Chapter 3 Environmental Impact Assessment

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Regulation Reference: 5(2)(a)
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Chapter 3 Environmental Impact Assessment

Introduction

3.1 This Chapter sets out the approach that has been used in the Environmental Impact assessment (EIA). It summarises the key methods that have been followed, in line with good practice. It also provides a sub-section on the assumptions made during the EIA process, how the key environmental issues were identified, and the consultation which has been undertaken.

Legal and Other Requirements for EIA


3.3 The Design Manual for Roads and Bridges (DMRB) is a collection of guidance documents prepared by the UK’s Highways Agency. It provides details of the standards for the design of major roads and bridges, and guidance and assessment methods for the environmental assessment of them. In doing so, it takes account of European and national environmental legislation, so that the assessments are current and reflect best practice. However, where the DMRB has not been recently updated supplementary assessment has been carried out to ensure compliance with all relevant legislation.

3.4 The bypass is a local authority proposed road development and thus is not bound by the requirement to assess the potential environmental effects in accordance with the DMRB. However, the DMRB is recognised as the most suitable guidance, and technical assessment methods have generally followed the methods it proposes. In those few cases where this is not the case, the alternative method has been clearly described in the Methodology section of the relevant technical chapter.

3.5 Table 3.1 summarises the relevant parts of the DMRB guidance:

Table 3.1 DMRB Environmental Assessment Guidance

<table>
<thead>
<tr>
<th>DMRB Reference</th>
<th>Version</th>
<th>Title/Environmental Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.3.1</td>
<td>HA 207</td>
<td>Air Quality</td>
</tr>
<tr>
<td>11.3.2</td>
<td>HA 208</td>
<td>Cultural Heritage</td>
</tr>
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<td>11.3.3</td>
<td>HA 209</td>
<td>Landscape</td>
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<td>11.3.4</td>
<td>HA 210</td>
<td>Nature Conservation</td>
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<tr>
<td>11.3.5</td>
<td>No reference</td>
<td>Geology and Soils</td>
</tr>
<tr>
<td>11.3.6</td>
<td>HA 212</td>
<td>Materials</td>
</tr>
<tr>
<td>11.3.7</td>
<td>HA 213</td>
<td>Noise</td>
</tr>
<tr>
<td>11.3.8</td>
<td>HA 214</td>
<td>Effects on All Travellers</td>
</tr>
<tr>
<td>11.3.9</td>
<td>HA 215</td>
<td>Community and Private Assets</td>
</tr>
<tr>
<td>11.3.10</td>
<td>HA 45</td>
<td>Road Drainage and the Water Environment</td>
</tr>
</tbody>
</table>
The EIA Process

3.6 EIA is the process of compiling, evaluating and presenting environmental information in support of an assessment of all potential significant environmental effects of a proposed development. The assessment is designed to help produce an environmentally sympathetic project. The early detection of significant adverse environmental effects enables appropriate mitigation (e.g. measures to avoid, reduce or offset significant adverse effects) to be identified and incorporated into the design of a project/scheme.

3.7 Diagram 1.1 illustrates the main approach to this EIA and the key stages of the process, once the need for an EIA has been determined.

Diagram 1.1: EIA Process

3.8 The EIA process has been undertaken in accordance with relevant UK environmental legislation and guidance. In addition to topic specific legislation and guidance (which will be presented in each specialist Chapter) reference will also be made to 'Environmental Impact Assessment: A Guide to Good Practice and Procedures - Consultation Paper (Department for Communities and Local Government, June 2006)' and The Institute of Environmental Management and Assessment (IEMA) 'Guidelines for Environmental Impact Assessment (2004)'.

3.9 In accordance with Part 1 Schedule 4 (Regulation 2 (1)) of the Infrastructure Planning (EIA) Regulations (2009) (as amended 2011) the ES should include as a minimum:

- A description of the physical characteristics of the whole development and the land-use requirements during the construction and operational phases;
- A description of the main characteristics of the production processes, for instance, nature and quantity of the materials used;
- An estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc.) resulting from the operation of the proposed development;
- An outline of the main alternatives studied by the applicant and an indication of the main reasons for the applicant’s choice, taking into account the environmental effects;
- A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above factors;
- A description of the likely significant effects of the development on the environment, which should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the development, resulting from: the existence of the development; the use of natural resources; the emission of pollutants, the creation of nuisances and the elimination of waste, and the description by the applicant of the forecasting methods used to assess the effects on the environment;
- A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment;
- A non-technical summary of the information provided under paragraphs 1 to 5 of this Part; and
- An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information.

3.10 A description of the proposed development and the main alternatives considered has been provided in Chapter 2 Scheme Description and Alternatives Considered. Part 1 of this ES is the Non-Technical Summary which provides a brief overview of the scheme and its environmental effects, as described in detail in this Part 2. Baseline data that has been used for the identification and assessment of potential effects, a description of the potential effects and mitigation measures, and assumptions and limitations used in the assessment, are described in each technical chapter. The following technical chapters are included:

- **Chapter 5** Air Quality
- **Chapter 6** Archaeology and Cultural Heritage
- **Chapter 7** Ecology and Nature Conservation
- **Chapter 8** Landscape and Visual
- **Chapter 9** Land Use
- **Chapter 10** Noise and Vibration
- **Chapter 11** Pedestrians, Cyclists, Equestrians and Community
- **Chapter 12** Vehicle Travellers
- **Chapter 13** Road Drainage and the Water Environment
Chapter 14  Geology and Soils  
Chapter 15  Socio-economic and Population Effects  
Chapter 16  Cumulative Effects  
Chapter 17  Disruption Due to Construction  
Chapter 18  Summary of Human Health Effects  

3.11 In addition to the above, Chapter 2 ‘Scheme Description and Alternatives Considered’ provides a summary of the Transport Assessment and a Utilities Statement. Furthermore, following a review of the Scoping Opinion provided by the Planning Inspectorate (September 2012), we have also included the following supporting technical appendices:  
- Appendix 17 Site Waste Management Plan; and  

3.12 To ensure that all pertinent information is captured, and presented clearly, the following general structure has been used for each technical chapter:  
- Introduction;  
- Legislation and Planning Policy;  
- Methodology;  
- Baseline Conditions;  
- Identification of Effects;  
- Mitigation Measures;  
- Residual Effects; and  
- Summary and Conclusions.  

Scoping  

3.13 Scoping is the process of identifying the likely significant environmental issues that may arise during construction operation and decommissioning of the proposed scheme, and which therefore should be considered in the EIA. This process determines the “scope” of the EIA (e.g. content and assessment methods) and is typically achieved by presenting baseline information and an outline assessment method in an Environmental Scoping Report, which is then issued to relevant statutory and non-statutory consultees to comment upon. The main objectives of the Scoping include:  
- Identifying areas of potential environmental significance and highlight the key issues;  
- Highlighting the issues of less significance which do not need to be addressed;  
- Briefly summarising baseline environmental information;  
- Defining an assessment framework for carrying out a comprehensive assessment; and  
- Inviting statutory and non-statutory consultees to comment on the proposed methodology and to provide information relevant to the scheme.
Approach to the Assessment of Effects

3.14 The main steps in the assessment process are as follows:

3.15 Baseline Studies: Once the scope of the EIA had been determined, it was important to collect the detailed environmental baseline information against which potential effects of the proposed bypass were assessed. Appropriate data was gathered, including site visits and other forms of survey, as required.

3.16 Surveys: A number of studies and surveys have been carried out as part of the EIA process and are presented in the relevant chapters in this ES. These studies and surveys have been used to define the environmental baseline conditions against which effects have been measured and predicted. Additionally, the information collated from the studies and surveys has also been used to inform the mitigation measures.

3.17 Prediction of Effects: The effects of the proposed bypass were predicted and evaluated using appropriate modelling and other objective or evaluative techniques. The initial assessment identified the significant effects, in the absence of additional mitigation measures. This exercise was then updated, once mitigation measures were agreed, in order to identify the significance of residual effects (i.e. the likely effects that would actually occur if the proposed bypass was constructed).

3.18 The determination of the significance of the effects arising from the proposed scheme is a key stage in the EIA process. It is this judgement that is crucial to informing the planning decision-making process. However, defining what is significant is not a simple task. In general, the following criteria were used, where appropriate to the issue being addressed in the EIA, to inform the assessment of the significance of an effect:

- Type of effect (adverse/beneficial and direct/indirect);
- Extent and magnitude of effect (major/moderate/minor/negligible);
- Duration of effect (short term (days or weeks), medium term (months to a year), long term (more than a year);
- Reversibility of effect (permanent/temporary);
- Sensitivity/importance of receptor (very high/high/medium/low);
- Comparison with legal requirements, policies and standards;
- Comparison with applicable environmental thresholds; and
- Effectiveness of mitigation.

3.19 Using the above criteria, the significance of the effects arising from the proposed development has been categorised for each individual environmental topic and is presented in each of the specialist chapters (i.e. Chapters 5 to 18).

3.20 For some chapters this process of determining the significance of effects is different in part to the above. For example:

- The Landscape and Visual Impact Assessment presented in Chapter 8 refers to the Guidelines for Landscape and Visual Impact Assessment (GLVIA) published by the Institute of Landscape Architects;
- The DMRB assessment for land use and agriculture does not provide a mechanism to determine significance in the method described above. Instead, the significance of
effect on farms is determined from the effect on a farms economic viability on a scale from neutral-minor-moderate-major; and

- The revised noise and vibration assessment (HD213/11) assesses the magnitude of potential noise and vibration effects in detail and establishes whether or not mitigation is required. It is assumed therefore, that where an adverse effect is predicted that is not mitigated, this constitutes a potential significant effect.

3.21 Please refer to each technical chapter for a full description of the precise method used to determine the significance of effects.

