
The Norfolk County Council (Norwich Northern Distributor Road (A1067 to A47(T))) Order

Responses to comments made by Interested Parties

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Infrastructure Planning

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Introduction

This document provides the Applicant's response to selected issues raised by certain Interested Parties in representations which were submitted on 3 November 2014. Matters raised in the representations which are also the subject of questions from the Examining Authority in their Third Written Questions are addressed in NCC/EX/90. Where a specific response is not provided to a matter raised, the Applicant relies on the evidence already submitted to the Examination in the DCO application material and in the Applicant's existing Examination responses.

1 Professor Phil Goodwin on behalf of Norwich and Norfolk Transport Action Group.

Q1.1 As a matter of responsible professional practice, I would propose the following principles for construction of an alternative, before tests can sensibly be carried out of its value for money.

- The measures in it have to be comprehensive, coherent, properly scaled, and at least in outline terms the separate elements need to be optimised.*
- Then testing it must be done by tools which are fit for purpose, realistic, evidence-based, and able to command professional consensus, against criteria of contribution to solving problems, contributing to policy objectives, value for money, economic, environmental and social impacts, and robustness to alternative future conditions. On these, it should be put to fair comparison with the proposed scheme.*
- A reasonable common-sense test for a well-designed alternative should be that if the Applicant's preferred scheme is not, for whatever reason, approved, the alternative is at least possible to be the best (or 'next best') course of action which could actually be implemented.*

The Applicant's case is that, in a way, that this had all been done, because the appraisals either 'took account' of such instruments by their implicit inclusion in background trends and policy, or were satisfactorily included by a series of separate outline tests on separate measures, or were implied in sensitivity tests.

It is manifestly obvious that the process described above for formulation of an alternative has not been followed, nor does there exist anywhere a clearly defined package of measures which can be pointed to as the Applicant's alternative (ie one that they would be willing to or able to implement) let alone one that would be recognised by objectors. Nevertheless there are a range of measures described as alternatives on the table, and the next stage is to consider in rather more detail whether they do meet the criteria, at least as far as meeting some sort of minimal criteria sufficient to support the NDR proposal.

Applicant's response

- 1.1.1 The consideration of the need and alternatives to the NDR carried out over a period of years is fully set out in the Environmental Statement Document Ref 6.1, Part 1 Vol 1, section 2. Further information has been provided in response to the Examining Authority's First and Second Written Questions (NCC/EX/5, NCC/EX/52 and NCC/EX/53). This material demonstrates that Professor Goodwin's characterisation of how the applicant has dealt with alternatives is a misrepresentation of what has been a detailed and iterative process, involving extensive opportunities for public participation. The Applicant has taken a proportionate and evidence-based approach, identifying a set of realistic transportation objectives to serve the current and future needs of the Greater Norwich area and considering a range of options to address those objectives.
- 1.1.2 Whilst a next best alternative option may be considered at 'programme entry' stage, when the scheme has subsequently received funding approval and is taken forward through the DCO process there is a single proposed option that could be ultimately approved or rejected. However, both in the initial formulation of the project and as part of the Environmental Impact Assessment of that proposed option, the Applicant has studied a number of alternatives, as reported in the ES (Document Ref 6.1). Some, but not all, of these alternatives were further assessed in Document Ref. 5.12 and would meet the scheme objectives albeit to a lesser degree and one of these might be considered as a next best alternative. However, an alternative which meets those objectives would comprise elements of NDR so that the objectives could be met. It is clear that an alternative that incorporates the main elements of the NDR (i.e. a road-based solution) would not be acceptable to NNTAG and is not the alternative that Professor Goodwin has in mind as the outcome he surmises may result from his suggested search for the next best alternative. The exercise that he suggests is therefore somewhat

academic to the case presented by NNTAG and to the case argued by Professor Goodwin. Also, it is clear from the assessments already undertaken of a wide range of alternatives that there is no credible non-road based alternative that would meet the scheme objectives (before any consideration is given to the question of value for money). The Examining Authority has a proportionate and more than adequate evidence base to be satisfied that the reasonable alternatives have been assessed and that the Applicant's conclusion that there is not a realistic alternative option that could deliver the scheme objectives is robust. Any suggestion that more time needs to be spent on an elusive search for some notional better performing option is in reality simply a way of avoiding a decision and of addressing the needs that arise.

Q1.2 *“The Applicant has pointed out that these monitoring figures do not comprise a full test of the forecast growth in traffic volumes over the city as a whole, since they are on selected roads (albeit the ones selected for publication in NCC’s own report). It would surely be possible to delve further into this by going into records which must be available somewhere. However at this stage it seems clear that the picture of generally continuing traffic growth forecast from 1996, is very different from the picture of declining traffic – even in the context of increasing population and employment – on the major roads selected in the monitoring reports.*

a) The general traffic forecasts made for the period 1996 to 2006, and probably 2011, were different from the monitored traffic flows, both in size and direction of change. They are based on the same source and methodology as the forecasts for the period to 2031.

b) Counted road traffic flows decreased, at the same time as population, economic activity, bus and rail use all increased, with some increases in cycling also, and less consistent changes in walking. This is especially noted during the period up to 2006 and 2007, uncomplicated by effects of the recession.

c) The explanations offered by the County in 2010 (and in some earlier commentaries) to explain this – albeit with sensible caution – rely on the successful effect of traffic reducing measures implemented up to 2010, including better bus measures and provision for cycling. I am not aware that other explanations have been made in Norwich.

I count this as a very considerable achievement. No doubt parts of the County would have been disappointed in the Secretary of State’s refusal of the Inner Ring Road phase 3 in 1993, but their colleagues planning sustainable transport rose to the challenge, responding positively and swiftly, and produced an outcome which bears favourable comparison with, for example, the ‘model’ sustainable travel towns supported by Government funding in Peterborough, Worcester and Darlington. The main discussion UK-wide of the possibility of combining increases in population and employment with reducing traffic has been in London, and it has sometimes been

assumed (though with little evidence) that this is not possible for smaller cities. The experience of Norwich is therefore very important.”

Applicant's response

- 1.2.1 The reductions observed on the inner Ring Road (IRR) and Outer Ring Road (ORR) cordons are considered to be due to city centre traffic management measures and implementation of park and ride (P&R) services during the last eighteen years, although it is not possible to identify the exact impacts from individual measures from the traffic count monitoring. However in all likelihood traffic has increased outside the ORR as the majority of growth, measured for example by population and development of employment land, has taken place outside the ORR. Over the period covered, a greater proportion of overall trips will be being made without crossing the ORR cordon to developments such as the Norfolk and Norwich University hospital (relocated in 2001), the expanding University of East Anglia with higher levels of onsite accommodation, new and expanded local schools, major business parks, other employment sites, retail parks and superstores. The traffic monitoring on the IRR and ORR would not capture this and there has been no long term monitoring over this wider area. Implementation of JCS plans for substantial growth in housing and employment will produce significant further increases in traffic, even allowing for limiting this as far as possible by implementation of travel planning measures which have been accounted for in the forecasting.

Q1.3 However up till now, it has been the NCC position that the final phase of these improvements are dependent on construction of the NDR and “they cannot be completed until after completion of the NDR. The NDR takes traffic off existing routes, freeing up capacity to allow re-routing away from the city centre”

However, this assessment is predicated on (a) the assumption of high traffic growth rates, and (b) the assumption that sustainable transport measures will not have a very big effect on reducing that traffic growth, let alone reversing it.

However, suppose that a bigger programme of sustainable transport measures, which had been planned for the next few years (ie in advance of the proposed availability of NDR) were fully implemented and that they had effects broadly similar to the previous smaller programme of sustainable transport measures. Then in that case, to some extent sustainable transport can bring about sufficient reduction in traffic to allow their own implementation.

There is a prima facie case –sufficient to merit its careful appraisal – that the third phase of sustainable transport improvements can also be implemented without needing to be dependent on NDR, or, alternatively, that the first and second phase will bring about sufficient reduction in traffic to allow the proposed smaller provision of road capacity (such as an improved connected version of the developer link roads) to be a feasible alternative. Therefore the case for ‘need’ of NDR, compared with alternatives, has not been made.”

Applicant’s response

- 1.3.1 The need for the NDR is fully set out in the in the Environmental Statement Document Ref. 6.1, Part 1 Vol 1, section 2.
- 1.3.2 An appraisal has been carried out for a smaller scale highway intervention with reduced traffic. This was set out in Document Ref NCC/EX/35 which appraised Alternative 5 with low growth. The economic appraisal indicated that it would fail to meet the scheme objectives.

Q1.4 The applicant suggests that various sensitivity tests carried out give the same information as formally carrying out the process required by TAG Unit 2.3. . I don't think that is true for the first two steps, which become very relevant to a proposed connected developer link road option if considered in the context of a potential reduction in traffic due to wider sustainable transport measures (either a newly defined package, or a revised assessment of the possible traffic effects of the already proposed measures in the absence of NDR).

These two steps are those outlined in Para 3.1.1

“Step 1: Determine the quantity of new housing that should be regarded as dependent on a transport scheme;

Step 2: Identify the minimum transport scheme required to restore a reasonable level of service.

Step 2 seems an ideal procedure appropriate for testing whether the developer link roads, or some modified version of them, can make a sufficient contribution to restore a reasonable level of service (defined, presumably, as that experienced by the rest of the city evolving over the appraisal period in parallel) to the affected area. This would fulfil the Webtag advice at the same time as addressing specifically the effects on the development areas in the context of the contribution made by wider elements of an alternative package to them and the city as a whole.

Applicant's response

1.4.1 This issue was addressed in some detail in Document Ref NCC/EX/67 in section 5.8 (from page 144). It explained what testing has been carried out and how in the Applicant's view this is compliant with the WebTAG guidance. In the light of Professor Goodwin's comments on this it should be added that the testing to determine dependency was undertaken with a model network that already *included* the developer link roads as well as the Postwick Junction improvement so that the identification of dependent development was that which would require an improvement in addition to these network improvements.

2 Tony Clarke on behalf of Cyclists Touring Club

Q2.1 Brief comment on Cycling Delivery Plan in particular cycle proofing.

How are NCC proposing to amend NDR to meet the Cycling Delivery Plan

Applicant's response

2.1.1 Whilst the Department for Transport's draft document 'Cycling Delivery Plan' was only published for informal consultation in October 2014, its document 'Briefing on the Government's ambition for Cycling' (12 August 2013) had already identified its intention for the cycle proofing of roads. Cycle proofing was defined as taking action on a variety of fronts.

Examples of action were identified as:

- Designing road improvements with cyclists in mind as well as motorists and to use traffic management tools and techniques to manage the needs of all road users,
- Making greater provision for cycling on the strategic road network by correcting historic problems, retrofitting the latest solutions and ensuring that it is easy and safe for cyclists to use junctions,
- Ensuring cyclists have access to adequate training to enable them to safely and confidently cycle on the road,
- Encouraging a culture of sharing the road amongst all users.

2.1.2 Sections 6.6 and 10.12 of the 'Applicant's Responses to the Examining Authority's (ExA's) First Written Questions' (Document Ref NCC/EX/5) identified how Norfolk County Council (NCC) had considered cycle proofing. This included how it:

- Considered the design of the NDR with cyclists, pedestrians and equestrians in mind throughout the design process. This strategy was also used to help prioritise the requests for various NMU facilities during the consultations,

- Is working with Norfolk Constabulary to raise awareness of safety issues amongst cyclists and drivers.

2.1.3 The draft 'Cycling Delivery Plan' identifies that the Government will look to set up partnerships with local authorities, where - in exchange for signing up to a series of actions to deliver ambitious changes in cycling and walking - local authorities will receive access to supporting tools and incentives, including knowledge sharing, priority access to funding and sector expertise.

2.1.4 NCC does not propose amending the NDR proposals in light of the published draft 'Cycling Delivery Plan' but is committed to encouraging more cycling. One of the key features of the Norwich Area Transportation Strategy Implementation Plan includes a package of cycling and walking improvements. In addition NCC is intending to submit an expression of interest to form a partnership with the Department for Transport, as outlined in the draft 'Cycling Delivery Plan'.

Q2.2 Request that the estimated costs of the scheme be revised so the Council Tax Payers of Norfolk (on whom any additional costs will fall) can see how much more they are required to pay.

Applicant's Response

2.2.1 The estimated cost of the Scheme is given in the Funding Statement Document Ref. 4.2.

Q2.3 Any additional costs should be taken into account to revise the cost benefit analysis which is already marginal according to the evidence of Professor Goodwin.

Applicant's Response

2.3.1 It is not clear exactly which additional costs are being referred to, however given the relatively minor modifications agreed during the examination the Applicant is content that the details of the application funding statement (Document Ref 4.2) remains relevant and the cost of the minor modifications can be accommodated within the overall scheme budget. It is wrong to say that that the cost benefit analysis is marginal: it is robust and the scheme is expected to provide very high value for money. The economic appraisal is provided in Document Ref. 5.7 and shows the cost benefit ratio to be 5.33 (including Wider Economic Benefits and Journey Time Reliability) which is very high value for money as defined by DfT criteria. Sensitivity tests to check the robustness are set out in Document Ref. 5.11.

Q2.4 I have tried to understand this report which is difficult for members of the public to comprehend, but it appears that Norfolk County Council are planning further expenditure to mitigate the effects on the environment of the proposed Norwich Northern Distributor Road.

Could I ask that the estimated costs of the scheme be revised so the Council Tax Payers of Norfolk (on whom any additional costs will fall) can see how much more they are required to pay.

Also these additional costs should be taken into account to revise the cost benefit analysis which is already marginal according to the evidence of Professor Graham

Applicant's response

- 2.4.1 The Wensum SAC is currently in a failing condition in certain areas, due to silt ingress and reduced flows. There is a UK responsibility under the Water Framework Directive to ensure that there is betterment of surface water features. Where there is the prediction for increased traffic flows along roads near as a result of the NDR it is required that responsible agencies, including the Applicant, address the existing pathways for silt ingress into the Wensum.
- 2.4.2 The mitigation proposed to prevent silt entering the Wensum SAC consists of potential upgrading and then regular maintenance of existing drainage features and monitoring of silt loading within these structures. It is the responsibility of the Highways Authority to maintain these features as they are existing assets, and it is the responsibility of the Highways Authority to manage any silt on the County's roads from traffic or agricultural runoff. The cost for monitoring and maintenance of all drainage assets is part of the existing highways maintenance budget.
- 2.4.3 The estimated cost of the scheme is given in the Funding Statement (Document Ref. 4.2) and this includes the environmental mitigation works.

