland (NCN 68).
- 11.4.7. The Applicant is requested to provide further information on the Agricultural Land Holdings within the study area, existing accessibility issues associated with them, and the frequency of use. This may need to be supported by surveys undertaken with holders of agricultural land in the study area.

11.5 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 11.5.1. The preparation of an Environmental Management Plan prior to construction work commencing is welcome. The Applicant is recommended to include the consideration of the timing of the construction programme to accommodate for peak tourism periods, accommodation changeover days, and events such as the Appleby Horse Fair.
- 11.5.2. The Applicant should provide further details for how adverse effects on the function and viability of agricultural businesses will be mitigated, particularly if it involves the provision of equivalent facilities.
- 11.5.3. It is expected that the Applicant will confirm that use of the north to south crossing of the Pennine Bridleway National Trail in the Kirkby Stephen area will be uninterrupted, and that provision will be made to ensure access will be retained both during construction and operation of the Project.
- 11.5.4. The Key Tests of CCC and the LEP include for an “off A66” route for walking and cycling between M6 and A1(M) and the Applicant should provide further details in the ES as to how this will be achieved. The Applicant should also have consideration of any emerging Local Walking and Cycling Infrastructure Plans and any significant effects upon WCH routes should be appropriately mitigated with details included within the ES. Cumbria County Council has aspirations for promoting further traffic free options for connecting Penrith with Pooley Bridge for walkers and cyclists and any proposals at J40 of the M6 and Kemplay Bank should incorporate adequate and safe measures to facilitate travel for these vulnerable road users.

12 ROAD DRAINAGE AND THE WATER ENVIRONMENT

12.1 STUDY AREA

- 12.1.1. It is noted that the study area will include surface water and groundwater features within a 1km radius of the indicative DCO boundary and that this may be extended if it is necessary to capture potential impacts outside of this 1km radius. This approach is considered to be satisfactory.
- 12.1.2. The ES should clearly describe the extent of the study area and it should be shown on a plan.

12.2 OVERVIEW OF CONSULTATION TO DATE

- 12.2.1. Table 15-1 indicates that initial consultation has been undertaken with the Environment Agency (EA) and Natural England. It is recommended that consultation already undertaken with the Lead Local Flood Authorities (LLFAs) are also recorded in the ES.

12.3 BASELINE CONDITIONS

- 12.3.1. The information presented within Section 15.5 is very high level with limited sources of information used to complete the baseline assessment. The Applicant should incorporate further detail into the PEIR and ES including:
- Further consultation with key consultees including the EA, Cumbria County Council, Eden District Council and the Eden Rivers Trust with reference to key documents (for surface water and groundwater receptors);
 - Information on any consented surface water and groundwater abstractions or discharges (including private (non-licensed) abstractions);
 - Existing drainage arrangements and systems along the existing and proposed scheme routes;
 - Additional assets identified and added to Highways England's Drainage Data Management System (HADDMS);
 - Further details on surface water and groundwater receptors affected by the Project, including but not limited to information on the smaller watercourses, ponds, any culverts / structures / flood defences in the vicinity, catchments, hydrology and modelled flood levels (where available) aquatics / fish / mammal information relevant to any watercourse, any below ground work that could affect groundwater;
 - Update on the potential for Groundwater Dependent Terrestrial Ecosystems (GWDTE's) and the development of a conceptual hydrogeological model;
 - Further details on the assessment of the potential for groundwater flooding risk with relevant consultation sought on the matter.
 - Further details on the significance of karsts / gypsum deposits will need to be explored and what potential impacts these may have on groundwater receptors;
 - Specific site visit information including historical/current ground investigation data and groundwater level/water quality data;
 - Further information on the Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI) that is located within the study area; and
 - Reasons for the waterbodies failing elements of the WFD.
- 12.3.2. The assessment within the ES should include a review the provisional importance of key surface water and groundwater receptors once further baseline information becomes available, for example,

it appears that all watercourses not classified under the Water Framework Directive (WFD) have been allocated a medium importance which may not necessarily be the case.

12.3.3. The Applicant should also consider potential risks that may directly / indirectly impact all surface water and groundwater receptors.

12.3.4. In addition to the above, the below paragraphs provide further information on the individual schemes from west to east.

Scheme 1; M6 Junction 40

12.3.5. The closest watercourse is the River Eamont and the smaller watercourses within the study area are also detailed. It should be noted that Dog Beck is classed as a main river, not an ordinary watercourse to the east of the M6.

Scheme 2; M6 Junction 40 to Kemplay Bank Roundabout

12.3.6. The main watercourses are detailed and it should be noted that the Dog Beck is classed as a main river not an ordinary watercourse to the east of the M6. It is encouraging to note the likely interaction with groundwater as this scheme is an underpass and is located in a total catchment area of a Source Protection Zone (SPZ). The ES should include further information on the unnamed tributaries that flow into the River Eamont, if they are open or culverted, their location and also further details on the Thacka Beck as it is noted that the culvert along Thacka Beck will be affected by the proposals.

Scheme 3; Penrith to Temple Sowerby (Center Parcs)

12.3.7. The main watercourses are detailed but it would be beneficial for further information on the ponds, field drains and smaller unnamed watercourses within the study area and any structures / culverts that may be affected by the Scheme to be provided. It should be noted that Medium and Low pluvial flood risk is associated with the Light Water along the A66 and that the Light Water is shown as a Main River on Figure 15.1 when it is an ordinary watercourse.

Scheme 4; Temple Sowerby to Appleby

12.3.8. It is noted that alternative alignments are being assessed for this Scheme at the scoping stage. It is likely that Birk Sike, a main river will be included within the study area and that once a preferred alignment is selected, further baseline information should be included within the assessment because, for example, there are numerous watercourses, drains, ponds and springs that are not detailed.

Scheme 5; Appleby to Brough (Warcop)

12.3.9. It is noted that alternative alignments are being assessed for this Scheme at the scoping stage. It is likely that Hilton Beck, a main river, will be included within the study area and that once a preferred alignment is selected, further baseline information should be included within the assessment because, for example, there are numerous watercourses, drains, ponds and springs that are not detailed. Details on pluvial flood risk should also be included for this Scheme.

Provisional summary of receptors

12.3.10. Table 15-2 within the Scoping Report provides the provisional importance assigned to key receptors identified at this stage of the assessment. The ES should identify all the receptors that have been included within the assessment.

12.4 POTENTIAL IMPACTS

- 12.4.1. The potential impacts identified for the construction stage are satisfactory, given the information available to inform the Scoping Report. However, there may be an impact on fluvial geomorphology and an impact to flood risk (surface water and groundwater) for example, temporary works within areas of fluvial flood storage, works to existing watercourse alignments and culverts, associated changes to catchment permeability and hydrology. It is recommended that the potential hydrogeological impacts on buried archaeology is considered.
- 12.4.2. The potential impacts identified for the operation stage are satisfactory, given the information available to inform the Scoping Report. In addition, there may be an impact on fluvial geomorphology, changes in natural catchments and susceptibility to groundwater flooding risks. Further detail and consideration on how dissolution impacts of gypsum will be quantitatively assessed at the operational stage should be included within the ES. In addition, it should be noted whether Cumbria County Council would have additional maintenance duties as a consequence.

12.5 DESIGN, MITIGATION AND ENHANCEMENT MEASURES

- 12.5.1. The design and mitigation measures listed by the Applicant in the Scoping Report are very high level and are agreed at this stage given the information available.
- 12.5.2. It is recommended that discussions around the proposal to improve flow conveyance of structures within watercourses are discussed at an early stage with the LLFA's when designs are available. This requires careful consideration as improving flow conveyance is likely to increase flood risk downstream.
- 12.5.3. The LLFA and EA are currently working together with regards to natural flood management, sustainability and reducing flood risk, in particular around Warcop. It is recommended that the Applicant engages with the LLFA and EA to ensure that the Project complements these proposals.
- 12.5.4. As the designs for each Scheme are developed, it is recommended that the applicant engages with the LLFA to ensure that the scheme compliments the LLFA's objectives and any LLFA proposals.

12.6 ASSESSMENT METHODOLOGY

- 12.6.1. The assessment methodology described is agreed at this stage given the information available to within the Scoping Report.
- 12.6.2. The PEIR and ES should provide further information on the proposed methodology for:
- Flood Risk Assessment – what modelling is being undertaken and why, how culverts are being sized, how compensatory flood storage is being calculated and associated flood risk implications;
 - Various groundwater studies proposed including any detailed hydrogeological modelling and purpose of such modelling;
 - Spillage assessment;
 - Hydromorphological assessment;
 - WFD assessment;
 - Geomorphology Assessment (if deemed appropriate for any part of the proposed Scheme);
 - Drainage Strategy;
 - Scour assessment; and

- Assessment of dissolution impacts of gypsum and any other “bespoke” impact assessments on groundwater receptors that are not covered by DMRB LA 113 *Road Drainage and the Water Environment*. Where gaps in information are identified, how will this be considered and addressed against the Scheme design and specific mitigation measures should be included.

12.6.3. It is noted that site visits are planned to inform the assessments, that discharge locations of highway drainage will be investigated and confirmed and that consultation with the EA and LLFA will continue.

12.6.4. It is recommended that a water features survey (including groundwater receptors) be considered following early engagement / consultation with the relevant stakeholders.

12.6.5. It is also noted that if mitigation is not possible, then the residual effects will be discussed in detail with relevant stakeholders to determine acceptability and compensation requirements. It is recommended that these discussions happen as early as possible in the design process.

12.7 ASSUMPTIONS AND LIMITATIONS

12.7.1. It is noted that the assessment of potential impacts is based on indicative project layout drawings with decisions regarding the proposed design and mitigation not yet made. The assumptions and limitations described are agreed at this stage given the information available to inform the Scoping Report.

12.7.2. In addition to items listed in Section 15.10.2 reference should also be made to any reports and any anecdotal/factual evidence of groundwater flooding risk to further complement historic flooding information already provided. Private (non-licensed) groundwater abstractions will also need to be considered to inform detailed assessment as the Scheme progresses.

12.7.3. In addition to the items listed, a Drainage Strategy with associated catchments, calculations and drawings for each Scheme should be provided alongside the ES. It is recommended that the Applicant engages with the LLFA's to discuss the potential drainage solution for each Scheme as the design progresses.

12.7.4. It is recommended that the Applicant engages with the EA and LLFA regarding the Natural Flood Management options that are being considered in the upper catchments of the Eden. Such proposals would align with the Key Tests.

12.7.5. Table 15-3 lists the scoping criteria from DMRB LA 113 *Road Drainage and the Water Environment* for construction and operation of the Project.

12.7.6. Table 15-3 is agreed at this stage given the information available to inform the Scoping Report but it should be noted that additional receptors that have not been considered, for example, groundwater receptors will need to be included and further justification as to why these receptors are scoped in or out based on the scheme design provided. It is also recommended that impacts to the floodplain should be scoped in.

13 ASSESSMENT OF CUMULATIVE EFFECTS

13.1 STUDY AREA AND ASSESSMENT METHODOLOGY

- 13.1.1. The approach to the cumulative effects assessment (CEA) will follow DMRB LA104 and PINS Advice Note 17 and this is considered to be an acceptable approach.
- 13.1.2. The proposal to consider combination and cumulative effects resulting from the Project is also considered to be acceptable, as is the acknowledgement that effects arising from more than one scheme are not cumulative effects but rather the effects of the Project itself.
- 13.1.3. Within the ES it would be beneficial for the justification to the Zone of Influence that is to be used in the CEA to be clarified. For example, the Biodiversity (see Chapter 4 of this response) assessment may need to be extended to a much larger area, and therefore the CEA should follow suit. Any deviation for the study area for the CEA should therefore mirror the technical topic chapter, unless it can be justified accordingly.

13.2 BASELINE CONDITIONS

- 13.2.1. The Applicant's proposal to consult with relevant Local Planning Authorities to identify the developments to be included in the CEA is to be encouraged. However, as Material Resources and Climate are to have a regional zone of influence (as shown in Table 16.1 of the Scoping Report, a greater number of authorities than listed will need to be consulted. The CEA should also ensure that NSIPs are identified from the PINS website and included as appropriate within the CEA.

13.3 POTENTIAL IMPACTS

- 13.3.1. It is accepted that at this early stage in the EIA process other developments that are to be considered in the CEA are often not available for consideration. However, as the Applicant is keen to progress the DCO application within the year, there are clearly developments in the planning process at the moment that will be captured within the CEA that will be submitted with the ES.
- 13.3.2. It would therefore be beneficial for an initial list of the developments that will be considered in the ES to be provided in the PEIR and that the Councils are consulted to provide information on the other developments that are suitable for consideration.

Appendix A

CCC AND LEP CONSULTATION RESPONSE



CLEP

**CUMBRIA
LOCAL
ENTERPRISE
PARTNERSHIP**



A66 Northern Trans-Pennine Project Public consultation

Cumbria County Council and
Local Enterprise Partnership



A66 Northern Trans-Pennine Project - Public consultation

Cumbria County Council and Cumbria Local Enterprise Partnership Response

The Importance of this Proposal

Cumbria County Council and Cumbria Local Enterprise Partnership strongly support the proposed upgrade to the A66; this is one of our shared strategic infrastructure priorities for Cumbria and can create far reaching benefits. We consider that this upgrade can:

- **Bolster connectivity to support inward investment** – by increasing accessibility, we consider that this proposal can help drive inward investment across Cumbria; supporting ambitious Local Plan proposals for Penrith and St Cuthbert's Garden Village in Carlisle and major employment sites in west Cumbria.
- **Better connect Cumbria to national and international markets** – the proposed upgrade can boost access to markets, an opportunity amplified by Cumbria's major strengths in transport reliant sectors like, energy, nuclear, advanced manufacturing and logistics.
- **Bolster resilience and safety for all users** – the A66 has significant safety challenges with changes in carriageway standards; junction arrangements and weather significant contributing factors. More widely, and in common with much of Cumbria, the mountainous landscape encompassing this route significantly limits the ability to provide appropriate diversions.
- **Better support local trips** – while the A66 plays a national and regional role; for communities along the route it is an important part of day to day life, being used to access, work, services and education. The proposed upgrade of the route has the potential to support all users and their journeys.
- **Support national traffic and operation of the Northern Powerhouse / M62** – the route already plays a strategically significant role in supporting journeys between Cumbria and Scotland and Yorkshire, Midlands and South East and this upgrade can further enhance this role and drive growth across the Northern Powerhouse.
- **Enhance Cumbria's major visitor economy** – Cumbria is globally recognised for its beauty and natural capital with nearly 50 million visitors each year. Improving the A66 will increase Cumbria's reach as a destination and help to address major congestion issues at peak times.

Key Tests

While there are a number of significant benefits that could be realised, we consider there to be a range of key tests that should be met to enable the strongest possible scheme emerge, namely:

- **Clear and effective junction strategies** – considering those not only on the newly dualled sections but also existing junctions on the route. We consider that the outcome should see greater junction safety and legibility, supporting both east and west bound journeys.
- **No loss of connectivity for local communities** – there is a need to ensure that junctions are integrated with a comprehensive arrangement of connecting routes to enable businesses, communities and visitors to enjoy ready access to key destinations.
- **An effective solution for Kemplay; M6 Junction 40 and Skirsgill** – the section of the A66 between Kemplay Bank and Junction 40 of the M6 is critical to the success of this scheme. As part of proposals it is vital that additional capacity is provided through Junction 40, there is no loss of connectivity for emergency services at Kemplay Bank and effective access arrangements are provided for the Cumbria County Council owned facilities and Local Plan allocation at Skirsgill.
- **A clear strategy for sections of the A66 that are “de-trunked”** – it is considered that any “de-trunked” sections of the existing A66 do not include a maintenance backlog, and that commuted sums be provided to support future up keep. We also consider that transferred sections of the route should be subject to enhancements where these are considered to best reflect their new role, for example to junction arrangements or the introduction of improved facilities for non-motorised users.
- **An “off A66” route for walking and cycling between M6 and A1(M)** – we consider it is important for this scheme to bring meaningful benefit for the community and all users. In particular we consider that the scheme should seek to support delivery of a Scotch Corner to Penrith “off A66” route suitable for walking and cycling. Moreover the scheme should incorporate meaningful improvement for horse drawn traffic accessing Appleby Horse Fair.
- **More and smarter technology to bolster resilience** – resilience is a challenge along this route. We consider it critical that as part of the proposed upgrade greater use be made of technology including smart signage, vehicle charging, 5G and CCTV.
- **Meeting wider service and infrastructure needs** – the distance of the A66 from the south east and southern ports and rules on driving time often sees HGVs parked on side roads and lay-bys overnight. This creates a poor environment, safety issues and difficulty for HGV drivers. We consider that as part of this scheme Highways England work with Cumbria County Council, Cumbria LEP and Eden District Council to explore opportunities for the introduction of services for HGV's.

- **Environmental mitigation to minimise harm and boost benefit** – the A66 is located within a high quality environment, reflecting this, it is vital for the development and delivery of proposals to be supported by a comprehensive approach to mitigation.
- **A clear strategy for the establishment of alternative/diversion routes** – it is important that there is detailed consideration of diversion routes to support both the construction and operational period and that necessary upgrades are delivered to support their operation.
- **Even further and stronger joint working** – Cumbria County Council, LEP and Highways England have enjoyed an effective working relationship; as proposals move forward this needs to be further enhanced. In particular we see a real opportunities to establish a planning performance agreement with the County Council as part of a deepened working relationship.

A66 Consultation – Route Sections

1) Junction 40, M6 to Kemplay Bank, Penrith

Housing the headquarters for Cumbria Fire and Rescue and Cumbria Constabulary respectively Kemplay Bank Roundabout plays a critical role in the provision of emergency services within Cumbria.

Current arrangements allow Cumbria Fire and Rescue to take direct access to the A66 with a further non-emergency access provided through an access road/underpass from the A686.

From this station, fire service vehicles were mobilised 244 times in 2018/19 with an average crew turnout time (time it takes the crew to respond to the station) at 3 minutes 47 seconds and an average response time (time it takes the crew to arrive at the incident from the station) of 10 minutes 8 seconds. It is critical that as part of the proposals, the ability to achieve direct emergency access to the A66 is maintained and that delays to emergency vehicles response times or crew turnout time are avoided.

The need to overcome capacity issues at Kemplay is understood however it will be important that through the development process consideration be given to the sensitivity of the design solution. In this context we note that the A66 overpass option has the potential to create a detrimental visual impact.

Within the consultation, we note proposals to remove the non-emergency road/underpass to the fire station from the A686, replaced by a new link from the A6. This proposal requires further consideration as part of the land proposed for the link has been identified as a possible location for additional emergency service facilities. Mindful of this, it is very important that access arrangements around Kemplay Bank are developed working closely with Cumbria County Council, Cumbria Fire and Rescue and Cumbria Constabulary.

Another important element within this section of the A66 surrounds land at Skirsgill. This is currently accessed from the westbound carriageway of the A66 and hosts a Cumbria County Council highway depot and office facility. Alongside these, 3.89 hectares of adjoining land has been allocated for employment development in the recently adopted Eden Local Plan. Current access to this site is from the A66 and as part of the scheme proposals; effective vehicular and pedestrian access to the site will need to be accommodated.

Junction 40 of the M6 represents a key interchange and there is a need to ensure that it can accommodate future demand. While we note that within the consultation there is a clear commitment to improve the junction, detail on this arrangement is not provided. We also consider it important that as the development of proposals move forward, the A592 arm of this junction be brought into scope.

2) Penrith to Temple Sowerby

This section of the A66 plays an important role, providing direct access to Center Parcs and a number of important side roads including access to Brougham and a number of local businesses.

Within the proposals we note that it is stated that the Brougham junction would operate on a westbound only basis. By making the junction to Brougham west bound only there could be significant impact on local trips with proposals likely to result in additional journey time for traffic needing to access the A66 eastbound.

While both options are presented as online improvements it will nevertheless be important to consider whether the dualled section could be provided in parallel to the existing A66 route. Such an arrangement could bring benefit to all road users.

Flooding has been experienced in the vicinity of the Karma Llama Café due to a watercourse culvert underneath the A66 and it will be important for this issue to be addressed through the proposal.

3) Temple Sowerby to Crackenthorpe

The proposed bypass of Kirkby Thore has the potential to bring significant amenity benefit for the community.

Notwithstanding this, it is important that as part of any improvement, the village and the services within it are not isolated from the A66. While it is appreciated that proposals remain conceptual there are concerns that they do not provide adequate access into and out of the town for local residents and businesses. To address this point, it is considered important for all junctions to support both east and west bound movements.

With regard to the southern option assessment will need to include the detailed consideration of impacts to the Site of Special Scientific Interest and flood risk from the River Eden.

4) Crackenthorpe to Appleby

Improvements within this section having the potential to deliver significant benefit improving journey times and with that, free up the existing A66 to support all users and journeys. Alongside this, proposals to provide all-movement junctions (as opposed to one directional) are welcome.

This section does include a number of features of historic significance including a Roman Road and Scheduled Ancient Monument and these will need careful considered as part of proposals.

5) Appleby to Brough

Within this section of the route, poor vertical and horizontal alignment combined with sub-standard junction arrangements contribute to significant safety concerns.

The proposed dualling has the potential to address these issues while improving journey times and freeing up the existing A66 to support local and non-motorised trips.

Notwithstanding these opportunities, we are concerned with the suggested junction strategy seeing the introduction of three west bound only junctions with only a single all-movement junction. We have concerns that such arrangements could prove extremely restrictive to local users with the potential for convoluted arrangements and with that extended journey times.

Responding to these concerns we would wish for the proposals to be enhanced to provide effective east bound access with this further supported by the introduction of an all movement junction where the current and future A66 converge to the east of Warcop.

In parallel with the development of an effective junction strategy, detailed consideration needs to be given to the future use of former sections of the A66 to support all users and journeys.

To the west of Warcop, it is important for consideration to be given to the feasibility of enhancing junctions on the Appleby bypass. There is an important industrial estate located to the north east of Appleby but junction arrangements means that to access it from the A66 east bound there is a need to go through the heart of the town.

Providing effective direct access from the eastern end of the bypass would support this important site while helping the environment of the town and the legibility of the highway network.

End.



8 First Street
Manchester
M15 4RP

wsp.com

PUBLIC

The Planning Inspectorate
Environmental Services
Central Operations
Temple Quay House
2 The Square
Bristol
BS1 6PN

Our ref: NO/2021/113624/01-L01
Your ref: TR010062-000008-210614
Date: 12 July 2021

Dear Sir/Madam

PLANNING ACT 2008 (AS AMENDED) AND THE INFRASTRUCTURE PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017 (THE EIA REGULATIONS) – REGULATIONS 10 AND 11

APPLICATION BY HIGHWAYS ENGLAND (THE APPLICANT) FOR AN ORDER GRANTING DEVELOPMENT CONSENT FOR THE A66 NORTHERN TRANS-PENNINE PROJECT (THE PROPOSED DEVELOPMENT) – SCOPING CONSULTATION AND NOTIFICATION OF THE APPLICANT'S CONTACT DETAILS AND DUTY TO MAKE AVAILABLE INFORMATION TO THE APPLICANT IF REQUESTED

A66 BETWEEN PENRITH & SCOTCH CORNER

Thank you for consulting us on the above and the following document:-

- A66 Northern Trans-Pennine PCF Stage 3 Environmental Scoping Report (reference HE565627-AMY-EAC-S00-RP-LX-000001; Revision P05; dated 11/06/21)

We have reviewed the document and associated appendices in so far as they relate to our remit.

Our comments in relation to the scope of the Environmental Impact Assessment (EIA) to support the Development Consent Order (DCO) for the A66 Northern Trans-Pennine Project are set out in Table 1 below. If you have any questions or queries arising from this response, we are happy to discuss them further.

Table 1: Environment Agency comments on EIA scoping document

Chapter 1: Introduction		
1.3	Issue	The need for the retention of flexibility in the DCO to allow scope for detailed design work to be developed post-consent is understood but it present risks in relation to demonstrating how impacts of the development can be mitigated.
	Impact	Potentially detrimental impacts of the development on the environment may not be appropriately mitigated.
	Suggested solution	<p>Taking a conservative approach in the form of a realistic worst-case scenario through the EIA to establish limits of deviation and parameters in the DCO to inform the detailed design is supported (paragraph 1.3.3), but this must be accompanied by ongoing engagement with us prior to DCO submission to ensure that</p> <ul style="list-style-type: none"> a) all opportunities to resolve issues of concern are taken; and b) all areas of agreement / concern are fully understood and acknowledged prior to Examination
Chapter 2: Project Objectives		
2.2.1	Issue	The environmental objective for the A66 project to <i>“minimise adverse impacts on the environment and where possible optimise environmental improvement opportunities”</i> seems to offer less protection to the environment that the stated duty of Highways England to <i>“minimise the environmental impacts of operating, maintaining and improving its network and seek to protect and enhance the quality of the surrounding environment”</i> (paragraph 2.2.2)
	Impact	The stated HE duty to <i>“seek to protect and enhance the quality of the surrounding environment”</i> and the A66 project objective to <i>“where possible, optimise environmental improvement opportunities”</i> do not give environmental protection and enhancement equal weight.
	Suggested solution	Consider reviewing the environmental objective for the A66 project to provide greater significance to environmental protection and enhancement, e.g. <i>“minimise adverse impacts on the environment and contribute to the protection and enhancement of the quality of the surrounding environment”</i> .
Chapter 5: Environmental Assessment Methodology		
5.3.10	Issue	Decommissioning is scoped out of the EIA but there is no consideration of the design life of the proposed Trout Beck crossing and when this may require removal and replacement

	Impact	The effects of decommissioning and replacing the Trout Beck crossing on the river and its associated habitats may have a detrimental impact on the environment.
	Suggested solution	Depending on the lifetime of the proposed Trout Beck crossing, consider including end of life replacement to minimise potential impacts on the river and its associated habitats. By the time replacement or significant repair is required, the river may not follow its current course due to the active geomorphology and there is at least potential for more diverse but challenging (for engineering) habitats across the valley floor. While any future design cannot be predicted, the ease of removal / change to the current crossing scheme can be built in to the design of the proposals
Chapter 7: Biodiversity		
7.5.7	Issue	While it is not identified on our designated sites map, the Environment Agency flood storage basin with ponds on Thacka Beck (grid reference NY5077530610) is managed as a nature reserve by Cumbria Wildlife Trust and this has not been identified as a non-statutory site within 2km of the project.
	Impact	This impacts of the development on this non-designated site have not been considered.
	Suggested solution	While we acknowledge that there is a very low risk of any impact to this site, for completeness of screening, we recommend including it as a non-statutory site as it is 1.5km north (upstream) of the A66 project.
7.3.3 Table 7.1	Issue	The search radius for protected species was 1km at Option selection stage and 2km for the EIA update. However, this is likely to miss fish records which, due to specialist survey methods, tend to be at dispersed locations. While site surveys are being carried out and are likely to pick up most fish species, there is the possibility of missing migratory species e.g. salmon, sea trout, eels, sea lamprey or river lamprey. Even if they are not recorded within the project corridor, they may still be present and they must be able to pass through the project corridor to return to sea.
	Impact	The proposed development may have a detrimental impact on migratory fish species without suitable mitigation.
	Suggested solution	For the desk study, we recommend that you check the full upstream sub catchment of watercourses crossed by the road for records of migratory fish e.g. several more records of salmon exist upstream of the A66 on Trout Beck. To mitigate the impact on migratory species, the design and construction of culverts and bridges must allow for inverts that will be fully passable to fish – please refer to CIRIA C786 (2019) and the Fish Pass Manual. Where relevant to SAC populations, these criteria are likely to be stricter.

7.5.32	Issue	No otter records around the east of the scheme (J53 Scotch Corner), however a 2km search radius for otter may not pick up records where populations are low.
	Impact	Potential to miss records of otter in the wider area and therefore the potential for them to be commuting across the scheme.
	Suggested solution	Consultation with local organisations or groups may provide information as to the known presence of otter within a catchment area. Otters may be known to be widespread and therefore a precautionary principle when considering ease of passage for commuting otters and other mammals may be worth applying e.g. installation of mammal passes or fencing to direct animals through culverts. Where records of road mortalities are found, this should inform mitigation measures to reduce this with the construction of the new scheme.
7.5.36	Issue	Reference is made to the trapping of American mink (Neovision vision) managed by the Cumbria Water Vole Project but this may no longer be taking place.
	Impact	The impact of the proposed development on Water Voles may not be fully understood if any baseline data / information in out of date.
	Suggested solution	We recommend confirming whether or not trapping of American mink (Neovision vision) is still undertaken by the Cumbria Water Vole Project.
7.6.1	Issue	<p>The potential construction impacts do not include any reference to the risk of:</p> <ul style="list-style-type: none"> • Temporary losses of habitat continuity, particularly at watercourse crossings • Silt pollution from exposed soils entering rivers • Silt pollution from accumulation of site water with high sediment loads due to earth works and vehicle movements
	Impact	The impacts of construction on the aquatic environment may not be fully assessed. This could be significant to fish and other aquatic species as well as SSSI / SAC habitats. There may also be insufficient space for appropriately sized treatment areas included in the DCO boundary.

	Suggested solution	We recommend expanding the potential impacts of construction so that any necessary mitigation to ensure i) fish passage throughout the construction phase of culverts and bridges and ii) controls to prevent silt entering rivers, e.g. not stripping extensive areas of vegetation, are identified. A sediment management plan should be designed in from the outset, including the need for suitable sediment settlement ponds / treatment areas. An Environmental Clerk of Works may be required to monitor areas of high risk.
7.6.1	Issue	Uncertainty remains with regards to the final route of the road and hence the number and nature of watercourses that may be impacted by the scheme. The scheme may also lead to changes in flow patterns that affect the ability for fish to move through culverts, including existing downstream Highways England culvert assets that have previously been identified as likely to impede fish passage, e.g. the A66 Tutta Beck culvert.
	Impact	The potential impacts of the proposed development on watercourses and their associated habits and species is unknown.
	Suggested solution	<p>We suggest that the applicant follows, as a minimum, the guidance regarding culverts and outfalls, as outlined in CIRIA 2019 – Culvert, Screen and Outfall Manual. We specifically ask the applicant to</p> <ul style="list-style-type: none"> • Aim to create a channel within any culvert that is as similar as possible to the “natural” channel in both structure and function. • Ensure that any culvert does not destabilise the reach they sit within, avoiding scour and aggradation • Allowing a natural bed throughout, taking into account upstream and downstream planform and channel grade • Ensure the continuation of sediment transport through any structure or re-aligned channel • Consider future changes to hydrology and how this may impact on sediment supply, channel dynamics and geomorphological processes (up and downstream of any structure or re-aligned channel)
7.7	Issue	The report states that <i>‘to avoid impacts at new and amended watercourse crossings across the project, it is recommended that new bridges are designed as clear spanning structures with abutments set well back from the river’s edge.’</i> However, where bridges are not possible and culverts are required, this may restrict passage for mammals.
	Impact	Mammal passage may not be maintained where culverts are proposed instead of bridges.