3.22 Mitigation/Enhancement Measures: Mitigation measures reported in the ES have been developed and agreed in consultation with consultees and NCC. Mitigation measures are set out in each of the assessment chapters in this ES. In stating the mitigation measures in this ES, NCC is committed to the implementation of all those measures described. The following mitigation hierarchy has been applied (taken from Environmental Impact Assessment: A Guide to Good Practice and Procedures - Consultation Paper (Department for Communities and Local Government, June 2006)):

1) **AVOIDANCE** – Make changes to the design of a scheme (or location) to prevent adverse effects ever occurring;

2) **REDUCTION** – Where avoidance is not possible, adverse effects can be reduced through sensitive environmental design/treatments. Adverse effects should be minimised as far as reasonably practicable to do so;

3) **COMPENSATION** – Where avoidance and reduction are not possible, it may be appropriate to provide compensatory measures (i.e. where a certain habitat is being lost, new habitat may be created elsewhere). It should be noted that compensatory measures do not eliminate the original adverse effects, but seek to offset it with a comparable positive one;

4) **REMEDIATION** – Where adverse effects are unavoidable, management measures can be introduced to limit their influence; and

5) **ENHANCEMENT** – Where possible, a proposed development might be able to enhance an environment receptor.

3.23 Residual Effects: Residual effects relate to the effect of the development on the environment, taking account of proposed mitigation measures. Residual effects represent the effects that are likely to occur if the proposed development is constructed, and can be adverse/beneficial, direct/temporary etc.

3.24 Construction, Permanent and Operational Effects: Effects will be separated into ‘types’ based on different stages of the development. Construction effects are temporary, short term effects which occur during the construction period only. Operational effects are those which occur once the proposed bypass is open to traffic, and can be temporary or permanent. Permanent effects are those long term effects which would occur as a result of the development, and may include the introduction of new structures, the permanent loss of habitat, or the demolition of structures. Depending on the nature of the effect,
some effects which might occur initially during construction may be categorised under operational effects due to their permanence (e.g. demolition of a building).

3.25 Inter-relationships between Effects: For the purposes of this EIA, the potential effects of the proposed scheme have been considered in terms of effects on each of the discrete environmental topic areas. In reality, topic areas such as ‘ecology’ or ‘landscape’ cannot be considered in isolation since changes affecting one factor may often have secondary implications for other areas. Thus, if one effect of the scheme is to alter local topography, this could affect micro-climate, which would in turn affect flora and fauna. Under some circumstances, it is possible for the secondary or indirect effects to be more significant than the changes that triggered them. Cross references between topics is provided in each of the chapters through consideration of cumulative effects.

3.26 Cumulative Effects: Cumulative effects relate to “other” projects and plans, or from the combination of different aspects of the proposed scheme. Good practice guidelines recommend that an EIA should assess the effects of the development cumulatively with other developments only when there are likely to be significant effects.

3.27 The combined effects on specific resources or receptors will be described, where relevant, in each of the specialist chapters. An example would be where different project elements in different locations have a cumulative effect on a particular species.

3.28 A qualitative assessment of the potential cumulative effects of the proposed scheme with other proposed developments in the local area has been undertaken. Chapter 16 provides a brief overview of the potential combined effects which may occur during the construction and operational phase of the scheme.

3.29 Uncertainty, Assumptions and Limitations: The EIA process enables good decision-making based on the best possible information about the environmental implications of a proposed development being made available. However, there will always be some uncertainty as to the exact scale and nature of the environmental effects. This uncertainty arises because of the level of detail and information about the scheme available at the time the assessment was carried out and/or due to the limitations of the prediction process itself. Please refer to each technical chapter for full details of the assessment uncertainty, assumptions and limitations pertaining to each environmental topic, respectively.

3.30 Level of Design Detail for EIA: It is acknowledged that slight changes in the design of the proposed road scheme that is eventually constructed may occur after permission is granted. However, it should be noted that this ES presents the results of the environmental assessment of the proposed design at the time of writing. If there are fundamental changes it may be necessary to revisit the assessment presented by this ES and to submit a revised planning application.

3.31 The environmental effects that are reported in this ES and the level of mitigation described effectively set the minimum standard which will be achieved by the final scheme.
The Scope of the EIA – Scoping and Scoping Consultation

3.32 MNB has had a long development history prior to the scheme being identified as an NSIP. As part of this development process the scheme has had a public profile since 1994 and has been the subject of several specific consultation exercises.

3.33 Table 3.2 table sets out the consultation/publicity of the scheme prior to NSIP status:
### Table 3.2 Consultation Summary

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Outcome(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>A1 – South East Northumberland Link Road included in County Council Transport Programme. This includes the MNB as part of the scheme.</td>
<td>Document approved and published</td>
</tr>
<tr>
<td>Jul &amp; Aug 2002</td>
<td>Public Exhibitions held at Morpeth Leisure Centre (16/07/2002) and Pegswood &amp; District Social Club &amp; Institute (18/07/2002). Smaller exhibition put up in County Hall (19 – 26/07/2002). Members Exhibition in County Hall (20/08/2002). These exhibitions showed the plans for the whole of the A1 – South East Northumberland Link Road (as it was known at the time) covering the Pegswood Bypass section, the A1 – A192 Link Road and the St. George’s Link (the latter two sections make up the MNB as it is now known). People were asked to comment on all sections of the proposals with comments to be received by 31/07/2002.</td>
<td>Approx. 350 attended the Leisure Centre. Approx. 200 attended the Social Club. 60 comments received. Comments noted and where possible incorporated into the design.</td>
</tr>
<tr>
<td>Jan 2003</td>
<td>Planning Application for Pegswood Bypass submitted to Northumberland County Council. Mentions other parts of the A1 – South East Northumberland Link Road including what is now known as the MNB.</td>
<td>Planning Application for Pegswood Bypass approved.</td>
</tr>
<tr>
<td>Jan 2003</td>
<td>Planning Application for A1 - A192 Link Road (which now forms the eastern part of the MNB) submitted.</td>
<td>A1 - A192 Link Road Planning Application approved. Now lapsed.</td>
</tr>
<tr>
<td>2003</td>
<td>Castle Morpeth District Local Plan 1991 – 2006 Adopted 2003. The route of the A1 – South East Northumberland Link Road was included in the Castle Morpeth District Local Plan which was approved via a Public Inquiry process which considered valid objections. The Plan was adopted in 2003</td>
<td>The Planning Inspector indicated that the need for the road scheme had been established through consideration of the Northumberland County Structure Plan which had previously identified that the scheme was intended to improve access for communities in the South East of the County to the A1.</td>
</tr>
<tr>
<td>Date</td>
<td>Activity</td>
<td>Outcome(s)</td>
</tr>
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<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>End of 2005</td>
<td>Regional assessment by Government Office North East included the MNB in a 10 year programme of preferred major transport schemes.</td>
<td>Endorsement by the Department for Transport.</td>
</tr>
<tr>
<td>2004 – Mar 2006</td>
<td>Northumberland County Council LTP 2 produced covering the years 2006 to 2011. Consultations prior to and during production of the document were done. The MNB is considered as part of the proposed major transport schemes.</td>
<td>Scheme welcomed by Castle Morpeth while the Highways Agency wanted discussions connected with it. Final document accepted and published March 2006.</td>
</tr>
<tr>
<td>Mar 2008</td>
<td>Public Exhibitions held at County Hall (5-7/03/2008) and Morpeth Library (8/03/2008). Following the completion of the Pegswood Bypass these exhibitions showed revised proposals consisting of a brief scheme history, alternatives considered, plans of the preferred route (&amp; reasons) and traffic &amp; environmental impacts of the completed scheme. Comments were requested prior to a 'Bid for Programme Entry' submission to the Department for Transport. Consultation letters were also sent out to all statutory &amp; non statutory bodies, councils, interest groups and stakeholders requesting comments.</td>
<td>Approx. 330 people attended over the 4 days. 59 written comments were received. For scheme 41% Against scheme 29% No decision but commented 25% Others 5%. Comments received back from consultees. Report written and published. The report discussed the comments raised, their merits and made recommendations.</td>
</tr>
<tr>
<td>Aug to Nov 2009</td>
<td>Business Survey Questionnaire issued to over 600 companies employing 10 or more people.</td>
<td>Results included in Economic Impact Report.</td>
</tr>
<tr>
<td>Sept 2009 – Present</td>
<td>New website launched giving details of the scheme along with the ability to contact the design team, ask questions and make comments. Updated with latest information as and when required.</td>
<td>Ongoing. Regularly viewed by the public with some queries and questions raised. Up to end of June 2012 visitors had numbered in excess of 11000 with only 9 queries or comments relating to the scheme.</td>
</tr>
<tr>
<td>Date</td>
<td>Activity</td>
<td>Outcome(s)</td>
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<tr>
<td>Mar 2010</td>
<td>Public Exhibition held at Morpeth Town Hall (25/03/2010) prior to a Planning Application submission. The exhibition presented detailed scheme information and development since 2008 showing what was to be submitted for the planning application. The information included a brief scheme history, plans, traffic projections, visualisations, drainage and environmental details and a computer generated fly through which could be used to show views of the final proposals from anywhere within the scheme proximity such as views from specific properties. As per the 2008 consultation letters were also sent out to statutory &amp; non statutory bodies, councils, interest groups and stakeholders.</td>
<td>Over 500 people attended. 23 written responses were received. None raised issues which would prevent the submission of the planning application. Report written and published.</td>
</tr>
<tr>
<td>2010 – Mar 2011</td>
<td>Northumberland County Council LTP 3 produced covering the years 2011 to 2016. Consultations held between Nov 2010 and Jan 2011. The document mentions MNB several times and other aspirations discussed are reliant on the construction of the bypass. The 2011 – 2015 implementation plan produced alongside the LTP states “The scheme is the second phase in the construction of a strategic link road between south-east Northumberland and the A1 trunk road. The strategic link road has been an aspiration of this Council since 1995-6, when it was first proposed as a priority in the Transport Policy and Programme for that year.”</td>
<td>Documents accepted and published. No adverse comments received relating specifically to the scheme.</td>
</tr>
<tr>
<td>Sep 2011</td>
<td>MNB Planning Application submitted to Northumberland County Council. Consultation on planning application October 2011 and February 2012. Legal advice received that the scheme now constituted a Nationally Significant Infrastructure Project.</td>
<td>Planning Application withdrawn. Preparations begun for submission of application for Development Consent Order.</td>
</tr>
</tbody>
</table>
Scoping Methodology and Proposed Scope of Assessment

3.34 A scoping exercise has been undertaken to determine those topics to be considered in more detail within this assessment. Part I of Schedule 4 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended) was used to inform the identification of the main aspects of the environment that are likely to be affected by the development. These include, in particular:

- Population;
- Fauna and flora;
- Soil;
- Water;
- Air and climatic factors;
- Material assets;
- Landscape; and the
- Inter-relationship between the above factors.