Q2.5 In general traffic flow predictions are unreliable and underestimate the eventual outcome. In order to protect the environment the worst case scenario should be considered.

Applicant's response

- 2.5.1 The forecasts for transport schemes are always subject to some uncertainty as they necessarily include assumptions about future changes such as planning and economic growth. In this case the planning assumptions are based on the recently adopted JCS which has been subject to examination. The uncertainty in forecasting has been tested with sensitivity testing which is reported in Document Ref. 5.11.

3 Les Gray

- Q3.1
- 1) Support for proposed modification at Drayton Lane.
 - 2) Comment that small additional land should not deter for making the proposed change.
 - 3) Concern that accidents will continue to occur on the Reepham Road / Hall Lane junction with people turning right.
 - 4) Suggestion the safest option is to close Hall Lane (north) at this time to through traffic and concentrate all turning movements via the proposed roundabout.
 - 5) Mr Gray also maintains the closure of Hall Lane (north) will result in a far safer junction where it meets Drayton Lane (south)
 - 6) NCC's are ignoring continued warnings on points of safety.
 - 7) If Hall Lane (north) is not closed, then there needs to be a right turn lane on the Reepham Road into Hall Lane and safe foot-way / cycle links on the northern stretch of this road.

Applicant's response

- 3.1.1 Norfolk County Council (NCC) has proposed a modification to include a 4 arm roundabout at the junction of Drayton Lane and Reepham Road. The details of the modification are explained in the Applicants Response to Examining Authority's Second Written Question Q1.4 (Document Ref NCC/EX/52).
- 3.1.2 At the Issue Specific Hearing on 18 September 2014 NCC subsequently agreed to proceed to submit the Drayton Lane/Reepham Road 4 arm roundabout as a change to the DCO. Document Ref NCC/EX/85 explains the process followed and the results of stakeholder engagement undertaken by NCC.
- 3.1.3 The junction of Reepham Road and Hall Lane would be simplified with the removal of the Holly Lane arm. Traffic flow on Hall Lane (North) is forecast to substantially reduce with the NDR as shown in the table

included as Appendix B of Document Ref NCC/EX/63. Right turning traffic from Reepham Road into Hall Lane (North) is also forecast to substantially reduce compared with the originally submitted scheme.

- 3.1.4 NCC has responded to the suggestion that Hall Lane should be closed in Section 1.4.25 of the document Response to Examining Authority's Second Written Questions (Document Ref NCC/EX/52) and also Section 5.1.5 of Document Ref NCC/EX/85.
- 3.1.5 NCC is not ignoring points of safety. NCC has listened to the local community and has proposed a modification to the scheme to address concerns raised.
- 3.1.6 The junction of Hall Lane (North) with Drayton Lane will be reviewed as part of the development of a traffic calming scheme for Hall Lane. NCC has committed to providing this traffic calming scheme irrespective of whether the NDR is implemented or not. The feasibility study for this scheme will include consideration of forecast traffic flows and it will in due course be subject to its own safety audit and public consultation exercise. Should a mini roundabout be considered appropriate at this location its effective operation would require forecast traffic flows on any arm to be above 500 Annual Average Daily Traffic (AADT). This would not be achieved if Hall Lane was closed at its junction with Reepham Road.
- 3.1.7 The provision of a right turn lane on Reepham Road for traffic turning into Hall Lane is not justified given the very low levels of right turning traffic forecast.

4 Robert Craggs

Q4.1 NDR & JCS inextricably linked, lack of effective consultation, scrutiny and research for both projects

Applicant's response

- 4.1.1 Need Case for the Scheme and the Objectives have been discussed in Document Ref 6.1 (Environmental Statement Vol. 1). This also includes details regarding the policy basis for the Scheme and provides details in relation to the Joint Core Strategy (JCS). The JCS has been the subject of its own public examination and has been found to be sound by the Inspector. The JCS has therefore been adopted by the local planning authorities.

Q4.2 Answers to questions are not readily available or convincing such as credible alternative to the NDR in the form of the proposed inner link road and whether or not this NDR was going to make traffic management better or worse.

Applicant's response

- 4.2.1 The consideration of the need for and alternatives to the NDR carried out over a period of years is fully set out in the Environmental Statement Document Ref. 6.1, Part 1 Vol 1, in section 2. Further assessment of alternatives was presented in Document Ref. 5.12, updated by NCC/EX/71 for the PT Option. This included appraisal of an inner link road as an alternative to the NDR.
- 4.2.2 A detailed assessment of the traffic impact of NDR is provided in section 7 of the Traffic Forecasting Report, Document Ref. 5.6.

Q4.3 As for careful forethought on obvious environmental issues such as the adverse effects of noise, light and atmospheric pollution, inadequate and non-answers revealed a distinct lack of forethought. On the contrary it was not even clear what standards NCC thought they could get away with, rather than eagerly embracing future norms and requirements.

Applicant's response

- 4.3.1 The Scheme Assessment process has included the production of a Stage One, Stage Two and Stage Two-and-a-half Environmental Impact Assessments. The proposed scheme includes overarching design principles to mitigate for the likely adverse impacts caused by noise and light; the majority of the scheme is cutting and/or edged with bunds to minimise noise impacts, and the scheme has been designed with the absence of any streetlights, with the exception of the Postwick junction and short length of associated approach, to reduce impacts due to lighting on the landscape and tranquillity. These are detailed in Chapters 4 (Air Quality) and 11 (Noise and Vibration) of the Environmental Statement (ES), (Document Reference 6.1). Atmospheric pollution has been assessed in the above described Air Quality Chapter of the ES, as well as Chapter 5 (Carbon).
- 4.3.2 Each of these chapters has been produced in accordance with the guidelines and recommendations in Volume 11 of the Design Manual for Roads and Bridges, alongside guidance in relevant discipline-specific methodology documents. The baseline survey data collection and subsequent assessments were carried out in accordance with the methodologies included in the NDR Scoping Report (Appendix 4 of the ES), incorporating any comments from PINS and/or the appropriate Statutory Bodies included in the Scoping Opinion (Appendix 5 of the Environmental Statement Document Ref 6.1).
- 4.3.3 The methodologies detailed in the ES incorporate consideration of both UK and European standards as necessary.

- 4.3.4 The assessments and design input has been carried out using the traffic model, predicting traffic volumes and distributions for the proposed Scheme opening year 2017, and design year (2032).

Q4.4 No convincing evidence of improvement to traffic management or the environment generally. Financial case is not convincing.

Applicant's response

- 4.4.1 Substantial evidence is provided on the impacts of the NDR in the Environmental Assessment (Document Ref 6.1) and the Traffic Forecasting Report (Document Ref. 5.6 chapter 7). The financial case was reviewed by the Department for Transport in 2011 and the economic appraisal was updated for the scheme that has been submitted for the DCO and this is provided in Document Ref. 5.7. This demonstrates that the NDR will provide very high value for money.

Q4.5 Failure to listen to opposition points. Lessons from Saddlebow Incinerator. No link to A47 questions it's very purpose. Road of national infrastructure importance unconvincing argument.

Applicant's response

- 4.5.1 The 'Pre-application Consultation Report' (Document Ref 5.1) detailed the consultations undertaken on the NDR since 2003 and how the comments received have informed the proposals for the Scheme. Key opposition parties have been involved in the DCO examination process and Norfolk County Council (NCC) has provided responses to Written Representations from these parties; which have included Norwich and Norfolk Transport Action Group (NCC/EX/29), Norwich Green Party (NCC/EX/30) and Campaign for Better Transport (NCC/EX/33).
- 4.5.2 Section 2.8.6 to 2.8.10 of 'Applicant's comment on Relevant Representations Volume 2 - Key Topics' (Document Ref NCC/EX/4)

outlined the chronology of events and reasons why NDR is a project of national significance and so should be treated as development for which development consent is required.

4.5.3 Section 2.5 of ‘Applicant’s comment on Relevant Representations Volume 2 - Key Topics’ (Document Ref NCC/EX/4) provided a response to comments that the NDR application had no link between the A1067 and A47 to the west of Norwich. It identified that the Transport Assessment for the NDR (Document Ref 5.5.) shows that the NDR can provide substantial benefits without a further link between the A1067 and A47(w) and that the NDR will reduce daily traffic on existing routes between the A1067 and the A47(w) Drayton/Taverham and Costessey. The NDR is therefore in no way dependent on the provision of such a link.

4.5.4 In addition NCC’s response to the Examining Authority’s First Written Question 10.2 described the key benefits/disbenefits of not including a full link between Postwick and the A47 to the west of the city. This response is contained in Sections 10.2.1 to 10.2.6 of ‘Applicant’s Responses to The Examining Authority’s (ExA’s) First Written Questions’ (Document Ref: NCC/EX/5).

Q4.6 Economic growth in the north east of Norwich, emanating from the construction of this road, is very much more speculative than it is identifiable.

Applicant’s response

4.6.1 Within the JCS, the key diagram (page 27) illustrates the broad locations of new strategic employment sites. These employment locations are described in Policy 9.

4.6.2 Chapter 5 of the Land Use and Economic Development Report (Document Ref 10.3) includes more detail on emerging sites and these are illustrated on a map in Figure 5.1 (page 50) and detailed in the rest of

Section 5.4 and also Appendix A Table A.1 (page 69). Section 5.4 also discusses impacts on locations over the wider area.

- 4.6.3 The need for the employment allocations in the JCS has been tested at public examination and the scale and distribution of locations for growth found sound.
- 4.6.4 The New Anglia Strategic Economic Plan (included as Appendix I of NCC/EX/5) highlights the importance of the civil aviation cluster at the Airport (paragraph 2.5) and focuses on the north east quadrant and its employment locations from paragraph 6.9 and particularly paragraphs 6.20 to 6.23. The Growth Triangle is recognised as the largest single development proposal in the LEP area (SEP paragraph 8.17). The New Anglia LEP is also a party to the City Deal which identifies three key clusters: Norwich Research Park, Norwich City Centre and Norwich International Airport.
- 4.6.5 The potential for successful employment development in the area to be directly served by the NDR is illustrated by the extensive concentrations of existing businesses at Broadland, St Andrews and Meridian Business Parks; the Salhouse Road/Roundtree Way/Pinetrees area; Rackheath Industrial Estate; and the employment areas between the airport and Outer Ring Road. On a smaller scale the employment site at Horsham St Faith (just off the A140) has also been successfully occupied and is proposed to be expanded through a further allocation.

Q4.7 A degree of speculation has the propensity to change cost benefit analyses dramatically of course, which gives more credence to Opportunity Cost thinking and what is not contested by anyone it seems is that such money would be better spent on the A47.

Applicant's response

4.7.1 The appraisal of transport schemes are always subject to uncertainty as they necessarily include assumptions about future changes such as planning and economic growth. In this case the planning assumptions are based on the recently adopted JCS which has been subject to examination. The uncertainty in forecasting has been tested with sensitivity testing which is reported in Document Ref. 5.11. It was concluded that the transport benefits reported in the submission are robust and that the Scheme would deliver high or very high value for money.

Q4.8 Cannot be classed as a good investment, no convincing evidence, overwhelming suggestions that other roads, let alone other projects, are more worthy recipients.

Need for restraint in public expenditure especially after an unprecedented period of QE will demand that all candidate projects are carefully assessed for soundness.

Applicant's response

4.8.1 The NDR project has been examined in detail by the Department for Transport as part of their 'Development Pool' funding process. The NDR has been given 'Programme Entry' status by DfT, with an allocation of funding of £86.5m. Within application document 5.7 (Economic Appraisal) the NDR cost benefit ratio is calculated to be 5.33 (including Wider Economic Benefits and Journey Time Reliability), which means it is incorrect to say it is not a good investment.

- 4.8.2 The funding for the NDR has already been responded to in document ref NCC/EX/67 and this includes details of the s151 Officer confirmation of affordability.

5 Cllr Andrew Boswell on behalf of Norwich Green Party

Q5.1 In response to Mr Boswell's submission on behalf on the NGP - November 3rd: Response on CARBON to NCC/EX/74

Applicant's response

- 5.1.1 Norfolk County Council (NCC) notes that Norwich Green Party (NGP) accepts the clarifications provided in Document Ref NCC/EX/74. NGP restates carbon emissions data based on other Norfolk County Council (NCC) submissions. The Applicant notes that there are some small factual errors in the reproduction of these numbers, for example in Paragraph 6, NGP refers to the rise of 6.17% against the 2012 baseline, when this refers to the 2017DM, and the table rows are labelled as '% from base' where NCC believes this should read '% from 2017DM'. Finally the table columns lack labels, and NCC takes these to be 2012, 2017DM, 2017DS, 2032DM and 2032DS respectively.
- 5.1.2 NCC maintains that the correct way evaluate the scheme, in line with the prevailing guidance, is by comparing the DM and DS in any given assessment year, and that the impact due to the scheme remains small as set out in the Environmental Statement, Document Ref 6.1.
- 5.1.3 As noted by NGP and as discussed in previous NCC responses emerging policy suggests that carbon emissions should be considered in the analysis of alternatives. NCC, in its assessment of alternatives, has considered emissions of carbon in the determination of the benefit-cost ratio for each alternative (including those included in NCC/EX/71 and NCC/EX/72).