	Suggested solution	The design of any culverts should include mammal passage from the outset and ensure they are suitably sized. Mammal crossings may also be appropriate for offline alignments.
7.7.1	Issue	The commitment to consider the geomorphological interest of a watercourse needs to be applied to all crossing points and not limited to new or existing bridges.
	Impact	The potential impacts of the proposed development on watercourses and their associated habits and species is unknown.
	Suggested solution	<p>We suggest that the applicant follows, as a minimum, the guidance regarding culverts and outfalls, as outlined in CIRIA 2019 – Culvert, Screen and Outfall Manual. We specifically ask the applicant to</p> <ul style="list-style-type: none"> • Aim to create a channel within any culvert that is as similar as possible to the “natural” channel in both structure and function. • Ensure that any culvert does not destabilise the reach they sit within, avoiding scour and aggradation • Allowing a natural bed throughout, taking into account upstream and downstream planform and channel grade • Ensure the continuation of sediment transport through any structure or re-aligned channel • Consider future changes to hydrology and how this may impact on sediment supply, channel dynamics and geomorphological processes (up and downstream of any structure or re-aligned channel)
7.7.2	Issue	Adequate compensation for any detrimental impacts to watercourses must be provided.
	Impact	Inadequate compensation will result in a detrimental impact to the environment.
	Suggested solution	Ensure enough length of watercourses are included within the DCO boundary to allow for compensation measures to offset any loss of watercourses due to culverting or loss of riparian habitats associated with the proposed development.
7.7.3	Issue	The installation / replacement of land drains to mitigate compaction or damage to historic land drains which may not be fully functional may cause a net improvement in land drainage flows.
	Impact	Any improvement in land drainage flow has the potential to damage wetland habitats and increase run-off rates.
	Suggested solution	Ensure that vulnerable wetland habitats are identified and any land drainage improvements are appropriately managed, where relevant. This risk should also be considered in areas with flood problems downstream.

Chapter 10: Geology & Soils

10.6.8	Issue	Any intrusive ground investigations should include total concentration and leachable concentration analysis of soils and groundwater level and quality monitoring to allow accurate assessment of risk from mobile contaminants in water.
	Impact	The impact of the proposed development on controlled waters will not be determined in the absence of adequate monitoring and analysis of soils and groundwater.
	Suggested solution	To ensure the accurate assessment of risk from mobile contaminants in water, intrusive investigations should include appropriate monitoring, e.g. MCERT accreditation for soils analysis, UKAS accreditation for water analysis, leachate analysis of soils. This assessment will also be useful to help the waste classification of soils for re-use / disposal off site.
10.6.8	Issue	Any remedial options identified as being necessary following intrusive investigation and analysis will require agreement, regulation and verification.
	Impact	The proposed development may have a detrimental impact on controlled waters in the absence of an agreed remediation strategy where it is deemed necessary.
	Suggested solution	To ensure the acceptability of any remediation strategy, suitable engagement with relevant stakeholders to agree remediation proposals and understand any regulatory requirements (e.g. need for a mobile treatment permit) is recommended.
10.6.13	Issue	There is no reference to any potential impacts to land quality arising from road drainage.
	Impact	Road drainage may enhance leaching potential and mobilise contaminants.
	Suggested solution	Assess the impact of road drainage such that the risks to the receiving water body are considered and the design of drainage systems ensure leachable soils do not exacerbate mobilisation of contaminants.
10.6.14	Issue	The use of sustainable drainage systems (SUDS) will not be appropriate on land that is known to be contaminated and / or requires remediation.
	Impact	Infiltration of surface water on contaminated land will mobilise contaminants with detrimental impacts to the environment.

	Suggested solution	Ensure that the use of infiltration SUDS is not proposed in locations known to be contaminated and / or that require remediation.
10.8.9	Issue	A Burial site on Warcop range has not been identified as a potential source of contamination.
	Impact	Any risks to controlled waters that may arise from the burial site as a result of the proposed development are unknown.
	Suggested solution	We recommend contacting the MoD to request additional information and allow an assessment of the risks to controlled waters from this source.
Chapter 12: Materials & Waste		
12.5.10	Issue	If recycled aggregates have not met the end of waste criteria, they will still be considered to be waste
	Impact	A suitable waste permit or waste exemption will be required to cover their use.
	Suggested solution	Ensure that the potential need for a suitable waste permit or waste exemption associated with the use of recycled aggregates that have not met the end of waste criteria is identified.
12.7.14	Issue	Not all material produced during the construction process will be classed as waste, but excess material will need to be classified in accordance with WM3 guidelines prior to its removal.
	Impact	The removal of material may not be compliant with the relevant Environmental Permitting requirements in the absence of suitable classification.
	Suggested solution	Ensure that the need for material to be appropriately classified prior to disposal off site in accordance with WM3 guidelines is recognised https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/948735/Waste_classification_technical_guidance_WM3.pdf
Chapter 13: Noise and vibration		
13.6	Issue	The potential impacts of construction vibration on fish arising from piling near a watercourse have not been identified.
	Impact	If there is piling or similar works in or near a watercourse in the spawning season (October to mid-June) and there are redds (fish nests) nearby, vibration in the bed may have a detrimental impact on them.

	Suggested solution	Avoid significant vibration near watercourses during the spawning season. Any vibration in the bed must be below 13mm per second peak particle velocity for species laying eggs in the gravel e.g. salmon & lamprey. Be aware of “safe distances” for use of relevant equipment to watercourses and recommend redds surveys (several over the season) directly before and during construction if piling runs in to the spawning season. Piling works may have to be postponed if significant adverse impact is likely.
Chapter 15: Road Drainage and the Water Environment		
Table 15.2	Issue	Table 15-2 mentions the SPZ as being 300m west of the M6 J40, but the SPZ is actually to the east of the junction as mentioned in paragraph 15.5.15.
	Impact	The location of the SPZ is incorrectly identified in Table 15-2.
	Suggested solution	Ensure the location of the SPZ is corrected as required.
Table 15.2	Issue	WFD objectives apply to all watercourses within any given ‘water body’ boundary, however the report appears to make an invalid distinction between watercourses that are termed to be a ‘WFD watercourse’ and those that are not, giving greater value to the former. This is demonstrated by the fact that in the column headed ‘Value rationale’, a ‘Watercourse not classified under WFD’ is generally allocated a ‘Provisional importance’ of ‘Medium’.
	Impact	Any distinction between watercourses based on size or whether it is a tributary of a monitored watercourse in the ES means the assessment of impacts of the development may not take account of the WFD objectives for the water body as a whole.
	Suggested solution	The methodology for identifying the value of all watercourses must be consistent with WFD legislation and guidance. The provisional importance of any particular watercourse should have more regard to the current WFD ecological status and element status of a water body and the statutory WFD objectives of that watercourse, including the requirement for no deterioration, achievement of protected area objectives and not to jeopardise attainment of WFD objectives.
15.5	Issue	The report includes the distance from the proposed schemes to the ‘WFD watercourse’ in the assessment of geographical scope, however WFD does not use the unit of ‘watercourses’ but rather the unit of ‘water body’ to delineate and identify characteristics, status and objectives relating to a specific area, typically a discrete sub catchment. The entire A66 scheme is wholly within a number of WFD water bodies.
	Impact	The effects of the proposed development on WFD objectives may not be adequately assessed if the assessment only considers the effects on watercourses rather than water bodies

	Suggested solution	Ensure that the assessment of the development consider the effects on water bodies. WFD objectives apply to all watercourses within any given water body boundary. Water body status is derived from monitoring of watercourses at one or more points within that water body. Some watercourses may be monitored whereas others, particularly tributaries, may not.
15.5.29	Issue	The scoping report states that “ <i>the Environment Agency are considering a flood alleviation scheme for the area (of Eamont Bridge)</i> ”. This is incorrect as we have been unable to identify a technically viable and affordable option at this time.
	Impact	The evidence base informing the assessment of flood risk impacts of the scheme is inaccurate in relation to flood risk measures in Eamont Bridge.
	Suggested solution	Ensure that the EA position, previously shared with HE, is referenced follows:- <i>The village of Eamont Bridge has a long history of flooding with recent significant events occurring in 1997, 2002, 2005, 2009 and 2015. Following the Devastating flooding of 2015 the Environment Agency commissioned an appraisal study to try and identify viable options for reducing the flood risk. This study was unable to identify any technically viable and affordable options at this time. However, the EA will continue to work with the residents, partner organisations, landowners in the upstream catchment and potential funders to reduce the risk of flooding in this community.</i>
Table 15-1	Issue	We have identified that some of our comments dated 18 December 2020 have been reported incorrectly and the resulting sentence (highlighted below) is incoherent:- <i>“Where sections of the project are in close proximity to sensitive features (e.g. Special Area of Conservation (SAC), floodplains), <u>these areas should be minimise adverse impacts and to avoid exacerbating existing flooding issues or increase flooding elsewhere.</u> Local knowledge and expertise from the different stakeholders will help inform these types of decisions.”</i>
	Impact	Our previous advice in relation to the proximity of the development to sensitive features is unclear and could be misunderstood.
	Suggested solution	Ensure that the EA advice of the 18 December 2020 is reflected as follows:- <i>“With Flood Risk in mind and considering that sections of the project will take place in/near sensitive areas (e.g.: SACs, floodplains), it is paramount when planning surveys and modelling, to prioritise those specific areas to minimise negative impacts and to avoid exacerbating existing flooding issues or indeed create flood risk problems elsewhere”.</i>

15.5.73	Issue	The current river flow and rainfall allowances at https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances are in the process of being updated based on UKCP18 data.																																										
	Impact	If the hydraulic modelling does not use the latest available information, the risk of flooding may not be satisfactorily assessed.																																										
	Suggested solution	When producing the Flood Risk Assessment for the scheme, the latest advice / guidance on Climate Change river flow allowances must be considered and that the most up to date terminology must be used to avoid confusion.																																										
15.5.72, 15.5.73	Issue	Hayber Beck / Moor Beck splits just downstream of the current A66. The majority of the flow passes over a lateral weir into the left hand channel. The “straight on” branch of Hayber Beck is a smaller mill channel which runs through the military base. The model we have provided may be representing the flow division between these two watercourses incorrectly.																																										
	Impact	Incorrect modelling could lead to worsening of flood risk issues in the area.																																										
	Suggested solution	We welcome the fact that the modelling in this area will be further developed to assess the schemes and ensure the risk of flooding is fully understood.																																										
Table 15-3 Table 15-4	Issue	<p>Tables 15-3 and 15-4 include some typographical errors as set out below</p> <table border="1"> <thead> <tr> <th colspan="3">Table 15-3</th> </tr> <tr> <th><i>M6 J40</i></th> <th><i>Refers to</i></th> <th><i>Should refer to</i></th> </tr> </thead> <tbody> <tr> <td>g)</td> <td>15.5.14</td> <td>15.5.15</td> </tr> <tr> <td>• Proposed scope out</td> <td>15.5.15</td> <td>15.5.16</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="3">Table 15-4</th> </tr> <tr> <th><i>M6 J40</i></th> <th><i>Refers to</i></th> <th><i>Should refer to</i></th> </tr> </thead> <tbody> <tr> <td>b)</td> <td>15.5.15</td> <td>15.5.16</td> </tr> <tr> <td>c)</td> <td>15.5.15</td> <td>15.5.16</td> </tr> <tr> <td>g)</td> <td>15.5.14</td> <td>15.5.15</td> </tr> <tr> <td>• Proposed scope out</td> <td>15.5.15</td> <td>15.5.16</td> </tr> <tr> <td><i>Bowes Bypass</i></td> <td>15.5.82, 15.5.83</td> <td>15.5.83, 15.5.84</td> </tr> <tr> <td><i>Cross Lanes to Rokeby</i></td> <td>15.5.94, 15.5.95</td> <td>15.5.95, 15.5.96</td> </tr> <tr> <td><i>Stephen Bank to Carkin Moor</i></td> <td>15.5.108, 15.5.109</td> <td>15.5.109, 15.5.110</td> </tr> <tr> <td><i>A1M J53 Scotch Corner</i></td> <td>15.5.118, 15.5.119</td> <td>15.5.120, 15.5.121</td> </tr> </tbody> </table>	Table 15-3			<i>M6 J40</i>	<i>Refers to</i>	<i>Should refer to</i>	g)	15.5.14	15.5.15	• Proposed scope out	15.5.15	15.5.16	Table 15-4			<i>M6 J40</i>	<i>Refers to</i>	<i>Should refer to</i>	b)	15.5.15	15.5.16	c)	15.5.15	15.5.16	g)	15.5.14	15.5.15	• Proposed scope out	15.5.15	15.5.16	<i>Bowes Bypass</i>	15.5.82, 15.5.83	15.5.83, 15.5.84	<i>Cross Lanes to Rokeby</i>	15.5.94, 15.5.95	15.5.95, 15.5.96	<i>Stephen Bank to Carkin Moor</i>	15.5.108, 15.5.109	15.5.109, 15.5.110	<i>A1M J53 Scotch Corner</i>	15.5.118, 15.5.119	15.5.120, 15.5.121
	Table 15-3																																											
<i>M6 J40</i>	<i>Refers to</i>	<i>Should refer to</i>																																										
g)	15.5.14	15.5.15																																										
• Proposed scope out	15.5.15	15.5.16																																										
Table 15-4																																												
<i>M6 J40</i>	<i>Refers to</i>	<i>Should refer to</i>																																										
b)	15.5.15	15.5.16																																										
c)	15.5.15	15.5.16																																										
g)	15.5.14	15.5.15																																										
• Proposed scope out	15.5.15	15.5.16																																										
<i>Bowes Bypass</i>	15.5.82, 15.5.83	15.5.83, 15.5.84																																										
<i>Cross Lanes to Rokeby</i>	15.5.94, 15.5.95	15.5.95, 15.5.96																																										
<i>Stephen Bank to Carkin Moor</i>	15.5.108, 15.5.109	15.5.109, 15.5.110																																										
<i>A1M J53 Scotch Corner</i>	15.5.118, 15.5.119	15.5.120, 15.5.121																																										
Impact	There is the potential for confusion																																											

	Suggested Solution	Ensure that any replication of these tables or use of similar versions to support the DCO are updated to refer to the correct paragraphs.
15.7.5 Table 15-3	Issue	The scoping report makes reference to the authorisation of activities through the DCO that would otherwise be regulated through flood risk activity permits (FRAP), but this approach will require the agreement of the relevant body (S150 of the Planning Act 2008).
	Impact	In the absence of any agreement from the Environment Agency to control activities normally regulated through flood risk activity permits, the mitigation in Table 10.3 may not be achievable.
	Suggested solution	Further discussions between the Environment Agency and Highways England are required to understand how the proposed approach could be achieved.
15.7.6	Issue	One of the proposed mitigation measures under 15.7.6 is that “ <i>Works would be suspended during out-of-bank river flows or during intense rainstorms</i> ”. It is likely that the risk of water pollution will be increased during such events.
	Impact	Construction associated with the proposed development works increase the risk of water pollution.
	Suggested solution	We suggest that any water monitoring plan for the Construction phase should include that the monitoring will be continued, if not enhanced, during these events.
15.9.7	Issue	The report states that the legislation regarding flood compensation and WFD requires that proposed schemes <i>do not lead to a significant adverse effect</i> on the function and capacity of floodplains or the ecological or chemical status of a WFD designated watercourse, however the WFD Regulation 2017 do not use the term ‘ <i>significant adverse effect</i> ’
	Impact	The effects of the proposed development on WFD status may be underestimated in the ES having regard to the requirements of the WFD Regulations 2017.
	Suggested solution	Ensure that in relation to any effects of the development on the function and capacity of floodplains or the ecological or chemical status of a WFD designated watercourse, they are assessed having regard to the the requirements of the WFD Regulations 2017.

Additional information

Flood risk activity permitting

The Environmental Permitting (England and Wales) Regulations 2016 require a permit to be obtained for any activities which will take place:

- on or within 8 metres of a main river (16 metres if tidal)

- on or within 8 metres of a flood defence structure or culverted main river (16 metres if tidal)
- on or within 16 metres of a sea defence
- involving quarrying or excavation within 16 metres of any main river, flood defence (including a remote defence) or culvert
- in a floodplain more than 8 metres from the river bank, culvert or flood defence structure (16 metres if it's a tidal main river) and you don't already have planning permission

For further guidance please visit <https://www.gov.uk/guidance/flood-risk-activities-environmental-permits> or contact our National Customer Contact Centre on 03708 506 506. The applicant should not assume that a permit will automatically be forthcoming once planning permission has been granted, and we advise them to consult with us at the earliest opportunity.

Abstraction and impoundment

If you intend to abstract more than 20 cubic metres of water per day from a surface water source e.g. a stream or from underground strata (via borehole or well) for any particular purpose then you will need an abstraction licence from the Environment Agency. There is no guarantee that a licence will be granted as this is dependent on available water resources and existing protected rights.

If you intend to impound a watercourse then you are likely to need an impounding licence from the Environment Agency. An impoundment is any dam, weir or other structure that can raise the water level of a water body above its natural level. 'On-line' impoundments hold back water in rivers, stream, wetlands and estuaries, and consequently affect downstream flows, sediment transport and migration of fish.

If you intend to fill and/or maintain a proposed lake with water from a surface source e.g. a stream or from underground strata (via borehole or well) then you are likely to need an abstraction licence. There is no guarantee that a licence will be granted. A licence is not required if you intend to excavate and allow the lakes to fill naturally to existing groundwater levels.

Dewatering is the removal/abstraction of water (predominantly, but not confined to, groundwater) in order to locally lower water levels near the excavation. This can allow operations to take place, such as mining, quarrying, building, engineering works or other operations, whether underground or on the surface. The dewatering activities on-site could have an impact upon local wells, water supplies and/or nearby watercourses and environmental interests. This activity was previously exempt from requiring an abstraction licence. Since 1 January 2018, most cases of new planned dewatering operations above 20 cubic metres a day will require a water abstraction licence from us prior to the commencement of dewatering activities at the site.

More information is available on gov.uk: <https://www.gov.uk/guidance/water-management-apply-for-a-water-abstraction-or-impoundment-licence#apply-for-a-licence-for-a-previously-exempt-abstraction>.

Waste regulation

The project may need to use a combination of Quality Protocol, DoW CoP, exemptions and / or permits.

CL:AIRE Definition of Waste: Development Industry Code of Practice (DoW CoP) guidance can be found at <http://www.claire.co.uk/projects-and-initiatives/dow-cop/28-framework-and-guidance/111-dow-cop-main-document>

The DoW CoP sets out the lines of evidence that are needed to demonstrate that the excavated materials are not or have ceased to be waste. These are based on four factors:

- Protection of human health and the environment (acceptable risk assessment of pollution)
- Suitability for use without further treatment (no further processing and/or treatment, as demonstrated by a specification and a site specific risk assessment including chemical, geotechnical properties and biological aspects);
- Certainty of Use (outlined in the Remediation Strategy and Material Management Plan);
- Quantity of Material (outlined in the Remediation Strategy and Material Management Plan); and

To demonstrate the factors a Materials Management Plan (MMP) needs to be produced to ensure all factors are considered and the correct determination is made. A Verification Plan needs to be set out in the MMP and must identify the recording method of materials being placed, as well as the quantity of materials to be used. It should also contain a statement on how the use of the materials relate to the remediation or design objectives.

In general, any material that has to be treated in order to render it suitable for its intended use is considered to be a waste and waste controls apply.

To demonstrate this to the Environment Agency's satisfaction, the processes and requirements detailed in the DoW CoP need to be followed in full. Requirements include:

- desktop study of the site
- conceptual modelling of the site(s) concerned
- site investigation details (if appropriate)
- and any details of contamination (if relevant)

Regardless of whether the site is contaminated or not there the following documents should be produced:

- Risk Assessments
- Options Appraisal Report
- Remediation Strategy (Contaminated soils) or Design Statement (Clean naturally occurring soils)
- Materials Management Plan
- Verification Report once the work is completed.

The decision to use the CL:AIRE Definition of Waste: Development Industry Code of Practice is the responsibility of the holder of the materials. The project manager should collate all relevant documents; permissions, site reports, MMP etc. and consult with an independent Qualified Person (QP) to confirm that the site meets the requirements and tests for use of the DoW CoP. The Qualified Person must review the documentation and let the developer know that a Verification Report will be required before signing a Declaration. If the site meets the tests that materials are suitable for re-use, certain to be re-used, are not excessive in volume and pose no risk to the environment or harm to

human health then the QP can make a formal Declaration to CL:AIRE.

The formal Declaration must be submitted to CL:AIRE and the Environment Agency by a Qualified Person before any excavation activities or transfer of materials occurs. In these circumstances the Qualified Person is meeting the requirements of the Regulator to ensure appropriate environmental and human health protection is in place for the development to go ahead.

Materials not used in accordance with the DoW CoP process in full may be deemed waste and will require a relevant permit for deposit. Materials illegally deposited or deposited at inappropriate sites may be subject to relevant landfill taxes, payable by all parties. Only robust due diligence is a defense against joint liability. For clarification, it is important to note that DoW CoP declarations cannot be made retrospectively. In addition to this if you wish to re-use material under the 'site of origin scenario' and this material has previously been imported to that site as waste without authorisation for example a historical illegal deposit then it does not originate at that site. It is not site derived material and you cannot use DoW CoP site of origin scenario for this activity, you will require an appropriate waste authorisation such as an environmental permit.

Additional evidence / environmental information

If required, background water quality data can be found online at the Water Quality Data Archive <https://environment.data.gov.uk/water-quality/view/landing>.

Further information about reducing flood risk through working with natural processes is available at <https://www.gov.uk/flood-and-coastal-erosion-risk-management-research-reports/working-with-natural-processes-to-reduce-flood-risk> if required.

Yours faithfully

Philip Carter
Planning Officer - Sustainable Places

Direct dial [REDACTED]

Direct e-mail [REDACTED]

From: [ESP Utilities Group Ltd](#)
To: [A66Dualling](#)
Subject: Reference: PE159813. Plant Not Affected Notice from ES Pipelines
Date: 23 June 2021 12:41:35

A66Dualling
Planning Inspectorate

23 June 2021

Reference: TR010062

Dear Sir/Madam,

Thank you for your recent plant enquiry at:

I can confirm that ESP Utilities Group Ltd has no gas or electricity apparatus in the vicinity of this site address and will not be affected by your proposed works.

ESP Utilities Group Ltd are continually laying new gas and electricity networks and this notification is valid for 90 days from the date of this letter. If your proposed works start after this period of time, please re-submit your enquiry.

Important Notice

Please be advised that any enquiries for ESP Connections Ltd, formerly known as British Gas Connections Ltd, should be sent directly to us at the address shown above or alternatively you can email us at: PlantResponses@espug.com

ESP have provided you with all the information we have to date however, there may be inaccuracies or delays in data collection and digitisation caused by a range of practical and unforeseeable reasons and as such, we recommend the following steps are taken as a minimum before work is commenced that involves the opening of any ground and reference made to HSG47 (Avoiding danger from underground services).

A. Plans are consulted and marked up on site

B. The use of a suitable and sufficient device to locate underground utilities before digging (for example the C.A.T and Genny)

C. Trial holes are dug to expose any marked up or traced utilities in the ground

D. If no utilities are shown on any plans and no trace is received using a suitable and sufficient device, trial holes are dug nonetheless using hand tools at the

location or at regular intervals along the location that the work is being carried out depending on the length of excavation work being undertaken
E. All location work is carried out by individuals with sufficient experience and technical knowledge who may choose to control this activity under a Safe System Of Work

Yours faithfully,

Plant Protection Team
ESP Utilities Group Ltd



Bluebird House
Mole Business Park
Leatherhead
KT22 7BA



<http://www.espug.com>

The information in this email is confidential and may be legally privileged. It is intended solely for the addressee. Access to this email by anyone else is unauthorised. If you are not the intended recipient, any disclosure, copying, distribution or any action taken or omitted to be taken in reliance on it, is prohibited and may be unlawful.

Yorkshire and North East Area

Foss House, King's Pool
1-2 Peasholme Green
York
YO1 7PX

Tel 0300 067 4900

Area Director
Crispin Thorn

**Email for North West and West
Midlands Area Team :**

12^h July 2021

**The Planning Inspectorate
Environmental Services,
Central Operations,
Temple Quay House,
2 The Square,
Bristol,
BS1 6PN**

By email only

**Planning Act 2008 (as amended) and The Infrastructure Planning
(Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) –
Regulations 10 and 11**

**Application by Highways England (the Applicant) for an Order granting
Development Consent for the A66 Northern Trans-Pennine Project (the
Proposed Development)**

**Scoping consultation and notification of the Applicant's contact details and
duty to make available information to the Applicant if requested**

Dear Marie Shoemith,

Thank you for seeking the Forestry Commission's advice about the impacts that this application may have on ancient woodland. The Forestry Commission is a statutory consultee for:

- nationally significant infrastructure projects that could affect forests and woodlands
- conditions on the after-use of minerals sites for forestry

The Forestry Commission is also a non-statutory consultee on development affecting or within 500m of ancient woodland.

As a Non-Ministerial Government Department, we provide no opinion supporting or objecting to an application. Rather we are including information on the potential impact that the proposed development could have on the ancient woodland. The Forestry Commission would like to provide further comment on this scheme and has also previously provided comment on these proposals in 2019 (attached to the same email). Also please note as the proposed A66 project crosses both sides of the Pennines and therefore crosses Forestry Commission Area Teams **I recommend in future emailing both the Yorkshire and North East / the North West and West Midlands Teams email address details on previous page.**

One of the most important features of ancient woodlands is the quality and inherent biodiversity of the soil; they are relatively undisturbed physically or chemically. This applies both to Ancient Semi Natural Woodland (ASNW) and Plantations on Ancient Woodland Sites (PAWS). Direct impacts of development that could result in the loss or deterioration of ancient woodland or ancient and veteran trees include:

- damaging or destroying all or part of them (including their soils, ground flora or fungi)
- damaging roots and understory (all the vegetation under the taller trees)
- damaging or compacting soil around the tree roots
- potentially polluting the ground and watercourses around them
- changing the water table or drainage of woodland or individual trees
- damaging archaeological features or heritage assets

It is therefore essential that the ancient woodland identified is considered appropriately to avoid the above impacts.

We recommend that any woodland creation by any means and woodland management works as part of this proposal are carried out in accordance to the UK Forestry Standard : <https://www.gov.uk/government/publications/the-uk-forestry-standard>
This guidance sets out the UK government's approach to sustainable forestry, including standards and requirements, regulations and monitoring, and reporting.

We also recommend that future resilience in relation to climate change, current and potential pest and diseases is considered in relation to the species choice of trees as part of this proposal and we recommend using the Ecological Site Classification Decision Support System (ESC-DSS) : <https://www.forestresearch.gov.uk/tools-and-resources/ecological-site-classification-decision-support-system-esc-dss/>.

We recommend that a Forestry Commission Standard Management Plan <https://www.gov.uk/guidance/create-a-woodland-management-plan> is developed for ongoing management of any new woodland sites and management is considered in relation to neighbouring or other existing woodland in the local landscape.

Finally, we also particularly refer you to further technical information set out in Natural England and Forestry Commission's [Standing Advice on Ancient Woodland](#) – plus supporting [Assessment Guide and Case Decisions](#).

We hope these comments are helpful to you. If you have any further queries, please do not hesitate to contact the Forestry Commission on the email addresses provided above.

Yours faithfully,



Forestry Commission
Yorkshire & North East Area Local Partnership Adviser

Forestry Commission
Ghyll Mount
Gillan Way,
Penrith 40 Business Park
Penrith
CA11 9BP

Date: 11th July 2019

Our ref:
Your ref:

BY EMAIL ONLY

Dear Sir/Madam

Response to the A66 Northern Trans-Pennine: Public Consultation

The Forestry Commission is the Government's expert on forestry and woodland and is a statutory consultee under the Planning Act 2008 for major infrastructure (Nationally Significant Infrastructure Projects - NSIPs) that is likely to affect the protection or expansion of forests and woodlands (as defined by Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms And Procedures) Regulations 2009)¹. The Forestry Commission is also a non-statutory consultee where any part of a proposed development site is within 500m of ancient woodland.

As such, we provide the following feedback in both our statutory role (in respect of the A66 Northern Trans-Pennine) and non-statutory, expert advisor role (for all other elements of the proposal).

The Forestry Commission's responsibility is to discharge its consultee roles as efficiently, effectively and professionally as possible, based on the forestry principles set out in [The UK Forestry Standard](#) (4th edition published 2017).

We work with others to protect, improve and expand our nation's forests and woodlands, increasing their value to society and the environment. In this role, we would welcome the opportunity to continue to provide advice to Highways England on the Trans-Pennine Upgrade programme to ensure that opportunities are maximised and potential adverse impacts minimised.

¹ <http://www.legislation.gov.uk/ukxi/2009/2264/contents/made>

A66 Northern Trans-Pennine

- **Ancient woodland**

There are several ancient woodlands (ASNW / PAWS) that may be directly or indirectly impacted by the proposals, including:

Temple Sowerby to Appleby – Crackenthrope

Option G (and to a lesser extent option H) both could potentially impact upon ancient woodland site known as Chapel Wood (noted discounted option to widen the current A66 at Crackenthrope).

Cross Lanes to Rokeby

Option K could potentially impact upon ancient woodland site known as Jack Wood.

The A66 Northern Trans-Pennine project Public consultation document does not appear to identify and value and potential impact on these irreplaceable habitats in the relevant option benefits and impacts tables.

The benefit and impact tables within the public consultation document refer to 'important hedgerows' with no further definition provided, some of these may contain veteran trees. It is noted that these features will be subject to a further survey and that you will work with relevant statutory bodies to mitigate any impacts: We would also consider compensatory measures (net gain) may also be appropriate in some cases.

Ancient woodlands and veteran trees are irreplaceable and are considered important for their wildlife, soils, recreation, cultural value, history and contribution to the landscape. Therefore the Forestry Commission recommends that every effort is afforded to avoid this scheme affecting ancient woodlands or veteran trees. The developer should start by looking for ways to avoid the development affecting ancient woodland or veteran trees e.g. by redesigning the scheme in line with the recommendations outlined in BS 5837:2012². It is not possible to fully compensate for the loss or damage to ancient woodlands, thus compromising Highways England's aim to achieve no net loss of biodiversity by 2020.