3.35 The exercise considered the likely effects of the proposed bypass which were likely to be significant, determined whether further assessment was required, and if so what methods of assessment to use. In summary the topics that required further assessment were:

- Air Quality;
- Archaeology and Cultural Heritage;
- Ecology and Nature Conservation;
- Landscape and Visual;
- Land Use;
- Noise and Vibration;
- Pedestrians, Cyclists, Equestrians and Community;
- Vehicle Travellers;
- Road Drainage and the Water Environment;
- Geology and Soils;
- Socio-economic and Population Effects;
- Cumulative Effects;
- Disruption due to Construction; and
- Summary of Human Health Effects.
3.36 Due to the nature of the proposed scheme, assessment of decommissioning would not be considered appropriate. The road will form part of the highways network (NCC and trunk road) and will be included in the existing maintenance regime, which would keep the road operational. This may include routine gully pot cleaning, management of landscaped areas along the verge and drainage ponds, and the application of de-icing materials during freezing conditions over winter months. These activities have the potential for short term, temporary minor adverse effects and will need to be managed in accordance with good practice.

3.37 An Environmental Scoping Report was submitted to the Planning Inspectorate for consultation in July 2012. The report covered all the topics detailed in the DMRB and identified the existing/baseline scenario for each receptor, and made recommendations for the assessment which needed to be undertaken as part of this ES. A short summary of the key issues and proposed scope of assessment is provided in Table 3.3:
Table 3.3 Proposed Scope of Assessment

<table>
<thead>
<tr>
<th>Environmental Topic</th>
<th>Proposed Scope of Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Air Quality</strong></td>
<td>Detailed Level Assessment with regards local air quality in accordance with DMRB 11.3.1. WebTAG local assessment is also proposed. Regional air quality effects will be assessed using the Simple Level Assessment presented in the DMRB 11.3.1. Finally, construction effects (primarily dust) will be assessed qualitatively.</td>
</tr>
<tr>
<td><strong>Archaeology and Cultural Heritage</strong></td>
<td>Due to the nine recorded archaeological monuments within the route corridor, a full Desk Study assessment of heritage and potential archaeology is proposed. This will be carried out in accordance with the guidelines published by the Institute of Archaeology and in consultation with the Country Archaeologist.</td>
</tr>
<tr>
<td><strong>Ecology and Nature Conservation</strong></td>
<td>To supplement existing data and investigate areas not previously surveyed, the following surveys will be carried out in accordance with best practice guidance where relevant: Phase 1 Habitat Survey, hedgerow, otter, water vole, red squirrel, badger, bats, and breeding birds (including barn owl). The results from these surveys will be used to inform an Ecological Impact Assessment.</td>
</tr>
<tr>
<td><strong>Landscape and Visual</strong></td>
<td>It is recommended that a detailed Landscape and Visual Assessment in accordance with the methods contained within DMRB Volume 11 Section Part 4 and drawing on the Guidelines for Landscape and Visual Impact Assessment (GLVIA) be undertaken. Landscape character will be studied and Local Character Zones established along the route. A Zone of Theoretical Visibility (ZTV) will be developed which will inform the assessment of visual effects. Mitigation proposals will be developed in order to reduce the effects on landscape and visual amenity and ensure the scheme is sympathetic to the existing landscape.</td>
</tr>
<tr>
<td><strong>Noise and Vibration</strong></td>
<td>There are four stages of work that may be carried out when assessing the potential noise and vibration effects of a road scheme using the DMRB methodology. The Scoping Level of the assessment was completed and presented in the Scoping Report (AECOM, 2009). The object of the scoping assessment is to ‘determine the likely extent of any assessment and to identify sensitive receptors’ (DMRB, Volume 11, Section 3 Part 7 (HA213/08). It is recommended that the next stage of assessment with regard to noise and vibration be a Detailed Level Assessment, undertaken in accordance with the DMRB. Please note that since the publication of the Scoping Report (AECOM, 2009) the DMRB guidance for noise as been updated. Please refer to Chapter 10 for more information.</td>
</tr>
<tr>
<td><strong>Pedestrians, Cyclists, Equestrians and Community</strong></td>
<td>An assessment in accordance with the DMRB will be provided.</td>
</tr>
<tr>
<td><strong>Vehicle Travellers</strong></td>
<td>An assessment in accordance with the DMRB will be provided.</td>
</tr>
<tr>
<td><strong>Road Drainage and the Water Environment</strong></td>
<td>There is the potential for new structures within the flood plains and channel of the How Burn and Cotting Burn to alter the flow and thus the flood risk. Runoff from the proposed bypass may also contribute to elevated flows in receiving watercourses. A Flood Risk Assessment in accordance with the National Planning Policy Framework (NPPF) and HD45/09 of the DMRB is proposed. This will be informed by hydraulic modelling of the proposed new structures at How Burn and Cotting Burn. There is the potential for adverse effects on the water environment from construction and operation of the new bypass. Construction effects will be assessed qualitatively. During operation, the risk from routine runoff and spillages will be assessed using the methods set out in HD45/09 of the DMRB.</td>
</tr>
<tr>
<td><strong>Geology and Soils</strong></td>
<td>The Scoping Report (AECOM, 2009) reviewed the effect of the scheme on the geology and soils along the route. Although the</td>
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<tr>
<td>Environmental Topic</td>
<td>Proposed Scope of Assessment</td>
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<td>potential for significant effects on geology was not predicted, it was not possible to assess the effects of mineral resources and former contaminative uses until a ground investigation along the route had been completed. As a result, an assessment in accordance with the DMRB will be included in the EIA and presented in the ES.</td>
</tr>
<tr>
<td>Socio-Economic and Population Effects</td>
<td>In response to Scoping consultation comments the effect of the scheme on socio-economic aspects and population will be assessed in the EIA and presented in the ES using a methodology guided by Her Majesty’s Treasury Green Book Guidance,</td>
</tr>
</tbody>
</table>
Consultation

3.38 As previously stated a detailed planning application accompanied by an Environmental Statement (ES) was submitted to NCC in August 2011. As part of the planning application process an Environmental Scoping Report was submitted for consultation in May 2009. Following the publication of the Environmental Scoping Report the comments received were presented in the ES (AECOM, 2011), a summary of which is included in Appendix 3.1 and copies of correspondence in Appendix 3.2.

3.39 The 2011 planning application was withdrawn when it was determined that the scheme was a Nationally Significant Infrastructure Project. An EIA for submission under the Planning Act 2008 was prepared. This included a Scoping Report prepared by AECOM in 2012 for which we received collated comments from PINS; the Scoping Opinion (SO). These comments are summarised below under each technical topic with our comments in italics. The full consultation responses can be viewed in Appendix 3.3.

3.40 Further to the formal scoping consultation process, additional technically specific consultation has been undertaken as required by each assessment. For details please refer to the ‘Consultation’ section in each technical chapter.

Air Quality

The Planning Inspectorate

3.41 The ES should clarify the extent of the study area for the Detailed Local Level Assessment and the Regional Simple Level Assessment (SO paragraph 3.19). A section has been added to the introduction providing details of the study area in accordance with the DMRB Guidance.

3.42 The receptors in Table 4.3 should be illustrated in a Figure. The receptor list should also be extended to include sensitive ecological receptors (SO paragraph 3.19). A receptor figure was previously submitted; however, this has been updated to include proposed receptors. Assessment of ecological receptors was scoped out as there are no designated features within 200 m of the proposed bypass.

3.43 The assessment should consider the impact of dust generation and vehicle emissions on these receptors during the construction and operational phases of the development. The assessment should consider both existing receptors and any proposed development within the study area that may be sensitive to emissions (SO paragraph 3.19). Assessment of proposed receptors has now been included in the construction and operational phase assessments.

3.44 The ES should also consider the impact upon local footpaths and other PROW (SO paragraph 3.20). A receptor was selected to represent a worse case location on a footpath. The impact of the proposed scheme was determined at this receptor.

3.45 The ES should identify any proposed development which is likely to cause an increase in traffic flows along the bypass and take account of the potential cumulative impacts on air quality (SO paragraph 3.22). Proposed developments were identified and traffic flows
associated with the developments were included in the traffic data applied to the modelling assessment.

Health Protection Agency

3.46 The Health Protection Agency (HPA) states that when considering a baseline and in the assessment and future monitoring of impacts consideration of the impacts on existing areas of poor air quality should be included, modeling should use appropriate meteorological data and take into account local topography. The impact of the proposed bypass was predicted at receptors anticipated to experience the largest impacts due to changes in traffic flow. The modelling software used to predict the pollutant concentrations uses appropriate meteorological data, recorded at the nearest station in the base year.