Q5.2 Response on NATS and Public Transport Options: I do not have confidence in the appraisal of alternatives to the NDR DCO, the data management in the modelling, the quality processes and the consistency of calculations and presentation. I recommend that the appraisal of alternative options is not accepted as adequate. On this reason alone, the DCO application should be rejected. (Paragraph 77)

Applicant's response

5.2.1 This is addressed in the introduction to the Applicant's response in answering Q.7. In addition, the Applicant would add that whilst the initial error in relation to the economic appraisal of the PT Option is regretted, it does not have the wide sweeping consequences for the evidence base that are claimed by NGP. The error was made at a relatively late stage in the assessment process, after the submission of the DCO for examination when additional work was undertaken to provide a quantified economic assessment of some of the alternatives, to supplement the assessments already undertaken in the formulation of the proposal (and as reported in the ES (Document Ref 6.1). The earlier work had already concluded that a public transport option (there described as Option 2) would not meet the scheme objectives (see Table 3.7 of Document Ref 6.1). One of the alternatives that was then subject to economic appraisal using the latest version of the Transport Model was the PT Option. The results were reported in Appendix B of Document Ref 5.12, which was published in May 2014. The error occurred in the preparation of that work and is not something that "*persisted for years*" as claimed by NGP. The economic appraisal reported in Document Ref 5.12 concluded that the PT Option would have a negative BCR and would not represent value for money. Now that the error has been corrected (in NCC/EX/71) that conclusion remains unchanged. The Applicant has carefully checked the other elements of the appraisal and is confident that there are no other errors.

Q5.3 As demonstrated by the economic appraisals of other benchmark local authority PT systems under development, and research on the benefits of delivering STC solutions. For example, the Bristol Metrobus system, the Bath Transportation Package, and the June 2014 KPMG report for Green Journeys (discussed in more detail later). Bath, my home city, is on a par with Norwich in size and may provide an interesting benchmark comparator: the BCR for its PT system is 2.51. (Paragraph 9)

Applicant's response

5.3.1 The comparison with Bath has also been suggested by NNTAG and the Applicant's response on that is in 13.3 below. The Bristol Metrobus scheme shares some similarity in objectives with NDR + NATS PT such as reducing congestion, improving the environment, improving accessibility and supporting economic growth. However the particular problems in each city are different, both existing and in supporting growth in the future. The KPMG report assesses the costs and benefits of bus priority provision such as bus lanes, selective priority at junctions, bus gates and bus only streets etc. It does not assess the costs and benefits of new bus provision or increasing bus frequency. The PT Option and NDR+NATS PT tested for Norwich includes new services and increased bus frequency so the KPMG report is not directly comparable.

Q5.4 Why were NATS and the CC complementary measures not modelled in isolation as a sensitivity test?(Paragraph 41)

Applicant's response

5.4.1 The full NATS strategy including CC measures is considered to require the traffic relief produced by NDR for their successful implementation. Therefore they were not tested without NDR. Furthermore any appraisal work should be proportionate and seeking to assess measures that could meet the scheme objectives. The PT Option in effect provided an exaggerated NATS PT strategy but in combination with Alternative 5 it was shown to fail to meet the scheme objectives. It is also clear that the CC measures on their own would fail to meet the scheme objectives and it does not require a sensitivity test to reach this conclusion.

Q5.5 Why was the model not altered to remove warnings relating to CC measures, and to provide a better modelling of the CC measure areas? What are the TUBA warnings for the PT options and NATS models? (Paragraph 48)

Applicant's response

5.5.1 It is usual that TUBA produces large numbers of warnings as it undertakes range checks on travel cost values for different time periods, user classes...etc. It would be wrong to alter the transport model to eliminate these messages if they are still correct and appropriate. For example, the CC measures will prevent traffic cutting through the city centre so TUBA would recognise that these trips would be subject to large travel cost changes and would identify this with a warning message. To prevent this happening either the network coding would need to be altered to again allow the traffic to cut through the city centre, or the matrix of trips would need to be artificially changed to remove these trips that tripped the warning message. Both would be wrong as they would not represent the proposed conditions with the CC measures in place.

Q5.6 The handling of Private Sector investments, operating costs and revenue is inconsistently applied across the different options as shown in Table 4 above.

(Paragraph 51)

Then, the total “Private Sector investments, operating costs and revenue” (xiii. above) included in Transport Economic Efficiency (TEE) tables is different: for the PT option, it is -£802.3m and for NATS it is -£572.1m. (Paragraph 53)

The breakdown of the differences may be seen by looking at the elements (xiv. to xvi. above). It can be seen that revenue costs are applied in both TEEs, operating costs only in the NATS case, and investment only in the PT option case.

A further vital point here is that assessments from other places such as Bath and Bristol, which have passed successfully through DfT funding appraisal, do not include Private Sector costs for buying buses for an entire 60 year appraisal period. There may be some modest Private Sector investment given, for example, the Bath system has £400K allocated under this heading. Larger Private Sector costs for entire bus fleets etc are usually not included. (Paragraph 54)

Applicant’s response

5.6.1 The public transport costs entered into the appraisal include bus purchase costs and operator costs. These are combined and entered as a cost stream over the appraisal period. It is correct that these costs have been entered into the appraisal in a different way for the DCO+NATS PT test compared with the PT Option. In the PT Option the cost stream was entered under investment costs and allocated to the private sector. However for the DCO+NATS PT test the investment stream will include public sector investment in the DCO scheme and it was not possible to specify the investment cost stream for both public and private sector, therefore the bus cost stream was entered under operational costs (which are the major share of costs). Whether the costs are entered under investment or operating costs makes no difference to their treatment in the appraisal, for example the discounting is identical.

Q5.7 Investment costs for the PT option are stated as £44.3m but only £26.2m is brought into the BCR calculation as PVC. As the PVC for the Developers Link Road18 is £24.4m when it is appraised stand-alone (as “Alternative 5”), only £2m appears to have be apportioned for the PT. However, the narratives in NCC/EX/72 and Document 5.12 would indicate that this option is essentially NATS, certainly of the same order of magnitude, and therefore a PVC for a similar order would be expected. Both NATS and the PT option should be of the order of £110m to be consistent. (paragraph 50)

Postulate 1: PVC for the PT option is too low. Postulate 2: PVC for the NATS option is too low (both paragraph 50). Postulate 3: There is a major discrepancy between the cost of buses between the NATS and PT options (paragraph 52). Postulate 4: There is a major discrepancy between Private Sector investments, operating costs and revenue between the NATS and PT options, leading to outputs which cannot be meaningful compared (Paragraph 53).

Whilst this benchmarking exercise is simplistic, it provides some confidence around Postulates 1 and 2, and also Postulate 3 and 4. Crucially, it also shows that a Norwich PT Only option would model as good value for money when the current discrepancies, particularly about how the PSPI elements are attributed, are removed from the Applicant’s appraisal methods (paragraphs 71 and 72).

Only a complete rework of alternative appraisals by the Applicant, following an audit of processes and models can deliver trustworthy BCRs. Whilst the “what if” experiment and benchmark does not deliver BCRs fully worked out in such a way, it does suggest that the BCRs for DCO, NDR+NATS, and PT Only options all align in the above +4 range with the PT Option performing better

This then reflects what many interested parties have said; that is, that a public transport option presents a viable, cost effective (i.e. value for money) alternative which needs to be properly appraised.

The results provide further evidence for the need for a full audit to be carried out on all models in the application and presented in the Examination, and that in addition to

software and model robustness, the consistency of all the appraisals needs to be thoroughly reviewed, and validated against practice elsewhere (paragraphs 74-76)

Applicant's response

- 5.7.1 The £44.3m investment cost contained in Table 10.3 of Document Ref 5.12 for the PT Option covers the cost of developer link roads as Alternative 5. This cost is in 2013 Q1 prices as stated in the table and before adjustments for optimism bias and construction price inflation. The cost is adjusted for these latter two aspects, converted to 2010 prices and then discounting is applied. This together with any changes in revenues produces the PVC figure of £26.6m (not £26.2m quoted by NGP). The slightly lower PVC for Alternative 5 is due to different revenue changes with the two options: changes in public sector parking revenue are allocated as a cost. It is not true that the public transport provision is essentially the same as NATS. The different assumptions are set out in the response to Q5 in the response to the Third Written Questions from the ExA (NCC/EX/90).
- 5.7.2 Postulates 1 and 2 are wrong. The reason that the PVC values are reduced from the values input is due to conversion to a 2010 price base and discounting and that private sector costs should be allocated in the benefits table in accordance with WebTAG and TUBA guidance (see also the response to Q7b in the response to the Third Written Questions (NCC/EX/90).
- 5.7.3 Postulate 3 identifies the large cost difference between the cost of buses in the PT Option and DCO+NATS PT test. This difference in costs is correct due to the differences in service provision which are set out in the response to the ExA Q.5. This is not a discrepancy or error.
- 5.7.4 Postulate 4 identifies that the private sector costs in the PT Option and DCO+NATS PT test are input under different headings. The reason for this is explained above in the response to the previous points. This is not a discrepancy or error and does not affect the appraisal.

- 5.7.5 Therefore the basis for the reasoning in the following ‘experiment to correct discrepancies in BCR calculation’ is fundamentally flawed.

Q5.8 This is a watershed in the Examination because it strongly suggests that alternative ways forward are possible, and credible.

Developing a stand-alone PT system based on NATS PT elements with an inner link road, whilst deferring NDR development for a later review of its necessity, after completion of all PT elements (i.e. 2027, the end of Phase 3 of the JCS LIPP), may provide the same order of economic benefit as the front-loading the build of the NDR as per the Application. (Paragraph 80)

Applicant’s response

- 5.8.1 This type of intervention has been appraised as the PT Option which includes the developer link roads. In the Applicant’s view the first test of whether an alternative succeeds is whether it meets the objectives, not whether it is simply good value for money. The PT Option fails to meet the objectives, as described in Document Ref. 5.12. It also does not represent value for money, as shown by the assessment in NCC/EX/71.

6 Michael Innes

Q6.1 The NDR has been doggedly pursued by the applicants as an 'idée fixe' from the very beginning. This is a perverse approach to searching for a better policy option.

From 'Issues & Options' 2007, (which prompted the NAA ideas) through the abandonment of Regional Spatial Strategies, to the present enquiry: any alternative, or challenge presented to this pre-determined assumption has received short shrift.

Applicant's response

6.1.1 Chapter 3 of Volume 1 of the ES (Document Ref 6.1) explains the evolution of the scheme and consideration given to potential alternatives. Further detail on the transport options considered early in the process are included in the Norwich Area Transportation Strategy: Options Assessment Report August 2005 (Appendix A of Document Ref NCC/EX/25). Further analysis using the DCO transport model for alternatives is provided in The Traffic and Economic Appraisal of NDR Alternatives (Document Ref 5.12). Section 8 of the report provides an analysis for Alternative 5 and conclusions are summarised in Section 9.

Q6.2 The designation of the NDR as a necessary missing 'link' in a 'strategic' infrastructure of national significance is, in practice, but a last bit of this gerrymandering that flies in the face of any honest view of democratic debate.

Applicant's response

6.2.1 This matter has been responded to in section 2.8.6 of Document Ref NCC/EX/4.

Q6.3 Strategically, it is a duplication of a southern by-pass which has a reserve capacity: it demonstrates the NDR can but intrude unnecessarily on the countryside and landscapes to the north.

Applicant's response

- 6.3.1 The Scheme Objectives, the Need Case and Environmental Impacts have been considered in detail in the submitted application documents (see Environmental Statement - Document Ref 6.1).

7 Peter Lanyon

Q7.1 What then of the character of the landscape and the tranquillity of the area through which the NNDR would thrust its noise, pollution, inappropriate development, carbon emissions and out-dated and ineffective transport system?

Applicant's response

- 7.1.1 The Landscape and Visual Impact Assessment (LVIA) has determined that 'the predominant landscape character along the NDR is generally one of fairly open arable farmland with urban fringe influences such as housing development, Norwich Airport and the Broadland Business Park', with a higher quality area centred around the former parklands of Beeston and Rackheath Halls.
- 7.1.2 The LVIA has also concluded that 'Despite the close proximity to Norwich the route would pass through fairly tranquil countryside, particularly in the vicinity of the wooded parkland areas of Rackheath and Beeston'.
- 7.1.3 However, the thorough assessment of the local landscape has determined that the proposed mitigation along the route, which includes screen mounding and extensive mitigation planting, incorporating blocks of native tree and shrub planting that will replace existing tree numbers at a ratio in excess of 3.5 to 1, will help to blend the proposed road into the landscape and screen it from affected properties minimising the impact upon the landscape character and upon the tranquillity of the area. Therefore, by year 15, once the mitigation planting has matured, landscape effects, which includes impacts upon the landscape character and tranquillity, will have been reduced to slightly adverse.
- 7.1.4 The assessments on landscape, carbon air quality can be found the Environmental Statement (ES) (Document Ref 6.1). How the NDR fits in with development proposed in the Joint Core Strategy and the Norwich Area Transport Strategy can be found in Chapter 3 of the ES.

Q7.2 *The Inner Orbital Link Road, appropriately augmented, would provide a far more suitably modest alternative for traffic in the shorter term, until we cure ourselves of our dangerous motoring habit. And that road has never been properly examined.* Applicant's response

7.2.1 The inner orbital link road was assessed as Alternative 5 in Document Ref. 5.12. The appraisal showed that the alternative failed to meet the objectives of the Scheme.

8 Andrew Cawdron

Q8.1 Various comments with respect to DCO wording / requirements. Two main points to address are as follows:

Where there is a requirement to be satisfied in the DCO, the approving planning authority is the applicant, i.e. the principle of 'self certify' applies. I can find nothing in the documents that allows rights of redress. There is no clear legal means of robust enforcement available under the Planning Act 2008, particularly when the Applicant and the "relevant planning authority" are one and the same body.

Defence to proceedings in respect of statutory nuisance' which appears to remove rights provided by the Environmental Protection Act 1990.

Applicant's response

- 8.1.1 Defining the "relevant planning authority" as the County Planning Authority matches the approach in a number of Development Consent Orders (DCOs) as made. These include The Lancashire County Council (Torrisholme to the M6 Link (A643 Completion of Heysham to M6 Link Road)) Order 2013, The M1 Junction 10a (Grade Separation) Order 2013 and The Central Bedfordshire Council (Woodside Link Houghton Regis) Development Consent Order 2014, although in relation to the latter two, as these involved development outside the area of the applicant local authority, another body was the "relevant planning authority" in respect of those areas.
- 8.1.2 This approach also matches that under the Town and Country Planning Act 1990 (TCPA 1990), whereby a local authority may make applications for planning permission to its own planning department where appropriate. A district authority would therefore make an application to itself in respect of matters determined by district planning authorities (such as for a new office building), and similarly a county authority would make an application to itself in respect of matters determined by county planning authorities (such as for a waste development) or where the

development is to be undertaken by the county authority (such as a new school or a new highway).