The Forestry Commission also recommends that ancient woodlands and veteran trees are be included in all future habitat and species surveys in relation to the Scheme. We recommend that the list of statutory and non-statutory sites for which desk based studies were carried out is expanded to include surveys on Ancient Woodlands with a 2km area of search, reflecting good practice established on other NISPs.

The Forestry Commission has prepared joint [Standing Advice](#) with Natural England on ancient woodland and veteran trees which we refer you to as it notes that ancient woodland is an irreplaceable habitat, and that, in planning decisions, Plantations on Ancient Woodland Sites (PAWS) should be treated equally in terms of the protection afforded to ancient woodland. It highlights the Ancient Woodland Inventory as a way to find out if woodland is ancient.

² <https://shop.bsigroup.com/ProductDetail/?pid=00000000030213642>

- **Mitigation and Compensation**

Whilst we highlight the need to avoid impacts on woodland as a priority, should a decision be made to lose woodland to the proposed scheme then suitable activities for mitigation may include:

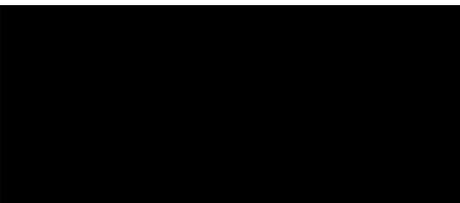
- putting up screening barriers to protect woodland or veteran trees from dust and pollution
- noise reduction measures
- leaving an appropriate buffer zone of semi-natural habitat between the development and the ancient woodland or tree (depending on the size of the development, a minimum buffer should be at least 15 metres)
- leaving a buffer zone at least 15 times larger than the diameter of a veteran tree or 5m from the edge of its canopy, if that's greater
- protecting veteran trees by designing open space around them
- identifying and protecting trees that could become veteran trees in the future.

Suitable activities for compensation may include:

- planting new native woodland or wood pasture
- restoring or managing other ancient woodland, including plantations on ancient woodland sites, and wood pasture
- connecting woodland and veteran trees separated by development with green bridges, tunnels or hedgerows
- long-term management plans for new woodland and ancient woodland
- managing veteran trees
- replacing lost veteran trees.

The [Standing Advice](#) on ancient woodland contains further information on avoiding and reducing the impacts of development. While this advice does refer to ancient woodlands specifically, the suggested activities are also applicable to broadleaved woodlands.

Yours sincerely



Colin Binnie
Partnership and Expertise Manager
NW&WM Area Team

From: [REDACTED]
To: [A66Dualling](#)
Subject: Scoping consultation for the A66 Northern Trans-Pennine Project
Date: 07 July 2021 11:50:11
Attachments: [image549357.gif](#)
[image541246.gif](#)
[image082230.gif](#)

Your ref
TR010062-000008-210614
Out ref
21/01527/GENENQ

Dear Marie

Thank you for your message regarding the above.

I confirm that Hambleton District Council have considered the details in the scoping consultation and have no comments to make upon the details contained in the submissions.

It is considered that Hambleton District Council is correctly identified as a consultation body.

Kind regards

Tim

Tim Wood

Development Manager

Development Management

Hambleton District Council

Tel: [REDACTED]

Email: [REDACTED]

Web: www.hambleton.gov.uk

How do you rate your email response from Hambleton District Council?

Feedback survey - click below to begin



Your calls may be recorded for training and quality purposes. The call recording policy is available at www.hambleton.gov.uk

From: [REDACTED]
To: [A66Dualling](#)
Subject: RE: [Ref: TR010062-000008-210614] Application by Highways England (the Applicant) for an Order granting Development Consent for the A66 Northern Trans-Pennine Project (the Proposed Development)
Date: 12 July 2021 10:13:49

Good Morning

Thank you for your scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested, in respect of the above referenced DCO application by Highways England. On behalf of Hartlepool Borough Council, I can confirm that we have no comments to make at this stage in response to the scoping consultation.

If you have any queries or require any further information, please do not hesitate to contact me.

Kind regards

Ryan Cowley MPlan (Hons) MRTPI | Senior Planning Officer
Hartlepool Borough Council

Tel: [REDACTED]

Email: [REDACTED]

Web: www.hartlepool.gov.uk

Facebook: [/hartlepoolcouncil](https://www.facebook.com/hartlepoolcouncil)

Twitter: [@HpoolCouncil](https://twitter.com/HpoolCouncil)



Please consider the environment before printing this e-mail

This document is strictly confidential and is intended only for the use by the addressee. If you are not the intended recipient, any disclosure, copying, distribution or other action taken in reliance of the information contained in this email is strictly prohibited. Hartlepool Borough Council will handle your personal information in accordance with the General Data Protection Regulation and the Data Protection Act 2018. To find out how the Council collect, use, store and retain your personal data, please see our privacy notice(s) at www.hartlepool.gov.uk/privacy-notices. Any views expressed by the sender of this message are not necessarily those of Hartlepool Borough Council. If you have received this transmission in error, please use the reply function to tell us and then permanently delete what you have received. This message has been scanned for malware by Websense. www.websense.com

CEMHD Policy - Land Use Planning,
NSIP Consultations,
Building 1.2,
Redgrave Court,
Merton Road,
Bootle, Merseyside
L20 7HS.

HSE email: NSIP.applications@hse.gov.uk

FAO Marie Shoesmith
The Planning Inspectorate
Temple Quay House
Temple Quay
Bristol
BS1 6PN
By email only

Dear Ms Shoesmith,

30 June 2021

**PROPOSED A66 NORTHERN TRANS-PENNINE PROJECT (the project)
PROPOSAL BY HIGHWAYS ENGLAND (the applicant)
INFRASTRUCTURE PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017 (as
amended) REGULATIONS 10 and 11**

Thank you for your letter of the 14 June 2021 regarding the information to be provided in an environmental statement relating to the above project. HSE does not comment on EIA Scoping Reports but the following information is likely to be useful to the applicant.

HSE's land use planning advice

Will the proposed development fall within any of HSE's consultation distances?

From the information provided, it can be determined that the proposed works will interact with the consultation zones for Hulands Quarry approximately 2 km east of the A66/A67 junction at Bowes as well as for the major accident hazards pipelines that run under the A66 between the A66/B6262 junction and Whinfell Park. As regards the interaction with the Hulands Quarry consultation zones, it is noted that the proposals do not include any plans to divert the road in this area however the applicant should be advised to consult Hulands Quarry when planning and carrying out the works to ensure they do not affect the major accident hazards site there.

Hazardous Substances Consent

The information provided does not indicate that the works would be of a kind that would require Hazardous Substances Consent (HSC), however the applicant should be advised to seek information from the relevant Hazardous Substances Authority should this not be the case.

Explosives sites

HSE has no comment to make as there are no licensed explosives sites in the vicinity.

Electrical Safety

No comment from a planning perspective.

At this time, please send any further communication on this project directly to the HSE's designated e-mail account for NSIP applications at nsip.applications@hse.gov.uk. We are currently unable to accept hard copies, as our offices have limited access.

Yours sincerely,

■

Monica Langton
CEMHD4 NSIP Consultation Team

From: [REDACTED]
To: [A66Dualling](#)
Subject: RE: TR010062 - A66 Northern Trans-Pennine - EIA Regulation 10 Consultation
Date: 01 July 2021 16:27:51
Attachments: [image001.jpg](#)
[image002.jpg](#)

Hello,

We have checked our database of former railway structures against the route options and the plans showing the DCO Boundary.

The Historical Railways Estate (HRE) contains the following structure within the DCO Boundary shown on the plans:

Structure	OS Grid Ref	Comments
EDE/75	NY624257	Infilled former overbridge – not directly affected by any of the proposed routes.

HRE sold a section of the former Appleby to Warcop closed branch line to Railway Paths Limited in 2001. The freehold was sold including the majority of the bridge structures on the branch line. However, we retain the right to enter the property if the buyer has not carried out our statutory obligations in relation to the maintenance of the bridges. Although we have never had to exercise that right it could apply to the following structure within the DCO:

Structure	OS Grid Ref	Comments
EDE/38	NY720175	Former underbridge within DOC boundary

From the plans provided the proposals do not impact on either of these structures but if anything changes or more information is required please do not hesitate to contact me.

Kind regards,
Colin

Colin McNicol

Historical Railways Estate (on behalf of Department for Transport)

Highways England | 37 Tanner Row | York | Y01 6WP

General Office: +44 (0) 1904 621924

Mobile: + [REDACTED]

Web: <http://www.highwaysengland.co.uk>

If you would like to make a request under the Freedom of information Act, please contact info@highwaysengland.co.uk

Fridays – I am not in the office and do not have access to emails

From: Davies, Robert
Sent: 15 June 2021 08:36
To: McNicol, Colin [REDACTED]
Cc: A66Dualling@planninginspectorate.gov.uk
Subject: FW: TR010062 - A66 Northern Trans-Pennine - EIA Regulation 10 Consultation

Hi Colin

Please see attached letter concerning proposed dualling of the A66 between scotch corner and Penrith.

I have been through the figures contained in Chapter 2 part 2 to 11 link and note that sections of the Eden Valley railway lie within the scoping area.

In particular the section of the former railway between Warcop and Temple Sowerby as indicated on figures 2.1 sheets 2 and 3 may be of interest . Bridges EDE 27-78 seem to be in the scoping area and some of these bridges may form part of the estate we manage.

Would you consider and respond to the consultation document please.

Thanks

Rob

Robert Davies

Historical Railways Estate (on behalf of Department for Transport)

Highways England | 37 Tanner Row | York | Y01 6WP

General Office Tel : 01904 621924

Mobile Tel: + [REDACTED]

If you would like to make a request under the Freedom of information Act, please contact info@highwaysengland.co.uk

Web: <http://www.highwaysengland.co.uk>

From: A66Dualling [<mailto:A66Dualling@planninginspectorate.gov.uk>]
Sent: 14 June 2021 17:00
To: HRE Enquiries <hreenquiries@highwaysengland.co.uk>
Subject: TR010062 - A66 Northern Trans-Pennine - EIA Regulation 10 Consultation

FAO: Robert Davies

Dear Sir/Madam,

Please see attached correspondence on the proposed A66 Northern Trans-Pennine.

Please note the deadline for consultation responses is **12 July 2021**, and is a statutory requirement that cannot be extended.

Kind regards,

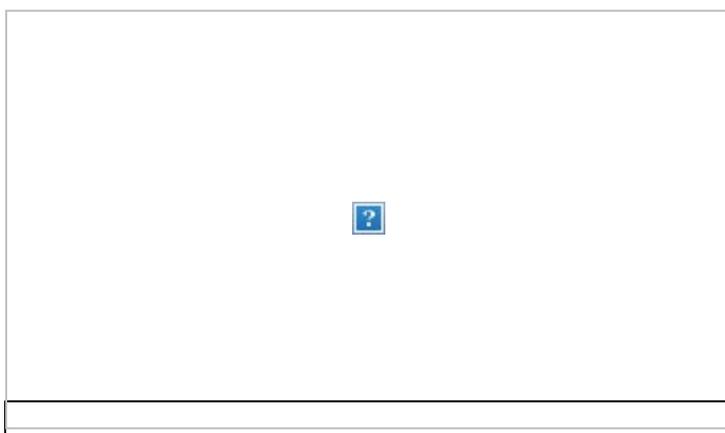
Marie Shoemith

Marie Shoemith
Senior EIA Advisor
Environmental Services
Helpline: 0303 444 5000

Web: <https://infrastructure.planninginspectorate.gov.uk/> (National Infrastructure Planning)
Web: www.gov.uk/government/organisations/planning-inspectorate (The Planning Inspectorate)

Twitter: [@PINSgov](https://twitter.com/PINSgov)

This communication does not constitute legal advice.



Please note that the contents of this email and any attachments are privileged and/or confidential and intended solely for the use of the intended recipient. If you are not the intended recipient of this email and its attachments, you must take no action based upon them, nor must you copy or show them to anyone. Please contact the sender if you believe you have received this email in error and then delete this email from your system.

Recipients should note that e-mail traffic on Planning Inspectorate systems is subject to monitoring, recording and auditing to secure the effective operation of the system and for other lawful purposes. The Planning Inspectorate has taken steps to keep this e-mail and any attachments free from viruses. It accepts no liability for any loss or damage caused as a result of any virus being passed on. It is the responsibility of the recipient to perform all necessary checks.

The statements expressed in this e-mail are personal and do not necessarily reflect the opinions or policies of the Inspectorate.

DPC:76616c646f72



[Please take a moment to review the Planning Inspectorate's Privacy Notice](#)

[which can be accessed by clicking this link.](#)

This email may contain information which is confidential and is intended only for use of the recipient/s named above. If you are not an intended recipient, you are hereby notified that any copying, distribution, disclosure, reliance upon or other use of the contents of this email is strictly prohibited. If you have received this email in error, please notify the sender and destroy it.

Highways England Company Limited | General enquiries: 0300 123 5000
|National Traffic Operations Centre, 3 Ridgeway, Quinton Business Park,
Birmingham B32 1AF | [https://www.gov.uk/government/organisations/highways-](https://www.gov.uk/government/organisations/highways-england)
[england](https://www.gov.uk/government/organisations/highways-england) | info@highwaysengland.co.uk

*Registered in England and Wales no 9346363 | Registered Office: Bridge House,
1 Walnut Tree Close, Guildford, Surrey GU1 4LZ*

Consider the environment. Please don't print this e-mail unless you really need to.



Historic England

Planning Inspectorate
Environmental Services
Central Operations
Temple Quay House
2 The Square
Bristol
BS1 6PN

Our ref: PL00586663
Your ref: TR010062-000008-210614

Telephone: [REDACTED]

Sent by email to: A66Dualling@planninginspectorate.gov.uk

09 July 2021

Dear Sir/Madam

Re: TR010062-000008-210614 ENVIRONMENTAL IMPACT ASSESSMENT (EIA) SCOPING REPORT Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations) – Regulations 10 and 11

Application by Highways England (the Applicant) for an Order granting Development Consent for the A66 Northern Trans-Pennine Project (the Proposed Development)

Thank you for your letter of 14 June 2021 consulting us about the above EIA Scoping Report. Historic England provides the following advice.

Summary

This scheme has the potential to have serious impacts upon heritage assets' significance. As such, Historic England agree that cultural heritage should be scoped into the Environmental Statement (ES). We have had early and continuing engagement with the applicant regarding the overall content; however, we note that not all impacts can yet be fully assessed. We provide advice and recommendations below regarding what further issues need to be assessed and how this should be approached.

Historic England Advice

The proposed scheme has the potential to have an impact upon a number of designated heritage assets¹ and their settings in each of the schemes across the route of the A66 between Penrith and Scotch Corner.

¹ A Designated Heritage Asset is defined in the National Planning Policy Framework as 'A World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated under the relevant legislation'.



Historic England, Bessie Surtees House, 41-44 Sandhill, Newcastle Upon Tyne NE1 3JF
Telephone 0191 269 1255 HistoricEngland.org.uk

Please note that Historic England operates an access to information policy.

Correspondence or information which you send us may therefore become publicly available.





In line with the advice in the *National Planning Policy Framework* (NPPF), we would expect the Environmental Statement (ES) to contain a thorough assessment of the likely effects which the proposed development might have upon those elements which contribute to the significance of these assets.

Historic England have been involved in early consultations with the applicant and their agents. We have given advice by means of engaging in a range of meetings with Statutory Environmental Bodies, the Heritage Technical Working Party, site visits and scheme specific meetings.

Cultural Heritage

Generally Historic England are pleased to see that the Scoping Report confirms what has already been shared with us, namely that the Environmental Assessment will:

- follow industry standards and guidance for assessment (9.9);
- identify all known designated and non-designated heritage assets (9.3.3 & 9.3.5); acknowledged that the HER baseline data requires updating (9.5.3);
- assess the potential for further as yet unknown assets (9.10 & 9.11) by gathering further evidence through surveys (9.10);
- assess the level of significance (i.e. value) of the heritage assets (9.9.2 – 9.9.3); impacts on significance (9.9.4 – 9.9.5); and, magnitude of impact on significance (9.9.6 – 9.9.11);
- assess the impact from the scheme: both in terms of physical direct impact during construction, including impact upon setting (9.6.1 – 9.6.9); as well as impact on setting during the operational phase (9.6.10 – 9.6.11);
- identify proposed mitigation measures including design and enhancement measures (9.7);
- describe the significant effects during construction and operation (9.8.1 – 9.8.23)

We note that Highways England have a duty to “...*minimise the environmental impacts of operating, maintaining and improving its network...*” (1.1.5). We are therefore encouraged that the principle of seeking to design out impact will be an overriding consideration in relation to reducing impacts on highly designated heritage assets (9.7.1).

Historic England have sought to ensure that the heritage assessment is informed by an overarching heritage research framework (9.10.3). This document is a work in progress and is therefore not yet informing decisions regarding surveys which necessarily have to begin imminently. However, it is hoped that it will be ready as





soon as possible and be used to inform ongoing surveys leading up to and during the examination. It should also be invaluable during the construction phase to assist in the development of archaeological mitigation decisions as required and ultimately provide public benefits through identifying potential engagement opportunities in the heritage of the A66 corridor.

We note that part of the evidence gathering (9.10.2) will include the development of the geoarchaeological modelling for the scheme. This, like the research framework, urgently needs to be done to inform ongoing decisions being taken with regards to imminent surveys and trenching.

Comments regarding the content of the Scoping Report

Historic England acknowledge that the following schemes are not discussed as fully in the Scoping Report:

- Temple Sowerby to Appleby;
- Appleby to Brough (Warcop);
- Cross Lanes to Rokeby.

We are aware that they are all currently subject to further assessment due to alternative alignments being considered. We will await further information on the potential significant effects of this scheme to be presented in the PEI Report when it becomes available.

Correction required in Table 9.5

We have noted a minor, but necessary correction needed in this table. The identification of the location of the church of St Margaret and St James in Table 9.5 as 'Broom' is inaccurate. It's actually the parish church of Long Marton and located as such by the National Heritage List for England record. This should be rectified for the PEI report.

Historic Landscape Characterisation and the relationship between Landscape & Visualisation and Cultural Heritage chapters

Historic England is concerned that the Historic Landscape Characterisation (HLC) data available for all the LPAs along the route is not referenced nor fully utilised to assist in the assessments of cultural heritage in chapter 9.

We have some concerns about the limited cross-referencing between the Landscape and Visual Impact Assessment (LVIA) in Chapter 11 and the Cultural Heritage assessments set out in Chapter 9. Principally, how historic land use, field patterns and cultural remains (both above and below ground) contribute to landscape character.





Chapter 11 currently does not recognise heritage assets (designated and undesignated) as components of landscape character. Heritage assets should be included in the chapter as:

- Elements and features that can contribute to baseline landscape character;
- Visual receptors where they are publicly accessible landmarks, destinations or part of an associated experience (for example, associated with a marked panorama on an OS map or part of a national trail);
- Landscape receptors where they are either elements of landscape character (for example, a significant historic pattern of enclosure) or features that help define a landscape character area (for example, Rokeby church and hall) .

The Guidelines for Landscape and Visual Impact Assessment 3 (GLVIA3) make specific reference to the need to identify heritage assets as part of baseline character assessment work.

Landscape and visual Issues to be addressed in the PEI Report

At paragraph 11.10.3 the report rightly identifies that is not within the scope of the LVIA to assess the impact on the setting of heritage assets per se; this rightly should be within the Cultural Heritage chapter. But the report seems to confuse 'setting' of heritage assets with their contribution to landscape character and as landscape and visual receptors in their own right.

a) Rokeby Park

We are concerned that paragraph 11.8.38 suggests that the impacts and effects on Rokeby Park registered park and garden will be assessed 'separately', yet there is no indication as to how this separate assessment will inform the full LVIA, what method will be used to assess the parkland landscape or how and when this assessment will be carried out. Clearly the parkland at Rokeby is an important component of the landscape and it is not acceptable to divorce it from this wider assessment. However, a more careful and informed assessment of this sensitive heritage asset will be required at some point.

We note that paragraph 11.8.28 incorrectly places Rokeby Park in the 'Bowes Bypass' scheme area. This results in paragraphs 11.8.33 to 11.8.37 failing to consider impacts of construction and operation on Rokeby Park.

c) Terminology

Although not technically for Historic England to comment on, we have noted that Chapter 11 is conflating two different things in the baseline assessment. The Cumbria Landscape Character Assessment defines broad landscape types (e.g. Sandstone Ridge, Rolling Fell, etc.) whereas the report extracts from the Durham assessment broad landscape areas ('Barningham, Brignal and Rokeby', and 'Mid Greta Valley' for example).





b) *Identified cultural heritage receptors and viewpoints*

We have also noted that there do not appear to be any identified cultural heritage receptors or viewpoints mentioned in 11.5.22 nor identified in Figure 11.6.

The Cultural Heritage chapter refers to assessment of key views and sightlines in relation to designated heritage assets in several sections, but this does not appear to have been translated into Chp.11 in any way. This is a key issue especially, but not only, for the Rokeby scheme where visual impacts on the setting of the Registered Park and Garden require assessing alongside the contribution the parkland landscape makes to landscape character. This should also be rectified and included in the final PEI report.

Response to questions posed in Section 9.2

1. Do you agree with the proposed scope of the cultural heritage assessment outlined in this chapter? Yes
2. Do you agree with the proposed study area and methodology for undertaking the cultural heritage assessment outlined in this chapter? Yes. Are there any comments on the methodology you wish to raise? No, but see 4 below.
3. Is there any baseline information or data that you wish to draw our attention to, or are able to provide us with to inform our assessments? No, but see 4 below.
4. Are there any other key issues or aspects relevant to the cultural heritage assessment that you wish to bring to the attention of the design and assessment team? It is critical that the cultural heritage assessment is informed by the Research Framework which is being developed. In addition, the Historic Landscape Character data held by all LPAs across the route should be included the main Cultural Heritage chapter and integrated into the Landscape & Visual chapter where necessary.
5. Are you happy to be contacted directly? Yes

If you have any queries about any of the above, or would like to discuss anything further, please contact me.

Yours sincerely

[Redacted signature]

Lee McFarlane

Inspector of Ancient Monuments NE&Y – HE A66 Lead

[Redacted contact information]

cc: Kerry Whalley, Arup, Associate Director, Environment & Sustainability



Kirkby Thore Parish Council

Clerk: Lindsay Nicholson

Tel: [REDACTED]

Email: clerk@kirkbythore.org.uk

Website: www.kirkbythore.org.uk

Marie Shoesmith
Senior EIA Advisor on behalf of the Secretary of State
Environmental Services
Central Operations
Temple Quay House
2 The Square
Bristol
BS1 6PN

Sent via email to: A66Dualling@planninginspectorate.gov.uk

11th of July 2021

Dear Marie Shoesmith,

A66 Northern Trans-Pennine Project
Stage 3 Environmental Scoping Report
Planning Act 2008 (as amended) and The Infrastructure Planning
(Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) –
Regulations 10 and 11.

Kirkby Thore Parish Council comments on the Scoping Consultation
Documentation

Kirkby Thore Parish Council (KTPC) wishes to register its deep concern about the implications of some of the text within the above Scoping Report. It has confined its comments below to the text relating to the Temple Sowerby to Appleby Section of the route within the Scoping documentation.

It is clear from reading the report that the survey work required to inform the Environmental Impact Assessment (EIA) for the three currently proposed alternative routes for the Temple Sowerby to Appleby Section of the route will not be completed by the time the Development Consent Order will be applied for. As a result, since there are no community consultations in the process post DCO, it will be impossible for the parish (or any statutory stakeholder) to adequately assess the environmental impacts of the 3 currently proposed routes on our community, or to seek to mitigate the impacts of the eventual route and its design if these are agreed after the DCO is approved.

We remain alarmed that we have not been given any opportunity to directly influence the design elements of the schemes as they have progressed. We are aware that some stakeholders, i.e. land owners, have had access to far more detailed information, held direct meetings with senior Highways Agency Officials and Design team members and been able to influence the development of design features such

as access roads etc. Landowner opinions have been fully considered in developing the proposals and we would like to see the same degree of opportunity afforded to other stakeholders in this large historic Cumbrian village.

The document states that Highways Agency wishes to maintain flexibility post DCO in relation to design and other elements at a stage in the process when there will be no further engagement or consultation required with the community and when it is too late for such information to be properly considered and taken into account in the Environmental Impact Assessment which is subject to public consultation and should inform the design. This will significantly limit the potential of the local community in Kirkby Thore to influence the ongoing design and mitigation. There will be no formal opportunity for the community to be engaged and consulted post DCO on the evolving design, which seems totally undemocratic and against the spirit of the legislation.

We understand that the project has been selected as part of Project Speed and that there is political pressure for early completion, but this should not be at the expense of the ability of our community to have a real say in the development of proposals which will have a very significant effect on our community.

Throughout the Scoping document it states that the impact of the construction phase will not be available in time for inclusion in the EIA. This will result in the community of Kirkby Thore (and the statutory consultees) being denied the opportunity to consider and comment on the likely impacts of the construction phase during the public and statutory consultation. We do not consider this acceptable.

We also have a couple of comments on specific elements of the Scoping Report.

Regarding Paragraph 2.5.28 on page 24: the text in relation to the orange route suggests that the access for Heavy Goods Vehicles will avoid the need for HGV's to travel through the centre of Kirkby Thore. This is not true. The text states that all traffic will be routed from the orange route along Priest Lane, Cross Street and up Main Street towards British Gypsum. This route will draw HGV's through the very centre of the village past the school, shop, Foresters Hall, church, village hall and other listed buildings on roads which are not engineered for HGV's (Priest Lane and Cross Street). This whole proposed HGV route through the village follows the main walking route for children going to our local school, recreation area and playing fields, which in parts has no pavement. The various route maps attached to the report are not consistent with the text in this document.

Paragraph 14.5 table 14-2 population baseline conditions – section Temple Sowerby to Appleby, there is no mention in the table of the presence of the large village of Kirkby Thore (population more than 750), although Crackenthorpe which is a very small village is described in the table. This omission should be corrected in the scoping report and fully taken into account during the EIA

Paragraph 14.5 table 14-2 also fails to mention the large number of properties in Kirkby Thore which lie within 500 metres of the various routes under consideration. Only a few properties are named, when in fact large numbers of properties lie within 500m of the three proposals and should be included in the assessments.

The community land assets listed in the same table do not include the recreation field or the village hall. The recreation field is very well used, close to all three alignments in the North-west of the village and should be treated as a sensitive receptor.

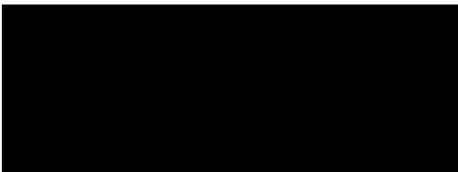
Paragraph 14.6.19 the text suggests that there is likely to be a beneficial impact on NO₂ levels along the current A66 for the blue route but does not mention the fact that this will also cause a deleterious impact elsewhere as the emissions will merely be moved from the part of the village that is currently affected to the rest of the village (which will be encircled on three sides by the blue route to the west, north and east). The majority of residents in the village would suffer increased emissions from the blue route, rather than the very small number of properties currently affected on the current alignment, (albeit the properties through main street are currently affected by local traffic, including HGV's coming through the village).

Paragraph 14.8.6 the Parish Council questions the assumption stated that the health effects will be beneficial since large numbers of people will be affected in the village by the A66 for the first time. The current alignment only affects a small number of properties at one end of the village (the SW side).

We feel that the Highways Agency must ensure that the Parish Council is treated as a full stakeholder and provided with full access to the detailed technical reports as it develops. The Parish Council formally requests that the Highways Agency involves the Parish Council as representatives of the community in all ongoing design issues.

Please do not hesitate to contact me further via clerk@kirkbythore.org.uk if you need any further information.

Yours sincerely



Lindsay Nicholson
Clerk
Kirkby Thore Parish Council

From: 
To: [A66Dualling](#)
Subject: A66 - dual carriage way response from Musgrave Parish Council
Date: 11 July 2021 18:11:21

To Whom it may concern.

Musgrave Parish Council have some great concerns over the proposed routing of the A66 between Brough and the Appleby sections. Our main concerns are at Langrigg and Flitholme. We have attended meetings in the early stage of the negotiations where promises were made, but HE seem to have totally disregarded all we have said and proposed although at the meetings they thought we had some very proposals. We realise that you have parameters to stay within, BUT there is an obvious route to go to the North of the current A66, this will save millions of pounds as there will be far less bridges/underpasses required, the land already is owned by the state, yes you can say it is AONB, but Natural England cannot say you are not allowed to go through this land when they have given permission for HS2 to go through their land in the Chilterns. You are going decimate properties that have been here for 100's of years, HE are not taking notice of locals concerns, they seem to want to ride over us as if we are not here. If you were to look closer at the problems further down the road you would see that Penrith cannot cope with the traffic at the moment, surely you would also see Tebay junction on the M6 is a very quiet junction, would it not be better to bypass Kirkby Stephen and send vehicles that way? There needs to be some joined up thinking, it's all well and good sitting in an office and planning things on a piece of paper or on the computer, HE should look at this project from a sensible point of view.

The proposed route will bring total disregard for locals, bringing the road closer to the village, therefore noise pollution, water courses which currently are unable to cope with the floods we get never mind more runoff which we are bound to have with more surface area of tarmac. Houses are going to become islands in the middle of the proposed melee. It is blatantly obvious the planners do not live here , they would not be suggesting a road plan similar to this where they live. You still have time to sort these problems, there are 24,000 acres of AONB land, at the moment it does not bother Natural England what the army do on their training regime, but to have a road through their land seems to make common sense to us that live here.

Please give us some hope, we live in a lovely area please do not spoil it for the people who live here.