Northumberland County Council

3.47 An assessment of the impact on air quality locally, regionally and globally, including the impacts of emissions from fixed and mobile plant and vehicles should be included in the ES. The methodology outlined in the DMRB, Volume 11, Section 3, Part 1 (HA, 2007) and the Transport Analysis Guidance (TAG) assessments have been followed to determine the local, regional and global air quality impacts.

3.48 The Environmental Health Officer (EHO) would like to see a Dust Management Plan for the planned works which would provide guidance to the contractor/developer on what actions to take as a result of; perceived dust leaving the site and/or affecting receptors, complaints from the public, observations from officers of the Council, etc. A Construction Environmental Management Plan is included in the ES (Appendix 18) which refers to mitigation to control dust.

Archaeology and Cultural Heritage

The Planning Inspectorate

3.49 The full extent of the study area should be illustrated on a Figure (SO paragraph 3.24). The ES should also detail the methodologies used to carry out the survey work (SO paragraph 3.25). In addition, the impacts of the proposed development upon the setting of the identified Scheduled Ancient Monuments should be assessed within the ES (SO paragraph 3.26). Chapter 6 presents the Archaeology and Cultural Heritage assessment which includes impacts on the setting of assets. Figures 6.1 and 6.2 illustrate the study area of the assessment. Survey work methodologies are included in Appendix 6.3 (Geophysical Survey) and Appendix 6.4 (Evaluation survey).

English Heritage

3.50 Government policy in respect of the historic environment is now contained in the National Planning Policy Framework (NPPF). The EIA should identify the location, nature, status and significance of all heritage assets within the area under investigation, or otherwise likely to be impacted upon by the proposal, define the setting of those assets, explain both the direct and indirect impacts of the proposed development upon them, and outlining measures planning to avoid, minimise, or compensate for these
impacts. English Heritage (EH) also suggests that the consequences of removing traffic from the town should also be examined as having a potentially negative impact in respect of trade within it. *The Archaeology and Cultural Heritage Assessment presented in Chapter 6 takes into account English Heritage comments.*

Natural England

3.51 The assessment should consider whether there is land in the area affected by the development qualifying for conditional exemption from capital taxes on the grounds of outstanding scenic, scientific or historic interest. These are considered to be designated landscapes of national importance and the impact of your plan on these should be assessed where appropriate. *This comment is noted but is not relevant to environmental assessment.*

Northumberland County Council

3.52 Northumberland County Council noted that previous archaeological investigations around the area have identified evidence of Iron Age/Romano-British period features. Therefore, the Archaeology and Cultural Heritage assessment should include a staged approach to archaeological assessment comprising the preparation of an archaeological desk based assessment, the results of a programme of targeted archaeological evaluation (e.g. trial trenching, geophysical survey etc), and further targeted assessment if required. *This staged approach has been undertaken and approved by the County Archaeologist.*

3.53 The following conditions were recommended on the previous planning application:

- A programme of archaeological work is required in accordance with the brief provided by Northumberland Conservation (NC ref: CM16/20: 15634). The archaeological scheme shall comprise three stages of work. Each stage shall be completed and approved in writing by the Local Planning Authority before it can be discharged.
- No development or archaeological mitigation shall commence on site until a written scheme of investigation based on the brief has been submitted to and approved in writing by the Local Planning Authority.
- The archaeological recording scheme required by the brief must be completed in accordance with the approved written scheme of investigation.
- The programme of analysis, reporting, publication and archiving if required by the brief must be completed in accordance with the approved written scheme of investigation.
- No development shall commence until the detail of a scheme of fencing has been agreed with LPA. The fencing scheme should be erected before construction works begin and should ensure that all areas of archaeological earthworks (including ridge and furrow earthworks) are protected from accidental damage during the development works.
- Pre-emptive archaeological investigations have been undertaken to enhance the baseline data and identify areas were further remedial works would need to be undertaken. This staged approach has been undertaken with approval from the archaeological advisor to NCC. Additional archaeological mitigation has been
included within the ES following recommendations from NCC and provisions for fencing will be included within the CEMP.

Ecology and Nature Conservation

Natural England

3.54 The ES should include a full assessment of the direct and indirect effects of the development on the features of special interest within any relevant SSSIs and should identify such mitigation measures as may be required in order to avoid, minimise or reduce any adverse significant effects. There are no SSSIs within 2km of the route.

3.55 Natural England (NE) strongly recommends that surveys for protected species should be carried out within the area affected by the development in optimal survey time periods and to current guidance by suitably qualified, and where necessary, licensed consultants. If any protected species are found the ES should include details of the species, population level affected, direct and indirect effects of the development, details of mitigation or compensation required and whether the impact is acceptable and/or licensable. Protected species surveys were undertaken in 2011 and 2012 to nationally accepted guidance.

3.56 The EIA will need to consider any impacts upon local wildlife and geological sites. The ES should include an assessment of the likely impacts on the wildlife interests of the site[s] including proposals for mitigation and if appropriate, compensation measures. The ecology chapter included an assessment of impacts and mitigation/compensation measures.

3.57 NE advises that a habitat survey (equivalent to Phase 2) is carried out on the site, in order to identify any important habitats present. In addition, ornithological, botanical and invertebrate surveys should be carried out at appropriate times in the year, to establish whether any scarce or priority species are present. The ES should include details of historical data for the site, additional surveys carried out as part of this proposal, the habitats and species present, the status of these habitats and species, direct and indirect effects and details of mitigation or compensation required. Adverse impacts to sensitive areas for wildlife within the site should be avoided, and if possible opportunities for overall wildlife gain should be provided.

3.58 Our comments to the above are as follows:

- A Phase 2 habitat survey was not undertaken due to the relatively undiversified habitats that were encountered during the Phase 1 Habitat Survey. However, an in-depth hedgerow survey was completed in 2012.
- A botanical survey was also not undertaken due to the relatively undiversified habitats that were encountered during the Phase 1 Habitat Survey.
- Ornithological and crayfish survey were undertaken but not an invertebrate survey due to the lack of diversity of butterflies and dragonflies recorded in the data search and the undiversified habitats that were encountered during the Phase 1 Habitat Survey.
- Historical data was provided in the Baseline Conditions section of Chapter 7 Ecology and Nature Conservation for each species group.
In response to the application made in 2011 NE made the following comments:

- In relation to bats NE objected as it was unclear which of the proposed mitigation measures will be included in the final development, how they will be delivered or whether they will be effective in mitigating the impacts which have been identified. Further information was requested to demonstrate how the proposed landscape planting will be used to mitigate impacts, consideration needs to given to impacts arising through the short term loss / severance of commuting/foraging routes prior to the effective establishment of landscape planting and how these impacts will be mitigated in the short term and confirmation as to whether the conversion of the pill box to a hibernaculum / summer roost will form part of the mitigation plan.
- Further details of the Great Crested Newt (GCN) surveys were requested.
- In relation to otters NE suggests a condition requiring a detailed mitigation plan for otter to be submitted for the approval of the LPA in advance of works commencing on site.
- Recommend that red squirrels surveys are included in the suite of pre-construction surveys and the results be used to inform/update the mitigation strategy.
- Recommends that as well as undertaking full pre-construction surveys for fauna the Phase 1 Habitat Survey is also updated to ensure that no significant changes have occurred.
- It is however unclear why watercourses have been assessed of ‘low’ nature conservation value and clarification should be provided.
- It is recommended that the detailed mitigation strategy is agreed in discussion with the County ecologist and delivery secured by means of a suitably worded condition.
- NE recommends a condition requiring the submit a detailed Ecological Management Plan

In response to the above we make the following comments:

- Bat mitigation was detailed in paragraphs 7.332-7.351 of the ecology chapter including how landscape planting will mitigate impacts. With regards to the pill box this proposal is included in the ecology chapter but is now caveated (‘consideration is given for the conversion’) as permission to convert it has not been finalised.
- GCN survey results from the 2012 survey have now been included in the ecology chapter and also within Appendix 7.12.
- The otter condition will be based on the otter mitigation section.
- Red squirrels have been added to the suite of pre construction surveys
- Full justifications for assessing the importance of watercourses were provided in the ecology chapter. The assessment was based on the habitat quality rather than the species each watercourse supports.
- The ecology chapter now states that the county ecologist will be consulted regarding the detailed bat mitigation strategy.
- A draft Construction Environmental Management Plan has been prepared which incorporates ecological mitigation measures.
3.61 In 2012 following issue of the 2012 Scoping Report, NE made the following additional comments:

3.62 NE has concerns regarding the age of survey work. While accepting that it is intended to undertake update surveys prior to works commencing, we would expect the ES to provide a clear, robust rationale as to why the survey work undertaken to date can be relied upon to provide an accurate assessment of the current ecological interest of the site and hence appropriate to inform scheme design. *New Phase 2 species surveys were undertaken in 2011 and repeated in 2012.*

3.63 NE would recommend that updated bat assessment information be used to inform the development of scheme design. NE recommends that a full Draft European Protected Species Licence is submitted at the earliest opportunity. *Current bat data has been used to inform the scheme design. The bat license application package can only be determined following planning approval and can only include data from the preceding twelve months.*

Northumberland County Council

3.64 NCC states that it is essential that up to date ecological information is provided. The ecological assessments should be undertaken in accordance with the Guidelines for Ecological Impact Assessment produced by the Institute of Ecology and Environmental Management. The protected species surveys should be carried out using recognised methodologies at appropriate times of the year. Consideration should be given to the UK Bio-diversity Action Plan (BAP) and the Northumberland BAP Surveys, and assessments and recommendations for mitigation measures should be undertaken by suitably qualified and experienced persons. *The Ecological Impact Assessment incorporates IEEM’s guidance. The protected species surveys followed nationally accepted methodologies and were undertaken at appropriate times of the year. Consideration was given to UK and local Biodiversity Action Plans throughout the ecology chapter especially in Section 7.4 (Baseline Conditions).*

3.65 In 2012 following issue of the 2012 Scoping Report, NCC made the following additional comments:

3.66 Timing of works will need to take account of ecology, the most likely issue being nesting birds. Works that would destroy hedges would need to avoid the bird nesting season or an appropriately qualified and experienced ecologist would need to inspect the relevant sections to establish the presence or otherwise of nesting birds. Tree removals will have to be assessed against the current ecological survey work. Specific measures will be required during construction in order to avoid contamination of the watercourses. Construction method statements with regard to methods of working and the use and storage of machinery, materials and fuels will be required. *Reference was made throughout the ecology chapter as to the importance of undertaking construction work outside the nesting season.*

3.67 Full details of landscape planting, seeding and aftercare will be required taking into account the current plant disease issues relating to ash die-back. Areas of woodland
Planting, to be carried out by ‘Others’ will need to be clarified and agreements finalised. Information has been provided in Chapter 8 Landscape and Visual.