- 8.1.3 It is clear that Parliament, both in terms of the DCOs that have been made and in terms of the TCPA 1990, is content that a local authority can appropriately carry out the two roles as applicant and planning authority. As explained in section 2.5 of the Consultation Report (Document Ref 5.1) NCC put arrangements in place to ensure a proper separation of its functions as DCO applicant and as a local planning authority in the pre-application processes, and those arrangements have been maintained during the Examination. NCC would expect similar arrangements to be in place in relation to all matters concerning the implantation of the scheme in the event that the DCO is granted.
- 8.1.4 Any thing done or not done by a County planning authority in relation to a DCO (such as a decision to approve details submitted pursuant to a requirement), is subject to the normal oversight of the Courts through judicial review.
- 8.1.5 The draft Order for the NDR includes, where appropriate, provision for other bodies to be consulted on matters submitted to discharge a requirement (see Schedule 2). These other bodies include the District Councils, the Environment Agency and Natural England, who (as for the discharge of planning conditions) advise the planning authority on whether the details submitted are sufficient and appropriate.
- 8.1.6 The enforcement provisions in the Planning Act 2008 (for DCOs) are different to those in the TCPA 1990. Section 173 of the 2008 Act provides that enforcement of matters relating to a development consent order for a highways scheme is the responsibility of the “relevant local planning authority”, which is the District planning authority and not the County planning authority. The term “relevant local planning authority” as defined by section 173 of the 2008 Act should not be confused with the term “relevant planning authority” as defined by Article 2 of the draft DCO. The only case in which County planning authorities are the

enforcing authority in respect of DCOs is for hazardous waste facilities (not relevant here).

Q8.2 Article 40 - Defence to proceedings in respect of statutory nuisance. This is a removal of a legal right and I do not comprehend how a Development Consent Order can include such a far reaching statement which removes legal right.

Applicant's response

8.2.1 Section 158 Planning Act 2008 provides a defence to civil or criminal proceedings for nuisance in relation to the carrying out of development authorised by a development consent order (DCO) and doing anything else authorised by a DCO. Article 40 is based on the relevant model provision (although the model provisions no longer have statutory effect, see the explanation at paragraph 2.1 in the Explanatory Memorandum, Document 3.2), and versions of it have been included in many DCOs that have been made. Section 152 Planning Act 2008 provides for a right to compensation in cases where, by virtue of section 158 of a DCO itself, there is a defence to proceedings in nuisance and development is carried out (or anything else is done) and a person's land is injuriously affected.

9 Environment Agency

Q9.1 We note and welcome the submission of this document. Regarding the measures detailed in respect of the 'Construction Phase', we are satisfied with those included to protect the water environment. These are detailed under 'Nature Conservation', 'Geology and Soils', 'Materials' and 'Road Drainage and the Water Environment' sections. Where unsuspected contamination and piling through contaminated land are considered on pages 25 and 26, we would suggest that these issues would be addressed under Requirement 7 as well as Requirement 18. Regarding the 'Operational Phase', the section on 'Nature Conservation', at page 47 highlights the design measures that will ensure that drainage will not have an adverse impact on watercourses and designated sites. We have previously highlighted that further consideration should also be given to the opportunities to enhance the proposed drainage features to further encourage biodiversity. This issue remains outstanding.

Applicant's response

- 9.1.1 Opportunities to enhance biodiversity with the SuDS design have been considered further. It is not possible to line any of the proposed unlined infiltration ponds due to the capacity and drain down times required. Unlined infiltration ponds will be planted with grass and wildflower mixes. The potential to plant reeds within other unlined infiltration ponds will depend on the underlying ground conditions and the ability for the pond to retain shallow waters. Where secondary lagoons are to be lined reeds will be planted to create wetland areas i.e. at the Springs at Rackheath.
- 9.1.2 The biodiversity officer at the Environment Agency suggested that the primary lined attenuation ponds could be planted for habitat creation. It was concluded that this was inappropriate as they are pollution control features, and are designed to take a tanker spill load in the event of an accident.

Q9.2 The section on 'Road Drainage and the Water Environment' from page 63 details the proposed approach to managing surface water run-off. This includes reference to the use of, in some locations, unlined swales and a two-tiered treatment train. We had previously raised concerns about the acceptability of this approach.

On the 23 September 2014 we received further information on this issue from Mott MacDonald on behalf of the Applicant. This included an updated Groundwater Risk Assessment and information on the hydro-geological setting of the route. Following a review of this information, we subsequently confirmed in our response to Mott MacDonald (dated 15 October 2014), that based on the submitted information we were satisfied that the proposed drainage system as designed would appear acceptable in terms of affording protection to groundwater resources.

We accepted the overall conclusions of the risk assessment and the proposed schedule for lining of swales, although we have requested further clarification on the approach proposed for catchment CA2A. Paragraph C.5.7 of the submitted ES FRA Addendum (ref NCC/EX/43) states: "Drainage structures within catchment CA2 consist of impermeable kerbs and gullies serving the northern carriageway and a bitumen channel in the central reserve serving the southern carriageway". This is also stated in paragraph 4.2.3 of the draft HRA Addendum (NCC/EX/83). However, the submitted drawing MMD-233906-DT-0815, along with drawings R1C093-R1-5064 Rev A and R1C093-R1-5065 Rev A appear to show drainage via swales at this location. It should be confirmed whether swales are indeed to be used and if so that they will be lined?

Applicant's response

- 9.2.1 This swale is present but will only serve overland flow from the embankment not from the road.

Q9.3 We also stated that that we would consider the proposals for a two-tier drainage system using kerbs and gullies at the identified locations acceptable in terms of protection of groundwater quality. We highlighted that gullies should be maintained at appropriate frequency in order to prevent sediment accumulation / remobilisation into the lined ponds.

Subsequently, subject to being satisfied on the above issue in relation to catchment CA2, we are able to withdraw our previous objections on these issues.

We are satisfied with the remaining Operational Phase mitigation measures contained under 'Road Drainage and the Water Environment'. We note the inclusion on page 71 of maintenance requirements, and welcome the reference to the Mitigation Measures Action Plan (MMAP) on page 72. The MMAP is required under Requirement 25 to ensure the prevention of sediment ingress to the Wensum SAC, and is currently being drafted.

Applicant's response

9.3.1 The MMAP will be finalised by 21st November 2014, draft copies have been sent to Natural England and the Environment Agency and their comments are being incorporated.

Q9.4 .With regards to the proposed monitoring and 'Road Drainage and the Water Environment', we note and welcome the inclusion on page 78 of the intention to monitor the drainage performance of all lagoons. As highlighted in our response to Q7.2 in the Examining Authority's second written questions (our letter dated 8 September 2014, Ref AE/2014/117942/02-L01), further work is necessary to ensure that lagoon 5 will drain effectively.

Applicant's response

9.4.1 Lagoon 5 will be part of the water level monitoring regime.

Q9.5 We note the reference to monitoring water quality and groundwater levels at The Springs CWS prior to and during construction. Our response to the Examining Authority's second written questions (Q7.2), included confirmation that our position remains that such monitoring should continue post-construction.

Applicant's response

9.5.1 Norfolk County Council (NCC) are committed to this post-construction monitoring regime.

Q9.6 Finally, as above, we welcome the reference to the Mitigation Measures Action Plan in the monitoring section. Updated CEMP (Doc Ref: NCC/EX/82) The construction phase mitigation included appears satisfactory, and reflects that included in the relevant sections of the NDR Mitigation Table. We note and welcome the further reference to managing unsuspected contamination at page 29. We note that the Outline Site Waste Management Plan included at Appendix A of this document remains the version from November 2013. As such, the advisory comments in our Relevant Representation, and the approach agreed in the Statement of Common Ground between us and the Applicant, remain valid. The Applicant is advised to discuss issues of waste management with us at the earliest opportunity to ensure that the requirements of the Environmental Permitting Regulations are complied with.

Applicant's response

9.6.1 The appointed contractor operates a WRAP site waste procedure. They will consult with the Environment Agency to comply with Environmental Permitting Regulations.

Q9.7 Draft Development Consent Order (DCO) (Document Ref: NCC/EX/76) The revised draft DCO includes at Article 17 Discharge of Water, an appropriately updated legislation reference, as requested by us. We have reviewed the Outline drainage works plans and Drainage and surface water plans (Updated plans, document ref NCC/EX/73 pt5) as listed under Requirement 4: Development to be carried out in accordance with plans. Whilst these have mostly been updated to reflect our discussions with the Applicant, plan R1C093-R1-5080 Rev A, showing lagoon 18, requires an amendment. It currently does not show the two filter drains proposed to be added ahead of lagoon 18 in paragraph E.3.8 of the submitted ES FRA Addendum (ref NCC/EX/43) and shown on drawing R1C093-R1-4908A in Appendix D1 of that document. The filter drains are required to safeguard water quality.

Applicant's response

- 9.7.1 Plan R1C093-R1-5080 showing filter drains pre lagoon 18 will be updated.

Q9.8 Additionally, as mentioned above in respect of the NDR Mitigation table, drawing R1C093-R1-5064 Rev A shows a swale draining to lagoon 1. Clarification is required on the proposed method of drainage for this catchment.

Applicant's response

- 9.8.1 As mentioned above this swale will be unlined and will be serving overland flow not road runoff.

Q9.9 We welcome the specific reference to ‘groundwater quality’ in Requirement 7: Contamination. We also support the proposed changes to Requirement 25. The scope of this Requirement has been expanded to include the A1067 at Attlebridge and Lenwade, and the Environment Agency added as a specific consultee. As stated in our response to Q7.2 in the Examining Authority’s second written questions (letter dated 8 September 2014, Ref AE/2014/117942/02-L01), we are satisfied that this proposed Requirement will be capable of securing appropriate measures to ensure that the Wensum SAC is not adversely affected by increased silt input. Draft Habitats Regulation Assessment (HRA) Addendum (Doc ref: NCC/EX/83) This draft has been updated to reflect the ongoing discussions between the Applicant, Natural England and us to address the increased risk of sediment ingress to the River Wensum SAC resulting from increased traffic movements on routes leading to the NDR. The draft outlines proposed mitigation measures, references the proposed Requirement 25 and includes detail on the scope of the Mitigation Measures Action Plan (MMAP) required to discharge Requirement 25. The MMAP is currently being drafted and is subject to continuing discussions between the parties. Mitigation may include physical improvements to drainage from Weston Hall Road and the A1067. The document includes most of the discussed measures, although we have also highlighted the benefits of removing a specific drop-board structure from ‘Ditch 2a’ which is not included within this draft. As previously highlighted, Requirement 25 provides a mechanism in the form of the MMAP which is capable of securing measures to ensure no adverse effect on the integrity of the Wensum SAC.

Applicant’s response

- 9.9.1 The MMAP will be finalise by 21st November 2014
- 9.9.2 Requirement 25 of the draft DCO (AD-129) includes drainage from the A1067 as well as Weston Hall Road.
- 9.9.3 As mentioned above, a draft MMAP is being prepared to satisfy Requirement 25. NCC are aware that Natural England have been sent a draft copy of this document. Based on the discussions that have been held to date between all parties, it is NCC’s view that subject to the finalisation

and implementation of the MMAP in accordance with Requirement 25, there will be no adverse effect on the integrity of the River Wensum SAC.

10 Stephen Heard on behalf of Stop Norwich Urbanisation

Q10.1 To date the case for the NDR has not been proven any of the above beyond reasonable doubt.

Applicant's response

10.1.1 The Scheme objectives, the Need Case and how the Scheme meets the needs has been considered in detail in the submitted application documents (see Environmental Statement - Document Ref 6.1) and the relevant issues have been examined during the course of the Examination. The Applicant considers that the case for the NDR has been clearly demonstrated.

Q10.2 Mr Heard listed a number of advantages in his letter, and states that; a large number of the benefits and reasons, if indeed not all of them, could be achieved by developing the alternative route of an inner relief road that has never been appraised despite that fact that it could be achieved for £20m and wholly funded by developers through Section 106 payments.

Applicant's response

10.2.1 Substantial evidence is provided on the impacts of the NDR in the Environmental Statement (Document Ref 6.1) and the Traffic Forecasting Report (Document Ref. 5.6 chapter 7). It is not correct that an alternative route of an inner relief road has never been appraised. This is assessed in the ES as Alternative 5 and a quantified assessment is provided in the appraisal of Alternative 5 in Document Ref. 5.12.

Q10.3 NCC are prepared to use public money to fund the NDR to a minimum of £40m whilst also cutting front line services. Mr Heard then sets out the cuts as reported in the EDP.

Applicant's response

10.3.1 The funding for the NDR has already been responded to in Document Ref NCC/EX/67 and this includes details of the s151 Officer confirmation of affordability.

Q10.4 The Public Services (Social Value) Act 2012 places a duty on public bodies to consider social value ahead of procurement. The Applicant has not taken the requirements of this legislation into consideration and have failed to undertake a consultation on the alternative to the NDR. The authority has a duty of care to use public money carefully and with consideration to human rights of their residents. Public money is being wasted here and not considering the inner link road prejudices the authority's ability to provide other statutory services. Norfolk County Council is not ensuring that public funds are spent on activities that provide the greatest benefits to society, and that they are spent in the most efficient way contrary to the guidance in the Green Book. NCC is not promoting public interest in forging ahead with the NDR and not assessing the alternatives in a proportionate manner

Applicant's response

10.4.1 The Public Services (Social Value) Act 2012 does not apply to the Applicant's processes and decisions in terms of the consenting process for the NDR, i.e. seeking a DCO. Whilst the Act does apply to the "carrying out of works" (amongst other matters, see section 1(1)), it is only the carrying out of works that are to be procured through a "public services contract", as defined in the Public Contract Regulations 2006. It is clear that the planning processes in which the Applicant is currently involved do not meet the definition of a public service contract (see regulation 2).