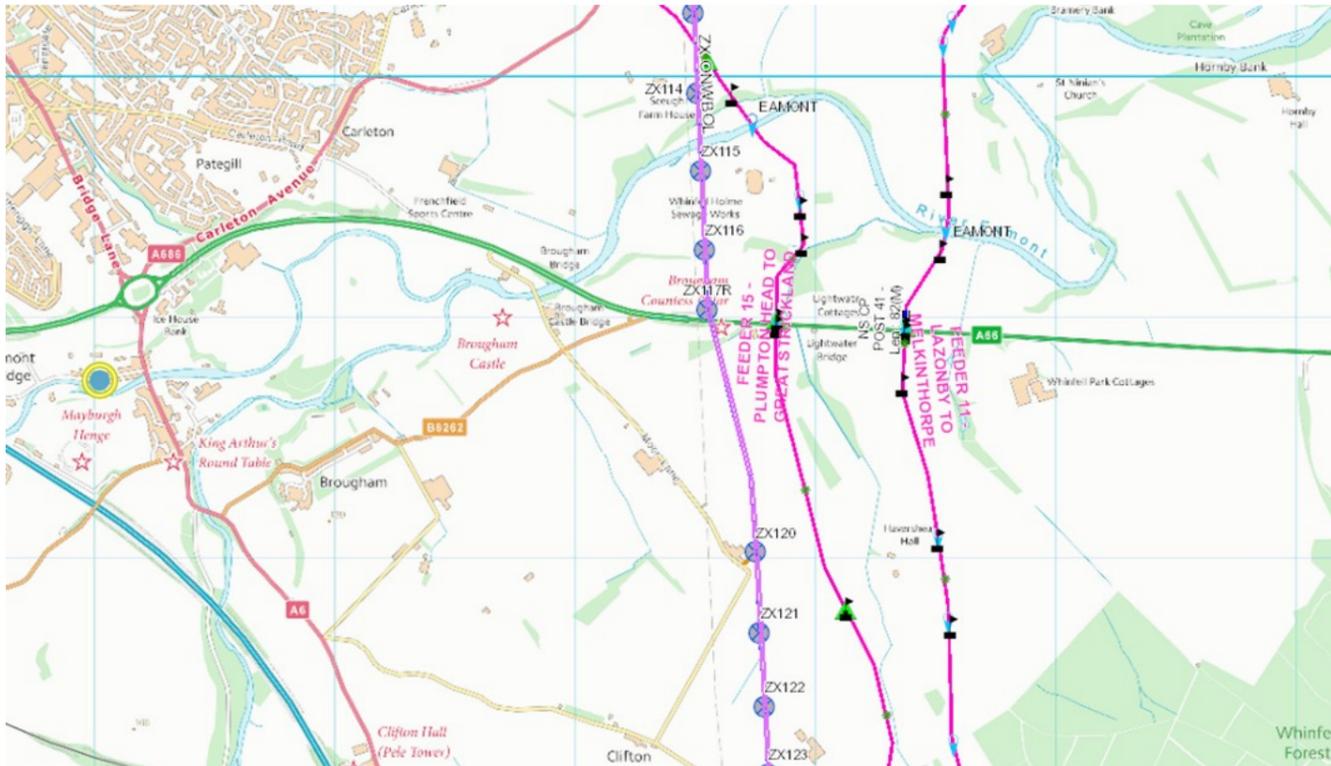
Tim Wells
Chairman Musgrave Parish Council
Sent from [Mail](#) for Windows 10

Chapman, Gary

From: Jefferies, Spencer [REDACTED]
Sent: 12 July 2021 16:34
To: A66Dualling
Subject: RE: EXT || TR010062 - A66 Northern Trans-Pennine - EIA Regulation 10 Consultation

Good afternoon

National Grid have a number of assets within the scoping consultation and therefore would like to be sent further information as the project progresses. The assets that are potentially affected by the scheme are 2 high pressure gas pipelines and 1 overhead power line.



Kind Regards

Spencer Jefferies BSc AssocRTPI

Town Planner
Land Rights and Acquisitions, UK Land and Property
nationalgrid

[REDACTED]
National Grid House, (Floor C2), Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA
[nationalgrid.com](https://www.nationalgrid.com) | [Twitter](#) | [LinkedIn](#)

Please consider the environment before printing this email.

In order to deal with your query/request, we may need to collect your personal data. For more information on National Grid's privacy policy in respect of your personal data, please see attached link: <https://www.nationalgrid.com/group/privacy-policy>

Advance notice of holiday:

From: A66Dualling <A66Dualling@planninginspectorate.gov.uk>
Sent: 14 June 2021 17:03
To: .box.landandacquisitions [REDACTED]
Cc: Jefferies, Spencer [REDACTED]
Subject: EXT || TR010062 - A66 Northern Trans-Pennine - EIA Regulation 10 Consultation

FAO: Spencer Jefferies

Dear Sir/Madam,

Please see attached correspondence on the proposed A66 Northern Trans-Pennine.

Please note the deadline for consultation responses is **12 July 2021**, and is a statutory requirement that cannot be extended.

Kind regards,
Marie Shoemith

Marie Shoemith
Senior EIA Advisor
Environmental Services
Helpline: 0303 444 5000

Web: <https://infrastructure.planninginspectorate.gov.uk/> (National Infrastructure Planning)
Web: www.gov.uk/government/organisations/planning-inspectorate (The Planning Inspectorate)

Twitter: [@PINSgov](#)

This communication does not constitute legal advice.

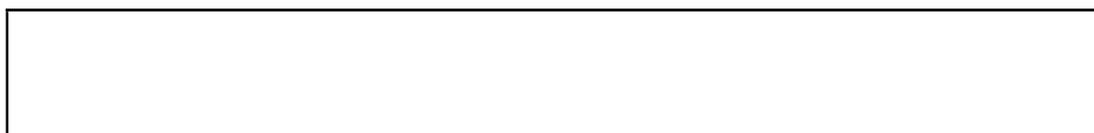


Please note that the contents of this email and any attachments are privileged and/or confidential and intended solely for the use of the intended recipient. If you are not the intended recipient of this email and its attachments, you must take no action based upon them, nor must you copy or show them to anyone. Please contact the sender if you believe you have received this email in error and then delete this email from your system.

Recipients should note that e-mail traffic on Planning Inspectorate systems is subject to monitoring, recording and auditing to secure the effective operation of the system and for other lawful purposes. The Planning Inspectorate has taken steps to keep this e-mail and any attachments free from viruses. It accepts no liability for any loss or damage caused as a result of any virus being passed on. It is the responsibility of the recipient to perform all necessary checks.

The statements expressed in this e-mail are personal and do not necessarily reflect the opinions or policies of the Inspectorate.

DPC:76616c646f72



[Please take a moment to review the Planning Inspectorate's Privacy Notice which can be accessed by clicking this link.](#)

This e-mail, and any attachments are strictly confidential and intended for the addressee(s) only. The content may also contain legal, professional or other privileged information. If you are not the intended recipient, please notify the sender immediately and then delete the e-mail and any attachments. You should not disclose, copy or take any action in reliance on this transmission.

You may report the matter by contacting us via our [UK Contacts Page](#) or our [US Contacts Page](#) (accessed by clicking on the appropriate link)

Please ensure you have adequate virus protection before you open or detach any documents from this transmission. National Grid plc and its affiliates do not accept any liability for viruses. An e-mail reply to this address may be subject to monitoring for operational reasons or lawful business practices.

For the registered information on the UK operating companies within the National Grid group please use the attached link: <https://www.nationalgrid.com/group/about-us/corporate-registrations>

Date: 07 July 2021
Our ref: 356711
Your ref: TR010062



A66Dualling@planninginspectorate.gov.uk
BY EMAIL ONLY

Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

T 0300 060 3900

Dear Marie,

Environmental Impact Assessment Scoping consultation (Regulation 10 and 11 of the EIA Regulations 2017): A66 Northern Trans-Pennine Project
Location: Cumbria

Thank you for seeking our advice on the scope of the Environmental Statement (ES) in your consultation dated 14 June 2021 which we received on 14 June 2021.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Case law¹ and guidance² has stressed the need for a full set of environmental information to be available for consideration prior to a decision being taken on whether or not to grant planning permission.

Should the proposal be amended in a way which significantly affects its impact on the natural environment then, in accordance with Section 4 of the Natural Environment and Rural Communities Act 2006, Natural England should be consulted again.

Natural England welcomes the opportunity to comment on the Environmental Scoping Report. As a statutory consultee and the national landscape agency it is our advice that the North Pennines AONB Partnership be given the opportunity to comment on documents relevant to this project. In order to secure the success of this project, the North Pennines AONB should be consulted on all matters relevant to the remit of their partnership including assessment of landscape and visual impacts as well as the design and application of mitigations measures.

Please see below general answers to the questions asked in each of the chapters in the scoping report and a table, which sets out the relevant comments on specific chapters of the Scoping Report, as well as answering the Scoping Questions set out in the relevant chapters.

1. Do you agree with the proposed scope of the biodiversity/landscape/water etc assessment outlined in the report?

Generally, NE agree to the proposed scope of the further survey work identified, subject to the specific points detailed in the table below.

2. Do you agree with the proposed study area and methodology for undertaking the

¹ Harrison, J in *R. v. Cornwall County Council ex parte Hardy* (2001)

² *Note on Environmental Impact Assessment Directive for Local Planning Authorities* Office of the Deputy Prime Minister (April 2004) available from

<http://webarchive.nationalarchives.gov.uk/+http://www.communities.gov.uk/planningandbuilding/planning/sustainability/environmental/environmentalimpactassessment/noteenvironmental/>

Biodiversity / landscape / water etc assessments outlined in this report? Are there any comments on the methodology you wish to raise?

Yes, NE generally agree, but refer to comments in table below. We welcome the opportunity we have through the Technical working Groups to comment when they may be changes to the proposals.

3. Is there any baseline information or data that you wish to draw our attention to, or are able to provide us with to inform our assessments that you have not already provided?

We have provided the consultants with the relevant information we have, but if anything, else is need we can discuss and provide this through the Technical Working Groups.

4. Are there any other key issues or aspects relevant to the biodiversity/ landscape / water etc assessments that you wish to bring to the attention of the design and assessment team?

Refer to the table below. If any issues arise during the surveys and discussions with regard to final designs, red line boundaries, mitigation and enhancement can be taken forward with the Evidence Plan and through the Technical Working Groups, on which NE are represented.

5. Are you happy to be contacted directly to discuss any aspects of your response to this scoping request? If so, we would be grateful if you could please include contact details in your response

Yes. See the contact below for formal requests. Karen Slater (karen.slater@naturalengland.org.uk) or Andrew Gale / Mark Hesketh (andrew.gale@naturalengland.org.uk, mark.j.hesketh@naturalengland.org.uk) with regard to landscape issues are also able to provide specific information though the technical working groups.

Section (Page/ Paragraph)	Comment
Air Quality Chapter 6	
6.1.3, 6.8.8	Natural England (NE) and Highway England (HE) are currently in discussion at national level regarding DRMB LA105. NE do not support the use of LA105, specifically the loss of one species metric. HE is currently working on an updated approach in light of this. We recommend the use of published guidance NEA001. We recognise that all sites are being scoped into the assessment, irrespective of the outcome of the application of the loss of one species metric. We welcome the inclusion of all sites in further assessment and recommend that NEA001 or an approach endorsed by NE is used.
6.6.4	Traffic related pollutants are stated as NOx and PM10. NE and HE are currently in discussion at national level regarding an approach to include ammonia in assessment of traffic emissions. Natural England's current position is that whilst we lack an endorsed national standard or emission factor for assessing ammonia from road traffic, we cannot agree that it should consequently be omitted from assessment. We are aware that the current CREAM model produced by AQC has not been peer reviewed and is therefore not nationally endorsed by Natural England. Nevertheless, at this time it has been recognised as the best available tool to support risk assessment in certain situations. Consequently, it has been used in several cases. Examples of this have

	<p>included Local Plans such as Epping Forest examining urban and non-urban road types.</p> <p>To date Natural England has advised that the impacts of ammonia from vehicle emissions should be considered at the appropriate assessment stage, particularly where case specific circumstances would benefit from such an analysis. This is the recommended approach until the importance of this source is better understood and peer reviewed assessment tools are available. The long-term aim will be to require ammonia from vehicles to be assessed at the in-combination stage of screening.</p>
Biodiversity Chapter 7	
Table 7-2	The Table does not include comments provided on the Ecology Survey Strategy Technical Note Dated 10/03/2020 in relation to bat surveys.
Table 7-3	The River Eden and Tributaries row – the river SAC feature is Rivers with floating vegetation often dominated by water-crowfoot.
7.5.26	The River Eden and Tributaries SSSI also has breeding bird assemblage of watercourses as a notified feature.
7.5.28	Although records of maternity roosts are mentioned, these are not shown on the Biodiversity Constraints Figures (Figures 7.1). Inclusion of significant roost records on the constraint's figures would provide useful context and aid in identifying potential areas of high bat activity.
7.5.32	Reference is made to a number of records of otter on the A66 including within the DCO boundary. It is recommended that a review of otter casualty records on the entire route is included within the EIA to identify potential areas for enhancement opportunities to address existing casualty 'hotspots' even if these are outside the proposed areas of improvement works.
7.5.47	River Eden SAC habitat (Rivers with floating vegetation often dominated by water-crowfoot) is present throughout the SAC, including the main River Eden and Troutbeck in the Temple Sowerby – Appleby Section and Coupland Beck. Many of the smaller tributaries whilst not within the SAC, will flow into the site and are likely to comprise SAC habitats and species.
Table 7-8	See comments for 7.5.47 - Rivers with floating vegetation often dominated by water-crowfoot are present within the study area.
7.6.1	Otter are also sensitive to light pollution and salmon are sensitive to vibration (both SAC species).
7.6.2	Watercourse crossings and changes to hydrology may alter the natural functioning, hydrology and geomorphology of watercourses and their floodplains during the operation of the scheme, not just during the construction.
7.7.1	Does the Defra Biodiversity Metric 2.0 (Natural England, 2019) include the EA metric for watercourses? The general metric does not work well for linear features.
7.9.14	<p>We are aware that some survey work has been undertaken during September/October 2020 with further work proposed for the 2021 season. It is unfortunate that information on these surveys has not been included within the scoping report.</p> <p>Paragraph 7.9.14 makes reference to the need for further surveys being determined by the desk study and preliminary surveys for the PEA. However, as the scoping report has identified likely significant effects on a range of species, it is not clear what survey will or will not be undertaken.</p> <p>Furthermore, the scoping report does not include details of the survey methodologies or timings which would be required to determine if the scope of the proposed survey work is sufficient to inform the Environmental Impact Assessment.</p> <p>It should be noted that due to concerns over the potential transmission of SARS-CoV-2 to bats and other novel coronaviruses from bats to humans it is currently recommended that close contact with bats, including trapping, handling and radio</p>

	tracking, are avoided unless there is an over whelming research need. For the majority of developments, it is anticipated that traditional non-invasive survey methods (emergence/re-entry surveys, static acoustic surveys, walked/driven transects and crossing point surveys) would be sufficient to provide baseline information for the assessment of impacts and design of mitigation measures.
7.9.24	During the Technical Working Groups we have had discussion, and recommended that eDNA samples are taken and analysed for white clawed crayfish in addition to manual searching to conform presence/absence (manual searching can often not pick up presence of crayfish).
Geology and Soils Chapter 10	
Key Questions for Scoping	
<p>1. Do you agree with the proposed scope of the geology and soils assessment outlined in this chapter? Agree with the scope with regards to Agricultural Land Classification assessment. However, the assessment also needs to consider the soil resource, in terms of appropriate soil handling requirements so as to minimise soil disturbance, soil damage, soil loss and enhance soil reuse opportunities.</p> <p>2. Do you agree with the proposed study area and methodology for undertaking the geology and soils assessment outlined in this chapter? Are there any comments on the methodology you wish to raise? Natural England agree with the proposed Study area for the ALC and soil survey, which will include all temporary land-take areas (para 10.2.1 – 10.2.2).</p> <p>3. Is there any baseline information or data that you wish to draw our attention to, or are able to provide us with to inform our assessments that you have not already provided? Additional details should be provided in Table 10-2, to reference precise mapping layers utilised in Magic (i.e. Provisional ALC/post 1988 ALC, where appropriate).</p> <p>4. Are there any other key issues or aspects relevant to the geology and soils assessment that you wish to bring to the attention of the design and assessment team? Soil management. Whilst ALC grade as determined from the soil survey will be used to inform the restoration criteria (para 10.6.3), it should also be used to inform soil handling (such as separate handling of different soil handling units) and soil re-use (where displacement is proposed). Maps should also be prepared to show intended soil reinstatement to minimise BMV loss.</p> <p>5. Where the full baseline survey information is unavailable at the time of initial impact assessment, the baseline will need to be based on desk-based information and worst-case assumptions – do you have any comments on this approach and the proposed methodology? The ALC and soil survey scope and methodology has been discussed and agreed between the Project Team and Natural England (07/04/2021)</p> <p>6. Are you happy to be contacted directly to discuss any aspects of your response to this scoping request? If so, we would be grateful if you could please include contact details in your response? Yes (Eleanor.Reed@naturalengland.org.uk)</p>	
10.2.1 – 10.2.2	Natural England agree with the proposed Study area for the ALC and soil survey, which will include all temporary land-take areas.
10.5.1	<p>Land take has been acknowledged in the Scoping as a potential temporary and permanent construction impact.</p> <p>The potential impacts of the proposed development should be considered in terms of land take (i.e. permanent and temporary ALC loss/downgrading); potential soil loss (with potential soil loss mitigation through identified sustainable soil re-use); and potential soil damage (e.g. through inappropriate soil handling).</p> <p>Soil is a finite resource which plays an essential role within sustainable ecosystems, performing an array of functions supporting a range of ecosystem services, including</p>

	<p>storage of carbon, the infiltration and transport of water, nutrient cycling, and provision of food. The soil resource supports agriculture, arboriculture, gardens, parks, greenspaces, allotments, forests and woodland, and ecological habitats. It is therefore important that the soil resources are protected and sustainably managed.</p> <p>In addition to the consideration of ALC grade, the ES should provide details of how any adverse impacts on the soil resource can be avoided or minimised, and demonstrate how soils will be sustainably managed (e.g. through identifying soil handling units to inform their management).</p> <p>Sustainable soil management should aim to minimise risks to the ecosystem services which soils provide, through appropriate site design/masterplan/Green Infrastructure and through provision of suitable soil handling and management advice. Further guidance is contained in the Defra (2009) Construction Code of Practice for the Sustainable Use of Soil on Development Sites.</p>
10.6.2	<p>Natural England welcomes the Mitigation by Design to minimise the impact on Agricultural land and soils, including the intent to minimise the project footprint as far as practicable to minimise permanent land take.</p>
10.6.3 – 10.6.4	<p>Natural England welcomes the proposed Mitigation Measures to minimise the impact on Agricultural land and soils, utilising ALC grades and soil characteristics determined from the soil survey to inform the restoration criteria.</p> <p>Natural England welcomes the proposal to prepare an Environment Management Plan (EMP) containing soil mitigation measures in line with the Defra Construction Code of Practice for the Sustainable Use of Soil on Development Sites.</p> <p>The EMP should include the type and volume of each soil type to be stripped; the nutrient status of the soil units to inform the potential suitability for biodiversity enhancement (where soils cannot be reinstated where excavated); and where required, the location of soil storage and restoration, derived from the soil survey. For areas of temporary development (i.e. the construction compounds), the ALC grade determined from the soil survey should be used to inform the restoration criteria, with temporarily disturbed BMV land returned to the same quality as far as practicable to minimise loss.</p> <p>In order to retain the long term potential of the temporarily disturbed land and to safeguard soil resources as part of the overall sustainability of the whole development, it is important that the soil is able to retain as many of its important functions and services (ecosystem services) as possible through careful soil management during the construction phase and restoration.</p> <p>Natural England advocates the use of best practice on all restoration, particularly given the linear nature of the A66 NTP proposal.</p>
10.6.15	<p>The ALC and soil survey should also inform potential soil re-use opportunities when direct replacement is not possible.</p>
Landscape and Visual Chapter 11	
	<p><u>Study area and consultations</u></p> <p>Natural England's comments only concern those sections of the project (individual schemes) which affect or could affect nationally designated landscapes, and particularly the North Pennines AONB. We do not provide landscape planning advice for schemes or parts of a scheme which do not affect a designated landscape or its setting.</p> <p>We are content that the Landscape and Visual Impact Assessment (LVIA) will use the standard Highways England methodology for this and draw upon the Guidelines for LVIA published by the Landscape Institute and IEMA.</p>

	<p>That the geographical scope/extent of the LVIA is adequate for the North Pennines AONB and its setting should be confirmed with the AONB Partnership given their more detailed and direct knowledge of the development site and its landscape character and visual relationship to the AONB. The Technical Working Group is an important avenue for this and we note from the report that the AONB Partnership have been consulted on viewpoints. We note and welcome that the viewpoints requested by Natural England have been added to the initial list.</p> <p>Clarification is needed for paragraphs 11.3.2 and 11.3.3. The first of these paragraphs explains that an initial ZTV of 10km was used but with fieldwork this was reduced to 7km. The next paragraph however talks about the ZTV being extended where the AONB is in close proximity, but still sets the limit at 7km.</p>
	<p><u>Baseline conditions</u></p> <p>We note and welcome the intention to fully assess effects on the North Pennines AONB. The AONB Management Plan will be an important source of information to support the baseline and assessment.</p> <p>We note the use of National Character Areas. As the report recognises these are produced at a large scale. Whilst they will provide useful context for the assessment, they cannot provide the level of detail needed to assess the actual effects of the scheme in sufficient detail or to inform detailed design and mitigation measures at a local level. The focus for the baseline should therefore be Landscape Character Assessment (LCA) and the Landscape Character Areas identified within them. This appears to be reflected in the report, but it is important for us to emphasise this focus.</p> <p>We note and welcome the intention (para 11.5.20) to produce both summer and winter photography and (para 11.5.23) the use of the Landscape Institute's guidance for photography. The winter images will of course assist in assessing the worst-case scenario.</p> <p>The range of recreational receptors identified at para 11.5.22 appears to be adequate, but the AONB Partnership may be able to offer more comments based on their knowledge of how the AONB is used and enjoyed by the public.</p> <p>Regarding potential effects on National Parks: The report (para 11.5.11) says that a small area of the Lake District NP coincides with the eastern part of the study area but that the area is already affected by existing major transport infrastructure and the limited works are not likely to have a noticeable impact on the setting of the Park. The National Park is therefore proposed to be scoped out of the EIA. We are content with this but would suggest that the National Park Authority are notified in case they have a different view. Paragraph 11.5.12 recognises that a small part of the Yorkshire Dales NP coincides with the study area and that effects on the Park will be scoped into the EIA. We welcome this and would encourage engagement with the National Park Authority as soon as possible. For this scheme Natural England will be focusing its attention and resources on the North Pennines as the most directly and significantly affected designated landscape, and because the National Park Authority (as a planning authority) should have the resources to deal with this issue without Natural England needing to be involved. If, however, issues arise that Natural England, as the national landscape agency, can help to address we can be involved.</p>
	<p><u>Potential impacts</u></p> <p>Paragraph 11.6.3 says that the operational phase will be assessed for year one and year fifteen. It would also be appropriate to assess the extent to which any mitigation measures, especially any screening vegetation, will have become established and started to achieve results by year seven or eight.</p>
	<p><u>Design, mitigation and enhancement measures</u></p>

	<p>The construction phase of major schemes like this are inevitably disruptive and with impacts that are hugely challenging from a landscape and visual perspective to reduce to a below significant level, particularly where very sensitive landscape and visual receptors are affected (in this case the North Pennines AONB). This however, does not mean that all appropriate construction phase mitigation measures should not be applied to reduce the effects as far as possible. The mitigation for the operational phase is arguably more important because this will determine the permanent impact of the scheme. The range of operational mitigation principles and measures proposed at para 11.7.5 are very good. We would however, suggest that works to strengthen the fabric of the landscape, including outwith the red line boundary (or extending that boundary accordingly) could be a stronger part of this list. The final bullet point provides a hook for this but comes across as an afterthought rather than a potential core measure. What this can achieve through an uplift to the wider landscape setting for the scheme is a landscape and visual counterbalance to the development that the landscape is required to accommodate. Viewed in these terms this is core mitigation rather than wider enhancement or compensatory measure.</p>
	<p><u>Description of Likely Significant Effects</u></p> <p>Paragraph 11.8.26 says that the AONB designation will inform the assessment of sensitivity. For Natural England AONB receptors will, as a default, have a high or normally very high sensitivity to major development.</p> <p>Paragraph 11.8.46 and table 12-7 identify no significant construction or operational landscape effects for the Appleby to Brough (Warcop) section for Landscape Character Areas Scarps (13a) and Intermediate Moorland Plateau (09). We cannot confirm that this is correct but the assessment, and advice from the North Pennines AONB Partnership, should do so.</p>
	<p><u>Assessment of effects on the North Pennines AONB</u></p> <p>We welcome the intention (para 11.9.30) to assess effects on the defined special qualities of the AONB, and to address effects on the setting of the designated area.</p>
<p>Noise and Vibration Chapter 13</p>	
	<p>Those using the North Pennines AONB and anticipating / seeking the relative tranquillity generally expected of a designated landscape will be highly sensitive to the construction and operational noise produced by this scheme. They should therefore be included as noise sensitive receptors for this part of the assessment. We note that in para 13.5.5 the AONB has been identified as a receptor within close proximity of the A66 but it will be the users of the AONB rather than the AONB itself that will be affected by noise.</p> <p>Par 13.8.15 identifies specifically in relation to the Appleby to Brough (Warcop) scheme noise sensitive receptors 'particularly those located to the south of the A66'. Users of the AONB immediately to the north of the road should also be referenced here.</p>
<p>Assessment of Cumulative Effects Chapter 16</p>	
	<p>Regarding landscape and visual cumulative effects Natural England is only focused on the implications for the designated landscapes along the route of the A66, and with a particular focus on the North Pennines AONB.</p> <p>Paragraph 16.3.2 lists receptors that could experience residual cumulative effects. This list does not include landscape and visual receptors but those are identified as</p>

<p>potentially subject to combined effects in para 16.3.5. Given the highly sensitive nature of landscape and visual receptors associated with the North Pennines we would ask that this is included in the main list at para 16.3.2.</p> <p>We are not aware of any other major development schemes, proposed, approved or built within the vicinity or landscape setting of the proposed works affecting the AONB. The North Pennines AONB Partnership may be able to advise you further.</p>

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us. For any queries relating to the specific advice in this letter only please contact Niamh Keddy on Niamh.Keddy@naturalengland.org.uk. For any new consultations, or to provide further information on this consultation please send your correspondences to consultations@naturalengland.org.uk.

Yours sincerely

Niamh Keddy
Sustainable Development Lead Advisor

The Planning Inspectorate
By Email
A66Dualling@planninginspectorate.gov.uk

Our Ref: Michael Reynolds
Your Ref: TR010062-000008-210614

Michael Reynolds
Business and Environmental Services
East Block
County Hall
Racecourse Lane
Northallerton
DL7 8AD

Tel: 01609 523253

Email:
[REDACTED]

Dear Sirs

A66 Dualling
Scoping Report

Thank you for consulting North Yorkshire County Council and Richmondshire District Council on the scoping report for the above project.

Please accept this response on behalf of both North Yorkshire County Council and Richmondshire District Council.

Responses are shown below

Ecology and Biodiversity

Thank you for your consultation on the above scoping document at this early stage. It should be noted that comments provided below are limited to the section of the scheme that falls within the North Yorkshire County Council administrative boundary, which in the document are referred to as Stephen Moor to Carkin Moor and A1(M) J53 Scotch Corner.

The overall approach to the Environmental Impact Assessment (EIA) for biodiversity is supported. The scope set out in Chapter 7 of the report is supported as it generally follows current best practice guidance. At this stage most of the ecological information available from desk based assessment or early survey results is very useful in understanding the types of habitats present within and surrounding the development site and the species likely to be supported by these habitats. It provides a good baseline and it can be seen how this has been used in the targeting of specific surveys.

At 7.8.23, it is noted that the route alignment at Stephen Moor to Carkin Moor is still being worked on and as such there is no headline impact assessment at this stage – which is understandable. The

information in Table 7-10 is very useful at this stage in understanding the potential impacts. Further detailed comments will be provided at the time of the Preliminary Environmental Impact Report.

It is pleasing that at this early stage the development is considering opportunities for ecological enhancement and biodiversity net gain. The use of the most up to date version of the Defra Biodiversity Metric in presenting data on biodiversity losses and gains is encouraged.

Cultural Heritage

The report sets out a framework for the assessment of the archaeological resource in line with the appropriate professional standards.

This is a major infrastructure project that will provide opportunities to advance understanding of a key routeway, in use from at least the Roman period. It is noted that an archaeological research framework for the route is under preparation (Table 9-1) and support this ambition.

The project will also involve a geo-archaeological model. This will be particularly important in identifying areas of archaeological potential based on their geomorphology, altitude and palaeo-environmental value. Again, this approach is supported. Ideally these first two pieces of work should be carried out as early as possible in the assessment process to provide a strong foundation for additional works, particularly in the field (i.e. geophysical survey and trial trenching).

The scoping opinion does not really address the potential public benefits of the archaeological research, evaluation and mitigation. This should be embedded within the scheme with clear outcomes for public participation and for legacy interpretation of the heritage of the route and its environs.

At several points the report mentions that access issues and design changes may mean that field assessment is not always possible. The logistical issues that may be involved are understood but that lack of an appropriate level of assessment may severely impact on The Councils' ability to make sound planning recommendations at future stages of this NSIP.

Landscape and Visual Effects

These comments principally relate to Chapter 11 Landscape and Visual in the Applicants Scoping Report, but comments overlap with other topic areas such as Cultural Heritage, Geology and Soils, Noise, Road Drainage.

These comments are based on the current published details within the NYCC area. The project sections mainly relevant to the NYCC area are: Stephen Bank to Carkin Moor; and A1 (M) Junction 53 Scotch Corner. The Scoping Report states that the Stephen Bank to Carkin Moor scheme is currently subject to further alternative alignment and routes assessment. We would welcome the opportunity to provide further detailed comment once the alignment has been finalised.

Soil Management, Agricultural Land – The proposed methodology and approach set out in the Scoping Report Chapter 10 Geology and Soils is welcomed. A soil survey, assessment and management plan are needed in order to protect and manage site soils, including protection and restoration of ALC best and most versatile land where appropriate.

Landscape and Visual Methodology – The proposed methodology and approach set out in the Scoping Report Chapter 11 Landscape and Visual (to follow guidance as set out in GLVIA Third Edition (LI and IEMA, 2013) and DMRB LA 107 Landscape and Visual Effects) is welcomed.

An assessment of night-time visual effects where new lighting is to be proposed (fixed columns and vehicle lighting), and to agree a methodology for this would be welcomed.

Study Area – An initial 7km study area, adjusted and extended where appropriate is welcomed.

Detailed study of existing landscape components (part of baseline) – The Authority would wish to see proposals based on a detailed topographical survey showing all key features of the site. This will be important where extended re-grading is expected and to determine likely scale of effects, design and mitigation.

Existing Trees and Vegetation - Tree survey and arboricultural impact assessment should be to BS5837. There are a number of mature trees, hedgerows and woodland likely to be directly affected by the scheme.

Temporary access, storage and working areas – these should be taken into account as part of the assessment.