3.68 The engineering plans annotate a ‘Drainage Pond’ just to the south of the St. George’s Roundabout but none is actually shown on the plans though there are such ponds a short distance to the west. Noted and detailed design updated.

3.69 The How Burn Wood, immediately south of the How Burn crossing, is annotated as ‘Ancient Replanted Woodland’. This is incorrect. At this point How Burn Wood is designated as ‘Ancient Semi-Natural Woodland’. The ARW designation relates to a section of the east side of How Burn Wood about 500m to the south east of the How Burn crossing. Figure 7.2 has been checked and confirmed as to be correct.

3.70 Note that the ‘NCC Salt Depot’ shown to the south of the Whorrall Bank roundabout has recently been developed. Noted and detailed design updated.

3.71 Fulbeck Lane Crossing planting of new trees and/or hedges needs to be taken as close as is possible to the abutments of the bridge in order to reduce the possibility of bats in particular dropping down to the level of the new carriageway whilst maintaining as much as is possible the line of Fulbeck Lane as a bat commuting/foraging route. These points have been addressed in Chapter 7 Ecology and Nature Conservation.

3.72 Mammal ledges at the Cotting Burn crossing are not annotated on the Engineering plans. Are similar features to be installed on the other smaller watercourse crossings given the long barrier that the proposed bypass will present to animals moving north to south or vice versa. Mammal ledges have been annotated on the relevant structure design plans (Cotting Burn and How Burn; Ful Beck not affected by the scheme).

3.73 The extent of the ‘badger fencing’ annotated on the engineering plans is not clear consideration may need to be given to extend that fencing westwards beyond the How Burn. In addition it should be noted that mammals, and especially badgers will move both ways north and south of the proposed bypass route and, as a result consideration will need to be given to appropriate fencing on the north side of the road workings as well as the south. The full extent of the badger fencing cannot be determined until the pre-construction survey has been completed.

The Planning Inspectorate

3.74 The Planning Inspectorate recommends that the assessment should take account of other proposed development within the area to ensure that cumulative impacts upon nature conservation are assessed (SO paragraph 3.27). The cumulative assessment of the ecology chapter now considers all relevant proposed developments that have been identified in consultation with NCC’s planning department.

3.75 The ES should assess the potential impact of pollutants upon ecology within the watercourse environment (risk of pollutants discharging into the watercourses which cross the bypass route via surface water and groundwater pathways as recognized in the water environment chapter) (SO paragraph 3.28). This point is addressed in Chapter 7 Ecology and Nature Conservation.
3.76 The ecological assessment should include the potential impacts downstream of the Development within the River Wansbeck, assess the impact of the loss of part of How Burn Wood SNCI/LNR/Ancient Woodland, and hedgerows and hedgerow trees, in particular in relation to severance of habitats such as the Cotting Burn Wildlife Corridor, take into account impact on animal movement and migration in the wider area, including the loss of life as a result of wildlife attempting to cross the bypass once operational and the need for appropriate mitigation measures, the impact of temporary and permanent lighting upon nature conservation and an assessment of impact of culverting with appropriate mitigation proposed (SO paragraph 3.29, 3.30 & 3.32). This point is addressed in Chapter 7 Ecology and Nature Conservation.

3.77 The Planning Inspectorate advises that Natural England and the County Ecologist are liaised with to ensure that appropriate bat survey work is carried out, and suitable mitigation measures are proposed where necessary (SO paragraph 3.31). The County Ecologist was contacted in 2012 regarding bat surveys. However, NE will be consulted as part of the licence application process and the ecology chapter has been updated accordingly.

3.78 The Planning Inspectorate is pleased to note that the Applicant has considered the opportunities for habitat creation and biodiversity enhancement (SO paragraph 3.34). No comment.

3.79 The Planning Inspectorate advises that an assessment of reptiles should not be scoped out and states that it is important that appropriate survey work is carried out to confirm that there would be no adverse impact on reptiles that may be present (SO paragraph 3.5). Clarification was requested on the requirement to undertake reptile survey work. PINS noted the comments and suggested that justification is set out in the ES as to why surveys are not required and that the approach is agreed with the relevant SNCB (NE). NE has agreed that a reptile survey is not needed. The ecology chapter has been updated accordingly with a provision for a reptile method statement and pre construction surveys where appropriate.

3.80 Following clarification the Planning Inspectorate noted the comments and suggested that justification is set out in the ES as to why surveys are not required and that the approach is agreed with the relevant SNCB. NE was written to and they recommended that: ‘In relation to the extended Phase 1 Habitat Surveys, given their age (between 4-6 years) checking surveys are undertaken in order to clearly demonstrate that no significant changes have occurred to the extent / quality of habitats in the interim period which may, for example, have influenced the distribution of protected species within the study area.’

3.81 We have responded to this by amending the ecology chapter (section 7.3.3.): ‘The data provided by the Extended Phase 1 Habitat survey, has been reviewed in light of the data provided by the many surveys that have been undertaken, especially the 2011 and 2012 species surveys. No significant changes to the extent / quality of habitats within the Survey Area have been detected and as a consequence the Extended Phase 1 Habitat surveys were not required to be updated.’
Environment Agency

3.82 The EA welcome the proposed ecological mitigation and enhancement measures, as the EA seeks to restore and enhance watercourses wherever possible, as required under the Water Framework Directive. However the EA considers that measures to enhance the catchment as a whole may be more useful including, for example, targeted measures which would address the current poor habitat (in-stream and riparian) and reduced water quality in the Cotting, How and Benridge Burns and the Ful Beck, particularly the signs of detrimental nutrient and silt loading. The EA also suggests that further investigation into feasible mitigation and enhancement measures and implementation of these wherever possible is undertaken. *Silt and sediment control measures are summarised in Chapter 7 Ecology and Nature Conservation, which is based on the mitigation set out in Chapter 13 Road Drainage and the Water Environment.*

3.83 In 2012 following issue of the 2012 Scoping Report, the EA made the following additional comments:

3.84 Consideration should be given to the possible cumulative impacts on biodiversity of this development and the Morpeth Flood Alleviation Scheme. The Scheme presents opportunities to ensure that any remaining adverse ecological impacts could be offset by enhancement of watercourses and riverine habitat in the vicinity. The EA propose the following condition to ensure that the mitigation and protection measures detailed in the draft ES are delivered 'The development hereby permitted shall only be carried out in accordance with the approved Environmental Strategy outlined in drawing HE092631/0/A197/01/84 and the approved Environmental Statement including the mitigation and protection measures detailed in Section 7.5, Chapter 7 - Ecology and Nature Conservation, Section 13.6, Chapter 13 - Water Environment. Due to the distance between the FAS and the route and the limited habitat creation involved with the FAS it is difficult to say how the scheme can offset any adverse impacts specified in the ecology chapter.' *Noted and no further comment.*

3.85 The mitigation measures shall be fully implemented prior to occupation and subsequently in accordance with the timing / phasing arrangements embodied within the scheme, or within any other period as may subsequently be agreed, in writing, by the local planning authority.' *Noted and no further comment.*

3.86 The EA advise that plans are put in place for the long term maintenance of the natural bed and banks in the culverted sections of the watercourses crossing the site. The EA considers that measures to enhance the catchment as a whole may be more useful including, for example, targeted measures which would address the current poor habitat (in-stream and riparian) and reduced water quality in the Cotting, How and Benridge Burns and the Ful Beck, particularly the signs of detrimental nutrient and silt loading. *Silt and sediment control measures are summarised in Chapter 7 Ecology and Nature Conservation, which is based on the mitigation set out in Chapter 13 Road Drainage and the Water Environment.*
Morpeth Town Council

3.87 Morpeth Town Council have identified that an examination in respect of the interference the new road will have on wildlife corridors (notably at Cottingwood and How Burn), possibly by the wildlife Trust, CPRE or equivalent Authority should be undertaken. If areas are rendered inhabitable to wildlife, then the Town Council's view would constitute a formal objection. The ecology chapter stated that there would be a slight adverse impact on the Cotting Burn Wildlife Corridor. This is the only wildlife corridor on the route. How Burn is not a corridor included in Policy C12 (Wildlife Corridors).

Northumberland Badger Group

3.88 Northumberland Badger Group has concerns regarding badger mitigation. During the last 12 months the group has become aware of a significant increase in road traffic casualties in the area of the A697/A1 junction and has also been advised that the badger sett within the Northgate Hospital complex is extremely active.

3.89 The group is also concerned that the badger activity in the area has been under-stated and hold records of 29 badger holes using a 1km search criteria along the length of the area. These records have not been requested from the group. The group is concerned that badger tracks have not been sufficiently surveyed and that bait marking surveys do not appear to have been carried out. The group is concerned that the mitigation proposed for the loss of foraging is not adequate and that consideration for an underpasses for badger use with appropriate directional fencing should be made.