10.4.2 Notwithstanding the above, the Applicant also refutes the substantive points made. It has taken into account the economic, social and

environmental well-being of the area in deciding to promote the NDR scheme, and its view of the benefits which it considers the scheme will bring is set out in a number of DCO application and examination documents. The social effects on the NDR on existing communities are included in the assessments in Chapters 4, 11, 12, and 13 of the Environmental Statement (Document Ref 6.1). Similarly the Applicant's view on why the benefits of the NDR substantially outweigh its costs is also set out in various documents, and it has considered the alternatives at various stages during the pre-application and application stages, as reported in the ES..

Q10.5 Mr Heard makes a point about the relationship between the NDR and the JCS particularly in relation to modifications made by Inspector Vickery and goes on to state:

“Inspector Vickery made six modifications of which two, the five year land supply and the Average Build Rate, have not been achieved within the time period set by him in his final report. The logical conclusion of the failure to achieve these modifications is the JCS is not legally sound and without a legally sound JCS the NDR is not viable. The JCS is due to be reviewed in 2017 and we would suggest that it would be sensible to wait until then to make any decision on the NDR”.

Applicant's response

- 10.5.1 The part-JCS, with Inspector Vickery's modifications, was found sound and has been adopted without legal challenge. It is not open to Mr Heard to argue that the JCS is not legally sound since this would be to question the validity of a development document outside of the procedures for challenging such documents as set out in the Planning & Compensation Act 2004.
- 10.5.2 Mr Heard appears to be referring to Policy 22 which was included as a modification. It deals with action to be taken in the event of a future shortfall in the 5 year supply of housing land in the Norwich Policy Area (NPA). In the specific situation identified in the Policy, it requires the

production of a focussed Local Plan with a single objective “of identifying and allocating additional locations within the whole NPA area for immediately deliverable housing land”. It should be noted that Policy 22 does not require a review of the JCS, it only applies to housing, it does not remove the locations identified for growth in the JCS, and a plan developed in accordance with this policy would have the effect of increasing the amount of land identified for growth in the NPA.

- 10.5.3 No date has been agreed to review the JCS. However, it is normal practice to review, and roll forward, plans on a regular basis to take account of new evidence, to make sure the plan is up to date, and to maintain a suitable time horizon for land allocation. As a result plan making should be a virtually continuous process and a review is likely over the next few years. However the review process will take a number of years; a “rule of thumb” might be 5 years to adoption. It is not credible for decision making to await the next, as yet unscheduled review, when a plan is recently adopted and remains up to date.

Q10.6 Alternative to the NDR would create the opportunity cost of moving ahead with our option allows release of monies for A47/A14 improvements. This is particularly important as this would see improvements to the European trunk road network which the NDR would never achieve.

Applicant’s response

- 10.6.1 Alternatives are discussed in Document Ref 6.1 (Environmental Statement Vol 1). None of the alternatives considered meet the scheme objectives. No other alternatives have been proposed that meet the scheme objectives (see Document Ref NCC/EX/67 section 4, which provides responses to points raised at the Issue Specific Hearings where Alternatives were discussed). The basis of the funding for the NDR project is through the Local Major Project (via the Development Pool process with the Department for Transport - discussed in more detail in

Application Document Ref 4.2 - Funding Statement). It is not possible to reallocate this funding provision to other projects. The A47 and A14 are funded centrally by government and maintained and improved under the management of the Highways Agency. NCC has been and remains proactive in seeking improvements to the A47 separate to the NDR (as it did for A11 improvements).

Q10.7 The NDR and the JCS was always meant to support employment sites in the North East growth triangle however there has been no “anchor tenant” announcements for major employment opportunities. Indeed all of the employment growth, including those promoted by the Anglia Local Enterprise Partnership, has been in the South or West of Norwich, along the A11 corridor and on the east coast. The planned expenditure on the NDR and the JCS would merely see the promotion of thousands of houses and a dual carriageway to enable the residents to travel to work!

Applicant’s response

- 10.7.1 The need for the employment allocations in the JCS has been tested at public examination and the scale and distribution of locations for growth found sound. Employment allocations in local plans generally reflect evidence of underlying economic growth trends rather than the needs of a specific tenant. Similarly, applications for large employment areas, business parks and industrial estates are generally brought forward to address general market needs. Applications for specific buildings or individual plots are much more likely to be targeted at an end-user.

- 10.7.2 The permitted proposal for the Aeropark (40ha at the northern side of the airport – corresponding to site 8 on the map in Document Ref10.3) includes detailed planning permission to provide 15,035sqm of aviation related B1(c), B2 and B8 floorspace intended for Air Livery (an “anchor tenant”).

- 10.7.3 It is entirely incorrect to suggest that “all of the employment growth, including those promoted by the Anglia Local Enterprise Partnership, has been in the South or West of Norwich, along the A11 corridor and on the east coast”.
- 10.7.4 The New Anglia Strategic Economic Plan (included as Appendix I of Document Ref NCC/EX/5) highlights the importance of the civil aviation cluster at the Airport (paragraph 2.5) and focuses on the north east quadrant and its employment locations from paragraph 6.9 and particularly paragraphs 6.20 to 6.23. The Growth Triangle is recognised as the largest single development proposal in the LEP area (SEP paragraph 8.17). The New Anglia LEP is also a party to the City Deal which identifies three key clusters: Norwich Research Park, Norwich City Centre and Norwich International Airport.
- 10.7.5 The potential for successful employment development in the area to be directly served by the NDR is illustrated by the extensive concentrations of existing businesses at Broadland, St Andrews and Meridian Business Parks; the Salhouse Road/Roundtree Way/Pinetrees area; Rackheath Industrial Estate; and the employment areas between the airport and Outer Ring Road. On a smaller scale the employment site at Horsham St Faith (just off the A140) has also been successfully occupied and is proposed to be expanded through a further allocation.

Q10.8 SNUB are concerned that Norfolk County Council do not have the capability or capacity to undertake this major project and that they have a track record of failing local residents and the use of their money. The Kings Lynn incinerator fiasco is an example of this inability to deliver on major projects

Applicant's response

10.8.1 The County Council has an exemplary record of delivering highway infrastructure. Part of the test of funding from the Department for Transport (DfT) is the need to satisfy them that the delivering organisation has the correct experience, ability and governance. This is a specific point that is considered as part of the funding approval process completed with the DfT. More details can be seen in the Development Pool bid as set out in the Application Document Ref 4.2 (Funding Statement). There is no comparison between the NDR and the King's Lynn incinerator.

11 Graham Martin

Q11.1 If NCC wishes to have a “complete” NDR then NCC should make a full application and consult the public on the entire proposal. The implications for the current NDR application are very significantly different from those of a “complete” NDR regarding, costs, route followed, traffic generation, environmental issues, effect on a villages that have not been consulted previously and the location and extent of additional development required. It is bad practice to adopt a piecemeal approach to a scheme of this nature and shows a complete lack of transparency by NCC in its consultation procedures.

Applicant's response

- 11.1.1 It is not accepted that NCC has adopted a piecemeal approach to the development of the NDR. Chapter 3 on the Environmental Statement (Document Ref 6.1) sets out the need which the NDR proposals have been designed to meet. It also explains the consideration NCC has given to potential alternatives to meeting the need.
- 11.1.2 Paragraph 3.16.3 states:
- The overall conclusion is that the application Scheme proposals for a dual carriageway NDR between the A47(T) at Postwick and the A1067 Fakenham Road represent the most appropriate response to the need identified in the first section of this chapter.*
- 11.1.3 The issue of continuing the NDR from the A1067 to the A47 west of Norwich is discussed in the Applicants response to the ExA's first written question Q10.2 (Document Ref NCC/EX/5) and second written question Q1.1 (Document Ref NCC/EX/52).
- 11.1.4 Results of the initial scoping study were reported to the Environment, Transport and Development Committee on 18 September 2014. A copy of the report can be found in Document Ref NCC/EX/67. The matter was also discussed at the Issue Specific Hearing on the 18 September 2014.

Q11.2 Traffic and environmental implications for villages have downplayed and some of the possible alternatives mentioned below that might mitigate or even remove the need for an NDR have not been rigorously assessed.

Applicant's response

- 11.2.1 Substantial evidence is provided on the impacts of the NDR in the Environmental Assessment (Document ref 6.1) and the Traffic Forecasting Report (Document Ref. 5.6 chapter 7). The consideration of the need for and alternatives to the NDR carried out over a period of years is fully set out in the Environmental Statement Part 1 Vol 1, Document Ref. 6.1 in section 2. Further assessment of alternatives was presented in Document Ref. 5.12, updated by NCC/EX/71 for the PT Option.

12 John Elbro on behalf of Norwich Cycling Campaign

Q12.1 Cycling Delivery Plan - Cycle proofing the NDR. Norwich Cycling Campaign in its earlier representations to the Examining Authority has drawn attention to defects in the NDR provision for cyclists. It has made recommendations on points of detail, and on two overall concerns:

- The type of surface for the Bridleways-which are also intended to serve as cycling routes, could be a disincentive to cycling activity,

- The “at grade” un-signalled crossings of the NDR dual carriageway at roundabouts will, for many cyclists, effectively sever a number of routes across the NDR including main radial commuting routes for Norwich, and so will be a disincentive to cycling activity*

Applicant’s response

12.1.1 In Section 5.1.9 of the ‘Response to Examining Authority’s Second Written Questions’ (Document Ref NCC/EX/53) Norfolk County Council (NCC) stated that a surface of road planings is considered the best shared surface for these multi-user routes, such as bridleways, in a rural location. However, it will consider alternative surface types in consultation with representative groups as part of the detailed design. An example of an alternative that could be considered is the provision of a 2.5m wide section with a sealed surface (for use by pedestrians and cyclists) and a 2m wide section of verge (for use by equestrians).

12.1.2 Sections 6.6 of the ‘Applicant’s Responses to the Examining Authority’s (ExA’s) First Written Questions’ (Document Ref NCC/EX/5) outline Norfolk County Council’s reasons for proposing unsignalised crossings at the roundabout junctions with the NDR and the alternatives that were considered.

*Q12.2 Norwich Cycling Campaign asks that the applicant be required to ensure its proposals are likely to be in accord with the Government's declared intention of cycle proofing the road network, and be required to provide evidence in the DCO that the NDR proposals are cycle proofed as far as can be determined at this stage. *Of particular concern are the roundabouts where the NDR crosses the North Walsham Road, the Wroxham Road, and the Salhouse Road.*

Applicant's response

- 12.2.1 Norfolk County Council has outlined how it has considered cycle proofing in the development of the NDR scheme in its response to the Cyclist Touring Club (Section 2.1 of this report).

13 Norwich and Norfolk Transport Group

Q13.1 Major Offshore Great Yarmouth Firm to Move its UK Operations to Norwich - NNTAG is concerned that the NDR would encourage more businesses to relocate from Great Yarmouth and other towns to out-of-town sites opened up by the new road. As well as undermining the local economies of smaller towns, this would also have the effect of encouraging more car commuting.

Applicant's response

- 13.1.1 It is not possible to identify any trends from a single newspaper report.
- 13.1.2 The only reasons for relocation quoted by the company in the article attached to the NNTAG submission relate to the timely availability of premises. However, it can be assumed that Great Yarmouth and Norwich together provide a combination that is attractive to the offshore industry i.e. the company's proposed move is illustrative of the complementary nature of the Great Yarmouth and Norwich offer.
- 13.1.3 As no evidence is presented on the home location of Parenco's staff there is no way of assessing the impact on commuting. If, on average, staff live closer to Norwich than to Great Yarmouth the impact could be beneficial.
- 13.1.4 In terms of any impact on Great Yarmouth it is worth noting that the company are quoted as saying "Parenco remains heavily committed to the Great Yarmouth area and only this month opened a large quayside operational warehouse to support the business' high on-going activity levels. Parenco will still have a sizeable presence in Yarmouth and will continue to make a significant contribution to the local community."

Q13.2 4,500 seat arena mooted for outskirts of Norwich, Eastern Daily Press, 1 Oct 2014 - NNTAG is concerned that development of entertainment and cultural activities on land opened up by new road schemes on the edge of Norwich would undermine the city centre's cultural role. For example, a major new music venue on the city edge would harm the potential for enhancing the historic St Andrews Hall for use as a concert hall.

Applicant's response

13.2.1 An application for a major leisure proposal would need to address the concerns raised by NNTAG and would be tested against planning policies including the town centre first approach of the NPPF (paragraphs 24-27) and JCS Policy 11.

Q13.3 NNTAG thought that it would be instructive to compare the NCC PT Option with an urban public transport initiative developed by another transport authority and look at the differences / similarities in approach. We selected the recently implemented Bath Transportation Package (for comparison)...this Package shares some of the aims and objectives with NDR...Bath is slightly smaller than Norwich with a population of 177,000 against 230,000 for Norwich.

Development dependency

Norwich: NDR would support 37,000 dwellings and 27,000 new jobs by 2026.

Development dependency is claimed for the North east Growth Triangle of 10,000 dwellings and new neighbouring employment areas.

Bath and NESG: The Best and Final Bid (for the Bath Transportation Package (BTP)) notes: "There is not a dependency on developments, but the BTP will help transport in the City, supporting the overall development strategy which seeks to deliver 72,000 new dwellings and 74,000 new jobs by 2026".

Applicant's response

13.3.1 Norfolk County Council's (NCC's) consultants Mott MacDonald are very familiar with the Bath Transportation Package (BTP) having supported

Bath and North East Somerset Council (B&NES) in undertaking all of the modelling and economic appraisal for the business case for the scheme. The approach to modelling and economic appraisal used for NDR was similar to that used for the BTP.