Visual Assessment and Representative viewpoints – The County Council is generally in agreement with the suggested representative viewpoints within the NYCC road sections, but we would also recommend several additional locations. These partly relate to sensitive receptors and also to landscape features which may be affected such as boundary walls, trees and woodland. Certain viewpoints might benefit adjustment in order to get a clear view of the scheme. We would welcome further discussion to agree final viewpoints once the alignment has been finalised.

The principle of using representative viewpoints to illustrate the experience of different types of visual receptor is acceptable, however the assessment should aim describe and assess the full effects of the development (not limited to a summary of viewpoints) and to explain the scale and geographical extent of effects.

Photographs and Photomontages – should be in-line with Technical Guidance Note (TGN) 06/19 Visual Representation of Development Proposals (Landscape Institute, 2019).

The County Council would suggest that for annotated photo-panoramas TGN 06/19 Type 1 or additional wirelines to TGN 06/19 Type 2 are most appropriate. For viewpoints selected for photomontages It is suggested at least Type 3, but Type 4 should be considered where sensitivity of context, scale and proximity of the development warrant it. I would wish to see a realistic impression of scale and detail.

The County Council would wish to see photomontages to explain how adverse effects will be mitigated over time. Photographs should include winter views where possible to explain the worst-case scenario.

Appendix 3 and 4 in TGN 06/19 should be noted, with camera / tripod height / position in the field adjusted as necessary so that views show the full extent of the site / development and show the effect it has upon the receptor location. Views of the site should not be unnecessarily obscured by buildings, roadside hedgerows or other vegetation.

Landscape Proposals, Mitigation, Maintenance and Aftercare – The County Council would wish to see a clear landscape strategy for the various elements of the proposed scheme and consideration of both Landscape and Biodiversity objectives as a clear joined-up approach.

Landscape proposals and mitigation should be proportionate to the scale of the development and should have regard for and contribute to the wider landscape character and setting, local amenity with clear aims and objectives. Long-term maintenance and management should be considered, particularly where this is needed for ongoing mitigation, screening and biodiversity benefit.

Minerals and Waste Planning

PCF Stage 3 Environmental Scoping Report refers to the mineral Safeguarding Areas that are designated by Durham Council and by Cumbria County Council MSA, but it makes no reference to the position on that subject with respect to land likely to be affected by the proposal within the North Yorkshire County Council area. The Minerals and Waste Joint Plan that has been produced by North Yorkshire County Council, the City of York Council and the North York Moors National Park Authority has been at Examination in Public and therefore with regards to 15.2 *Key questions for scoping* these mineral safeguarding areas should form part of the baseline information. The areas to which the safeguarding areas relate to Maps 6 and 7 within Chapters 2 and 10 of the Scoping report and the mapping layers can be supplied on request using the mwjointp@northyorks.gov.uk email address. In the meantime, the safeguarding areas can be viewed using the online interactive map that can be accessed via Core Document CD22, on the Minerals and Waste Joint Plan's Examination webpage on the County Council's website, or through the following link [Spectrum Spatial Analyst \(northyorks.gov.uk\)](#) .

It is noted the 15.5.99 refers to the scheme being currently subject to further alternative alignment routes assessment and within the *Stephen Bank to Carkin Moor* section there are a number of sites identified for safeguarding of the building stone that may potentially be affected (see the above link). The *Stephen Bank to Carkin Moor* section of the proposed route lies within a limestone safeguarding area as does the A1 (M) Junction 53 Scotch Corner area and the former Green Bank Quarry (GR 413738 509300) lies to the north-west of Ravensworth approximately 210 metres from the existing route of the A66. A small area in the vicinity of Fox Well (GR. 414859 509040) to the northeast of Ravensworth lies within a sand and gravel safeguarding area.

The County Planning Authority holds no information on the contamination sources identified at Browson Bank, nor with respect to the contamination source identified at Carkin Moor quarry (GR 416850 508215). The latter site has planning permission for the extraction of sandstone until 2036 under Planning Permission C1/12/00369/CM, but is currently not operational.

It is not clear from the Scoping Report whether it is expected that any borrow pits or material disposal will be required in connection with the A66 improvement works and it would be helpful if that is clarified within subsequent documents.

Should you have any queries regarding any of the above please contact Michael Reynolds and the query will be directed to the appropriate officer.

Yours faithfully

Michael Reynolds
Senior Policy Officer (Infrastructure)

From: [REDACTED]
To: [A66Dualling](#)
Subject: FW: TR010062 - A66 Northern Trans-Pennine - EIA Regulation 10 and 11 Scoping Notification and Consultation
Date: 15 June 2021 15:33:17
Attachments: [image001.jpg](#)
[image002.jpg](#)
[TR010062-Statutory-consultation-&-notification-letter.pdf](#)

To the Planning Inspectorate

This email is to confirm that North Yorkshire Fire and Rescue Service has no comments to make on the Environmental Statement on the dualling of the A66.

Regards

Euan

Euan Long
Temporary Station Manager
Richmondshire
Telephone: 01748823343
Ext: [REDACTED]
Mobile: [REDACTED]



Please consider the environment before printing this email

From: A66Dualling <A66Dualling@planninginspectorate.gov.uk>
Sent: 14 June 2021 16:23
Subject: TR010062 - A66 Northern Trans-Pennine - EIA Regulation 10 and 11 Scoping Notification and Consultation

Dear Sir/Madam,

Please see attached correspondence on the proposed A66 Northern Trans-Pennine.

Please note the deadline for consultation responses is **12 July 2021**, and is a statutory requirement that cannot be extended.

Kind regards,
Marie Shoemsmith

Marie Shoemsmith
Senior EIA Advisor
Environmental Services
Helpline: 0303 444 5000
Email: marie.shoemsmith@planninginspectorate.gov.uk

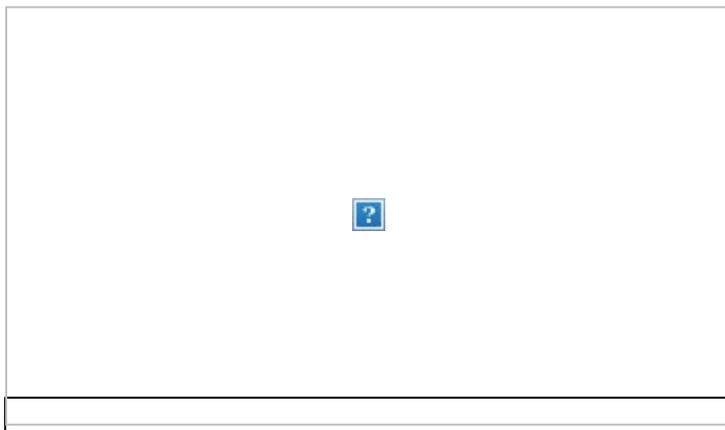
Web: <https://infrastructure.planninginspectorate.gov.uk/> (National

Infrastructure Planning)

Web: www.gov.uk/government/organisations/planning-inspectorate (The Planning Inspectorate)

Twitter: @PINSgov

This communication does not constitute legal advice.



Please note that the contents of this email and any attachments are privileged and/or confidential and intended solely for the use of the intended recipient. If you are not the intended recipient of this email and its attachments, you must take no action based upon them, nor must you copy or show them to anyone. Please contact the sender if you believe you have received this email in error and then delete this email from your system.

Recipients should note that e-mail traffic on Planning Inspectorate systems is subject to monitoring, recording and auditing to secure the effective operation of the system and for other lawful purposes. The Planning Inspectorate has taken steps to keep this e-mail and any attachments free from viruses. It accepts no liability for any loss or damage caused as a result of any virus being passed on. It is the responsibility of the recipient to perform all necessary checks.

The statements expressed in this e-mail are personal and do not necessarily reflect the opinions or policies of the Inspectorate.

DPC:76616c646f72



[Please take a moment to review the **Planning Inspectorate's Privacy Notice** which can be accessed by clicking this link.](#)

Direct Line: [REDACTED]
E-mail: [REDACTED]
Your Ref: TR010062-000008-210614

9th July 2021

Dear Sir/Madam,

Application details – The A66 Northern Trans-Pennine Project

Thank you for consulting Northumbrian Water on the above proposed development.

In making our response Northumbrian Water will assess the impact of the proposed development on our assets and assess the capacity within Northumbrian Water's network to accommodate and treat the anticipated flows arising from the development. We do not offer comment on aspects of planning applications that are outside of our area of control.

It should also be noted that, following the transfer of private drains and sewers in 2011, there may be assets that are the responsibility of Northumbrian Water that are not yet included on our records. Care should therefore be taken prior and during any construction work with consideration to the presence of sewers on site. Should you require further information, please visit <https://www.nwl.co.uk/services/developers/>

I can confirm at this stage we would have no significant comments to make.

Any future correspondence regarding the development consent order should be sent to planning@nwl.co.uk

Any queries regarding the apparatus affected or costs should be directed to our RASWA team at RASWA@nwl.co.uk

For information only

We can inform you that a number of assets including public sewers and water mains are located within the site boundary and may be affected by the proposed development. Northumbrian Water do not permit a building over or close to our apparatus. We will work with the developer to establish the exact location of our assets and ensure any necessary diversion, relocation or protection measures required prior to the commencement of the development. We include this informative so that awareness is given to the presence of assets on site. For further information is available at <https://www.nwl.co.uk/services/developers/>

Yours sincerely

Carrie Taylor
Developer Services

From: [Ros Richardson](#)
To: [A66Dualling](#)
Subject: Scoping Report Response
Date: 06 July 2021 12:06:31

Penrith Town Council Planning Committee considered the scoping opinion and whether they felt that any additional information should be included within the Environmental Statement. They felt that the scoping opinion was very detailed and agreed that they had no further comments to make.

Kind Regards

Rosalyn Richardson

DEPUTY TOWN CLERK PENRITH TOWN COUNCIL

Please be aware that although I normally only work part time at the present time I am working flexible hours, so whilst this is a convenient time for me to send this email to you – I do not expect a response from you outside your normal working hours.

Penrith Town Council
Unit 1 Church House
19-24 Friargate
Penrith
Cumbria
CA11 7XR

Direct Line: 
General Office No: 01768 899773

Under the General Data Protection Regulation (GDPR) (EU) 2016/679, we have a legal duty to protect any information we collect from you. Information contained in this email and any attachments may be privileged or confidential and intended for the exclusive use of the original recipient. If you have received this email by mistake, please advise the sender immediately and delete the email, including emptying your deleted email box. Penrith Town Council is committed to ensuring the security and protection of the personal information that we process, and to provide a compliant and consistent approach to data protection. If you have any questions related to our GDPR compliance, please contact us.



Public Health
England

Environmental Hazards and
Emergencies Department
Centre for Radiation, Chemical and
Environmental Hazards (CRCE)
Seaton House
City Link
London Road
Nottingham
NG2 4LA

nsipconsultations@phe.gov.uk

www.gov.uk/phe

Your Ref: TR010062-000008-
210614
Our Ref: 57583

Marie Shoesmith
The Planning Inspectorate.
Environmental Services.
Temple Quay House.
2 The Square,
Bristol BS1 6PN.

9th July 2021

Dear Ms Shoesmith,

**Nationally Significant Infrastructure Project
A66 Northern Trans-Pennine
Scoping Consultation Stage**

Thank you for including Public Health England (PHE) in the scoping consultation phase of the above application. Advice offered by PHE is impartial and independent.

PHE exists to protect and improve the nation's health and wellbeing and reduce health inequalities; these two organisational aims are reflected in the way we review and respond to Nationally Significant Infrastructure Project (NSIP) applications.

The health of an individual or a population is the result of a complex interaction of a wide range of different determinants of health, from an individual's genetic make-up, to lifestyles and behaviours, and the communities, local economy, built and natural environments to global ecosystem trends. All developments will have some effect on the determinants of health, which in turn will influence the health and wellbeing of the general population, vulnerable groups and individual people. Although assessing impacts on health beyond direct effects from for example emissions to air or road traffic incidents is complex, there is a need to ensure a proportionate assessment focused on an application's significant effects.

Having considered the submitted scoping report we wish to make the following specific comments and recommendations:

Environmental Public Health

We recognise the promoter's proposal to include a health section. We believe the summation of relevant issues into a specific section of the report provides a focus which ensures that public health is given adequate consideration. The section should summarise key information, risk assessments, proposed mitigation measures, conclusions and residual impacts, relating to human health.

V1.0 March 2021

Compliance with the requirements of National Policy Statements and relevant guidance and standards should also be highlighted.

In terms of the level of detail to be included in an ES, we recognise that the differing nature of projects is such that their impacts will vary. The attached appendix summarises PHE's requirements and recommendations regarding the content of and methodology used in preparing the ES. Please note that where impacts relating to health and/or further assessments are scoped out, promoters should fully explain and justify this within the submitted documentation.

Recommendation

Our position is that pollutants associated with road traffic or combustion, particularly particulate matter and oxides of nitrogen are non-threshold; i.e., an exposed population is likely to be subject to potential harm at any level and that reducing public exposures of non-threshold pollutants (such as particulate matter and nitrogen dioxide) below air quality standards will have potential public health benefits.

We support approaches which minimise or mitigate public exposure to non-threshold air pollutants, address inequalities (in exposure), maximise co-benefits (such as physical exercise). We encourage their consideration during development design, environmental and health impact assessment, and development consent.

Human Health and Wellbeing

This section of PHE's scoping response, identifies the wider determinants of health and wellbeing we expect the Environmental Statement (ES) to address, to demonstrate whether they are likely to give rise to significant effects. PHE has focused its approach on scoping determinants of health and wellbeing under four themes, which have been derived from an analysis of the wider determinants of health mentioned in the National Policy Statements.

The four themes are:

- Access
- Traffic and Transport
- Socioeconomic
- Land Use

Having considered the submitted scoping report PHE wish to make the following specific comments and recommendations:

Population and Human Health Scoping

Table 14.4 and 14.5 outline matters of population and or human health that are proposed to be scoped in or out, but with limited justification.

The justification for scoping out elements of human health centres on the sensitivity of the local population at each scheme that forms the wider A66 proposal. This approach does not consider the impacts on vulnerable populations. Table 14-3 (Local baseline conditions – human health) considers health data and in each area proposed to be scoped out includes findings that indicate the presence of vulnerable populations or local sensitivities. Key vulnerabilities identified in Table 14-3 include a relatively high proportion of older people within the community and / or relatively high deprivation ranking for living environment (a measurement of the quality of the indoor and outdoor local environment).

Recommendation

No matters are to be scoped out for population or human health, unless supported by additional justification and in consultation with PHE and the local Director of Public Health.

Vulnerable Populations

The impacts on health and wellbeing of the scheme will have particular effect on vulnerable or disadvantaged populations, including those that fall within the list of protected characteristics. The scoping report identifies a potential list of vulnerable populations, some of which are also within the protected characteristics. Any equalities assessment may identify effects that should be also considered within the ES.

Recommendation

The ES and Equalities Impact Assessment should be considered in parallel and the findings integrated where appropriate.

Construction Workers Impact on Local Housing and Services

The scoping report identifies a potential for route wide beneficial impacts for the economy from local employment and investment (para 14.06.12), but does not detail the potential numbers of construction workers and address potential impacts on housing availability or access to public services.

Recommendation

The ES should identify the peak construction workforce requirements and report providing geographic and temporal details.

Demand for temporary accommodation by the construction workforce should be identified. The assessment should consider the impact on local accommodation supply and affordability, particularly in relation to the provision of affordable rented sector housing supply.

The cumulative effects assessment should consider housing demand dependant on the number of local large developments.

Large numbers of construction workers can impact on the local health care system. An assessment of impacts from construction workers should also consider impacts on accessing local services.

Access to Public Open Space and Public Rights of Way (PRoW)

It is noted that where possible improvements to promote walking, cycling and horse riding will be included within the scheme. This offers benefits to the local community to improve mental and physical health.

The scoping report, however, comments in Table 14.1 (item 4) that DMRB LA 112 does not require 'amenity' or other impacts to be considered. This was made in response to a consultation request with the local authority that any existing PRoW and proposed new routes for non-motorised users (MNU), need to be assessed in terms of the impacts of noise, air quality, landscape and visual effects and human health.

Public open space, including PRoW provide essential provision to promote physical and mental health, for example through physical activity and access to nature. The quality of that provision will be affected by any loss of amenity, whether that is through visual impacts, noise or air quality.

DMRB 112 makes reference to the need to assess landscape amenity, which would include public open space and PRoW. Additionally LA111 includes PRoW and quiet areas as a noise sensitive receptor.

Recommendation

The impact on amenity, such as noise (tranquillity), air quality or visual, on PRoW and public open space should be considered and reported within the ES in accordance with DMRB LA 111 and LA 112

Mental Health

The scoping report identifies the impact due to noise, disruption of activities, the loss of property / land and community severance which can have a negative impact on mental health and wellbeing (Para 14.06.10 and 14.08.07).

The scoping report confines baseline health data to that proposed within LA112 and as such does not include local data in relation to mental health. This region has priority action in relation to suicides¹ with both the construction and operational phases having potential impacts on mental health, wellbeing and suicides.

Mental well-being is fundamental to achieving a healthy, resilient and thriving population. It underpins healthy lifestyles, physical health, educational attainment, employment and productivity, relationships, community safety and cohesion and quality of life.

A scheme of this scale and nature has impacts on the over-arching protective factors, which are:

- Enhancing control
- Increasing resilience and community assets
- Facilitating participation and promoting inclusion.

There should be parity between mental and physical health, and any assessment of health impacts should include the appreciation of both.

Recommendation

A systematic approach to the assessment of the impacts on mental health, including suicide, is required. The Mental Well-being Impact Assessment (MWIA) could be used as a methodology. The assessment should identify vulnerable populations and provide clear mitigation strategies that are adequately linked to any local services or assets.

Consultations with local health stakeholders should consider mental health, wellbeing and suicides.

Yours sincerely,

For and on behalf of Public Health England
nsipconsultations@phe.gov.uk

Please mark any correspondence for the attention of National Infrastructure Planning Administration.

¹ [Healthier Lancs and South Cumbria :: People in Lancashire and South Cumbria urged to become 'suicide aware' \(healthierlsc.co.uk\)](http://healthierlsc.co.uk)

Appendix: PHE recommendations regarding the scoping document

Introduction

The Planning Inspectorate's Advice Note 11: Working with Public Bodies covers many of the generic points of interaction relevant to the Planning Inspectorate and Public Health England (PHE). The purpose of this Annex is to help applicants understand the issues that PHE expect to see addressed by applicants preparing an Environmental Statement (ES) as part of their Nationally Significant Infrastructure Planning (NSIP) submission.

We have included a comprehensive outline of the type of issues we would expect to be considered as part of an NSIP which falls under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations). PHE encourages applicants to contact us as early in the process as possible if they wish to discuss or clarify any matters relating to chemical, poison, radiation or wider public health.

General Information on Public Health England

PHE was established on 1 April 2013 to bring together public health specialists from more than 70 organisations into a single public health service. We are an executive agency of the Department of Health and are a distinct delivery organisation with operational autonomy to advise and support government, local authorities and the National Health Service (NHS) in a professionally independent manner.

We work closely with public health professionals in Wales, Scotland and Northern Ireland, and internationally.² We have specialist teams advising on specific issues and the potential impacts arising from environmental public health including chemicals, noise, air quality, ionising and non-ionising radiation.

PHE's NSIP roles and responsibilities

PHE is a statutory consultee in the NSIP process for any *applications likely to involve chemicals, poisons or radiation which could potentially cause harm to people and are likely to affect significantly public health*.³ PHE will consider potential significant effects (direct and indirect) of a proposed development on population and human health and the impacts from chemicals, radiation and environmental hazards. We also consider other factors which may have an impact on public health, such as the wider determinants of health, health improvement and health inequalities (where PHE has a legal duty specified in the Health and Social Care Act 2012)⁴.

Under certain circumstances PHE may provide comments on radiation on behalf of the Scottish Government. If a proposer is submitting a planning application in Scotland which may require advice on radiation you are recommended to contact the appropriate Scottish Planning Authority for advice on how to proceed.

In the case of applications in Wales, PHE remains a statutory consultee but the regime applies to a more limited range of development types. For NSIP applications likely to affect land in Wales, an applicant should still consult PHE but, additionally will be required to consult the Welsh Government.

Environmental Impact Assessments – PHE Responsibilities

² <https://www.gov.uk/government/organisations/public-health-england/about#priorities>

³ The Infrastructure Planning (Interested Parties and Miscellaneous Prescribed Provisions) Regulations 2015

⁴ <http://www.legislation.gov.uk/ukpga/2012/7/contents/enacted>

PHE has a statutory role as a consultation body under the EIA Regulations. Where an applicant has requested a scoping opinion from the Planning Inspectorate⁵, PHE will be consulted regarding the scope, and level of detail, of the information to be provided in the ES. PHE has a duty to make information available to the applicant.

PHE provides advice relating to EIA within this document and during the NSIP consultation stages. PHE encourages applicants to discuss the scope of the ES with us at an early stage to explore, for example, whether careful site selection or other design issues could minimise or eliminate public health impacts or to outline the requirement for, scope and methodology of any assessments related to public health. PHE's standard recommendations in response to EIA scoping consultations are below.

PHE's recommendations to applicants regarding Environmental Impact Assessments

General approach

PHE provides advice relating to EIA within this document and during the NSIP consultation stages. It is the role of the applicant to prepare the ES.

When preparing an ES the applicant should give consideration to best practice guidance such as the Government's Handbook for scoping projects: environmental impact assessment⁶, and Guidance: on Environmental Impact Assessment⁷

The [Planning Inspectorate's Advice Note Seven](#): Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements also provide guidance to applicants and other persons with interest in the EIA process as it relates to NSIPs. It is important that the submitted ES identifies and assesses the potential public health impacts of the activities at, and emissions from, the development.

Applicants are reminded that Section 5(2)(a) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 specifically includes a requirement that the EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on population and human health.

PHE is of the opinion that this requirement encompasses the wider determinants of public health, as well as chemicals, poisons and radiation. Further information on PHE's recommendations and requirements is included below.

PHE understands that there may be separate sections of the ES covering the assessment of impacts on air, land, water and so on, but expects an ES to include a specific section summarising potential impacts on population and health. This section should bring together and interpret the information from other assessments as necessary. The health, wellbeing and population impacts section should address the following steps.

1. Screening: Identify any significant effects.

⁵ The scoping process is administered and undertaken by the Planning Inspectorate on behalf of the Secretary of State

⁶ <https://www.gov.uk/government/publications/handbook-for-scoping-projects-environmental-impact-assessment>

⁷ <https://www.gov.uk/guidance/environmental-impact-assessment#the-purpose-of-environmental-impact-assessment>

- a. Summarise the methodologies used to identify health impacts, assess significance and sources of information
 - b. Evaluate any reference standards used in carrying out the assessment and in evaluating health impacts (e.g., environmental quality standards)
 - c. Where the applicant proposes the 'scoping out' of any effects a clear rationale and justification should be provided along with any supporting evidence.
2. Baseline Survey:
- a. Identify information needed and available, evaluate quality and applicability of available information
 - b. Undertake assessment
3. Alternatives:
- a. Consideration of alternatives (including alternative sites, choice of process, and the phasing of construction) is widely regarded as good practice. Ideally, the EIA process should start at the stage of site selection, so that the environmental merits of practicable alternatives can be properly considered. Where this is undertaken, the main alternatives considered should be outlined in the ES⁸.
4. Design and assess possible mitigation
- a. Consider and propose suitable corrective actions should mitigation measures not perform as effectively predicted.
5. Impact Prediction: Quantify and Assess Impacts:
- a. Evaluate and assess the extent of any positive and negative effects of the development. Effects should be assessed in terms of likely health outcomes, including those relating to the wider determinants of health such as socio-economic outcomes, in addition to health outcomes resulting from exposure to environmental hazards. Mental health effects should be included and given equivalent weighting to physical effects.
 - b. Clearly identify any omissions, uncertainties and dependencies (e.g., air quality assessments being dependant on the accuracy of traffic predictions)
 - c. Evaluate short-term impacts associated with the construction and development phase
 - d. Evaluate long-term impacts associated with the operation of the development
 - e. Evaluate any impacts associated with decommissioning of the development
 - f. Evaluate any potential cumulative impacts as a result of the development, currently approved developments which have yet to be constructed, and proposed developments which do not currently have development consent
6. Monitoring and Audit
- a. Identify key modelling predictions and mitigation impacts and consider implementing monitoring and audit to assess their accuracy / effectiveness.

Any assessments undertaken to inform the ES should be proportionate to the potential impacts of the proposal, therefore we accept that, in some circumstances particular assessments may not be relevant to an application, or that an assessment may be adequately completed using a qualitative rather than quantitative methodology. In cases where this decision is made, the applicant should fully explain and justify their rationale in the submitted documentation.

⁸ DCLG guidance, 1999 <http://www.communities.gov.uk/documents/planningandbuilding/pdf/155958.pdf>

Human and environmental receptors

The applicant should clearly identify the development's location and the distance of the development to off-site receptors that may be affected by emissions from, or activities at, the development. Off-site receptors may include people living in residential premises; people working in commercial, and industrial premises and people using transport infrastructure (such as roads and railways), recreational areas, and publicly-accessible land.

Identify and consider impacts on residential areas and sensitive receptors (such as schools, nursing homes and healthcare facilities, as well as other vulnerable population groups such as those who are young, older, with disabilities or long-term conditions, or on low incomes) in the area(s) which may be affected by emissions, this should include consideration of any new receptors arising from future development

Consideration should also be given to environmental receptors such as the surrounding land, watercourses, surface and groundwater, and drinking water supplies such as wells, boreholes and water abstraction points.

Impacts arising from construction and decommissioning

Any assessment of impacts arising from emissions or activities due to construction and decommissioning should consider potential impacts on all receptors and describe monitoring and mitigation during these phases. Construction and decommissioning will be associated with vehicle movements and cumulative impacts should be accounted for.

We would expect the applicant to follow best practice guidance during all phases from construction to decommissioning to ensure appropriate measures are in place to mitigate any potential negative impact on health from emissions (point source, fugitive and traffic-related) and activities. An effective Construction Environmental Management Plan (CEMP) (and Decommissioning Environmental Management Plan (DEMP)) will help provide reassurance that activities are well managed. The applicant should ensure that there are robust mechanisms in place to respond to any complaints made during construction, operation, and decommissioning of the facility.

Emissions to air and water

PHE has a number of comments regarding the assessment of emissions from any type of development in order that the ES provides a comprehensive assessment of potential impacts.

When considering a baseline (of existing environmental quality) and in the assessment and future monitoring of impacts these should:

- include an evaluation of the public health benefits of development options which reduce air pollution – even below limit values – as pollutants such as nitrogen dioxide and particulate matter show no threshold below which health effects do not occur;^{9, 10}
- consider the construction, operational, and decommissioning phases;
- consider the typical operational emissions and emissions from start-up, shut-down, abnormal operation and accidents when assessing potential impacts and include an assessment of worst-case impacts;
- fully account for fugitive emissions;

⁹ <https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution>

¹⁰

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/795185/Review_of_interventions_to_improve_air_quality.pdf

- include appropriate estimates of background levels (i.e., when assessing the human health risk of a chemical emitted from a facility or operation, background exposure to the chemical from other sources should be taken into account);
- encompass the combined impacts of all pollutants which may be emitted by the development with all pollutants arising from associated development and transport, considered in a single holistic assessment (i.e., of overall impacts);
- identify and consider impacts on residential areas and sensitive receptors (such as schools, nursing homes and healthcare facilities) in the area(s) which may be affected by emissions. This should include consideration of any new receptors arising from future development;
- identify cumulative and incremental impacts (i.e., assess cumulative impacts from multiple sources), including those arising from associated development, other existing and proposed development in the local area, and new vehicle movements associated with the proposed development; associated transport emissions should include consideration of non-road impacts (i.e., rail, sea, and air);
- compare predicted environmental concentrations to the applicable standard or guideline value for the affected medium. Where available, the most recent UK standards for the appropriate media (i.e., air, water, and/or soil) and health-based guideline values should be used when quantifying the risk to human health from chemical pollutants;
- where UK standards or guideline values are not available, or other reputable International bodies e.g. European Union or OECD:
 - If no standard or guideline value exists, the predicted exposure to humans should be estimated and compared to an appropriate health-based value (e.g., a Tolerable Daily Intake or equivalent);
 - This should consider all applicable routes of exposure (e.g., include consideration of aspects such as the deposition of chemicals emitted to air and their uptake via ingestion).
- include appropriate screening assessments and detailed dispersion modelling where this is screened as necessary;
- include Chemical Abstract Service (CAS) numbers alongside chemical names, where referenced in the ES;
- include consideration of local authority, Environment Agency, Natural Resources Wales, Defra national network, and any other local site-specific sources of monitoring data;
- when quantitatively assessing the health risk of genotoxic and carcinogenic chemical pollutants, PHE does not favour the use of mathematical models to extrapolate from high dose levels used in animal carcinogenicity studies to well below the observed region of a dose-response relationship. When only animal data are available, we recommend that the Committee on Carcinogenicity of Chemicals approach¹¹ is used.

Whilst screening of impacts using qualitative methodologies is common practice (eg, for impacts arising from fugitive emissions such as dust), where it is possible to undertake a quantitative assessment of impacts then this should be undertaken.

PHE's view is that the applicant should appraise and describe the measures that will be used to control both point source and fugitive emissions and demonstrate that standards, guideline values or health-based values will not be exceeded due to emissions from the installation, as described above. This should include consideration of any emitted pollutants for which there are no set emission limits. When assessing the potential impact of a proposed installation on environmental quality, predicted environmental concentrations should be compared to the permitted concentrations in the affected media; this should include both standards for short and long-term exposure. Further to assessments of compliance with limit values, for non-threshold pollutants (ie, those that have no

¹¹ <https://www.gov.uk/government/publications/cancer-risk-characterisation-methods>

threshold below which health effects do not occur) the **benefits** of development options which reduce population exposure should be evaluated.

Additional points specific to emissions to air

When considering baseline conditions (of existing air quality) and the assessment and future monitoring of impacts, these should include:

- consideration of impacts on existing areas of poor air quality e.g. existing or proposed local authority Air Quality Management Areas (AQMAs) or Clean Air Zones (CAZ). The applicant should demonstrate close working/consultation with the appropriate local authorities
- modelling using appropriate meteorological data (i.e. from the nearest suitable meteorological station and include a range of years and worst-case conditions)
- modelling taking into account local topography, congestion and acceleration

Additional points specific to emissions to water

When considering baseline conditions (of existing water quality) and the assessment and future monitoring of impacts, these should:

- include assessment of potential impacts on human health and not focus solely on ecological impacts
- identify and consider all routes by which emissions may lead to population exposure (e.g., surface watercourses, recreational waters, sewers, geological routes etc.)
- assess the potential off-site effects of emissions to groundwater (eg, on aquifers used for drinking water) and surface water (used for drinking water abstraction) in terms of the potential for population exposure
- include consideration of potential impacts on recreational users (eg, from fishing, canoeing etc.) alongside assessment of potential exposure via drinking water

Land quality

We would expect the applicant to provide details of any hazardous contamination present on site (including ground gas) as part of a site condition report and associated risk assessment.