3.90 The group feels that a pre construction survey a few weeks before the commencement of work should be undertaken. Surveys should also be carried at times of low vegetation (late autumn through to early springtime).

3.91 As Northumberland Badger Group considers that there is more badger activity in the area than the ES refers to, it regards the assessment of impacts and proposed mitigation as insufficient.

3.92 In response to the above, a full badger survey was undertaken in 2011 and 2012. Although a small number of additional badger holes have been found, there has been no indication of a rise in badger activity. No bait marking surveys have been undertaken as no badger setts are to be lost as a result of the scheme. A pre construction badger survey will be undertaken which will inform the location of badger fencing and identify any new badger setts that may be impacted by the scheme.

Landscape and Visual

Natural England

3.93 NE wish to see details of local landscape character areas mapped at a scale appropriate to the development site as well as any relevant management plans or strategies pertaining to the area. The EIA should include assessments of visual effects on the surrounding area and landscape together with any physical effects of the development, such as changes in topography. The EIA should include a full assessment of the potential impacts of the development on local landscape character using landscape
assessment methodologies. The LVIA has addressed all items noted by NE. Local Landscape Character is shown on Figure 8.3. There don’t appear to be any relevant management plans but policies pertaining to the area are identified in the chapter. A full landscape and visual assessment has been carried out using appropriate guidance and methodologies.

The Planning Inspectorate

3.94 The Planning Inspectorate advises that the study area should be extended to include the full extent of the area of visual influence to ensure all visual receptors are identified and assessed where appropriate. Viewpoint locations should be identified on the basis of discussions with other statutory consultees (SO paragraph 3.36 and 3.38). In addition, the receptor locations within the ZVI should be illustrated on a Figure (SO paragraph 3.37), and the ES should describe the model used with respect to the Zone of Theoretical Visibility (ZTV) modeling, provide information on the area covered, the timing of any survey work and the methodology used (SO paragraph 3.39); The ES should assess how the introduction of road lighting into the landscape will affect the landscape character and visual appearance (SO paragraph 3.40); The mitigation strategy could be agreed with relevant statutory consultees and should seek to address any interrelationships with other topic areas (SO paragraph 3.41). Finally, the landscape character and visual impact assessment should also include the cumulative impact as a result of other proposed development within the area (SO paragraph 3.42).

3.95 In response to the Planning Inspectorate’s comments in SO paragraph 3.104, the study area shows the full extent of the Zone of Visual Influence. Viewpoint locations have been identified in consultation with NCC and NE. Additional consultation was carried out with NE by email with a response received on the 1st February 2013. Consideration of road lighting has been made in the assessment. The mitigation strategy has been developed by NCC’s Landscape Architect.

Northumberland County Council

3.96 NCC require careful consideration of the impact of construction and operation of MNB on the surrounding landscape, taking into account the existing landscape character and the screening of such impacts to retain or improve the landscape. Existing and proposed visual receptors need to be taken into account. NCC considers that the proposed approach as set out in the Landscape and Visual Assessment appropriate. No comment necessary.

Land Use

The Planning Inspectorate

3.97 The loss of land and impact on farm viability as a result of severing agricultural land along the bypass route should be assessed and mitigation to reduce the significance of adverse impacts should be clearly outlined with residual impacts clarified (SO paragraph 3.43). Please refer to Chapter 9 that presents an assessment of effects of the scheme on land use.
Northumberland County Council

3.98 The ES should address issues relating to agricultural land quality, rationalisation of field boundaries, provision for existing and proposed agricultural drainage systems, movement of agricultural traffic, including livestock, and access to fields. Please refer to Chapter 9 which presents an assessment of effects of the scheme on land use.

Noise and Vibration

The Planning Inspectorate

3.99 The noise and vibration assessment should take into account the proposed construction methods and plant which would be involved during the construction phase to assess the impact of construction activities (SO paragraph 3.44). A summary of predicted $L_{Aeq,10hr}$ noise levels at various distances from a selection of example construction activities has been provided within the ES noise chapter. An accurate demolition and construction noise and vibration impact assessment is not normally possible until appointment of the approved Contractor, with knowledge of the exact working methods and plant schedule. A draft Construction Environment Management Plan (CEMP) has been included in Appendix 18 which will be developed by the Contractor once proposed working methods, phasing and plant are known.

3.100 A schematic of the local area showing the route of the proposed bypass, including existing roads, the study area and the Calculation Area is provided in Figure 10.1 of the ES. The assessment considers how changing traffic flows both on the proposed bypass and the wider area (including Morpeth town centre) may affect levels of traffic noise and vibration.

3.101 The ES should consider how changing traffic flows both on the proposed bypass and the wider area including Morpeth town centre may affect levels of traffic noise and vibration. Impacts of noise and vibration upon nature conservation and agricultural livestock should be assessed and mitigation measures to minimize adverse noise impacts should be considered (SO paragraph 3.45, 3.46 and 3.47). The land use within the DMRB study area for the proposed MNB has been screened to identify locations where noise and vibration impacts on livestock may occur. There are no road traffic noise and/or vibration significance of impacts assessment criteria that apply to non-human noise sensitive receptors. However, the magnitude of change in noise levels for each of the identified pasture areas within the DMRB Calculation Area of the MNB alignment can be viewed in the noise level difference maps presented in Figures 10.10 to 10.20 within the ES.

3.102 Following clarification, the Planning Inspectorate advised that the ES should consider the potential impacts of noise and vibration on ecological receptors during both the construction an operational phase of the development. The assessment within EIA and approach on how to consider impacts on livestock will need to be agreed with relevant consultees. Cross reference to the noise and vibration chapter and demonstration that noise and vibration has been taken into account as part of the effects on farm businesses, especially in relation to potential impacts on livestock is required. Further information on the noise and vibration impacts on ecological species can be found within
Chapter 7: Ecology. The construction noise and vibration impacts on livestock may be implemented within a Construction Environment Management Plan (CEMP) to be prepared by the Contractor once proposed working methods, phasing and plant are known.

3.103 The ES should assess road traffic ground borne vibration the potential impact of ground borne vibration in the opening year and future assessment year, taking into account the degradation of the road surface over time and any increases in traffic numbers. Road traffic ground borne vibration cannot be scoped out of the ES (SO paragraph 3.5 and 3.46). The Highways and Neighbourhood Services (Design Section) of Northumberland County Council have been consulted on the likely degradation of the MNB scheme into the future. Their response to this issue was that ‘For a new road, constructed in accordance with the MNB specification, we would not expect any significant surface irregularities after 15 years of use unless there had been a material failure.’ During a phone conversation on January 30th 2013, the Environmental Health Officer at NCC was also not concerned with the issue of road traffic groundborne vibration. Despite the assurances from NCC that an assessment of road traffic groundborne vibration is not required, an assessment of ground borne vibration has been undertaken using the information within the technical paper cited within DMRB (Watts, G.R. 1990).

3.104 The cumulative impacts arising from noise and vibration should be considered, taking into account proposed Development within the local area and the potential for changes in traffic flows (SO paragraph 3.48). A cumulative noise assessment has been carried out in accordance with the DMRB and considering recently committed developments, ‘Where planning permission for a residential development or any other sensitive receptor has been granted but for which construction has not started, the potential impacts on these locations should be estimated and reported separately.’

Morpeth Town Council

3.105 Morpeth Town Council is concerned about the possible increase in noise levels for residents of Lancaster Park, who are already subjected to this problem from the A1. There should be no increase in the cumulative level of the existing and proposed roads. The noise assessment has been carried out in accordance with the DMRB for the proposed bypass and the wider area (including Lancaster Park). Graphical representations of the noise assessment outcomes at Lancaster Park can be seen within Figures 10.09 to 10.20.

Northumberland County Council – EHO

3.106 The Construction Noise Calculations are very simplistic and the predictions do not include additional vehicles which would be expected to be operating in conjunction with some of these plant. For some of the Nearest Noise Sensitive Receptor’s (NNSR’s), it is unlikely there will be any real prospect for mitigation/attenuation. It might be helpful to see special measures which may be employed to mitigate the impact of noise and vibration during the construction phase. It may also be prudent to make the residents of these particular premises an exceptional case for communication about works in
proximity to them. When the program of works is finalised, either a predicted noise level for each phase or a ‘worst case scenario’ to the NNSR’s should be provided. There are a few NNSR’s which do not appear to be considered, one in particular is Butley Ben, North Lane End, NE61 3JR (418482, 587340). A summary of predicted $L_{Aeq,10hr}$ noise levels at various distances from a selection of example construction activities has been provided within the ES noise chapter. The relevant section has been amended to include an example calculation of combine construction equipment. An accurate demolition and construction noise and vibration impact assessment is not normally possible until appointment of the approved contractor, with knowledge of the exact working routine and plant schedule. It is likely that a Construction Environment Management Plan (CEMP) will be prepared by the contractor once proposed working methods, phasing and plant are known. The CEMP will be required to address specific noise & vibration mitigation measures for all NNSR’s. Where mitigation measures are unable to suitably mitigate the noise and vibration impacts, special measures may need to be considered by the contractor.

3.107 Could an assessment be made of any piling/drilling/boring operations for the construction of the bypass (if they are required for the development) and any impacts on the nearest receptors following BS5228-2:2009? A vibration assessment of any specific construction methods, including piling/drilling/boring operations will need to be considered within the final CEMP after the appointment of the approved contractor, with knowledge of the exact working routine and plant schedule for the construction programme.

3.108 A summary of the composition of road traffic data used in the road noise calculations would be useful. A summary of road traffic data used within the noise assessment is contained within the Transport Assessment summary provided within Chapter 2 of the ES.