- 13.3.2 The two schemes share some similarity in objectives. The three primary objectives for the BTP, set out in the Best and Final Funding Bid (BAFFB) are to reduce congestion, to improve the environment and to improve accessibility. However the particular problems in each city are different, both existing and in supporting growth in the future.
- 13.3.3 The comparisons made by NNTAG between the two cities for population and the amount of development to be supported by the schemes are not accurate .
- 13.3.4 The populations of the cities are very different, Bath is considerably smaller in terms of population. The population of Bath is 90,000 (reference Bath Core Strategy) compared with 210,000 for the Norwich urban area. The figure provided by NNTAG of 177,000 for Bath is a number for the whole of the Council area and thus it includes other towns and the rural hinterland in North East Somerset (the ONS 2011 figure for B&NES is 176,000).
- 13.3.5 In the context of the correct population figure for Bath of 90,000 then of course the figures provided by NNTAG of 72,000 new dwellings and 74,000 new jobs do not make sense with an inference of these being attributable to the city. NNTAG have taken these figures from the BAFFB but it is explained in there that these forecasts are for the West of England Area. In the paragraphs preceding these figures in the BAFFB it states: *'The BTP will enable greater connectivity to key development sites by allowing improved movement of residents, workers and visitors between the area currently being developed and the city centre. These sites will see 3,000 new homes and nearly 11,000 new jobs being created.'* Since the time of the submission of the BTP the Council has developed their Core Strategy, adopted in July 2014. This provides the

spatial strategy for development in the Council area. For Bath the strategy identifies increases of around 7,000 dwellings and 7,000 jobs over the plan period to 2029. These numbers compare with JCS planned growth up to 2026 of 33,000 dwellings in the Norwich Policy Area (NPA) and 27,000 jobs. The Norwich City Deal seeks to deliver higher levels of growth through investment in infrastructure, skills and business support, bringing forward 3,000 additional dwellings and increasing the jobs target to 40,000. Therefore the planned scale of change in Norwich is substantially higher than Bath by around four to five times as much development.

Q13.4 For the fourth year running, NCC has agreed to transfer money for Integrated Transport in the DfT Local Transport Plan settlement for 2015/16 to road maintenance and major schemes. The Environment Development and Transport Committee on 16 October 2014 supported the transfer of £2.141 million from Integrated Transport to structural maintenance, leaving a £2 million allocation to integrated transport schemes.

Applicant's response

13.4.1 Spending on NATS and the funding and delivery of the Implementation Plan has been set out in a number of Documents, including NCC/EX/45 section 7, NCC/EX/52 Q1.7, and NCC/EX/67 sections 2 and 3. Funding is not only available from the Integrated Transport programme. Whilst government has reduced funding provision in general terms, requiring authorities to re-think their budget allocations, there has remained a healthy funding provision. In addition, with the adoption of the JCS and its now associated CIL, funding potential is increased as infrastructure can be targeted in a planned way. An example of the wider funding potential is the £5m 'push the pedalways' project that is delivering significant cycle improvements across the city during 2014/15 and

2015/16 financial years, (Document Ref NCC/EX/45 section 7). More similar cycle funding is expected in future years.

Q13.5 Overall, the NCC has not made the case for the NDR and the quality of life would be worse for many residents especially in villages to the west, east and north-east of Norwich. Furthermore, reasonable alternative options have not been satisfactorily defined and assessed, whilst flawed outputs in the NDR/ NATS traffic model in relation to complementary city centre measures and a public transport option raise uncertainties about the whole model.

Applicant's response

- 13.5.1 Substantial evidence is provided on the impacts of the NDR in the Environmental Assessment (Document Ref 6.1) and the Traffic Forecasting Report (Document Ref. 5.6 chapter 7). The consideration of the need for and alternatives to the NDR carried out over a period of years is fully set out in the Environmental Statement, Document Ref 6.1, Part 1 Vol1, in section 2. Further assessment of alternatives was presented in Document Ref. 5.12, updated by NCC/EX/71 for the PT Option. The issue of the appraisal of complementary city centre measures and a public transport option are dealt with further in the responses to the ExA questions and the points raised by Professor Goodwin on behalf of NNTAG.
- 13.5.2 The Applicant has provided detailed and proportionate evidence to substantiate the case made for the NDR as the most appropriate transportation intervention to address the current and future needs of the Greater Norwich area. It meets the identified objectives, facilitates the provision of substantial economic and housing growth in accordance with the JCS, and will allow the implementation of further NATS measures as part of an overall planned sustainable transport strategy for Greater Norwich. At the heart of the NNTAG case is an implicit rejection of the growth strategy set by the JCS and the step change in transportation

provision that it entails. The DCO Examination is not the place to revisit the planning strategy for Greater Norwich.

Q13.6 Propose the recommendation of alternative conditions:

- *Preliminary independent audit of the traffic model and re-appraisal of the NDR, a Half NDR and a properly defined alternative comprising a Sustainable Transport Package*
- *Re-design and deliver enhanced developer link roads in north-east Norwich (single carriageway Inner Orbital Link Road) as part of a sustainable transport package.*
- *Bring forward delivery of non road building measures in NATS Implementation Plan*
- *Design and implement traffic management measures for Weston Longville and Hockering parishes as proposed in Draft DCO*
- *In addition, an extensive rolling programme of local safety and traffic calming schemes should be implemented across Norwich to reduce traffic intrusion into residential areas*

Applicant's response

- 13.6.1 Section 3 of the Environmental Statement (Document Ref 6.1) sets out the detailed consideration that has been given alternatives to the NDR. Section 4 of NCC's "Response to requests and points made at Issue Specific Hearings" dated 29 September 2014 and published on the National Infrastructure Planning website on 3 October 2014 (doc reference NCC/EX/67) includes further discussion of Alternatives and reasons for their rejection. These assessments include developer link roads and enhanced public transport as part of the PT Option (which has been further assessed in NCC/EX/71).
- 13.6.2 It is considered that the outlined alternative proposals do not offer an option which would achieve the objectives of the NDR.
- 13.6.3 It is not accepted that the alternative conditions are appropriate. The suggested "conditions" could not function as requirements to be included in a DCO for the NDR because they would be inconsistent with the

making of the DCO to enable the provision of the NDR. Even if the “conditions” are regarded as an alternative strategy or option to be pursued instead of the NDR, the Applicant considers that such a strategy is neither necessary nor justified. The request for an independent audit of the traffic model is not necessary. The traffic model has been produced in accordance with current WebTAG guidance and the modelling process includes appropriate checks to test the robustness of the modelling (including calibration and validation of the model and a range of sensitivity tests of different model outputs). Whilst there has been some updating of the traffic model and the assessment years subsequent to the modelling work that was used to support the Postwick Hub scheme, the basic elements of the model have not been changed. The traffic model as used at the Postwick Hub Inquiry in 2013 was scrutinised by the Highways Agency and its transport consultants, and was found by both the Inspector and the Secretary of State to be fit for purpose (see paragraphs 3.12, 7.32, 8.52, and 8.58 of the Inspector’s report in Appendix B of NCC/EX/45) . The modelling used for the DCO has been scrutinised during the course of the Examination, and only one material error has been identified, which has now been corrected in NCC/EX/71. Where there are disagreements between the professional views of the transport consultants advising the Applicant and the views expressed by various of the Interested Parties, those disagreements have been identified and there is no reason why the Examining Authority is unable to reach its own conclusions on those matters. There is no basis for suggesting that the traffic modelling is unreliable as claimed by NNTAG or that an independent audit is necessary before any conclusions can be reached. The other “conditions” suggested by NNTAG involve a series of lesser transportation measures, some of which have a part to play (and are already included within NATS), but even in combination they are incapable of providing the level of additional capacity that is required both to relieve existing problems and to cater for the planned growth set

out in the JCS. They do not therefore represent a suitable or a realistic alternative strategy to the NDR.

Q13.7 Our strong preference is for outright refusal of the NDR. However, if the Examining Authority is minded to support the principle of a NDR, we recommend termination of the route at Norwich Airport on grounds that no transport or planning case for an extension of an NDR beyond the Airport has been made by NCC and Government financial support is restricted to a road between Postwick and the Airport.

Applicant's response

- 13.7.1 The Applicant's position on the ability of the Secretary of State, on the basis of matters as they currently stand, to lawfully make a development consent order (DCO) for a scheme from the A47 at Postwick to Norwich International Airport is set out at paragraphs 10.3.1 to 10.3.23 of Document Ref NCC/EX/53 (Response to Examining Authority's Second Written Questions).
- 13.7.2 As also set out in that section, the Applicant considers that a road from the A47 to the A140 does not meet the objectives for the NDR, including the identified need. Further detail on the Applicant's case in this regard can be found in chapter 3 of Vol 1 to the Environmental Statement (Document Ref 6.1) and in sections 6 and 9 of the Traffic and Economic Appraisal of NDR Alternatives (Document Ref 5.12). Whilst the funding from central Government relates to the section of the NDR from the A47 to the A140, the Applicant has provided substantial evidence to show that the NDR as put forward in the DCO provides additional benefits (as explained in response to Q10.3 of the Responses to the First Written Questions, NCC/EX/5), achieves a better BCR and represents greater value for money (as set out in Document Ref 5.12), and that the Applicant, in conjunction with partner bodies comprising the Greater Norwich Growth Board, has identified the necessary resources to deliver

the DCO scheme (as set out in the Funding Statement, Document Ref 4.2 and in sections 9, 10, and 11 of NCC/EX/74). There is therefore no credible basis for rejecting the DCO on the basis that a new scheme should be put forward extending no further than the A140.

14 Gail Mayhew

Q14.1 Ms Mayhew focusses on the servicing of the NE Norwich growth area as she feels the strategic movement requirement is already satisfied by the A47 and Norwich Southern by-pass. She goes on to set out a number of observations predominately with respect to the Inner Link Road (ILR) She also touches on the Bitten Line rail services.

Applicant's response

- 14.1.1 Section 4 of NCC's "Response to requests and points made at Issue Specific Hearings" dated 29 September 2014 and published on the National Infrastructure Planning website on 3 October 2014 (Document Ref NCC/EX/67) includes discussion on Alternatives. Section 4.6 includes discussion of "... a high quality developer link road ...", and Section 4.7 includes discussion of "Development of Rail". References are given to previous work on assessment of alternatives, and reasons are given for the rejection of alternatives. It is not accepted that studies of alternatives have not been undertaken.
- 14.1.2 The Scheme is forecast to carry both local and strategic traffic movements. The designation of the Scheme as development for which development consent is required does not alter the data or methodology used for traffic forecasts for the Scheme. It is not accepted that *"the strategic movement requirement is already satisfied by the A47 and Norwich Southern by-pass"*.
- 14.1.3 The Newquay Strategic Route is cited as a *...A parallel scheme with many similarities to the Inner Link Road ...* alternative. Newquay's Wider Community Area has a population of some 27,000, whereas the Norwich urban area has a population of some 210,000. The development area to be served by the Newquay Strategic Route includes proposals for up to 3,800 dwellings, whereas the JCS includes proposals for 33,000 dwellings in the Norwich Policy Area (NPA) of which 11,000 are in the

Broadland NPA (JCS table accompanying Policy 4) JCS policy 10 includes a commitment to an additional 3,000 dwellings in the Growth Triangle part of the Broadland NPA. Therefore it is considered that the Newquay Strategic Route is not comparable to the “Inner Link Road” alternative.

Q14.2 The fact that critical studies have not been undertaken by the GNDP authorities in spite of extensive canvassing of the necessity of these to due process, opens up significant questions around:

- a) the technical competence of the evidence base ;*
- b) oversight of the GNDP infrastructure proposition; and*
- c) where the proper forum lies for members of the professional , business and wider public to be able to have their voice heard in planning for growth.*

Applicant’s response

14.2.1 The JCS evidence base and infrastructure framework have been tested as part of the examinations that found the JCS sound. The involvement of the County Council in the GNDP enabled the partnership to take a robust and comprehensive approach to infrastructure planning to support the JCS. There have been numerous and on-going opportunities for engagement both through the statutory consultation processes and a wide range of non-statutory meetings. The latter include regular “developer forums”, the Chamber of Commerce planning and development group, and ad hoc meetings held at the request of any interest with a proposition to discuss.

Q14.3 The failure of process on the part of the GNDP authorities in investigating alternatives potentially breaches their obligations to build in Strategic Environmental Appraisal and also puts the JCS authorities in breach of the Social Value Act of 2013 in considering how the servicing of the new growth area will be undertaken to ensure optimal public benefit. There is a failure to undertake due diligence that would enable a full and accurate cost/benefit analysis, and which could potentially lead to saving many millions of pounds of public money.

Applicant's response

- 14.3.1 Norfolk County Council (NCC) has complied with the legislation and processes that apply to the NDR at the pre-application, application and examination stages, including where relevant the consideration of alternatives, which the Applicant has found do not meet the identified need. The requirements of legislation relating to strategic environmental assessment were satisfied via the JCS which has been found to be sound, and those matters are not relevant to the Secretary of State's consideration of the NDR DCO application which is subject to Environmental Impact Assessment (as set out in the Environmental Statement, Document Ref 6.1) in accordance with the Planning Act 2008 procedures and not Strategic Environmental Assessment.
- 14.3.2 NCC has set out in the response to the representation by Mr Heard (see section 10 above) why the Public Services (Social Value) Act 2012 is not relevant to the consenting of the NDR. To the extent that it applies to any matter which is procured to service growth areas around Norwich, then it would be for the relevant public authority to take the requirements of that Act into account at that stage.

15 Great & Little Plumstead Parish Council

Q15.1 lack of consultation and due diligence by local authorities involved with the GNDP to fully and comprehensible undertake to evaluate whether our proposals (made over several years) for a cost effective alternative to the NDR, namely a A Class inner orbital with separate cycle and pedestrian paths from the A47 east Postwick Hub to Norwich Airport would satisfy the orbital movement requirement to support a) a reduction of traffic on existing roads and b) underpin and afford the additional road capacity to meet the expected increase in road traffic which is an output of the large increase in housing and business park expansion currently being built and that which has planning permission already approved.

Applicant's response

15.1.1 The consideration of the need for and alternatives to the NDR carried out over a period of years is fully set out in the Environmental Statement, Document Ref 6.1, Part 1 Vol1, in section 2. Further assessment of alternatives was presented in Document Ref. 5.12, updated by NCC/EX/71 for the PT Option. Alternative 5 provided an inner orbital route alternative. The assessment concluded that it singularly fails to reduce traffic on inappropriate routes and relieve the existing network.