Emissions to and from the ground should be considered in terms of the previous history of the site and the potential of the site, during construction and once operational, to give rise to issues. Public health impacts associated with ground contamination and/or the migration of material off-site should be assessed in accordance with the Environment Agency publication Land Contamination: risk management¹² and the potential impact on nearby receptors; control and mitigation measures should be outlined.

Waste

The applicant should demonstrate compliance with the waste hierarchy (e.g. with respect to re-use, recycling or recovery and disposal).

For wastes arising from the development the ES should assess:

- the implications and wider environmental and public health impacts of different waste disposal options
- disposal route(s) and transport method(s) and how potential impacts on public health will be mitigated

If the development includes wastes delivered to the installation:

- Consider issues associated with waste delivery and acceptance procedures (including delivery of prohibited wastes) and should assess potential off-site impacts and describe their mitigation

Other aspects

¹² Available from <https://www.gov.uk/guidance/land-contamination-how-to-manage-the-risks>

Within the ES, PHE would expect to see information about how the applicant would respond to accidents with potential off-site emissions (e.g., flooding or fires, spills, leaks or releases off-site). Assessment of accidents should: identify all potential hazards in relation to construction, operation and decommissioning; include an assessment of the risks posed; and identify risk management measures and contingency actions that will be employed in the event of an accident in order to mitigate off-site effects.

PHE would expect the applicant to consider the COMAH Regulations (Control of Major Accident Hazards) and the Major Accident Off-Site Emergency Plan (Management of Waste from Extractive Industries) (England and Wales) Regulations: both in terms of their applicability to the development itself, and the development's potential to impact on, or be impacted by, any nearby installations themselves subject to these Regulations.

There is evidence that, in some cases, perception of risk may have a greater impact on health than the hazard itself. A 2009 report¹³, jointly published by Liverpool John Moores University and the Health Protection Agency (HPA), examined health risk perception and environmental problems using a number of case studies. As a point to consider, the report suggested: "*Estimation of community anxiety and stress should be included as part of every risk or impact assessment of proposed plans that involve a potential environmental hazard. This is true even when the physical health risks may be negligible.*" PHE supports the inclusion of this information within ES' as good practice.

Electromagnetic fields (EMF)

This advice relates to electrical installations such as substations and connecting underground cables or overhead lines. PHE advice on the health effects of power frequency electric and magnetic fields is available on the Gov.UK website.¹⁴

There is a potential health impact associated with the electric and magnetic fields around substations, overhead power lines and underground cables. The field strengths tend to reduce with distance from such equipment.

The following information provides a framework for considering the health impact associated with the electric and magnetic fields produced by the proposed development, including the direct and indirect effects of the electric and magnetic fields as indicated above.

Policy Measures for the Electricity Industry

A voluntary code of practice is published which sets out key principles for complying with the ICNIRP guidelines.¹⁵ Companion codes of practice dealing with optimum phasing of high voltage power lines and aspects of the guidelines that relate to indirect effects are also available.^{16, 17}

Exposure Guidelines

PHE recommends the adoption in the UK of the EMF exposure guidelines published by the International Commission on Non-ionizing Radiation Protection (ICNIRP). Formal advice to this effect, based on an accompanying comprehensive review of the scientific evidence, was

¹³ Available from: http://allcatsrgrey.org.uk/wp/download/public_health/Health-Risk-Perception-Env-Probs.pdf

¹⁴ <https://www.gov.uk/government/collections/electromagnetic-fields#low-frequency-electric-and-magnetic-fields>

¹⁵ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/37447/1256-code-practice-emf-public-exp-guidelines.pdf

¹⁶ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48309/1255-code-practice-optimum-phasing-power-lines.pdf

¹⁷ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/224766/powerlines_vcop_microshocks.pdf

published in 2004 by the National Radiological Protection Board (NRPB), one of PHE's predecessor organisations¹⁸

Updates to the ICNIRP guidelines for static fields have been issued in 2009 and for low frequency fields in 2010. However, Government policy is that the ICNIRP guidelines are implemented as expressed in the 1999 EU Council Recommendation on limiting exposure of the general public (1999/519/EC):¹⁹

Static magnetic fields

For static magnetic fields, the ICNIRP guidelines published in 2009 recommend that acute exposure of the general public should not exceed 400 mT (millitesla), for any part of the body, although the previously recommended value of 40 mT is the value used in the Council Recommendation. However, because of potential indirect adverse effects, ICNIRP recognises that practical policies need to be implemented to prevent inadvertent harmful exposure of people with implanted electronic medical devices and implants containing ferromagnetic materials, and injuries due to flying ferromagnetic objects, and these considerations can lead to much lower restrictions, such as 0.5 mT.

Power frequency electric and magnetic fields

At 50 Hz, the known direct effects include those of induced currents in the body on the central nervous system (CNS) and indirect effects include the risk of painful spark discharge on contact with metal objects exposed to electric fields. The ICNIRP guidelines published in 1998 give reference levels for public exposure to 50 Hz electric and magnetic fields, and these are respectively 5 kV m⁻¹ (kilovolts per metre) and 100 µT (microtesla). The reference level for magnetic fields changes to 200 µT in the revised (ICNIRP 2010) guidelines because of new basic restrictions based on induced electric fields inside the body, rather than induced current density. If people are not exposed to field strengths above these levels, direct effects on the CNS should be avoided and indirect effects such as the risk of painful spark discharge will be small. The reference levels are not in themselves limits but provide guidance for assessing compliance with underlying basic restrictions and reducing the risk of indirect effects.

Long term effects

There is concern about the possible effects of long-term exposure to extremely low frequency electric and magnetic fields, from power lines. In the NRPB advice issued in 2004, it was concluded that the studies that suggest health effects, including those concerning childhood leukaemia in relation to power frequency magnetic fields, could not be used to derive quantitative guidance on restricting exposure. However, the results of these studies represented uncertainty in the underlying evidence base, and taken together with people's concerns, provided a basis for providing an additional recommendation for Government to consider the need for further precautionary measures, particularly with respect to the exposure of children to power frequency magnetic fields.

The Stakeholder Advisory Group on ELF EMFs (SAGE)

SAGE was set up to explore the implications for a precautionary approach to extremely low frequency electric and magnetic fields (ELF EMFs), which include power frequency fields, and to make practical recommendations to Government:²⁰

¹⁸

<http://webarchive.nationalarchives.gov.uk/20140629102627/http://www.hpa.org.uk/Publications/Radiation/NPRBArchive/DocumentsOfTheNRPB/Absd1502/>

¹⁹ http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/PublicHealth/Healthprotection/DH_4089500

²⁰ <http://www.emfs.info/policy/sage/>

Relevant here is SAGE's 2007 First Interim Assessment, which makes several recommendations concerning high voltage power lines. In responding, Government supported the implementation of low cost options such as optimal phasing to reduce exposure; however it did not support the option of creating corridors around power lines in which development would be restricted on health grounds, which was considered to be a disproportionate measure given the evidence base on the potential long term health risks arising from exposure. The Government response to SAGE's First Interim Assessment is available on the national archive website.²¹

The Government also supported calls for providing more information on power frequency electric and magnetic fields, which is available on the PHE web pages.

Ionising radiation

Particular considerations apply when an application involves the possibility of exposure to ionising radiation. In such cases it is important that the basic principles of radiation protection recommended by the International Commission on Radiological Protection²² (ICRP) are followed. PHE provides advice on the application of these recommendations in the UK. The ICRP recommendations are implemented in the Euratom Basic Safety Standards²³ (BSS) and these form the basis for UK legislation, including the Ionising Radiation Regulations 1999, the Radioactive Substances Act 1993, and the Environmental Permitting Regulations 2016.

As part of the EIA process PHE expects applicants to carry out the necessary radiological impact assessments to demonstrate compliance with UK legislation and the principles of radiation protection. This should be set out clearly in a separate section or report and should not require any further analysis by PHE. In particular, the important principles of justification, optimisation and radiation dose limitation should be addressed. In addition compliance with the Euratom BSS and UK legislation should be clear.

When considering the radiological impact of routine discharges of radionuclides to the environment PHE would, as part of the EIA process, expect to see a full radiation dose assessment considering both individual and collective (population) doses for the public and, where necessary, workers. For individual doses, consideration should be given to those members of the public who are likely to receive the highest exposures (referred to as the representative person, which is equivalent to the previous term, critical group).

Different age groups should be considered as appropriate and should normally include adults, 1 year old and 10 year old children. In particular situations doses to the fetus should also be calculated²⁴.

The estimated doses to the representative person should be compared to the appropriate radiation dose criteria (dose constraints and dose limits), taking account of other releases of radionuclides from nearby locations as appropriate. Collective doses should also be considered for the UK, European and world populations where appropriate.

21

http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_107124

²² These recommendations are given in publications of the ICRP notably publications 90 and 103 see the website at <http://www.icrp.org/>

²³ Council Directive 96/29/EURATOM laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation.

²⁴ HPA (2008) Guidance on the application of dose coefficients for the embryo, fetus and breastfed infant in dose assessments for members of the public. Doc HPA, RCE-5, 1-78, available at <https://www.gov.uk/government/publications/embryo-fetus-and-breastfed-infant-application-of-dose-coefficients>

The methods for assessing individual and collective radiation doses should follow the guidance given in 'Principles for the Assessment of Prospective Public Doses arising from Authorised Discharges of Radioactive Waste to the Environment August 2012'²⁵

It is important that the methods used in any radiological dose assessment are clear and that key parameter values and assumptions are given (for example, the location of the representative persons, habit data and models used in the assessment).

Any radiological impact assessment, undertaken as part of the EIA, should also consider the possibility of short-term planned releases and the potential for accidental releases of radionuclides to the environment. This can be done by referring to compliance with the Ionising Radiation Regulations and other relevant legislation and guidance.

The radiological impact of any solid waste storage and disposal should also be addressed in the assessment to ensure that this complies with UK practice and legislation; information should be provided on the category of waste involved (e.g. very low level waste, VLLW). It is also important that the radiological impact associated with the decommissioning of the site is addressed.

Of relevance here is PHE advice on radiological criteria and assessments for land-based solid waste disposal facilities²⁶. PHE advises that assessments of radiological impact during the operational phase should be performed in the same way as for any site authorised to discharge radioactive waste. PHE also advises that assessments of radiological impact during the post operational phase of the facility should consider long timescales (possibly in excess of 10,000 years) that are appropriate to the long-lived nature of the radionuclides in the waste, some of which may have half-lives of millions of years.

The radiological assessment should consider exposure of members of hypothetical representative groups for a number of scenarios including the expected migration of radionuclides from the facility, and inadvertent intrusion into the facility once institutional control has ceased.

For scenarios where the probability of occurrence can be estimated, both doses and health risks should be presented, where the health risk is the product of the probability that the scenario occurs, the dose if the scenario occurs and the health risk corresponding to unit dose.

For inadvertent intrusion, the dose if the intrusion occurs should be presented. It is recommended that the post-closure phase be considered as a series of timescales, with the approach changing from more quantitative to more qualitative as times further in the future are considered.

The level of detail and sophistication in the modelling should also reflect the level of hazard presented by the waste. The uncertainty due to the long timescales means that the concept of collective dose has very limited use, although estimates of collective dose from the 'expected' migration scenario can be used to compare the relatively early impacts from some disposal options if required.

²⁵ The Environment Agency (EA), Scottish Environment Protection Agency (SEPA), Northern Ireland Environment Agency, Health Protection Agency and the Food Standards Agency (FSA).

Principles for the Assessment of Prospective Public Doses arising from Authorised Discharges of Radioactive Waste to the Environment August 2012.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/296390/geho1202bklh-e-e.pdf

²⁶ HPA RCE-8, Radiological Protection Objectives for the Land-based Disposal of Solid Radioactive Wastes, February 2009

Noise from National Networks and Airports

Public Health England's mission is to protect and improve the nation's health and wellbeing and reduce health inequalities. Environmental noise can cause stress and disturb sleep, which over the long term can lead to a number of adverse health outcomes.^{27 28}

The Noise Policy Statement for England (NPSE)²⁹ sets out the government's overall policy on noise. Its aims are to:

- avoid significant adverse impacts on health and quality of life;
- mitigate and minimise adverse impacts on health and quality of life; and
- contribute to the improvement of health and quality of life.

These aims should be applied within a broader context of sustainable development, where noise is considered alongside other economic, social and environmental factors. PHE expects such factors may include³⁰:

- Ensuring healthy lives and promoting well-being for all at all ages;
- promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all;
- building resilient infrastructure, promoting inclusive and sustainable industrialisation and fostering innovation;
- reducing inequality; and
- making cities and human settlements inclusive, safe, resilient and sustainable.

PHE's consideration of the effects of health and quality and life attributable to noise is guided by the recommendations in the 2018 Environmental Noise Guidelines for the European Region²⁷ published by the World Health Organization, and informed by high quality systematic reviews of the scientific evidence^{28 31 32}. The scientific evidence on noise and health is rapidly developing, and PHE's recommendations are also informed by relevant studies that are judged to be scientifically robust and consistent with the overall body of evidence.

In line with its mission, PHE believes that Nationally Significant Infrastructure Projects (NSIP) should not only limit significant adverse effects, but also explore opportunities to improve the health and quality of life of local communities and reduce inequalities.

PHE also recognises the developing body of evidence showing that areas of tranquillity offer opportunities for health benefits through psychological restoration. NSIP applications need to demonstrate that they have given due consideration to the protection of the existing sound environment in these areas.

Further, more detailed, guidance on PHE's scoping advice for noise issues associated with road schemes is included in Appendix 3.

²⁷ World Health Organisation, *Environmental Noise Guidelines for the European Region*. 2018.

²⁸ Lercher, P., G. Aasvang, and Y.e. de Kluizenaar, *WHO Noise and Health Evidence Reviews*.

²⁹ DEFRA, *Noise Policy Statement for England*. 2010.

³⁰ United Nations. *Sustainable Development Goals*. 2020 [01/06/2020]; Available from: <https://sustainabledevelopment.un.org/?menu=1300>.

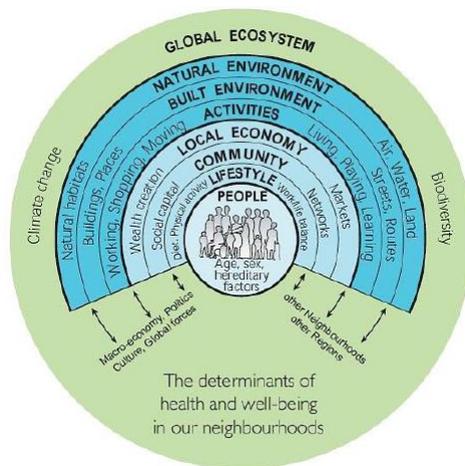
³¹ Clark, C., C. Crumpler, and A.H. Notley, *Evidence for Environmental Noise Effects on Health for the United Kingdom Policy Context: A Systematic Review of the Effects of Environmental Noise on Mental Health, Wellbeing, Quality of Life, Cancer, Dementia, Birth, Reproductive Outcomes, and Cognition*. *Int J Environ Res Public Health*, 2020. **17**(2).

³² van Kamp, I., et al., *Evidence Relating to Environmental Noise Exposure and Annoyance, Sleep Disturbance, Cardio-Vascular and Metabolic Health Outcomes in the Context of IGCB (N): A Scoping Review of New Evidence*. *Int J Environ Res Public Health*, 2020. **17**(9).

Wider Determinants of Health

The World Health Organization (WHO's) defines health as “a state of complete physical, mental and social well-being and not merely an absence of disease or infirmity” (WHO, 1948).

The health and wellbeing of an individual or a population is the result of a complex interaction of a wide range of different determinants of health, from an individual's genetic make-up, to lifestyles and behaviours, and the communities, local economy, built and natural environments to global ecosystem trends. All developments will have some effect on the determinants of health, which in turn will influence the health and wellbeing of the general population, vulnerable groups and individual people.



Barton and Grant³³

PHE recognises that evaluating an NSIP's impacts on health through the wider determinants is more complex than assessing a project's direct impacts against clearly defined regulatory protections. The 2017 EIA Regulations clarify that the likely significant effects of a development proposal on population and human health must be assessed.

PHE's expectations are that the proponent of an NSIP will conduct a proportionate and evidence-based assessment of the anticipated direct and indirect effects on health and wellbeing in line with the relevant regulatory and policy requirements. Consideration should be given to impacts during the construction, operation and decommissioning phase of NSIPs. Consideration should be given to the avoidance or mitigation of any negative impacts, as well as to how the NSIP could be designed to maximise potential positive benefits.

We accept that the relevance of wider determinants and associated impacts will vary depending on the nature of the proposed development. PHE has focused its approach on scoping determinants of health and wellbeing under four themes, which have been derived from an analysis of the wider determinants of health mentioned in the National Policy Statements.

The four themes are:

- Access
- Traffic and Transport
- Socioeconomic
- Land Use

³³ Barton H, Grant M. A health map for the local human habitat. The Journal of the Royal Society for the Promotion of Health 2006; 126(6): 252-3.

PHE has developed a list of 21 determinants of health and wellbeing under these four broad themes. These determinants should be considered within any scoping report and if the applicant proposes to scope any areas out of the assessment, they should provide clear evidence-based reasoning and justification. Appendix 2 provides greater detail on the nature of each determinant.

Methodology

PHE will expect assessments to set out the methodology used to assess impacts on each determinant included in the scope of the assessment. In some instances, the methodologies described may be established and refer to existing standards and/or guidance. In other instances, there may be no pre-defined methodology, which can often be the case for the wider determinants of health; as such there should be an application of a logical evidence based impact assessment method that:

- identifies the temporal and geographic scope of assessment
- identifies affected sensitive receptors (general population and vulnerable populations) to impacts from the relevant determinant
- establishes the current baseline situation
- identifies the NSIP's potential direct and indirect impacts on each population
- if impacts are identified, evaluates whether the potential effect is likely to be significant in relation to the affected population
- identifies appropriate mitigation to eliminate or minimise impacts or the subsequent effects on health and inequalities
- identifies opportunities to achieve benefits from the scheme for health and inequalities
- considers any in combination or cumulative effects
- identifies appropriate monitoring programmes

Currently there is no standard methodology for assessing the population and human health effects of infrastructure projects, but a number of guides exist, including:

- Institute of Environmental Management and Assessment, 2017: Health in Environmental Assessment, a primer for a proportionate approach;³⁴
- NHS London Healthy Urban Development Unit (HUDU), 2015. Healthy Urban Planning Checklist and Rapid Health Impact Assessment Tool;³⁵
- Wales Health Impact Assessment Unit, 2012: HIA a practical guide;³⁶
- National Mental Wellbeing Impact Assessment Development Unit 2011: Mental Wellbeing Impact Assessment Toolkit;³⁷

PHE expects assessments to follow best practice from these guides and from methodologies adopted within other successful health/environmental impacts assessments.

Determining significant effects

Neither the EIA regulations nor the National Policy Statements provide a definition of what constitutes a 'significant' effect, and so PHE have derived a list of factors which it will take into consideration in the assessment of significance of effects, as outlined below. These list of factors should be read in conjunction with guidance from the above guides.

34

https://www.researchgate.net/publication/316968065_Health_in_Environmental_Impact_Assessment_a_primer_for_a_proportionate_approach

³⁵ <https://www.healthyrbandevelopment.nhs.uk/our-services/delivering-healthy-urban-development/health-impact-assessment/>

³⁶ https://whiasu.publichealthnetwork.cymru/files/1415/0710/5107/HIA_Tool_Kit_V2_WEB.pdf

³⁷ <https://q.health.org.uk/document/mental-wellbeing-impact-assessment-a-toolkit-for-wellbeing/>

1. Sensitivity:

Is the population exposed to the NSIP at particular risk from effects on this determinant due to pre-existing vulnerabilities or inequalities (for example, are there high numbers in the local population of people who are young, older, with disabilities or long-term conditions, or on a low income)? Will the NSIP widen existing inequalities or introduce new inequalities in relation to this determinant?

2. Magnitude:

How likely is the impact on this determinant to occur? If likely, will the impact affect a large number of people / Will the impact affect a large geographic extent? Will the effects be frequent or continuous? Will the effects be temporary or permanent and irreversible?

3. Cumulative effects:

Will the NSIP's impacts on this determinant combine with effects from other existing or proposed NSIPs or large-scale developments in the area, resulting in an overall cumulative effect different to that of the project alone?

What are the cumulative effects of the impacts of the scheme on communities or populations. Individual impacts individually may not be significant but in combination may produce an overall significant effect.

4. Importance:

Is there evidence for the NSIP's effect on this determinant on health? Is the impact on this determinant important in the context of national, regional or local policy?

5. Acceptability:

What is the local community's level of acceptance of the NSIP in relation to this determinant? Do the local community have confidence that the applicants will promote positive health impacts and mitigate against negative health effects?

6. Opportunity for mitigation:

If this determinant is included in the scope for the EIA is there an opportunity to enhance any positive health impacts and/or mitigate any negative health impacts?

Vulnerable groups

Certain parts of the population may experience disproportionate negative health effects as a result of a development. Vulnerable populations can be identified through research literature, local population health data or from the identification of pre-existing health conditions that increase vulnerability.

The effects on health and wellbeing and health inequalities of the scheme will have particular effect on vulnerable or disadvantaged populations, including those that fall within the list of protected characteristics. Some protected groups are more likely to have elevated vulnerability associated with social and economic disadvantages. Consideration should be given to language or lifestyles that influence how certain populations are affected by impacts of the proposal, for example non-English speakers may face barriers to accessing information about the works or expressing their concerns.

Equality Impact Assessments (EqIA) are used to identify disproportionate effects on Protected Groups (defined by the Equality Act, 2010), including health effects. The assessments and findings of the Environmental Statement and the EqIA should be cross referenced between the two documents, particularly to ensure the assessment of potential impacts for health and inequalities and that resulting mitigation measures are mutually supportive.

The Wales Health Impact Assessment Support Unit (WHIASU), provides a suggested guide to vulnerable groups

Age related groups

- Children and young people
- Older people

Income related groups

- People on low income
- Economically inactive
- Unemployed/workless
- People who are unable to work due to ill health

Groups who suffer discrimination or other social disadvantage

- People with physical or learning disabilities/difficulties
- Refugee groups
- People seeking asylum
- Travellers
- Single parent families
- Lesbian, gay or transgender people
- Black and minority ethnic groups
- Religious groups

Geographical groups

- People living in areas known to exhibit poor economic and/or health indicators
- People living in isolated/over-populated areas
- People unable to access services and facilities

Mental health

PHE supports the use of the broad definition of health proposed by the World Health Organisation (WHO). Mental well-being is fundamental to achieving a healthy, resilient and thriving population. It underpins healthy lifestyles, physical health, educational attainment, employment and productivity, relationships, community safety and cohesion and quality of life. NSIP schemes can be of such scale and nature that they will impact on the over-arching protective factors, which are:

- Enhancing control
- Increasing resilience and community assets
- Facilitating participation and promoting inclusion.

There should be parity between mental and physical health, and any assessment of health impact should include the appreciation of both. A systematic approach to the assessment of the impacts on mental health, including suicide, is required. The Mental Well-being Impact Assessment (MWIA) could be used as a methodology. The assessment should identify vulnerable populations and provide clear mitigation strategies that are adequately linked to any local services or assets

Perceptions about the proposed scheme may increase the risk of anxiety or health effects by perceived effects. "Estimation of community anxiety and stress should be included as part of every risk or impact assessment of proposed plans that involve a potential environmental hazard.

Evidence base and baseline data

Baseline population / community health data (quantitative and qualitative) should be sufficient to represent current health status and identify areas or groups with poor health or inequalities. This should provide sufficient information on the physical and mental health and wellbeing and social determinants of health for the affected populations and any vulnerable groups identified.

A baseline health assessment could include:

- General population data (including size, density, age, gender, income and employment, socio-economic status, crime and disorder etc, health status.)
- Environmental information (housing, transport, access to services, provision and access to green space, tranquillity or sound environment)
- Data on behaviour, such as levels of physical activity, smoking, car usage, walking and cycling
- Surveys of local conditions
- Local concerns and anxieties (where documented)
- Secondary analysis of existing local data
- Resident surveys or consultations
- Health status, particularly of the population groups already identified as vulnerable and likely to benefit or be harmed by the proposal. This should include mental health and suicide.
- Quality of life indicators (if available / relevant)
- Local people's views of the area and of the services provided (community engagement exercises)

There will be a range of publicly available health data including:

- National datasets such as those from the Office of National Statistics,
- PHE, including the fingertips data sets,
- Non-governmental organisations,
- Local public health reports, such as the Joint Strategic Needs Assessment and Health and Wellbeing Strategies;
- Consultation with local authorities, including public health teams
- Information received through public consultations, including community engagement exercises

There should be a narrative which interprets the data collected in the context of the project. A list of tables and data is not sufficient, so the report should consider:

- Are particular groups or vulnerable groups likely to be impacted more than others and is this clearly described and explained?
- What indicators within the current health baseline that are worse than England average/ local ward or LSOA levels?
- What are the levels of inequality in the study area?
What are the potential inequalities in the distribution of impacts?

Mitigation

If the assessment has identified that significant negative effects are likely to occur with respect to the wider determinants of health, the assessment should include a description of planned mitigation measures the applicant will implement to avoid or prevent effects on the population.

Mitigation and/or monitoring proposals should be logical, feasible and have a clear governance and accountability framework indicating who will be responsible for implementation and how this will be secured during the construction and/or operation of the NSIP.

Any proposed mitigation should have sufficient detail to allow for an assessment of the adequacy of the proposed mitigation measures.

Positive benefits from the scheme

The scale of many NSIP developments will generate the potential for positive impacts on health and wellbeing; however, delivering such positive health outcomes often requires specific enabling or enhancement measures. For example, the construction of a new road network to access an NSIP site may provide an opportunity to improve the active transport infrastructure for the local

community. PHE expects developments to consider and report on the opportunity and feasibility of positive impacts. These may be stand alone or be considered as part of the mitigation measures.

Replacement publicly accessible space or community assets

The replacement of community assets provides opportunity for positive impacts and the design, location and operation of the replacement asset should be considered in consultation with user, the local community and agencies.

Any replacement recreational land, open space or other community assets should be located and designed to:

- Not unreasonably extend journey times or increase transport costs, or result in too many people being prevented from travelling sustainably due to unsuitable walking or cycling routes.
- Ensure that accessibility planning has been properly taken into account and that the proposal will not adversely impact on disadvantaged groups.
- Meet identified community needs which may go beyond direct replacement but can be reasonably incorporated
- Provide acceptable recreational amenity, including noise environment, for outdoor spaces associated with the individual community facilities
- The design of the sites should be carried out in consultation with the local community. It should incorporate features and designs to enable access and use across the life course.
- The PEIR should contain sufficient detail regarding the location and design in order to determine the acceptability of the replacement facilities.
- Quality, quantity and accessibility should be determined against defined criteria agreed with stakeholders. The following evidence based assessment tools should be considered:

The quality of the provision of replacement green space should be assessed, for example by the use of:

[Building with Nature](#) - There are 6 wellbeing standards, which are:

- Accessible
- Inclusive
- Seasonal enjoyment
- Locally relevant
- Socially sustainable
- Distinctive

The [ANGSt standards](#) address amount, access and quality

The [ORVaL tool](#) - This tool works on areas that are currently publicly accessible and looks at welfare values for this area. The site functionality allows users to investigate how altering the land cover, features or the area of existing recreation sites will change usage and welfare values. This allows a comparison between existing and the proposed sites. Contact should be made with the ORVaL team to establish the functionality of the tool relevant to the DCO and interpretation of the findings³⁸.

[Green Flag Award](#)- a robust framework for assessing the quality of public green spaces of all types and sizes.

³⁸ https://www.leep.exeter.ac.uk/orval/pdf-reports/ORVal2_User_Guide.pdf

Employment

NSIP schemes have the potential to negatively impact through the relocation or loss of local businesses. Equally they can offer an opportunity for new business activity and employment both at the construction stage and operation of the development approved by the DCO.

There is clear evidence that good work improves health and wellbeing across people's lives and protects against social exclusion. Conversely, unemployment is bad for health and wellbeing, as it is associated with an increased risk of mortality and morbidity. For many individuals, in particular those with long-term conditions such as mental health problems, musculoskeletal (MSK) conditions and disabilities, health issues can be a barrier to gaining and retaining employment. Employment rates are lowest among disabled people, with only 51.3% in work, meaning there is a substantial employment rate gap in the UK between disabled and non-disabled people (81.4% in employment). Among these working age disabled people in the UK, 54% have a mental health or MSK condition as their main health condition³⁹. Enabling people with health issues to obtain or retain work, and be productive within the workplace, is a crucial part of the economic success and wellbeing of every community and industry.

It is important that people are supported to gain employment and maintain economic independence for themselves and their families, especially as they age. This is of particular importance for individuals with long-term conditions and disabilities, due to the barriers they face in gaining employment and retaining a job.

Where relevant any assessments should include:

- The impact of business relocation in order to identify the likely level of job losses within the study area
- The proposed support mechanisms to be established for business owners and employees
- A clear strategy and action plan that addresses barriers to employment within the local population and those that cease employment due to the DCO.

Compulsory purchase

NSIP schemes can involve the compulsory acquisition of property from land take. Mitigation will involve supporting home-owners and tenants in understanding and utilising the compensation and support offered through the compensation policies.

The impacts from compulsory acquisition of land and property can affect health and wellbeing, including mental health, for example from home, school and employment relocation and loss of employment. This will be particularly relevant to sensitive receptors within communities, many of which will form part of the private rented sector.

Compensation and support can be an important element of mitigation, but developers should consider opportunities to work through partners and local Voluntary, Community and Social Enterprise (VCSE) organisations. These organisations offer the potential for engagement with vulnerable groups and may gain greater acceptance by the wider community.