Pedestrians, Cyclists, Equestrians and Community Impacts

NCC – Countryside Support

3.109 There is no objection to the proposed alteration to footpath 13 and 21. Noted, no action required.

3.110 The ES states that the crossing of Footpath No. 9 would be at-grade, however, Drawing No.HE092631/0/A197/01/67 indicates that Footpath 9 would be stopped up and diverted to the west. This proposal would be preferable but requires clarification. Text amended to read Footpath 9 would be stopped up and diverted slightly to the west; the crossing would be at-grade.

3.111 Pegswood Moor Bridge the shared access with field access is to be welcomed, although no current recorded status of the footpath. Status understood to be as per current footpath (existing footpath/track – permissive path) on drawing HE092631/0/A197/01/67 albeit with diversion via Pegswood Moor Bridge.
3.112 No action should be taken to disturb the path surface, without prior consent from Countryside Support as Highway Authority, obstruct the path or in any way prevent or deter public use without the necessary Order having been made, confirmed and an acceptable alternative route provided. Noted, no action required; consideration in CEMP as necessary.

The Planning Inspectorate

3.113 Terminology in the ES should be consistent. Clarification as to whether ‘Pedestrians, Cyclists, Equestrians and Community Effects’ corresponds with ‘Non-Motorised Users’ is required (SO paragraph 3.49). The ES should also define and justify the extent of the study area, mapping out public rights of way, and access to community facilities which could be affected by the proposed Development (SO paragraph 3.50). Finally, the ES should assess the impact of diverting footpaths upon the users of these footpaths, of the development upon public transport and community vehicle services including existing transport routes for public buses, school buses and community transport services and consider impacts caused as a result of the bypass construction. Consideration should also be given to the potential impact upon emergency services and healthcare facilities (SO paragraph 3.51, 3.52 and 3.53). All of these comments have been taken into consideration by Chapter 11 Pedestrian, Cyclists, Equestrian and Community Impacts.

Pegswood Parish Council

3.114 Pegswood Parish Council would like consideration given to the creation of a bridle path from under How Burn Wood Bridge along to Fulbeck Grange and onto St. Leonard’s Lane via the PRoW at Lancaster Park. Noted, but preferred option design unchanged.

Road Drainage and the Water Environment

3.115 Northumberland County Council

3.116 NCC request that where possible water course should be crossed using span bridges rather than culverts. Where span bridges cannot be accommodated, an explanation of why a culvert is the best option should be set out. In addition, culverts should be as short as possible and suitable to accommodate a 1 in 100 year flood, factoring in climate change and freeboard. NCC supports the use of Sustainable Urban Drainage Schemes (SUDS) and states that a full flood risk assessment would be required for both the construction phase and the completed road scheme. The scheme proposals have taken these comments into account.

3.117 A comprehensive Hydrological Risk Assessment should be included within the ES as there are a number of ground water abstractions in and around the local area. Other assessments include hydro-geological and drainage assessments. Please refer to Chapter 13 Road Drainage and the Water Environment and Chapter 14 Soils and Geology.

The Planning Inspectorate

3.118 The study area should be defined and justified (SO paragraph 3.57). The assessment should also give careful consideration to the effects and risks the development could
have upon local water resources and a Hydrological Risk Assessment should be considered in discussion with Northumberland County Council's planning department (SO paragraph 3.58). Finally, the Planning Inspectorate requires an assessment of groundwater flooding during operation: and the ES should include an assessment of flooding from artificial sources and these impacts cannot be scoped out of the ES (SO paragraph 3.5). Following clarification PINS advises that the ES assess the changes to groundwater flooding identified in the scoping report during construction (page 155 of the Scoping Report). Potential impacts that may affect groundwater levels as a result of the construction and operation of the development, as well as cumulatively with other potential development within the area should be considered. *These issues have been included in the assessments presented in Chapter 13 Road Drainage and the Water Environment and Chapter 14 Soils and Geology.*

Environment Agency

3.119 The EA recommend that the ES makes specific reference to the Source Protection Zone designation, as well as the principal aquifer, as this is the sensitive groundwater receptor which the lining will help to protect. An assessment of the groundwater flow and level implications of grouting underground mine workings should be undertaken before activities commence. *It was agreed during the determination of the previous planning application that the scheme would not have significant adverse impacts upon groundwater, and as a precaution the EA requested a series of planning conditions. This consultation is summarised in Chapter 13 Road Drainage and the Water Environment.*

3.120 The EA are concerned that the potential impacts of the Scheme on the Morpeth Flood Alleviation Scheme is not adequately assessed. The EA consider that the Scheme must be designed to manage surface water runoff up to the 100 year event (including a consideration of climate change). Information in relation to proposed run-off rates should be provided as part of a FRA which should also include detailed information, assessment and conclusions in support of the proposed new structures in terms of their impact on existing flood risk, identifying how this will be managed to ensure flood risk is not increased and the hydraulic assessment of the proposed structures. *The proposed structure designs for watercourse crossings and hydraulic modelling has been agreed with the EA. A FRA is included within the assessment presented in Chapter 13 Road Drainage and the Water Environment.*

3.121 The EA consider that steps should be taken to ensure that the Scheme does not contribute to any further deterioration in the watercourses. The EA proposes the following condition ‘The development hereby permitted shall not be commenced until such time as a scheme to treat and remove suspended solids from surface water run-off during construction works has been submitted to, and approved in writing by, the local planning authority. The scheme shall be implemented as approved.’ *Noted and no further comments.*

3.122 The EA recommend that the ES makes specific reference to the Source Protection Zone designation where reference is currently made to the aquifer vulnerability, as this is the sensitive groundwater receptor which the lining will help to protect. *Groundwater*
receptors have been taken into account by the impact assessment presented in Chapter 13 Road Drainage and the Water Environment.

Health Protection Agency

3.123 The HPA states that when considering a baseline and in the assessment and future monitoring of impacts the assessment should include impacts on human health, should identify and consider all routes by which emissions may lead to population exposure, should assess the potential off-site effects of emissions to groundwater and surface water and include consideration of potential impacts on recreational users. Noted. Please refer to Chapter 18 Summary of Human Health Effects.

Pegswood Parish Council

3.124 Pegswood Parish Council would like the drainage ponds at St. George’s roundabout to drain if possible to the How Burn rather than the Fulbeck. This would ensure that the How Burn does not run dry and reduce any potential flooding risk in Morpeth via the Fulbeck. The drainage system is dependent upon hydraulic principles and runoff needs to drain to low points and watercourses nearby.

Geology and Soils

Environment Agency

3.125 The EA note that a diesel oil storage tank is to be removed from a domestic premises (Rose Cottage) as part of the development and consider that the following condition to ensure that any unsuspected contamination that may be identified during the development is adequately dealt with ‘If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the local planning authority) shall be carried out until the developer has submitted a remediation strategy detailing how this unsuspected contamination shall be dealt with and obtained written approval of this from the local planning authority. The remediation strategy shall be implemented as approved.’ Noted and no further comments.

Health Protection Agency

3.126 The HPA would expect the details of any hazardous contamination present on site (including ground gas) as part of the site condition report. Emissions to and from the ground should be considered in terms of the previous history of the site and the potential of the site, 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 and the potential impact on nearby receptors and control and mitigation measures should be outlined. The risk from contaminated ground has been considered in Chapter 14 Soils and Geology.

Northumberland County Council

3.127 NCC state a Contaminated Land Preliminary Risk Assessment should be included within the ES. In addition, a geological and hydro-geological assessment should be carried out
as part of the ES together with detailed information regarding road stability particularly around the previous opencast area. A geo-environmental desk study has been undertaken and has informed the assessment of hydrogeology presented in Chapters 13 Water Environment and Chapter 14 Soils and Geology.

The Coal Authority

3.128 In accordance with the agreed risk-based approach to development management in Coal Mining Development Referral Areas, the past coal mining activities and the presence of surface coal resources within the site should be fully considered as part of the ES; this should take the form of a risk assessment, together with any necessary mitigation measures. Coal mining legacy issues that can potentially pose a risk to new development should be considered as part of the ES including the location and stability of abandoned mine entries, the extent and stability of shallow mine workings, outcropping coal seams and unrecorded mine workings and hydrogeology, mine water and mine gas. In addition, consideration should be afforded if surface coal resources are present, whether prior extraction of the mineral resource is practicable and viable and whether Coal Authority permission is required to intersect, enter, or disturb any coal or coal workings during site investigation or development work. These issues have been considered in Chapter 14 Soils and Geology.

Pegswood Parish Council

3.129 Pegswood Parish Council would like the following issue considered: any materials excavated and deemed unsuitable for reuse on the site should be used to infill the ‘lake’ in Pegswood Community Park Phase II, in liaison with Banks Mining. The proposed bypass has been developed with a cut and fill balance so there will not be any available material to infill the Pegswood Moor Lake. If any material needs to be removed from the site it will be undertaken strictly in accordance with UK waste management regulations.

Traffic and Transport

The Planning Inspectorate

3.130 A traffic and transport chapter should be provided in the ES that summarises the findings of a more detailed Transport Assessment. The Transport Assessment (TA) should be based on revised and up to date modelling applying the latest best practice guidance (SO paragraph 3.17). It may also be appropriate in the assessment to consider the ‘do nothing’ scenario, in order to assess the impact on traffic and transport of not developing the proposed Development (SO paragraph 3.18). A summary of the detailed Transport assessment is included in Chapter 2. The transport assessment considers the ‘Do Minimum’ scenario.

Northumberland Tyne and Wear NHS Foundation Trust

3.131 The effects of road closures and diversions on access to the hospital should be covered in the ES to ensure the continuous safe and efficient operation of Northgate hospital. All effects should be assessed and mitigation measures clearly described in the context of the timeline for the development. Outwith the Transport Assessment but included in the
Chapter 17 Disruption Due to Construction and the CEMP, to be developed by the appointed Contractor.