Q15.2 Safety - Proposals for the inner orbital A class road safeguards cyclists and pedestrians. Note 16000 cyclists have been seriously injured in the UK this year, if one is serious with regard to getting more people to cycle, then the proper thought process must be used at the design stage. The opportunity presents itself with our cost effective inner orbital.

Applicant's response

15.2.1 As identified in Section 15.1.1 above, Alternative 5 provided an inner orbital route alternative. The assessment concluded that it singularly fails to reduce traffic on inappropriate routes and relieve the existing network.

Q15.3 The inquiry has possibly been prejudiced because of the issue raised previously by the Parish Council with regard to the Postwick hub design and commencement prior to the DCO/NSIP conclusion.

Applicant's response

- 15.3.1 The Secretary of State can lawfully determine the application for a development consent order (DCO) made in respect of the NDR, notwithstanding that works which are similar to part of the overall NDR scheme have been separately consented and are under construction at Postwick.
- 15.3.2 The Postwick works consents and orders were subject to their own procedures, and involve their own mechanisms and controls which must be complied with. The Secretary of State's decision to approve the Orders for the Postwick Hub (Appendix A of NCC/EX/45) has not been the subject of any legal challenge, either on the ground that it would prejudice the consideration of the NDR or at all. If the NDR DCO is made by the Secretary of State, the controls it includes (such as requirements in Schedule 2) would apply to works carried out pursuant to the DCO.
- 15.3.3 The Postwick consents and orders do not prejudice the consideration of the NDR DCO application, which the Secretary of State is bound to consider and determine, taking into account the matters prescribed by sections 104 or 105 (as relevant) of the Planning Act 2008. The primary assessment of the DCO in the Environmental Statement (Document Ref 6.1) the Transport Assessment (Document Ref 5.5) and the Traffic Forecasting Report (Document Ref 5.6) treats the works at Postwick as part of the DCO rather than as part of the baseline. However, in addition sensitivity tests have been carried out as part of the transport appraisal with the Postwick works included as part of the Do Minimum (in Document Ref 5.11 and in Document Ref NCC/EX/90. The Secretary of

State is therefore able to make a full consideration of the merits of the DCO application.

Q15.4 We also consider the granting of a 10 year timescale by Broadland District Council to Lothbury Trust for the Broadland Park/Laurel farm/Brook farm development to further Jeopardise the Inner orbital (ILR) which predates the plans for the Northern Distributor Road (NDR), and has been part of the discussion on releasing growth in North East Norwich from the outset. The (ILR) is an acknowledged road infrastructure requirement of the proposed and releases in NE Norwich and is a central component of the Growth Triangle AAP.

Applicant's response

15.4.1 The NDR does not prejudice the link road and in any event Broadland District Council anticipates the details of the link road to be submitted (as a discharge of condition) by the end of November 2014, with the developer on site constructing the road before the end of 2015.

Q15.5 We believe our alternative cost effective option of our inner orbital class A road with separate cycleway and pedestrian footpaths from the A47 to Norwich Airport ticks all the boxes in terms of benefits. It fulfils the criteria set out in the Section 35 Direction of 9 August 2013, which confirmed the Secretary of State's view that the NDR is a nationally significant project and is to be treated as development for which development consent is required.

Applicant's response

15.5.1 The Applicant has already set out in various application and examination documents why it does not consider that any of the alternatives proposed meet the identified need, which only the NDR can do. As a matter of law the section 35 direction dated 9 August 2013 relates to the proposal described in it (which is the NDR). There is no information or realistic means to establish whether the Secretary of State would regard

alternatives (such as that advanced by Great and Little Plumstead Parish Council) as a nationally significant project, but it is the Applicant's view that it (and other alternatives) do not meet the criteria in that direction. In any event, the Applicant notes that those criteria were considered by the Secretary of State simply for the purpose of deciding whether to issue the direction, and (whilst there may well be overlap) they do not set the parameters for consideration of the DCO application itself. That must be determined in accordance with sections 104 or 105 (as relevant) of the Planning Act 2008.

Q15.6 Alternative cost effective option of a properly designed A class inner orbital to Norwich Airport as presented to the enquiry (not piecemeal as the current so called developer road is) meets this requirement. Cllr Townely sets out the key points of his alternative

Applicant's response

- 15.6.1 Section 4 of NCC's "Response to requests and points made at Issue Specific Hearings" dated 29 September 2014 and published on the National Infrastructure Planning website on 3 October 2014 (doc reference NCC/EX/67) includes discussion of Alternatives and reasons for their rejection.

- 15.6.2 It is considered that assessment of the components of various IP's proposals for an "Inner Orbital" alternative which could realistically be implemented would not result in radically different conclusions than those reached for the proposals discussed in Section 2.6 of Document Ref NCC/EX/4.

Q15.7 Major issues with traffic congestion within Norwich are mostly self inflicted with the adoption of pinch points which by the very nature restricts public transport to a single lane. Congestion charge on key roads within Norwich would be sustainable revenue positive and prove to be effective at the same time removing restrictions such as pinch points and many unnecessary disabled parking spaces.

Applicant's response

15.7.1 It is unclear from the details provided what is being referred to in relation to pinch points and how they restrict public transport. Most key routes across the city, including those used by public transport, are not restricted and are two-way. Any restrictions are generally there to assist public transport, cycling and walking routes. Congestion charging has been considered previously, however it was discounted for numerous reasons (see details in Document Ref NCC/EX/20 response to question 1.2). There is a proportionate allocation of disabled parking spaces across the city to serve blue badge parking - it is not correct to brand these parking spaces as unnecessary.

Q15.8 Downtime (no bus movement) that occurs daily on our Public transport, the waste of time and fuel should be given serious thought. One way would be to have a system that minimizes this downtime. An Oyster card system must be seriously considered as a matter of priority.

Applicant's response

15.8.1 Norfolk County Council (NCC) has received a grant of £2.5 million over three years from the Department for Transport to deliver the holdall smartcard® project across Norfolk. Launched in March 2014, NCC are currently trialing holdall® on Norwich Park and Ride. Holdall smartcards® provide numerous benefits to passengers and the wider economy through their flexibility and convenience. A greater variety of tickets are available and boarding times will be reduced with fewer cash transactions, making public transport more efficient. NCC are looking to

extend smart card use to other activities like school and college transport, and as a multi-operator ticket that can be used on buses right across the county.

Q15.9 No evidence has been provided by NCC to support the statement (stated in 3.2.1.14 in the preliminary Environmental Information Report) - that not proceeding with the NDR would pose a serious economic risk to Norwich City and the regions.

Applicant's response

15.9.1 Please refer to Chapter 13 of Environmental Statement (ES) (Document Ref 6.10) which assesses the impact the Scheme will have on the Community and Private assets. This provides a summary of the economic and social benefits arising from the NDR. Additional information is provided in the Land Use and Economic Development Report (Document Ref 10.3). Not proceeding with the NDR would undermine the growth strategy set by the JCS which has been established in part to improve the economic performance of the Greater Norwich area and to address weaknesses in the local economy.

Q15.10 What road substrate composition and surface finish were used by Mott MacDonald to forecast noise pollution along the proposed NDR?

Applicant's response

15.10.1 A negatively textured surface finish was used for the noise calculations. Refer to section 5.12 of Document Ref NCC/EX/67. Substrate composition has no bearing on the noise levels.

Q15.11 Should the proposed NDR obtain planning consent, will the complete road be to this specification and if not please define the areas that will not and what will be used for each.

Applicant's response

15.11.1 All of the carriageway surfacing will be negatively textured in line with the Environmental Assessments carried out.

Q15.12 Is there a better substrate composition and surface finish that would lower the noise emissions on a permanent basis? If so what is it and what is the cost difference?

Applicant's response

15.12.1 Substrate composition has no bearing on the noise levels. The surface course proposed is one of a number of surfacing courses that provides a negative surface texture and therefore a quieter surface. Other surface courses tend to have higher voids but inferior durability. NCC considers that the surface course proposed provides the right balance between noise reduction and durability. , NCC has committed to maintain the benefits of this product, see response below.

Q15.13 Could you confirm the Question asked by Mr Birch of Brown and Co that should the NDR proceed would NCC have written into the agreement an assurance to maintain/resurface the Road surface to the original noise emissions levels as quoted.

Applicant's response

15.13.1 Requirement 33 has been included within the current draft DCO to ensure that a low noise road surface will be maintained.

Q15.14 *It is evident from the Mott MacDonald Environment statement Volume 2 Chapter 11 that the Plumstead's will endure blanket noise pollution 200 metres from source (NDR) and Thorpe End Garden Village (having conservation status) will be seriously affected.*

Applicant's response

15.14.1 Cllr Townly is correct in observing that there will be noise increases within 200m of the proposed scheme. However, with the exception of Norwich Road, other roads such as Salhouse Road, Honeycombe Road, Belt Road, Water Lane and Church Road will have a traffic reduction with the scheme, thus there will be an associated traffic noise reduction in within this corridor which, in fact, extends through the majority of Great Plumstead and Little Plumstead.

15.14.2 Noise levels in Thorpe End Garden Village will increase by approximately 6dB at most. However to put these in the context of absolute levels, predicted noise levels with the scheme in the year of opening remain well below the level of 55dB LAeq identified in World Health Organisation Guidelines as being the levels at which the onset of significant annoyance could occur.

Q15.15 *Could you also confirm what levels of air pollution – carbon dioxide, methane, nitrous nitrogen oxides, will occur within the Plumstead's arising from the proposed NDR and what distance source from would they extend to.*

Applicant's response

15.15.1 Carbon dioxide and methane are not of concern in outdoor air in the UK with respect to health as concentrations are very well below any level at which adverse effects would occur. This would remain the case with or without the Scheme at any location within Norwich, including Plumstead. For this reason, ambient levels of carbon dioxide and methane are not predicted as part of the Air Quality Assessment (Document Ref 6.2

Environmental Statement: Volume II Chapter 4 Air Quality); these pollutants have been excluded from consideration during the Environmental Impact Assessment (EIA) 'Scoping' process.

- 15.15.2 Changes in emissions of nitrogen oxides (NO_x) as a result of the Scheme, and their subsequent impact on ambient nitrogen dioxide (NO₂) concentrations, have been assessed. This involves determining what the change in concentrations will be at properties near to the NDR itself and any roads where the NDR changes traffic flows to a degree that warrants detailed analysis. Emissions from vehicles using roads only have a notable effect on ambient concentrations up to 200 metres away. Plumstead is farther than 200 metres from the NDR and therefore emissions from vehicles using the NDR itself would not change the ambient levels of NO₂ in Plumstead.
- 15.15.3 The NDR is predicted to reduce traffic flows along Salhouse Road by approximately 2000 movements per day, Belt Road by approximately 1000 movements per day and Honeycombe Road by approximately 3500 movements per day. It is predicted to increase flows along Norwich Road by approximately 850 movements per day. Ambient levels of NO₂ at properties within Plumstead have not been specifically presented within the Air Quality Assessment (Document Ref 6.2 Environmental Statement: Volume II Chapter 4 Air Quality) because the reductions and increases in flows are small in air quality terms for a location where ambient air quality is good. The objective of the assessment is only to identify changes in air quality which are potentially significant. However, ambient NO₂ levels at properties Plumstead are likely to be around 15 µg/m³ in the opening year of 2017 and therefore well below the UK air quality standard of 40 µg/m³.

Q15.16 As requested by Councillor Boswell, could you provide the Map for the location within the JCS where and what type of business are assumed to locate to justify the huge Capital cost of the proposed NDR.

Applicant's response

15.16.1 Within the JCS, the key diagram (page 27) illustrates the broad locations of new strategic employment sites. These employment locations are described in Policy 9.

15.16.2 Chapter 5 of the Land Use and Economic Development Report (Document Ref 10.3) includes more detail on emerging sites and these are illustrated on a map in Figure 5.1 (page 50) and detailed in the rest of Section 5.4 and also Appendix A Table A.1 (page 69). Section 5.4 also discusses impacts on locations over the wider area.

Q15.17 Of these could you please quantify those that would not relocate to the JCS area if our alternative modified inner orbital constructed to A Class standard with separate cycle ways and pedestrian footpaths.

Applicant's response

15.17.1 NCC notes that economic growth is not simply a matter of relocations to the area. It also includes the net effects of businesses that are able to remain in the area, businesses that are able to expand in or to the area, and new businesses formed in the area.

15.17.2 NCC has considered as an Alternative to the NDR scheme developer funded link roads between the north east radials (in the segment between the A47(T) at Postwick and the A140. The assessment of this alternative, as a stand alone option, is reported in section 3.15 of Chapter 3 of the ES and section 8 of the Traffic and Economic Appraisal of NDR Alternatives (Document Ref 5.12). For the reasons explained, such an option would not meet the objectives.

- 15.17.3 As the alternative does not meet the scheme objectives no analysis has been undertaken of its impact on employment locations. However as the junction analysis (section 8.2 of Document Ref 5.12) demonstrates severe congestion at the junctions with North Walsham Road and Wroxham Road strategic connectivity to the employment sites would not be achieved.

Q15.18 *Why was the Postwick Junction decided as the best starting point (prior to 2003)? How was that decision reached? What alternatives were considered prior to 2003.*

Applicant's response

- 15.18.1 Now that the Postwick Hub has been approved and works to implement that scheme are underway, the question of why it was chosen as the appropriate location is of limited relevance to the DCO. The reality now is that the Postwick Hub is where it is. However, by way of background it can be noted that the NDR was first considered in the early 1990's. Work was undertaken then on alternative routes, including environmental assessments, and a public consultation undertaken in 1994 as part of a review of the Norfolk Structure Plan. At this stage no commitment was made to pursue the NDR until the feasibility of alternatives had been assessed, including resolving issues at the eastern and western ends of the route.
- 15.18.2 During 2002 and 2003 as part of a review of the Norwich Area Transportation Strategy (NATS) a Stage 1 Environmental Assessment was undertaken on possible routes for an NDR. This assessment work involved a comprehensive desk study assessment of a wide variety of possible options including those considered during the earlier work undertaken as part of a review of the Norfolk Structure Plan.
- 15.18.3 During 2003, more detailed studies were made on the most feasible options. This resulted in the identification of four possible corridors to the

west of Norwich, between the A47 and the A140, and three possible corridors to the east, between the A140 and the A47. These were included in the Public Consultation about the County Council's preferred revised NATS, during the autumn of 2003.