Any compulsory purchase support schemes should ensure sufficient competency in public health, including public mental health, in order to help support local communities. The aim would be to establish a workforce that is confident, competent and committed to:

- promote good physical and mental health across the population
- prevent mental illness and suicide

³⁹ [PHE \(Jan 2019\). Guidance - Health matters: health and work \(https://publichealthmatters.blog.gov.uk/2019/01/31/health-matters-health-and-work/\)](https://publichealthmatters.blog.gov.uk/2019/01/31/health-matters-health-and-work/)

- improve the quality and length of life of people living within affected communities

The Public mental health leadership and workforce development framework⁴⁰ published by PHE offers a skills framework for the wider public health workforce. As well as the competences in this framework. Health Education England (HEE) have published a course content guide entitled Public Mental Health Content Guide For introductory courses or professional development in mental health and wellbeing⁴¹.

Monitoring

PHE expects an assessment to include consideration of the need for monitoring and the ES should clearly state the principles on which the monitoring strategy has been established, including monitoring in response to unforeseen impacts or effects.

It may be appropriate to undertake monitoring where:

- Critical assumptions have been made in the absence of supporting evidence or data
- There is uncertainty about whether significant negative effects are likely to occur and it would be appropriate to include planned monitoring measures to track their presence, scale and nature.
- There is uncertainty about the potential success of mitigation measures
- It is necessary to track the nature of the impact or effect and provide useful and timely feedback that would allow action to be taken should negative effects occur

The monitoring strategy should set out:

- Monitoring methodologies
- Data sources, particularly if being obtained from third parties or open access data
- Assessment methods
- Publication methodology
- Reporting frequency
- Temporal and geographic scope

For very large controversial schemes it may be worth considering the need to have an independent organisation undertake / report on the monitoring and the need for academic robustness.

Community based reports

Large complex schemes that involve significant effects on communities or significant cumulative effects can benefit from identifying impacts and reporting at an individual community level. This assists in the identification of the overall potential effects across a range of impacts. These community level reports will also aid local communities to engage with consultations by providing relevant and accessible information.

How to contact PHE

If you wish to contact us regarding an existing or potential NSIP application please email: nsipconsultations@phe.gov.uk

⁴⁰ [Public mental health leadership and workforce development framework - Confidence, competence, commitment. PHE \(2015\)](#)

⁴¹ [Public Mental Health Content Guide for introductory courses or professional development in mental health and wellbeing. Health education England](#)

Appendix 2

Table 1 – Wider determinants of health and wellbeing

Health and wellbeing themes			
Access	Traffic and Transport	Socioeconomic	Land Use
Wider determinants of health and wellbeing			
<p>Access to :</p> <ul style="list-style-type: none"> • local public and key services and facilities. • Good quality affordable housing. • Healthy affordable food. • The natural environment. • The natural environment within the urban environment. • Leisure, recreation and physical activities within the urban and natural environments. 	<ul style="list-style-type: none"> • Accessibility. • Access to/by public transport. • Opportunities for access by cycling and walking. • Links between communities. • Community severance. • Connections to jobs. • Connections to services, facilities and leisure opportunities. 	<ul style="list-style-type: none"> • Employment opportunities, including training opportunities. • Local business activity. • Regeneration. • Tourism and leisure industries. • Community/social cohesions and access to social networks. • Community engagement. 	<ul style="list-style-type: none"> • Land use in urban and/or /rural settings. • Quality of Urban and natural environments

1) Access

- a. Access to local, public and key services and facilities
 Access to local facilities can increase mobility and social participation. Body mass index is significantly associated with access to facilities, including factors such as the mix and density of facilities in the area. The distance to facilities has no or only a small effect on walking and other physical activities. Access to recreational facilities can increase physical activity, especially walking for recreation, reduce body weight, reduce the risk of high blood pressure, and reduce the number of vehicle trips, the distances travelled and greenhouse gas emissions.

Local services include health and social care, education, employment, and leisure and recreation. Local facilities include community centres, shops, banks/credit unions and Post Offices. Services and facilities can be operated by the public, private and/or voluntary sectors. Access to services and facilities is important to both physical and mental health and wellbeing. Access is affected by factors such as availability, proximity to people's place of residence, existence of transport services or active

travel infrastructure to the location of services and facilities, and the quality of services and facilities.

The construction or operation of an NSIP can affect access adversely: it may increase demand and therefore reduce availability for the existing community; during construction, physical accessibility may be reduced due to increased traffic and/or the blockage of or changes to certain travel routes. It is also possible that some local services and facilities are lost due to the land-take needed for the NSIP.

Conversely if new routes are built or new services or facilities provided the NSIP may increase access. NSIPs relating to utilities such as energy and water can maintain, secure or increase access to those utilities, and thereby support health and wellbeing.

b. Access to good-quality affordable housing

Housing refurbishment can lead to an improvement in general health and reduce health inequalities. Housing improvements may also benefit mental health. The provision of diverse forms and types of housing is associated with increased physical activity. The provision of affordable housing is strongly associated with improved safety perceptions in the neighbourhood, particularly among people from low-income groups. For vulnerable groups, the provision of affordable housing can lead to improvements in social, behavioural and health related outcomes. For some people with long term conditions, the provision of secure and affordable housing can increase engagement with healthcare services, which can lead to improved health-related outcomes. The provision of secure and affordable housing can also reduce engagement in risky health-related behaviours. For people who are homeless, the provision of affordable housing increases engagement with healthcare services, improves quality of life and increases employment, and contributes to improving mental health.

Access to housing meets a basic human need, although housing of itself is not necessarily sufficient to support health and wellbeing: it is also important that the housing is of good quality and affordable. Factors affecting the quality of housing include energy efficiency (eg effective heating, insulation), sanitation and hygiene (eg toilet and bathroom), indoor air quality including ventilation and the presence of damp and/or mould, resilience to climate change, and overcrowding. The affordability of housing is important because for many people, especially people on a low income, housing will be the largest monthly expense; if the cost of housing is high, people may not be able to meet other needs such as the need for heating in winter or food. Some proposals for NSIPs include the provision of housing, which could be beneficial for the health and wellbeing of the local population. It is also possible that some housing will be subject to a compulsory purchase order due to the land-take needed for an NSIP.

c. Access to affordable healthy food

Access to healthy food is related to the provision of public and active transport infrastructure and the location and proximity of outlets selling healthier food such as fruit and vegetables. For the general population, increased access to healthy, affordable food through a variety of outlets (shops, supermarkets, farmers' markets and community gardens) is associated with improved dietary behaviours, including attitudes towards healthy eating and food purchasing behaviour, and improved adult weight. Increased access to unhealthier food retail outlets is associated with increased weight in the general population and increased obesity and unhealthy eating behaviours among children living in low-income areas. Urban agriculture can improve attitudes towards healthier food and increase fruit and vegetable consumption.

Factors affecting access to healthy affordable food include whether it is readily available from local shops, supermarkets, markets or delivery schemes and/or there are opportunities to grow food in local allotments or community gardens. People in environments where there is a high proportion of fast food outlets may not have easy access to healthy affordable food.

d. Access to the natural environment

Availability of and access to safe open green space is associated with increased physical activity across a variety of behaviours, social connectedness, childhood development, reduced risk of overweight and obesity and improved physical and mental health outcomes. While the quantity of green space in a neighbourhood helps to promote physical activity and is beneficial to physical health, eg lower rates of mortality from cardiovascular disease and respiratory disease in men, the availability of green environments is likely to contribute more to mental health than to physical health: the prevalence of some disease clusters, particularly anxiety and depression, is lower in living environments which have more green space within a 1-km radius.

The proximity, size, type, quality, distribution, density and context of green space are also important factors. Quality of green space may be a better predictor of health than quantity, and any type of green space in a neighbourhood does not necessarily act as a venue for, or will encourage, physical activity. 'Walkable' green environments are important for better health, and streetscape greenery is as strongly related to self-reported health as green areas. Residents in deprived areas are more likely to perceive access to green space as difficult, to report poorer safety, to visit the green space less frequently and to have lower levels of physical activity. The benefits to health and wellbeing of blue space include lower psychological distress.

The natural environment includes the landscape, waterscape and seascape. Factors affecting access include the proximity of the natural environment to people's place of residence, the existence of public transport services or active travel infrastructure to the natural environment, the quality of the natural environment and feelings of safety in the natural environment. The construction of an NSIP may be an opportunity to provide green and/or blue infrastructure in the local area. It is also possible that green or blue infrastructure will be lost due to the land-take needed for the NSIP.

e. Access to the natural environment within the urban environment

Public open spaces are key elements of the built environment. Ecosystem services through the provision of green infrastructure are as important as other types of urban infrastructure. It supports physical, psychological and social health, although the quality, perceptions of safety and accessibility of green space affects its use. Safe parks may be particularly important for promoting physical activity among urban adolescents. Proximity to urban green space and an increased proportion of green space are associated with decreased treatment of anxiety/mood disorders, the benefits deriving from both participation in usable green space near to home and observable green space in the neighbourhood. Urban agriculture may increase opportunities for physical activity and social connections.

A view of 'greenery' or of the sea moderates the annoyance response to noise. Water is associated with positive perceptive experiences in urban environments, with benefits for health such as enhanced contemplation, emotional bonding, participation and physical activity. Increasing biodiversity in urban environments, however, may promote the introduction of vector or host organisms for infectious pathogens, eg green connectivity may potentiate the role of rats and ticks in the spread of disease,

and bodies of water may provide habitats for mosquitoes.

The natural environment within the urban environment includes the provision of green and blue space in towns and cities. Factors involved in access include the proximity of the green and/or blue space to people's place of residence, the existence of transport services or active travel infrastructure to the green and/or blue space, the quality of the green and/or blue space and feelings of safety when using the green and/or blue space. The construction of an NSIP may be an opportunity to provide green and/or blue infrastructure in the local urban environment. It is also possible that green or blue infrastructure in the urban environment will be lost due to the land-take needed for the NSIP.

- f. Access to leisure, recreation and physical activity opportunities within the urban and natural environments.

Access to recreational opportunities, facilities and services is associated with risk factors for long-term disease; it can increase physical activity, especially walking for recreation, reduce body mass index and overweight and obesity, reduce the risk of high blood pressure, and reduce the number of vehicle trips, the distances travelled and greenhouse gas emissions. It can also enhance social connectedness. Children tend to play on light-traffic streets, whereas outdoor activities are less common on high-traffic streets. A perception of air pollution can be a barrier to participating in outdoor physical activity⁴². However, the health co-benefits from physical activity outweigh the adverse effects of air pollution. There is a positive association between urban agriculture and increased opportunities for physical activity and social connectivity. Gardening in an allotment setting can result in many positive physical and mental health-related outcomes. Exercising in the natural environment can have a positive effect on mental wellbeing when compared with exercising indoors.

Leisure and recreation opportunities include opportunities that are both formal, such as belonging to a sports club, and informal, such as walking in the local park or wood. Physical activity opportunities include routine activity as part of daily life, such as walking or cycling to work, and activity as part of leisure or recreation, such as playing football. The construction of an NSIP may enhance the opportunities available for leisure and recreation and physical activity through the provision of new or improved travel routes, community infrastructure and/or green or blue space. Conversely, construction may reduce access through the disruption of travel routes to leisure, recreation and physical activity opportunities.

2) **Traffic and Transport**

- a. Accessibility

Walkability, regional accessibility, pavements and bike facilities are positively associated with physical activity and negatively related to body weight and high blood pressure, and reduce the number of vehicle trips, the distances travelled and greenhouse gas emissions. Body mass index is associated with street network accessibility and slope variability.

Accessibility in relation to transport and travel has several aspects including whether potential users can gain physical access to the infrastructure and access to the

⁴² Annear, M., Keeling, S., Wilkinson, T., Cushman, G., Gidlow, B., & Hopkins, H. (2014). Environmental influences on healthy and active ageing: A systematic review. *Ageing & Society*, 34 (4), 590-622. Available at https://www.academia.edu/34314864/Environmental_influences_on_healthy_and_active_ageing_a_systematic_review

services the infrastructure provides. The design and operation of transport infrastructure and the associated services should take account of the travel needs of all potential users including people with limited mobility. People whose specific needs should be considered include pregnant women, older people, children and young people and people with a disability. Other aspects of transport infrastructure affecting accessibility include safety and affordability, both of which will affect people's ability to travel to places of employment and/or key local services and facilities and/or access their social networks.

b. Access to / by public transport

Provision of high-quality public transport is associated with higher levels of active travel among children and among people commuting to work, with a decrease in the use of private cars. Combining public transport with other forms of active travel can improve cardiovascular fitness. Innovative or new public transport interventions may need to be marketed and promoted differently to different groups of transport users, eg by emphasising novelty to car users while ensuring that the new system is seen by existing users as coherently integrated with existing services.

Transport facilitates access to other services, facilities and amenities important to health and wellbeing. Public transport is any transport open to members of the public including bus, rail and taxi services operated by the public, private or community sectors. For people who do not have access to private transport, access to public transport is important as the main agency of travel especially for journeys >1 mile. Access to public transport is not sufficient, however, and access by public transport needs to be taken into account: public transport services should link places where people live with the destinations they need or want to visit such as places of employment, education and healthcare, shops, banks and leisure facilities. Other aspects of access to public transport include affordability, safety, frequency and reliability of services.

c. Opportunities for / access by cycling & walking

Walking and cycling infrastructure can enhance street connectivity, helping to reduce perceptions of long-distance trips and providing alternative routes for active travel. Awareness of air pollution could be a barrier to participating in active travel, however those that choose to walk or cycle often experience lower exposure to pollution, and create less pollution than those in vehicles⁴³. Prioritising pedestrians and cyclists through changes in physical infrastructure can have positive behavioural and health outcomes, such as physical activity, mobility and cardiovascular outcomes. The provision and proximity of active transport infrastructure is also related to other long-term disease risk factors, such as access to healthy food, social connectedness and air quality.

Perceived or objective danger may also have an adverse effect on cycling and walking, both of which activities decrease with increasing traffic volume and speed, and cycling for leisure decreases as local traffic density increases. Health gains from active travel policies outweigh the adverse effects of road traffic incidents. New infrastructure to promote cycling, walking and the use of public transport can increase the time spent cycling on the commute to work, and the overall time spent commuting among the least-active people. Active travel to work or school can be associated with body mass index and weight, and may reduce cardiovascular risk factors and improve cardiovascular outcomes. The distance of services from cycle paths can have an adverse effect on cycling behaviour, whereas mixed land use, higher densities and

⁴³ Defra 2019, Clean Air Strategy 2019. Available at <https://www.gov.uk/government/publications/clean-air-strategy-2019>

reduced distances to non-residential destinations promote transportation walking.

d. Links between communities

Social connectedness can be enhanced by the provision of public and active transport infrastructure and the location of employment, amenities, facilities and services.

e. Community severance

In neighbourhoods with high volumes of traffic, the likelihood of people knowing and trusting neighbours is reduced.

f. Connections to jobs

The location of employment opportunities and the provision of public and active transportation infrastructure are associated with risk factors for long-term disease such as physical activity. Good pedestrian and cycling infrastructure can promote commuting physical activity. Improved transport infrastructure has the potential to shift the population distribution of physical activity in relation to commuting, although a prerequisite may be a supportive social environment. Mixed land use, higher densities and reduced distances to non-residential destinations promote transportation walking.

The ease of access to employment, shops and services including the provision of public and active transport are important considerations and schemes should take any opportunity to improve infrastructure to promote cycling, walking and the use of public transport

g. Connections to services, facilities and leisure opportunities

Mixed land use, higher densities and reduced distances to non-residential destinations promote transportation walking. Access to recreational opportunities and the location of shops and services are associated with risk factors for long-term disease such as physical activity, access to healthy food and social connectedness. Increased distance of services from cycle paths can have an adverse effect on cycling behaviour.

3) **Socio Economic**

a. Employment opportunities including training opportunities

Employment is generally good for physical and mental health and well-being, and worklessness is associated with poorer physical and mental health and well-being. Work can be therapeutic and can reverse the adverse health effects of unemployment for healthy people of working age, many disabled people, most people with common health problems and social security beneficiaries. Account must be taken of the nature and quality of work and its social context and jobs should be safe and accommodating. Overall, the beneficial effects of work outweigh the risks of work and are greater than the harmful effects of long-term unemployment or prolonged sickness absence. Employment has a protective effect on depression and general mental health.

Transitions from unemployment to paid employment can reduce the risk of distress and improve mental health, whereas transitions into unemployment are psychologically distressing and detrimental to mental health. The mental health benefits of becoming employed are also dependent on the psychosocial quality of the job, including level of control, demands, complexity, job insecurity and level of pay: transition from unemployment to a high-quality job is good for mental health, whereas transition from unemployment to a low-quality job is worse for mental health than being unemployed. For people receiving social benefits, entry into paid employment

can improve quality of life and self-rated health (physical, mental, social) within a short time-frame. For people receiving disability benefits, transition into employment can improve mental and physical health. For people with mental health needs, entry into employment reduces the use of mental health services.

For vocational rehabilitation of people with severe mental illness (SMI), Supported Employment is more effective than Pre-vocational Training in helping clients obtain competitive employment; moreover, clients in Supported Employment earn more and work more hours per month than those in Pre-vocational Training.

b. Local Business Activity

It is important to demonstrate how a proposed development will contribute to ensuring the vitality of town centres. Schemes should consider the impact on local employment, promote beneficial competition within and between town centres, and create attractive, diverse places where people want to live, visit and work

In rural areas the applicant should assess the impact of the proposals on a prosperous rural economy, demonstrate how they will support the sustainable growth and expansion of all types of business and enterprise in rural areas, promoting the development and diversification of agricultural and other land based rural businesses.

c. Regeneration

Following rebuilding and housing improvements in deprived neighbourhoods, better housing conditions are associated with better health behaviours; allowing people to remain in their neighbourhood during demolition and rebuilding is more likely to stimulate life-changing improvements in health behaviour than in people who are relocated. The partial demolition of neighbourhoods does not appear to affect residents' physical or mental health. Mega-events, such as the Olympic Games, often promoted on the basis of their potential legacy for regeneration, appear to have only a short-term impact on mental health.

d. Tourism and Leisure Industries

The applicant should assess the impact of the proposed development on retail, leisure, commercial, office, tourism, cultural, community and residential development needed in town centres. In rural locations assessment and evaluation of potential impacts on sustainable rural tourism and leisure developments that benefit businesses in rural areas, communities and visitors should be undertaken.

e. Community / social cohesion and access to social networks

The location of employment, shops and services, provision of public and active transport infrastructure and access to open space and recreational opportunities are associated with social connectedness. Access to local amenities can increase social participation. Neighbourhoods that are more walkable can increase social capital. Urban agriculture can increase opportunities for social connectivity. Infrastructure developments, however, can affect the quality of life of communities living in the vicinity, mediated by substantial community change, including feelings of threat and anxiety, which can lead to psychosocial stress and intra-community conflict.

f. Community engagement

Public participation can improve environmental impact assessments, thereby increasing the total welfare of different interest groups in the community. Infrastructure development may be more acceptable to communities if it involves substantial public participation.

4) Land Use

a. Land use in urban and / or rural settings

Land-use mix including infrastructure:

Land use affects health not only by shaping the built environment, but also through the balance of various types of infrastructure including transport. Vulnerable groups in the population are disproportionately affected by decisions about land use, transport and the built environment. Land use and transport policies can result in negative health impacts due to low physical activity levels, sedentary behaviours, road traffic incidents, social isolation, air pollution, noise and heat. Mixed land use can increase both active travel and physical activity. Transportation walking is related to land-use mix, density and distance to non-residential destinations; recreational walking is related to density and mixed use. Using modelling, if land-use density and diversity are increased, there is a shift from motorised transport to cycling, walking and the use of public transport with consequent health gain from a reduction in long-term conditions including diabetes, cardiovascular disease and respiratory disease.

b. Quality of urban and natural environments

Long-term conditions such as cardiovascular disease, diabetes, obesity, asthma and depression can be moderated by the built environment. People in neighbourhoods characterised by high 'walkability' walk more than people in neighbourhoods with low 'walkability' irrespective of the land-use mix. In neighbourhoods associated with high 'walkability' there is an increase in physical activity and social capital, a reduction in overweight and blood pressure, and fewer reports of depression and of alcohol abuse. The presence of walkable land uses, rather than their equal mixture, relates to a healthy weight. Transportation walking is at its highest levels in neighbourhoods where the land-use mix includes residential, retail, office, health, welfare and community, and entertainment, culture and recreation land uses; recreational walking is at its highest levels when the land-use mix includes public open space, sporting infrastructure and primary and rural land uses. Reduced levels of pollution and street connectivity increase participation in physical activity.

Good-quality street lighting and traffic calming can increase pedestrian activity, while traffic calming reduces the risk of pedestrian injury. 20-mph zones and limits are effective at reducing the incidence of road traffic incidents and injuries, while good-quality street lighting may prevent them. Public open spaces within neighbourhoods encourage physical activity, although the physical activity is dependent on different aspects of open space, such as proximity, size and quality. Improving the quality of urban green spaces and parks can increase visitation and physical activity levels.

Living in a neighbourhood overlooking public areas can improve mental health, and residential greenness can reduce the risk of cardiovascular mortality. Crime and safety issues in a neighbourhood affect both health status and mental health. Despite the complexity of the relationship, the presence of green space has a positive effect on crime, and general environmental improvements may reduce the fear of crime. Trees can have a cooling effect on the environment – an urban park is cooler than a non-green site. Linking road infrastructure planning and green infrastructure planning can produce improved outcomes for both, including meeting local communities' landscape sustainability objectives.

Appendix 3

NSIP National Networks – Road schemes (scoping stage)

Public Health England Generic Response: Noise and Public Health

Guiding principles

Public Health England's mission is to protect and improve the nation's health and wellbeing and reduce health inequalities. Environmental noise can cause stress and disturb sleep, which over the long term can lead to a number of adverse health outcomes [1, 2]. The Noise Policy Statement for England (NPSE) [3] sets out the government's overall policy on noise. Its aims are to:

- avoid significant adverse impacts on health and quality of life;
- mitigate and minimise adverse impacts on health and quality of life; and
- contribute to the improvement of health and quality of life.

These aims should be applied within a broader context of sustainable development, where noise is considered alongside other economic, social and environmental factors. PHE expects such factors may include [4]:

- Ensuring healthy lives and promoting well-being for all at all ages;
- promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all;
- building resilient infrastructure, promoting inclusive and sustainable industrialisation and fostering innovation;
- reducing inequality; and
- making cities and human settlements inclusive, safe, resilient and sustainable.

PHE's consideration of the effects of health and quality and life attributable to noise is guided by the recommendations in the 2018 Environmental Noise Guidelines for the European Region [1] published by the World Health Organization, and informed by high quality systematic reviews of the scientific evidence [2, 5, 6]. The scientific evidence on noise and health is rapidly developing, and PHE's recommendations are also informed by relevant studies that are judged to be scientifically robust and consistent with the overall body of evidence.

In line with its mission, PHE believes that Nationally Significant Infrastructure Projects (NSIP) should not only limit significant adverse effects, but also explore opportunities to improve the health and quality of life of local communities and reduce inequalities.

PHE also recognises the developing body of evidence showing that areas of tranquillity offer opportunities for health benefits through psychological restoration. NSIP applications need to demonstrate that they have given due consideration to the protection of the existing sound environment in these areas.

Significance of Impacts

Determining significance of impacts is an essential element of an Environmental Impact Assessment, and therefore significance needs to be clearly defined at the earliest opportunity by the Applicant. PHE recommends that the definition of significance is discussed and agreed with relevant stakeholders, including local authority environmental health and public health teams and local community representatives, through a documented consultation process. PHE recommends that any disagreement amongst stakeholders on the methodology for defining significance is acknowledged in the planning application documentation and could inform additional sensitivity analyses.

For noise exposure, PHE expects assessments of significance to be closely linked to the associated impacts on health and quality of life, and not on noise exposure per se (in line with the NPSE). The latest revision of the Design Manual for Roads and Bridges (DMRB) Table 3.49 LA111 [7] includes proposed values for the Lowest Observable Adverse Effect Level (LOAEL) and Significant

Observable Adverse Effect Level (SOAEL)⁴⁴ for operational noise, and these values are likely to inform judgements on significance of impact. Whilst DMRB does not explicitly reference the underpinning evidence that informed these numbers, the night time LOAEL and SOAEL of 40 dB L_{night} (outside, free-field) and 55 dB L_{night} (outside, free-field) respectively, correspond to the guideline value and interim target proposed in the WHO Night Noise Guidelines (2009) [8]. The Night Noise Guidelines emphasized that the interim target was “not a health-based limit value by itself. Vulnerable groups cannot be protected at this level”.

The daytime SOAEL of 68 dB LA_{10,18hr} (façade) appears to be derived from the relative noise level in the Noise Insulation Regulations (NIR) [9], which is linked to the provision of enhanced noise insulation for new highway infrastructure. The NIR does not explicitly refer to the underpinning evidence on which the relevant noise level is based, and there is a lack of good quality evidence linking noise exposure expressed in the LA₁₀ metric to health effects. Therefore, it is helpful to convert these levels to L_{den} and LA_{eq,16hr} metrics, which are more widely used in the noise and health literature. Assuming motorway traffic, a level of 68 dB LA_{10,18hr} (façade) is approximately equivalent to 45 free-field outdoor levels of 69dB L_{den} (or 64 LA_{eq,16hr}). The corresponding internal noise levels are⁴⁷ approximately 54dB LA_{eq,16hr} (open windows), 48dB LA_{eq,16hr} (tilted windows) and 36dB LA_{eq,16hr} (closed windows).

For construction noise the latest revision of the DMRB makes reference to Section E3.2 and Table E.1 in Annex E (informative) of BS 5228-1:2009+A1:2014 [10] for the definition of SOAELs. Table E.1 of BS 5228-1:2009+A1:2014 provides examples of threshold values in three categories, based on existing ambient values. Threshold values are higher when ambient noise levels are higher. Daytime (07:00-19:00, weekdays) thresholds can be traced back to principles promoted by the Wilson Committee in 1963 [11]: “Noise from construction and demolition sites should not exceed the level at which conversation in the nearest building would be difficult with the windows shut.” The Wilson committee also recommended that “Noisy work likely to cause annoyance locally should not be permitted between 22.00 hours and 07.00 hours.” BS 5228 states that these principles have been expanded over time to include a suite of noise levels covering the whole day/week period taking into account the varying sensitivities through these periods.

With reference to the noise exposure hierarchy table in the Planning Practice Guidance (Noise) [14], PHE is not aware of good quality scientific evidence that links specific noise levels to behavioural/attitudinal changes in the general population. Reactions to noise at an individual level are strongly confounded by personal, situational and environmental non-acoustic factors [16, 17], and large inter-personal variations are observed in the reaction of a population to a particular noise level [18-21]. For these reasons PHE is not able to provide evidence-based general recommendations for SOAELs that are able to achieve the aims and objectives of the Noise Policy Statement for England and the Planning Practice Guidance on noise. DMRB allows for project specific LOAELs and SOAELs to be defined if necessary, and PHE recommends that for each scheme the Applicant gives careful consideration of the following:

- The existing noise exposure of affected communities – in particular, consideration of any designated Noise Important Areas identified in proximity to the scheme;
- The size of the population affected – for example an effect may be deemed significant if a large number of people are exposed to a relatively small noise change;
- The relative change in number and type of vehicle pass-bys;

⁴⁴ As defined in the Noise Policy Statement for England [3] and the Planning Practice Guidance [14].

⁴⁵ Using equation 4.16 from [22], assuming free-field levels; $L_{A10,18hr}(\text{free-field}) = L_{A10,18hr}(\text{façade}) - 2.5\text{dB(A)}$ as per CRTN [13].

⁴⁶ Using conversion factors in para. 2.2.13 Transport Analysis Guidance (TAG) Unit A3 [15]

⁴⁷ Using external – internal level differences reported by Locher et al. (2018) [12], based on measurements at 102 dwellings in Switzerland in 2016.

- Changes in the temporal distribution of noise during day/evening/night, or between weekdays and weekends;
- Soundscape and tranquillity, in particular the value that communities put on the lack of environmental noise in their area, or conversely, on the lack of public areas within walking distance that are relatively free from environmental noise;
- Opportunities for respite (predictable periods of relief from noise), either spatially or temporally;
- Cumulative exposure to other environmental risk factors, including other sources of noise and air pollution,
- Local health needs, sensitivities and objectives.

The WHO Environmental Noise Guidelines (2018) do not define LOAELs for environmental noise sources, partly because the scientific evidence suggests that there is no clear threshold where adverse impacts on health and quality of life cease to occur in the general population. Based on the systematic reviews that informed the 2018 WHO Environmental Noise Guidelines [2], the daytime operational noise LOAEL quoted in DMRB is equivalent to approximately 8% of the population Highly Annoyed⁴⁸, and the night time LOAEL is equivalent to approximately 2% of the population Highly Sleep Disturbed⁴⁹. Therefore, the impact assessment should acknowledge that adverse health effects will occur beyond the assessment threshold (LOAEL). PHE recommends that the Applicant explains what its chosen SOAELs for a specific scheme mean in population health terms in a similar fashion.

PHE does not believe that the current scientific evidence supports the modification of SOAELs and UAELs based on the existing noise insulation specification of residential dwellings, and in particular whether enhanced sound insulation avoids significant adverse effects on health and quality of life. See also sections on Mitigation and Step Changes in Noise Exposure.

Health Outcomes

PHE encourages the applicant to present noise exposure data in terms of the Lden metric (in addition to Leq and L10), to facilitate interpretation by a broad range of stakeholders. This is because most recent scientific evidence on the health effects of environmental noise is presented in terms of Lden [1, 5, 6]. PHE believes that quantifying the health impacts associated with noise exposure and presenting them in health-based metrics allows decision makers to make more informed decisions.

For transportation sources, PHE recommends the quantification of health outcomes using the methodology agreed by the Interdepartmental Group on Costs and Benefits - Noise subgroup [IGCB(N) [23] (currently under review)), and more recent systematic reviews [1, 5, 6]. PHE believes there is sufficient evidence to quantify the following health outcomes: long-term annoyance, sleep disturbance, ischaemic heart disease (IHD), and potentially stroke⁵⁰ and diabetes⁵¹. Effects can be expressed in terms of number of people affected, number of disease cases, and Disability Adjusted Life Years (DALYs). THE IGCB(N) guidance can also be used to translate these effects into monetary terms.

⁴⁸ 55 dB LA10,18hr (façade) is approximately equal to 57 dB Lden (free-field), assuming motorway traffic [13, 22]. Applying the exposure-response function presented in Guski et al., 2017 [19] for road traffic noise and annoyance (excluding Alpine and Asian studies), approximately 8% of a population is highly annoyed at 57 dB Lden.

⁴⁹ Applying the exposure-response function presented in Basner et al., 2018 [20] for road traffic noise and sleep disturbance gives the result that approximately 2% of a population is highly sleep disturbed at 40 dB Lnight.