Vehicle Travellers

The Planning Inspectorate

3.132 The extent of the study area, including the roads that will be assessed, should be identified and justified within the ES (SO paragraph 3.55). In addition, the impact of the proposed development should be assessed for both the construction and operational phases (SO paragraph 3.56). Comments addressed in Chapter 12 Vehicle Travellers. In terms of construction impact, vehicle travellers are considered within the scope of Chapter 17 Disruption Due to Construction and a CEMP, to be developed by the appointed Contractor. The draft CEMP is included in Appendix 18.

Population

3.133 The Planning Inspectorate

3.134 Potential impacts on the viability of Morpeth Town Centre as a result of traffic being diverted away from the centre should be considered. A study area for the assessment should be identified and justified and both the construction period and Year 1 of operation should be considered as part of the assessment (paragraph 3.64 and 3.65). A socio-economic and population assessment has been carried out (Chapter 15) to develop an understanding of the potential impacts of the bypass on businesses and the local population. In particular, the appraisal has focused on the impacts within Morpeth Town Centre during the construction phase and Year 1 of operation. However the research has also taken into consideration wider impacts on the town and in Northumberland including longer term impacts.

Waste

The Planning Inspectorate

3.135 The environmental effects of all wastes to be processed and removed from the site should be addressed. The control processes and mitigation procedures for storing and transporting waste off site should be identified and described and all waste types should be quantified and classified (paragraph 2.36). Addressed through the outline SWMP in Appendix 17.

Health Protection Agency

3.136 The ES should demonstrate compliance with the waste hierarchy and should consider the implications and wider environmental and public health impacts of different waste disposal options and disposal route(s) and transport method(s) and how potential impacts on public health will be mitigated. Addressed through the outline SWMP in Appendix 17.
**Cumulative Assessment**

3.137 The Planning Inspectorate

3.138 The ES should consider potential cumulative impacts of the proposed Development with other developments (SO paragraph 3.13). A cumulative assessment is included in Chapter 16.

Natural England

3.139 NE state that the EIA should include an impact assessment to identify, describe and evaluate the effects that are likely to result from the project in combination with other projects and activities that are being, have been or will be carried out. A cumulative assessment is included in Chapter 16.

**General**

The Planning Inspectorate

3.140 A clear description of the site and surroundings identifying any relevant designation and sensitive receptors within the boundary and the surrounding area should be included in addition to baseline information within the individual chapters of the ES. The baseline year used within the assessment should be clearly identified, be up to date and, wherever possible, be consistent throughout the ES (SO paragraph 2.33 and 3.3). A description of the study area is included in Chapter 1. The baseline year used in the assessment is 2011 in line with the transport assessment.

3.141 The ES should reflect the evolution of the scheme description (from the Planning application submitted in August 2011) (SO paragraph 2.34). The scheme evolution is detailed in Chapter 2.

3.142 A clear description of all aspects of the proposed development at the construction and operational stages including land use requirements, site preparation, construction processes and methods, construction access, transport routes, maintenance activities (routine and proposed approaches) including potential environmental impacts and emissions should be included (SO paragraph 2.35). Chapter 2 provides a description of the scheme, both during construction and operation.

3.143 Appropriate consultation should be undertaken (SO paragraph 3.3). Consultations have been undertaken throughout the preparation of the scheme and the EIA. Table 3.2 provides a summary of EIA scoping responses received and Appendix 3.2 and 3.3 holds full responses.

3.144 The physical scope of the study areas should be identified under all the environmental topics and should be sufficiently robust in order to undertake the assessment. The scope should also cover the breadth of the topic area and the temporal scope, and these
aspects should be described and justified (SO paragraph 3.4). *Within each technical chapter the scope of the assessment has been defined.*

3.145 The ES methodology should describe and explain impact significance either in a separate chapter within the ES or set out under each topic chapter. The ES should assess the interrelationship between the different topics and potential cumulative impacts of the proposed Development with other development (SO paragraph 3.11, 3.12 and 3.13). The approach to the assessment is explained in Section 3.5 of Chapter 3. This has been expanded upon in each topic Chapter which set out the impact assessment methodology used. *Cumulative impacts are also assessed in each topic chapter with an overall assessment included in Chapter 16.*

3.146 Any proposed works and/or infrastructure required as associated development, or as an ancillary matter, (whether on or off-site) should be considered as part of an integrated approach to environmental assessment. The location of such infrastructure should be identified with the ES and the potential impact upon the utility infrastructure assessed (SO paragraph 3.14 and 3.16). *Chapter 2 Scheme description includes associated utility diversions required to facilitate the development and therefore have been assessed as part of the assessment.*

3.147 The ES should identify the anticipated number and type of lighting proposed and assess the potential impact, particularly in the context of landscape and visual impacts and impacts upon nature conservation (SO paragraph 3.15). *The preliminary lighting arrangements have been assessed as part of the EIA (see the development parameters in Table 2.3 Chapter 2). The lighting parameters are maximum parameters and therefore represent a ‘realistic worst case scenario’.*

3.148 Issues identified in the Disruption Due to Construction chapter should be included within the technical assessment chapters (SO paragraph 3.63). *Chapter 17 Disruption Due to Construction provides an overview of the potential disruption due to construction and summarises the assessment of construction impacts presented in each technical chapters.*

**Fulcrum Pipelines Limited**

3.149 Fulcrum Pipelines Limited confirms that they do not currently have any existing pipes or equipment on or around the above site address at this time. However they note that they are constantly adding to their underground assets and would strongly advise that consultation is undertaken with them prior to undertaking any excavations. *No comment.*

**Health Protection Agency**

3.150 The HPA states that the EIA should provide sufficient information to fully assess the potential impact of the development on public health. The HPA will only consider information contained or referenced in a separate section of the ES summarising the impact of the proposed development on public health: summarising risk assessments, proposed mitigation measures, and residual impacts. *Compliance with the requirements of National Policy Statements and relevant guidance and standards should be*
highlighted. *A summary of the impacts on human health has been provided in Chapter 18.*

3.151 The ES should clearly identify the development’s location and the location and distance from the development of off-site human receptors that may be affected by emissions from, or activities at, the development. *The ES identifies the development’s location in Figure 1.1 and the distance to sensitive receptors is identified within the specific technical chapters.*

3.152 Any assessment of impacts arising from emissions 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. *All technical chapters provide an assessment of the construction impacts and describe mitigation and monitoring where relevant. Cumulative impacts are also assessed within the technical chapters and are summarised in Chapter 16.*

3.153 The HPA would also expect to see information about how the promoter would respond to accidents with potential off-site emissions. *The ES is supported by a draft Construction Environmental Management Plan, which sets out the framework for the procedure to respond to spillages, in accordance with best practice pollution prevention guidance.*

Morpeth Town Council

3.154 Access to Fairmoor Cemetery should be as good as or better than the current approach to the site. *Noted.*

Northumberland County Council

3.155 The ES should contain a full assessment of the proposal against relevant planning policies, including national guidance (National Planning Policy Framework), relevant Development Plan documents and Local Plan Policies. *Chapter 4 provides an assessment against planning policies.*

3.156 The ES would have to demonstrate that there would be suitable mitigation in terms of the impacts of the bypass. Information should be submitted in terms of the highway and traffic benefits, the wider economic benefits and other mitigation particularly in terms of landscape and ecological benefits. *Where relevant mitigation measures have been proposed within the technical chapters. A summary of mitigation is provided in Chapter 19.*

3.157 The ES should also promote Sustainable Construction and consider opportunities for maximising the use of secondary and recycled materials, minimising non-renewable resources and water and energy conservation during construction together with the longer term benefits of reducing traffic congestion and promoting other ways of travel, e.g. cycling, walking, public transport. *The ES is supported by a Site Waste Management Plan Appendix 17 which considers the potential for recycling materials.*

3.158 Careful consideration should be given to assessing impacts of noise, dust, vibration during construction and end use. *Noise impacts are assessed in Chapter 10 and air*
quality (including dust) is assessed in Chapter 5. A summary of disruption during construction is included in Chapter 17.

Northumberland County Council - EHO

3.159 An assessment/statement should be made of any impacts from temporary lighting for the construction phase; for illuminating works in low light, lighting compounds or for security reasons. Construction lighting is discussed in paragraph 2.99 of Chapter 2. Lighting has also been assessed as part of the landscape and visual impact assessment presented in Chapter 8.

Northumberland Tyne and Wear NHS Foundation Trust

3.160 In respect of the St. George’s and surrounding land a full assessment of effects upon easements for private utilities, and the utilities themselves should be included in the ES. It is not typical for the ES to consider the effects of a scheme upon utilities as these are not listed in the criteria set out within the EIA Regulations. However, information has been included to describe the work that has been undertaken to identify utilities across the site, and to explain how any effects on these and service disruption would be managed during the construction process. A comprehensive consultation exercise was carried out in 2008 with utility service providers to determine the scope of utility work required. Drawing HE092631/0/A197/20/01 in Appendix 2.1 illustrates the utility services that require works.

Pegswood Parish Council

3.161 Pegswood Parish Council would like all movements of cut and fill materials to be contained within the site perimeter (i.e. along the proposed route) and the drainage ponds should be fenced off for safety reasons. Construction Access and Routes are discussed in paragraphs 2.102 to 2.109 of Chapter 2. A risk assessment will be carried out during the detailed design phase to determine the need for suitable safety measures.

3.162 No comments were received from the following additional consultees:

- Health and Safety Executive;
- Hepscott Parish Council;
- CABE Design Council;
- Carlisle City Council;
- Eden District Council;
- ES Pipelines;
- North Tyneside Council;
- Northumberland Fire and Rescue;
- Northumberland National Park Authority;
- Northumbrian Water;
- Ofwat; and
- Scottish Borders Council.