- 15.18.4 The County Council had intended to choose a preferred route after this consultation. However, over twenty variations to routes or suggested alternatives were put forward by members of the public and organisations. There was also concern that there was insufficient information available from a desk study, on which to make a fully informed choice on a preferred route.
- 15.18.5 Following the 2003 Public Consultation, a stage 1 environmental assessment was carried out on all the suggested variations and alternatives, so they could be appraised on an equal basis as the original routes. Further work to stage 2 level was undertaken on those routes it was felt warranted further consideration.
- 15.18.6 Norfolk County Council acknowledges that route options for consultation in 2003/2004 did commence at the Postwick Hub Junction. All consultations on the NDR since 2005 showed the NDR being proposed between the A47 at Postwick and the A1067 near Attlebridge including the more recent consultations in April/May/June 2012 and in February/March 2013. During these consultations there was the opportunity to comment on the route. In addition there has been opportunity to comment on the route as part of the statutory pre-application consultations. Norfolk County Council has given regard to the comments made during these consultations but considers that the junction proposed at Postwick is the appropriate solution to address the capacity issues here, accommodate the committed development at Broadland Gate Business Park and provide the NDR link to the A47. NCC's case for the Postwick Hub was accepted by the Secretary of State in January 2014 (Appendix A of NCC/EX/45). Given that the

Postwick Hub has been approved and is proceeding, investigation of the merits of that choice are now academic.

Q15.19 Light Pollution. We are told that the proposed NDR will be unlit even at junctions. As Mr Cawdron stated it will only take one serious accident and the request to have the NDR to be provided with Lighting. Will the proposal have built in facilities? If not does it mean extensive additional cost to provide it in response to pressure because of likely accidents?

Applicant's response

- 15.19.1 The proposed NDR will be unlit with the exception of the eastern end at Postwick. Some of the low level signing at the proposed roundabouts would be illuminated similar to the unlit roundabout at Pulham crossroads on the A140. The unlit roundabout at Pulham crossroads has been operational since 2009. Experience from Pulham and a long term trial at Corpusty supports the case that unlit roundabouts can operate safely. There will be no built in facilities to upgrade for future road lighting within the current scheme proposals other than there will be an electrical supply provided for the illuminated signs. The Applicant has proposed a requirement in the draft DCO (Requirement 32) to remove the ability for lighting to be subsequently installed (without a separate planning approval) and it will be a matter for the Secretary of State to determine whether such a requirement is necessary.

Q15.20 Due to the National debt and the budget pressures faced by the NCC highlighted by the incoming MD states Norfolk County Council is facing immediate cost savings of £71 million (Source in coming MD) and a whole range of measures are being looked at. Can I suggest the BUDGET committee looks to scrap the NDR? The considerable saving of taxpayers' money (taking account of the dire National debt and budgetary constraints' of Norfolk County Council) can be targeted for the real need for Roads of National Infrastructure Importance i.e. accident prone A47 and the totally congested A14

Applicant's response

- 15.20.1 The affordability of the Scheme has already been raised and a detailed response on this and funding of NATS has been included in Document Ref NCC/EX/67. This includes details of the Section 151 Officer confirmation regarding the County Council's commitment to funding the NDR. It also refers to the most recent April Cabinet report, which set out the funding requirements for the NDR and which were approved by Cabinet. Whilst the County Council, along with almost all other Council's nationally, is seeking to reduce it's annual costs, it still operates with a budget of over £1.4bn annually.
- 15.20.2 The point regarding funding other routes, such as the A47 and A14 has been responded to in the details raised by Mr Heard earlier in this report (see response to 10.6 above).

16 Mollie Howes

Q16.1 Stated as the JCS Inquiry No NDR – No JCS. Serious reservations about the JCS irrespective of the NDR, NDR is clearly designed to facilitate the JCS and the building of so many houses.

Applicant's response

16.1.1 The JCS has been found sound at public examination and is adopted. The relationship between NATS, the NDR and the JCS is set out within the JCS including within the supporting text to Policy 6 (paragraphs 5.44 to 5.51), Policies 9 and 10 and their supporting text, and in the “Contingency” section (JCS paragraphs 7.11 to 7.18). This relationship is further explored in Chapter 3 of the Environmental Statement Volume 1 (Document Ref 6.1).

Q16.2 As far as traffic management is concerned I find the views of Professor Goodwin far more convincing than what Norfolk CC has stated. Fail to see how NDR will improve traffic flow on Wroxham road and with the high increase in houses and inevitable addition of cars, see's more congestion occurring

Applicant's response

16.2.1 The points raised by Professor Goodwin on behalf of NNTAG are dealt with in responses to the questions from the Examining Authority and to his other points.

16.2.2 Implementation of the JCS plans for growth will see increased traffic generation in the North East Growth Triangle and over the GNDP area that the NDR will help to address. Traffic flows on Wroxham Road north of NDR are forecast to increase with the Scheme but inside the NDR in the Norwich urban area traffic is forecast to reduce compared with the case without NDR. The comparisons are shown in Figure I.2 in the Traffic Forecasting Report Volume 3 (Document Ref. 5.6).

Q16.3 Planning details for this road have been far from thoroughly researched and I for one was quite alarmed at the lack of answers to questions on noise and atmospheric pollution.

Applicant's response

- 16.3.1 Planning details for the NDR have been thoroughly researched in accordance with the rigorous DCO Application process.

- 16.3.2 With respect to potential environmental impacts (including noise and air quality), these have been fully studied and the road has been designed to mitigate them. The first stage in this process was for the Applicant to provide a consideration of which environmental topics were to be examined as part of the Environmental Impact Assessment (EIA). These considerations were presented in the Scoping Report (Document Ref 6.1 Environmental Statement Volume 1, Appendix 4). The Planning Inspectorate then held formal consultations with a range of bodies on the content of the Scoping Report and how the EIA was to be carried out. Following these consultations, the Planning Inspectorate issued a Scoping Opinion Report (Document Ref 6.1 Environmental Statement Volume 1, Appendix 5) which provided its views and recommendations as to the proposed content and methodology of the EIA.

- 16.3.3 In accordance with relevant guidance, standards, best practice, and the considerations of the Scoping Report and Scoping Opinion, detailed environmental studies were then carried out within the following disciplines: Air Quality, Carbon, Cultural Heritage, Landscape, Nature Conservation, Geology and Soils, Materials, Noise and Vibration, Effects on All Travellers, Community and Private Assets, Road Drainage and the Water Environment, and Cumulative Impacts. A Climate Change Risk Assessment, Habitat Regulations Assessment, Arboricultural Impact Assessment, Flood Risk Assessment, and Health Impact Assessment were also carried out. These studies informed the design of the NDR in

order to mitigate potential environmental impacts and enhance environmental benefits.

- 16.3.4 These studies together contributed to the Scheme's Environmental Statement (ES) which was submitted to the Planning Inspectorate as part of the DCO Application (Document Ref 6.1 Environmental Statement Volume 1, and Document Ref 6.1 Environmental Statement Volume 2). The findings of the ES are summarised in the Non-Technical Summary (Document Ref 6.3 Environmental Statement Non-Technical Summary). Following the submission of the DCO Application, the Applicant has continued to refine the planning details of the NDR as part of the on-going Examination in Public process. As part of the Examination in Public, the Applicant has received a number of questions (written and verbal) on a range of environmental topics, including with respect to potential noise and air quality impacts. The Applicants answers to these questions have referred to the relevant chapters of the ES: Document Ref 6.1 Environmental Statement Volume 1, Chapter 4 Air Quality, and Document Ref 6.1 Environmental Statement Volume 1, Chapter 11 Noise and Vibration. Written answers to these questions are available to view on the Infrastructure Planning Portal website and those provide at the verbal hearings have been recorded and can be downloaded from there.

Q16.4 What impressed me about the alternative route put forward by Cllr Townly was the convincing detail he presented. This route is virtually identical to the route I referred to in my earlier submissions. This cannot come as any surprise to NCC personnel because it is the old pink route version of the NDR that was put forward in the 2004 consultation and where this pink route ticked more boxes than the other 5 routes put forward. It has to be remembered of course that all these routes were by-pass roads, unlike this DCO NDR.

Applicant's response

16.4.1 Norfolk County Council has considered the alternative of an inner orbital link as Alternative No 5 in Volume 1 Chapter 3 of the Environmental Statement (Document Ref 6.1). Section 3.15 sets out the assessment. Further analysis is also presented in Traffic and Economic appraisal of NDR Alternatives (Document Ref 5.12). This identified that it fails to meet the scheme objectives in a number of respects, that it fails to operate satisfactorily and would produce transport economic disbenefits, as summarised in paragraphs 1.1.10 to 1.1.12.

Q16.5 Not seen map showing distribution of new and projected business locations as requested by Cllr Boswell. Business growth in the south west of Norwich from high technology and research companies casts doubt on the logic of building so many houses in the North East Growth Triangle.

Applicant's response

16.5.1 Within the JCS, the key diagram (page 27) illustrates the broad locations of new strategic employment sites. These employment locations are described in Policy 9.

16.5.2 Chapter 5 of the Land Use and Economic Development Report (Document Ref 10.3) includes more detail on emerging sites and these are illustrated on a map in Figure 5.1 (page 50) and detailed in the rest of

Section 5.4 and also Appendix A Table A.1 (page 69). Section 5.4 also discusses impacts on locations over the wider area.

- 16.5.3 The need for the employment allocations in the JCS has been tested at public examination and the scale and distribution of locations for growth found sound.
- 16.5.4 The New Anglia Strategic Economic Plan (included as Appendix I of Document Ref NCC/EX/5) highlights the importance of the civil aviation cluster at the Airport (paragraph 2.5) and focuses on the north east quadrant and its employment locations from paragraph 6.9 and particularly paragraphs 6.20 to 6.23. The Growth Triangle is recognised as the largest single development proposal in the LEP area (SEP paragraph 8.17). The New Anglia LEP is also a party to the City Deal which identifies three key clusters: Norwich Research Park, Norwich City Centre and Norwich International Airport.
- 16.5.5 The potential for successful employment development in the area to be directly served by the NDR is illustrated by the extensive concentrations of existing businesses at Broadland, St Andrews and Meridian Business Parks; the Salhouse Road/Roundtree Way/Pinetrees area; Rackheath Industrial Estate; and the employment areas between the airport and Outer Ring Road. On a smaller scale the employment site at Horsham St Faith (just off the A140) has also been successfully occupied and is proposed to be expanded through a further allocation.

Q16.6 I think choosing to build on good food producing greenfield sites is a serious mistake because this essential asset will be lost forever. Just as I was not that impressed with NCC's answers on traffic congestion and movement, noise, light and atmospheric pollution,

Applicant's response

16.6.1 The routing of the NDR was based on a variety of factors including the importance of maintaining the coverage of the "best and most versatile" agricultural land to the north and east of Norwich. This is the land which falls within the land classification categories 1, 2 and 3a according to the Agricultural Land Classification (ALC) of England and Wales. The route was selected to avoid all grade 1 agricultural land, but it was not possible to avoid lands of the lesser "best and most versatile" grades. Therefore, within the scheme footprint (i.e. the DCO boundary) there are 168.30 ha of grade 2 and 114.20 ha of grade 3a agricultural land, and there are no areas of grade 1 agricultural land. As described in the Environmental Statement (Document Ref 6.2, Chapter 13), 142.3 ha of grade 2 and 99.95 ha of grade 3b agricultural land will be permanently lost to the scheme. This was recognised as a major adverse and significant impact on agricultural land as a national resource, but was considered unavoidable. Land temporarily acquired for the scheme (for construction compounds, for example) will not be lost permanently, but instead will be restored to their original "best and most versatile" grade by the contractor.

Q16.7 I was appalled to learn that these proposals will not necessarily result in reduced carbon footprint. These doubts have been repeatedly raised by people who can see more cars and longer car journeys, more food imports, but since there has not been any meaningful consultation on this until your examination, we were never given the facts.

Applicant's response

16.7.1 The Applicant refers to Chapter 5 of the Environmental Statement (ES) (Document Ref 6.1) which is the Carbon Assessment within the ES. In addition Carbon was discussed most recently at the open floor hearings in Norwich and in document NCC/EX/67.

Q16.8 There seems to be a lot of effort put into effect drainage in this part of Norwich but not convinced that the risk of flooding has been taken seriously.

Applicant's response

16.8.1 The Environmental Statement (ES) (Document Reference 6.1), Volume 1, Chapter 14 Road Drainage and the Water Environment and ES Volume 2, Chapter 14 Flood Risk Assessment (Document Reference 6.2) this supported the Development Consent Order (DCO) application for the Norfolk County Council (NCC) Norwich Northern Distributor Road (NDR) (A1067 to A47(T)) Order (PINS reference No. TR010015), are all concerned with the risk of flooding along the route of the NDR. In addition an addendum to the Flood Risk Assessment (Document Ref NCC/EX/43 was completed in July 2014 to address any remaining concerns from the Environment Agency

16.8.2 Consultation with the Environment Agency has been undertaken throughout the design and planning process, and further consultation was completed post submitting the final DCO application. Measures to preserve and create flood storage areas are incorporated in the DCO.

Q16.9 Not convinced shortened NDR is a road of national infrastructure significance. NDR is not a worthwhile investment when there is a perfectly adequate and much cheaper alternative available that will not only save money and also benefit the environment, given that an inner link road system is going to be constructed in any case.

Applicant's response

- 16.9.1 The point regarding national significance has already been responded to in this report under a response to Michael Innes (see response to 6.2 above).
- 16.9.2 The issue of alternatives has been responded to in this report under the response to Mr Heard (see response to 10.6 above). The issue of funding provision has been responded to in Document Ref NCC/EX/67. The Scheme has been assessed by the Department for Transport and provides 'very high' value for money based on their funding criteria.