⁵⁰ A literature review commissioned by Defra [6] identified nine longitudinal studies on road traffic noise and incidence of stroke, and eight longitudinal studies on road traffic noise and stroke mortality.

⁵¹ A literature review commissioned by Defra [6] identified four longitudinal studies on road traffic noise and incidence of diabetes.

Some health outcomes, namely annoyance and self-reported sleep disturbance, can be influenced by the local context and situation. In these cases, it would be preferable to use exposure-response functions (ERFs) derived in a local context. However, PHE is not aware of any ERFs for road traffic being available for a UK context from data gathered in the last two decades. Therefore, in PHE's view the ERFs presented in the WHO-commissioned systematic reviews offer a good foundation for appraisal of the health effects associated with road traffic noise [2]. For annoyance, the average curve derived excluding Alpine and Asian studies may be considered more transferable to a UK context. For metabolic outcomes, no ERF was published in the WHO ENG 2018. A recent meta-analysis of five cohort studies of road traffic noise and incidence of diabetes was reported by Vienneau in 2019 [24].

Where schemes have the potential to impact a large number of people, PHE expects the Applicant to carry out literature scoping reviews to ensure that the most robust and up-to-date scientific evidence is being used to quantify adverse effects attributable to the Scheme.

PHE expects to see a clear outline of the steps taken to arrive at the final judgement of significance based on these health outcomes, including a description of local circumstances and modifiers anticipated, and how reasonably foreseeable changes in these circumstances will be dealt with during the assessment process.

Identification and Consideration of Receptors

The identification of noise sensitive receptors in proximity to the proposed scheme - or route options - is essential in providing a full assessment of potential impacts. Examples of noise sensitive receptors include but are not limited to:

- Noise Important Areas
- Residential areas
- Schools, hospitals and care homes
- Community green and blue spaces and areas valued for their tranquillity, such as local and national parks
- Public Rights of Way (PRoWs)

Noise Important Areas (NIAs) are areas with the highest levels of noise exposure at a national level and as such require very careful consideration in terms of protection from increased noise levels as well as opportunities for noise mitigation that can lead to an improvement in health and quality of life. DMRB requires a list of noise mitigation measures that the project will deliver in Noise Important Areas. PHE supports this requirement - new development should offer an opportunity to reduce the health burden of existing transport infrastructure, particularly for those worst affected. PHE would encourage this approach to extend beyond NIAs, in line with the third aim of NPSE [3].

Baseline Sound Environment

The greater the understanding of the baseline sound environment, the greater the potential for the assessment to reflect the nature and scale of potential impacts, adverse or beneficial, associated with the Scheme. PHE recommends that traditional averaged noise levels are supplemented by a qualitative characterisation of the sound environment, including any particularly valued characteristics (for example, tranquillity) and the types of sources contributing to it [25].

PHE recommends that baseline noise surveys are carried out to provide a reliable depiction of local diurnal noise variations for both weekdays and weekends, in a variety of locations, including the difference between day (07:00-19:00), evening (19:00-23:00) and night-time (23:00-07:00) periods. This is particularly important if there are areas within the scheme assessment boundary with atypical traffic day/evening/night distributions. Achieving these aims is likely to require long-term noise monitoring in multiple locations for a period greater than seven days. This information should be used to test the robustness of any conversions between noise metrics (e.g. converting from LA10,18hr to LAeq,2300-0700 and Lden).

PHE suggests that a variety of metrics can be used to describe the sound environment with and without the scheme – for example, levels averaged over finer time periods, background noise levels expressed as percentiles, and number of event metrics (e.g. N65 day, N60 night) – and that, where possible, this suite of metrics is used to inform judgements of significance. There is emerging evidence that intermittency metrics can have an additional predictive value over traditional long-term time-averaged metrics for road traffic noise [27].

Mitigation

PHE expects decisions regarding noise mitigation measures to be underpinned by good quality evidence, in particular whether mitigation measures are proven to reduce adverse impacts on health and quality of life. For interventions where evidence is weak or lacking, PHE expects a proposed strategy for monitoring and evaluating their effectiveness during construction and operation, to ensure the effectiveness of said measures.

With regards to road traffic noise, low-noise road surfaces, acoustic barriers, traffic management and noise insulation schemes can all be considered. Priority should be given to reducing noise at source, and noise insulation schemes should be considered as a last resort. PHE expects any proposed noise insulation schemes to take a holistic approach which achieves a healthy indoor environment, taking into consideration noise, ventilation, overheating risk, indoor air quality and occupants' preference to open windows. There is, at present, insufficient good quality evidence as to whether insulation schemes are effective at reducing long-term annoyance and self-reported sleep disturbance [28], and initiatives to evaluate the effectiveness of noise insulation to improve health outcomes are strongly encouraged.

PHE notes the suggestion in DMRB methodology that post-construction noise monitoring cannot provide a reliable gauge for reference against predicted impacts of operational noise. The issues highlighted in DMRB relate to noise exposure, and not to health outcomes. PHE suggests that monitoring of health and quality of life can be considered pre and post operational phases, to ascertain whether mitigation measures are having the desired effect for local communities.

PHE expects consideration of potential adverse effects due to noise and vibration during construction and recommends that a full and detailed Construction Environmental Management Plan (CEMP) is developed and implemented by the Applicant and/or the contractor responsible for construction. PHE recommends that the CEMP includes a detailed programme of construction which highlights the times and durations of particularly noisy works, the measures taken to reduce noise at source, the strategy for actively communicating this information to local communities, and procedures for responding effectively to any specific issues arising.

There is a paucity of scientific evidence on the health effects attributable to construction noise associated with large infrastructure projects [5, 6] where construction activities may last for a relatively long period of time. PHE recommends that the Applicant considers emerging evidence as it becomes available and reviews its assessment of impacts as appropriate.

Green Spaces and Private Amenity Areas

PHE expects proposals to take into consideration the evidence which suggests that quiet areas can have both a direct beneficial health effect and can also help restore or compensate for the adverse health effects of noise in the residential environment [29-31]. Research from the Netherlands suggests that people living in noisy areas appear to have a greater need for areas offering quiet than individuals who are not exposed to noise at home [29]. Control of noise at source is the most effective mitigation for protecting outdoor spaces; noise insulation schemes do not protect external amenity spaces (such as private gardens and balconies or community recreation facilities and green spaces) from increased noise exposure.

PHE expects consideration to be given to the importance of existing green spaces as well as opportunities to create new tranquil spaces which are easily accessible to those communities exposed to increased noise from the scheme. These spaces should be of a high design quality and have a sustainable long-term management strategy in place.

Step-changes in Noise Exposure and the Change-effect

The Applicant should take into consideration the “change-Effect”, i.e. the potential for a real or anticipated step-change in noise exposure to result in attitudinal responses that are greater or lower than that which would be expected in a steady state scenario [28, 32]. Where a perception of change is considered likely, PHE recommends that the change-effect is taken into account in the assessment for the opening year of the proposed development. For longer term assessments, the effects of population mobility need to be taken into consideration.

Community Engagement and Consultation Feedback

PHE recommends that public consultations carried out during the planning application process clearly identify the predicted changes to the sound environment during construction and operation of the Scheme, the predicted health effects on neighbouring communities, proposed noise mitigation strategies and any proposed measures for monitoring that such mitigation measures will achieve their desired outcomes.

PHE encourages the Applicant to use effective ways of communicating any changes in the acoustic environment generated by the scheme to local communities. For example, immersive and suitably calibrated audio-visual demonstrations can help make noise and visual changes more intuitive to understand and accessible to a wider demographic. If the proposed scheme will have an impact over a relatively large geographical area, the Applicant should consider community-specific fact-sheets and/or impact maps, which are easily accessible to all individuals both in hard copy and online. If online, search functionality can potentially be included, for example, by postcode.

References:

1. World Health Organisation, *Environmental Noise Guidelines for the European Region*. 2018.
2. Lercher, P., G. Aasvang, and Y.e. de Kluizenaar, *WHO Noise and Health Evidence Reviews*. International Journal of Environmental Research and Public Health 2018(Special Issue).
3. DEFRA, *Noise Policy Statement for England*. 2010.
4. United Nations. *Sustainable Development Goals*. 2020 01/06/2020]; Available from: <https://sustainabledevelopment.un.org/?menu=1300>.
5. Clark, C., C. Crumpler, and A.H. Notley, *Evidence for Environmental Noise Effects on Health for the United Kingdom Policy Context: A Systematic Review of the Effects of Environmental Noise on Mental Health, Wellbeing, Quality of Life, Cancer, Dementia, Birth, Reproductive Outcomes, and Cognition*. Int J Environ Res Public Health, 2020. **17**(2).
6. van Kamp, I., et al., *Evidence Relating to Environmental Noise Exposure and Annoyance, Sleep Disturbance, Cardio-Vascular and Metabolic Health Outcomes in the Context of IGCB (N): A Scoping Review of New Evidence*. Int J Environ Res Public Health, 2020. **17**(9).
7. Highways England. *Design Manual for Roads and Bridges*. 2020 29/05/20]; Available from: <https://www.standardsforhighways.co.uk/dmrb/>.
8. World Health Organisation, *Night Noise Guidelines*. 2009.
9. *The Noise Insulation Regulations*. 1975; Available from: <http://www.legislation.gov.uk/ukxi/1975/1763/introduction/made>.
10. British Standards Institution, *5228-1: 2009+ A1: 2014 Code of practice for noise and vibration control on construction and open sites. Part 1: Noise*. 2014.
11. National Archives. *Committee on the Problem of Noise (Wilson Committee)*. 2020 29/05/2020]; Available from: <https://discovery.nationalarchives.gov.uk/details/r/C10984>.
12. Locher, B., et al., *Differences between Outdoor and Indoor Sound Levels for Open, Tilted, and Closed Windows*. Int J Environ Res Public Health, 2018. **15**(1).
13. Department for Transport, *Calculation of Road Traffic Noise*. 1988.

14. Ministry of Housing, C.a.L.G., *Noise: Advises on how planning can manage potential noise impacts in new development*. 2014.
15. Department for Transport, *Transport Analysis Guidance Unit A3 Environmental Impact Appraisal*. 2019.
16. Job, R., *Community response to noise: A review of factors influencing the relationship between noise exposure and reaction*. J. Acoust. Soc. Am., 1988. **83**(3).
17. Guski, R., *Personal and social variables as co-determinants of noise annoyance*. Noise & Health, 1999. **1**(3): p. 45-56.
18. Miedema, H. and C. Oudshoorn, *Annoyance from Transportation Noise: Relationships with Exposure Metrics DNL and DENL and Their Confidence Intervals*. Environmental Health Perspectives, 2001. **109**(4).
19. Guski, R., D. Schreckenber, and R. Schuemer, *WHO Environmental Noise Guidelines for the European Region: A Systematic Review on Environmental Noise and Annoyance*. Int J Environ Res Public Health, 2017. **14**(12).
20. Basner, M. and S. McGuire, *WHO Environmental Noise Guidelines for the European Region: A Systematic Review on Environmental Noise and Effects on Sleep*. Int J Environ Res Public Health, 2018. **15**(3).
21. McGuire, S., et al., *Inter-individual Differences in the Effects of Aircraft Noise on Sleep Fragmentation*. Sleep, 2016. **39**(5): p. 1107-10.
22. Abbott, P. and P. Nelson, *Converting the UK traffic noise index $L_{A10,18hr}$ to EU noise indices for noise mapping*. 2002.
23. DEFRA, *Environmental Noise: Valuing impacts on sleep disturbance, annoyance, hypertension, productivity and quiet*. 2014.
24. Vienneau, D., et al., *Association between transportation noise and cardio-metabolic diseases: an update of the WHO meta-analysis*. 2019.
25. Standardization., I.O.f., *ISO 12913-1: 2014 Acoustics—soundscape—part 1: definition and conceptual framework*. 2014.
26. World Health Organisation, *Burden of Disease from Environmental Noise*. 2011.
27. Brink, M., et al., *A survey on exposure-response relationships for road, rail, and aircraft noise annoyance: Differences between continuous and intermittent noise*. Environment international, 2019. **125**: p. 277-290.
28. Brown, A.L. and I. Van Kamp, *WHO environmental noise guidelines for the European region: a systematic review of transport noise interventions and their impacts on health*. International journal of environmental research and public health, 2017. **14**(8): p. 873.
29. Health Council of the Netherlands. *Quiet Areas and Health*. 2006; Available from: <https://www.healthcouncil.nl/documents/advisory-reports/2006/07/04/quiet-areas-and-health>.
30. QSide. *The positive effects of quiet facades and quiet urban areas on traffic noise annoyance and sleep disturbance*. 2013; Available from: https://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=3669&docType=pdf.
31. COST. *TD0804 - Soundscape of European Cities and Landscapes*. 2012; Available from: <https://www.cost.eu/actions/TD0804/#tabs|Name:overview>.
32. Brown, A., *Longitudinal annoyance responses to a road traffic noise management strategy that reduced heavy vehicles at night*. The Journal of the Acoustical Society of America, 2015. **137**(1): p. 165-176.

From: [REDACTED]
To: [A66Dualling](#)
Cc: [Planning Admin](#); [REDACTED]
Subject: TR010062-000008-210614 Application by Highways England (the Applicant) for an Order granting Development Consent for the A66 Northern Trans-Pennine Project
Date: 09 July 2021 13:43:05
Attachments: [image001.png](#)

Dear Sir / Madam

I refer to your letter dated 14 June 2021 and can confirm this Council has no comments to make in respect of the scoping consultation relating the A66 DCO application.

Kind regards

Adrian Miller BA (Hons) Dip TP MRTPI
Head of Planning and Development
Redcar and Cleveland Borough Council

Directorate of Growth, Enterprise and Environment
Redcar and Cleveland House
Kirkleatham Street
Redcar
Yorkshire
TS10 1RT

Tel: [REDACTED]
Mob: [REDACTED]

Email: [REDACTED]
Website: <http://www.redcar-cleveland.gov.uk>

Follow us on Twitter: @redcarcleveland
Like us on Facebook: facebook.com/redcarcleveland

Upcoming leave: Friday 16 July until Monday 2 August 2021

NO CONFIDENTIAL INFORMATION



We have recently updated our terms and conditions for all our services, including making some important updates to our privacy notices. To find out more about how we collect, use, share and retain your personal data, visit: www.redcar-cleveland.gov.uk/dataprivacy If you wish to stop receiving emails and unsubscribe from this Council email account, then please reply to this email and let us know. We will need your name and address to amend our records. If we must contact you in the future, we will write to your postal address.

This email and any files transmitted with it are intended solely for the named recipient and may contain sensitive, confidential or protectively marked material up to the central government classification of "OFFICIAL" which must be handled accordingly. If you have received this e-mail in error, please immediately notify the sender by e-mail and delete from your system, unless you are the named recipient (or authorised to receive it for the recipient) you are not permitted to copy, use, store, publish, disseminate or disclose it to anyone else.

E-mail transmission cannot be guaranteed to be secure or error-free as it could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses and therefore the Council accept no liability for any such errors or omissions.

Unless explicitly stated otherwise views or opinions expressed in this email are solely those of the author and do not necessarily represent those of the Council and are not intended to be legally binding.

All Council network traffic may be subject to recording and/or monitoring in accordance with relevant legislation.

Redcar & Cleveland Borough Council, Redcar & Cleveland House, Kirkleatham Street, Redcar, TS10 1RT, Tel: 01642 774 774, Website: www.redcar-cleveland.gov.uk



Proposed DCO Application by Highways England for the A66 Northern Trans-Pennine Project

Royal Mail response to EIA Scoping Consultation

Under section 35 of the Postal Services Act 2011, Royal Mail has been designated by Ofcom as a provider of the Universal Postal Service. Royal Mail is the only such provider in the United Kingdom. The Act provides that Ofcom's primary regulatory duty is to secure the provision of the Universal Postal Service. Ofcom discharges this duty by imposing regulatory conditions on Royal Mail, requiring it to provide the Universal Postal Service.

Royal Mail's performance of the Universal Service Provider obligations is in the public interest and should not be affected detrimentally by any statutorily authorised project. Accordingly, Royal Mail seeks to take all reasonable steps to protect its assets and operational interests from any potentially adverse impacts of proposed development.

Royal Mail and its advisor BNP Paribas Real Estate have reviewed Highways England's PCF Stage 3 Environmental Scoping Report dated June 2021.

This scheme has been identified as having potential for impact on Royal Mail operational interests. However, at this time Royal Mail is not able to provide a consultation response due to insufficient information being available to adequately assess the level of risk to its operation and the available mitigations for any risk. Therefore, Royal Mail wishes to reserve its position to submit a consultation response/s at a later stage in the consenting process and to give evidence at any future Public Examination, if required.

In the meantime, any further consultation information on this infrastructure proposal and any questions of Royal Mail should be sent to:

Holly Trotman ([REDACTED]), Senior Planning Lawyer, Royal Mail Group Limited

Daniel Parry Jones ([REDACTED]), Director, BNP Paribas Real Estate

Please can you confirm receipt of this holding statement by Royal Mail.

End



The Coal
Authority

Resolving the **impacts** of mining

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG
T: 01623 637 119

E: planningconsultation@coal.gov.uk
www.gov.uk/coalauthority

For the Attention of: Ms M Shoesmith – Senior EIA Advisor
On behalf of the Secretary of State

[By email: A66Dualling@planninginspectorate.gov.uk]

06 July 2021

Dear Ms Shoesmith

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11

Application by Highways England (the Applicant) for an Order granting Development Consent for the A66 Northern Trans-Pennine Project (the Proposed Development)

Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested

Thank you for your notification of 14 June 2021 seeking the views of the Coal Authority on the above scoping opinion.

I can confirm that parts of the DCO sites: Stephen Bank to Carkin Moor (Sheet 6 of 7) and the A1(M) Junction 53 Scotch Corner (Sheet 7 of 7) lie within the defined coalfield area. However, none of the red line boundaries fall within the Development High Risk Area, as defined by the Coal Authority. Therefore, there are no recorded mining features likely to impact on the surface stability at these sites. We consider that the Scoping Opinion has confirmed the above.

Accordingly, if you determine that the application is EIA development, there is no requirement for the applicant to consider coal mining legacy as part of their Environmental Impact Assessment. In addition, the determining authority will not need to consult us on any subsequent planning application for this site. However should planning permission be approved, we would request that the determining authority add the following wording as an Informative Note on any planning permission granted:

The proposed development lies within a coal mining area which may contain unrecorded coal mining related hazards. If any coal mining feature is encountered during development, this should be reported immediately to the Coal Authority on 0345 762 6848.

Further information is also available on the Coal Authority website at:

www.gov.uk/government/organisations/the-coal-authority

I hope this is helpful, however please do not hesitate to contact me if you would like to discuss this matter further.

Yours sincerely



Deb Roberts *M.Sc. MRTPI*

Planning & Development Manager

Disclaimer

The above consultation response is provided by The Coal Authority as a Statutory Consultee and is based upon the latest available data on the date of the response, and electronic consultation records held by The Coal Authority since 1 April 2013. The comments made are also based upon only the information provided to The Coal Authority by the Local Planning Authority and/or has been published on the Council's website for consultation purposes in relation to this specific planning application. The views and conclusions contained in this response may be subject to review and amendment by The Coal Authority if additional or new data/information (such as a revised Coal Mining Risk Assessment) is provided by the Local Planning Authority or the Applicant for consultation purposes

From: [REDACTED]
To: [A66Dualling](#)
Cc: [REDACTED]
Subject: Re: TR010062 - A66 Northern Trans-Pennine - EIA Regulation 10 Consultation
Date: 12 July 2021 15:06:06

Dear Marie,

Please accept this email as the formal response to the A66 NTP scoping report consultation by Warcop Parish Council. I would be grateful if you can acknowledge receipt of it as soon as possible, please.

Warcop Parish Council supports the dualling of the A66 between Penrith and Scotch Corner and it fully appreciates the need to conduct the various environmental surveys in order to submit a DCO. However, we write to express major concerns regarding the section between Appleby and Brough and our objection to the "preferred route" chosen by Highways England. In our case, there was only one option offered and this deception has led to increased anger and concern amongst local residents because a four-lane highway would be built closer to properties, farms and businesses.

For months now, we have set out an alternative route which would mitigate all the environmental concerns we have and which Highways England have consistently ignored. Our northern route proposal would take the new road on a northern trajectory, making use of low grade agricultural land (as shown in your survey) through natural valleys, thus reducing the noise, air, visual and flooding risks for the residents of Warcop. When we recently surveyed all residents of Warcop and Musgrave parishes, 94% of respondents favoured our northern alternative route. Yet despite this, Highways England refuses to consider our proposal based on the fact that a small section of AONB land would be required.

Our main observations are set out below:

1. Warcop & Musgrave Parish Councils do not appear on the list of consultees in the tables provided. Why not? We are representatives of the people who live here and know the area better than anyone.
2. Why has a similar scoping exercise not been carried out on our alternative proposed northern route?
3. The current A66 dual carriageway over Stainmore towards Bowes cuts through the North Pennine AONB, thus setting a precedent which negates the argument against our proposal.
4. Highways England should reconsider building the new carriageway section of road between Cafe 66 and Dyke Nook to the **north** of the existing road, and all ponds should also be located to the north away from any properties. The current proposal also takes it through ancient barrows. Originally, the Sandford junction was to be 1km west of the current junction; why not revert to this option and reduce the impact on properties?

5. We remain concerned that the flood risk will be increased by the proximity of the new road to our water courses such as Hayber Beck, Moor Beck, Crooks Beck and Lowgill Beck. Our proposal would use the natural landscape to store run-off water and also work to alleviate flood risk to Warcop up on the fellside. This water also flows into the River Eden which itself floods regularly.

6. The preferred route means high quality farmland has to be built on and lost forever; our proposal makes use of lower-grade land.

7. The villages of Warcop and Sandford will endure increased noise, air and visual pollution if the preferred route goes ahead. Our proposal takes the road completely out of sight and nowhere near properties.

8. Apart from anything else, our option would be cheaper and easier to build as there would only be the need for two main junctions west of Sandford and near Brough, with a few access bridges on MOD land. Construction will be completely away from the existing road.

9. The MOD land, nominally designated AONB land, is of poor quality and fails to reach any commonly agreed criteria for natural beauty. The land to the south of the current road is, by contrast, far more beautiful and attractive, with the road being a convenient but completely arbitrary boundary of the AONB.

10. We completely refute the need for a complex junction at Langrigg with its unnecessary encirclement of a cottage, nor do we feel a link road from Flitholme is necessary. What is proposed is completely out of scale to the level of traffic and adds hugely and wastefully to the cost of the project. Other options must be explored as the proximity to properties here would be devastating, let alone the environmental impacts. Our option will allow the existing A66 de-trunked road to become a safe local access road for use by farmers, cyclists, horse riders and walkers.

11. Highways England has made a few small amendments to its planned route, including two sections which would now encroach onto previously prohibited AONB land! While these plans might take the road a little further away, the noise, air and visual impact remain significant. It is interesting that AONB arguments do not seem to be so important now, so our northern route should be seriously considered and worked up into a proper scheme.

In conclusion, while we understand the need for your scoping exercise along the whole route, we believe that the omission of a similar exercise for our alternative route should now be completed as a matter of urgency. The whole point of this A66 NTP project is to minimise the environmental impact of such a huge national scheme. Our northern route proposal, we maintain, will reduce all of the potential impacts by effectively bypassing our community and creating a superb road route which will enhance the small strip of AONB land it passes through.

Kind regards,

David Keetley,

Chair, Warcop Parish Council

On Monday, 14 June 2021, 16:48:16 BST, A66Dualling <a66dualling@planninginspectorate.gov.uk> wrote:

FAO: Warcop Parish Council

Dear Sir/Madam,

Please see attached correspondence on the proposed A66 Northern Trans-Pennine.

Please note the deadline for consultation responses is **12 July 2021**, and is a statutory requirement that cannot be extended.

Kind regards,

Marie Shoesmith

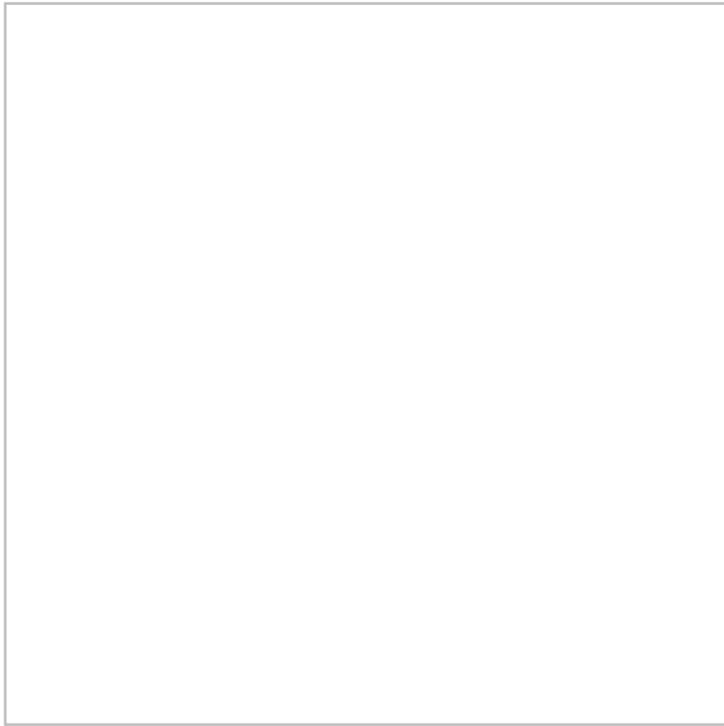
Marie Shoesmith
Senior EIA Advisor
Environmental Services
Helpline: 0303 444 5000

Web: <https://infrastructure.planninginspectorate.gov.uk/> (National Infrastructure Planning)

Web: www.gov.uk/government/organisations/planning-inspectorate (The Planning Inspectorate)

Twitter: [@PINSgov](https://twitter.com/PINSgov)

This communication does not constitute legal advice.

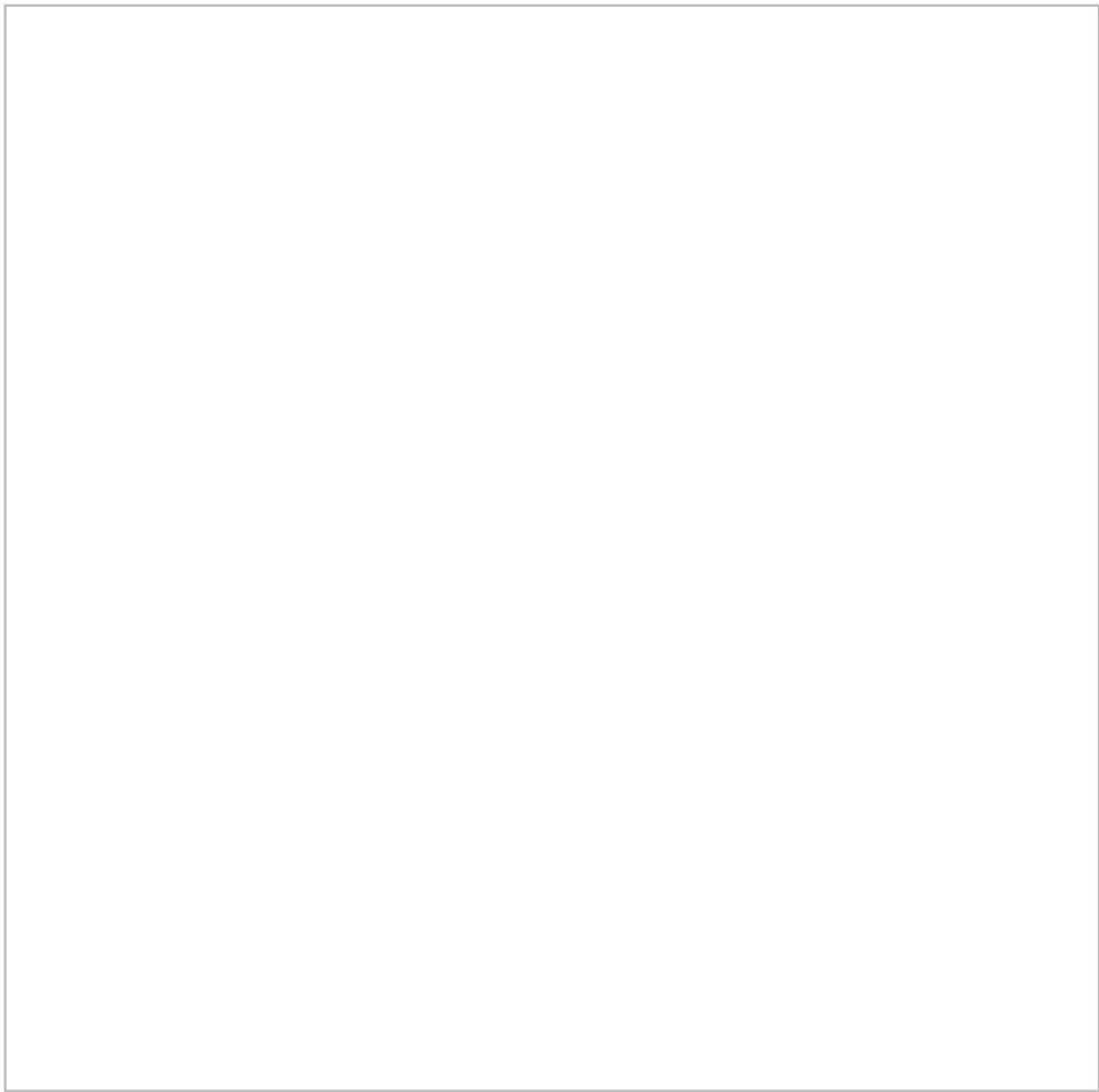


Please note that the contents of this email and any attachments are privileged and/or confidential and intended solely for the use of the intended recipient. If you are not the intended recipient of this email and its attachments, you must take no action based upon them, nor must you copy or show them to anyone. Please contact the sender if you believe you have received this email in error and then delete this email from your system.

Recipients should note that e-mail traffic on Planning Inspectorate systems is subject to monitoring, recording and auditing to secure the effective operation of the system and for other lawful purposes. The Planning Inspectorate has taken steps to keep this e-mail and any attachments free from viruses. It accepts no liability for any loss or damage caused as a result of any virus being passed on. It is the responsibility of the recipient to perform all necessary checks.

The statements expressed in this e-mail are personal and do not necessarily reflect the opinions or policies of the Inspectorate.

DPC:76616c646f72



Please take a moment to review the **Planning Inspectorate's Privacy Notice** which can be accessed by clicking [this link](#).