

The Northampton Gateway Rail Freight Interchange Order 201X

Northamptonshire County Council's Responses to ExQ2

ExQ 2	Question to:	Question:	NCC Response
2.1.			
2.1.2 3	Northampton County Council (NCC), SNC, NBC	<p>Para 9.6.6 – are NCC, SNC and NBC satisfied that the objectives, targets and indicators of the Framework Travel Plan (FTP) - Environmental Statement Appendix 12.1 TA Appendix 1 Framework Travel Plan (Doc 5.2 [APP-232]) - will be achieved? How do they envisage attaining them will be enforced? Please would they explain what mechanisms and sanctions they would expect to use and against whom? The FTP forms an identified mitigation in the Air Quality Chapter (para 9.6.6). It would be helpful to have worked examples. The Applicant may also wish to provide one or more worked examples.</p> <p>The ExA suggests at least the following scenario, taking Table 3 of the FTP:-</p>	<p>The Framework Travel Plan (FTP) has been developed in accordance with the County Council's Travel Plan Guidance and meets its requirements as an acceptable FTP.</p> <p>It outlines a comprehensive monitoring and review programme (Chapter 8 of the FTP) meaning progress of the Travel Plan will be reviewed against the Travel Plan targets annually. Based on this annual report the Area-Wide Travel Plan Coordinator, Sustainable Transport Working Group and NCC will discuss if Travel Plan targets and measures need to be revised and if remedial action needs to be taken.</p> <p>Collaborative and proactive working between the undertaker / developer (as site wide travel plan coordinator), occupiers, local highways authorities, bus operators and other local stakeholders is key to ensuring the right measures are being planned for and delivered, and provides the greatest chance of success in terms of meeting the targets associated with the FTP.</p> <p>It should be recognised that each business and occupier is different and their employee base may also differ as would their shift patterns. As such what may work for one business may not work for another. If one business is found to be working below anticipated targets then those initiatives that are working, based on monitoring, can be enhanced and pushed more, whilst resources focussed on less successful initiatives can be refocussed where they can have the best impacts.</p>

ExQ 2	Question to:	Question:	NCC Response
		<p>1 Car sharing (Objective 2). By 2031 only 6% of employee trips are made by car sharing. (The indicator and target are 12%.) All employers on site have fully complied with the objective of encouraging car sharing. In the case of employer A, the biggest employer on site, only 3% of the employee trips are car shares. In the case of employer B who has only 20 employees, 20% are car shares. In the case of employer C, 12% are car shares. Against whom can NCC, SNC and NBC enforce, and what will the sanctions be? How is achievement of the target and indicator delivered?</p>	<p>The County Council considers that the Sustainable Transport Working Group is best placed to assist the Area Wide Travel Plan Coordinator and thence the business level Travel Plan Coordinators to best achieve the desired outcomes.</p>
2.1.2 4	NCC, SNC, NBC	<p>(i) Para 9.6.6 – are NCC, SNC and NBC satisfied that the Overarching Aim of the Public Transport Strategy – Doc 5.2 [APP-233] - Environmental Statement Appendix 12.1 TA Appendix 2 Public Transport Strategy (PTS) - (see para 7.1</p>	<p>i) The Public Transport Strategy was developed with input from the Bus & Rail Development Team at NCC. This followed the approach in the Northamptonshire Bus Strategy of providing a journey to/from Northampton from the “site” every time 50-or-more employees start of finish work. Funding and a funding period have been designed to deliver a bus service required.</p>

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		<p>thereof) and the main target (see para 7.5) will be achieved?</p> <p>(ii) How do they envisage attaining the Overarching Aim and the main target will be enforced? Please would they explain what mechanisms and sanctions they would expect to use and against whom? The PTS forms identified mitigation in the Air Quality Chapter (para 9.6.6). It would be helpful to have worked examples. As with ExQ 2.1.24, the Applicant may also wish to provide one or more worked examples.</p> <p>(iii) Is the aim sufficiently precise so that a breach can be identified?</p> <p>(iv) The main target is that “10% of staff working at the NGSRFI should use the bus as their primary mode of transport to and from the site, within 5 years of the site being fully</p>	<p>Previous experience, specifically at Swan Valley and Pineham in Northampton, saw a similar scheme instigated in 2007, running only when 50-or-more workers started or finished their shifts. By 2012, this service was commercial and, with assistance from a nearby housing development, is now running commercially every hour.</p> <p>(ii) An approach similar to DIRFT will be employed, with a series of Steering Group meetings to continually review the bus service. Any employee number or trip data that is available can be compared to known bus trips from the site to determine uptake. If it becomes clear that the required mode shift is not being met, there is an additional sum of money identified within the PTS that allows further measures to be instigated.</p> <p>(iii) It can be identified what the main shift patterns are through engagement with the employers on the site, which can be compared to the registered bus service timetables.</p> <p>(iv) It is intended that the Steering Group would enable engagement that achieved 10% across the site from an earlier point than final completion. Indeed, even if the full extent of development as planned is not reached, there will be a point when the site as far as will be built is “fully open”. There is an incentive to continue to work towards this 10% target to avoid the additional pot of money being required.</p>

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		<p>open". What is the meaning of "fully open"? Could the developer avoid the obligation to achieve the target by not "fully opening"?</p> <p>(v) As with the FTP, against whom is the PTS enforced if the 10% target is not met where, say, 20% of the workforce of one employer use the bus, only 5% of the workforce or another employer do so and other employers are at or above the 10% figure?</p> <p>(vi) Some new construction – such as bus lay-bys – is required by the PTS. Are those part of the "authorised development" describes in the dDCO? Does the Applicant control the land needed? If the answer to either question is not "Yes", how will that construction be delivered? If the answer is "Yes" please will the Applicant indicate which parts of the authorised</p>	<p>(v) Not all employment sites with NGFRI can be considered equal and it is possible that some will have better mode share for bus than others. The 10% is intended to cover the entire site, whilst it is expected that work will be done with all employers to work towards this aim. Through the Steering Group, uptake will be monitored and work can be undertaken with individual employers to incentive use of public transport. Again, if the 10% target is not met, additional funding can be drawn down from the contribution so avoiding this is an incentive.</p> <p>(vi) Question for Applicant. However, the County Council believes that the land needed is in the control of the applicant, and the works are covered by the draft Development Consent Order.</p>

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		development they form and the land control position?	
2.1.2 5	NCC, SNC, NBC	Both the FTP and the PTS use the term “employee”. Given that large parts of the general workforce are often engaged as self-employed (independent contractors), how is it intended to ensure that such persons are included in the objectives, targets, aims, indicators and generally the ambit of the FTP and PTS?	NCC agree with the applicants’ response to this question. The term “employee” is intended to cover all of the workforce engaged on the site.
2.1.3 2	SNC, NBC, NCC	Monitoring – this is a general question which applies across the ES. In its reply to ExQ1.0.18 about monitoring and the requirements of the Infrastructure Planning (EIA) Regulations 2017 the Applicant wrote: “The Applicant proposes to update the Commitments Tracker (Document 6.11, APP-381) to include monitoring arrangements. It is proposed to submit this for Deadline 3”. There are references to	As already covered by questions 2.1.23 and 2.1.24 above, the County Council has included arrangements for monitoring the Framework Travel Plan and the Public Transport Strategy in its requirements for those documents.

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		<p>monitoring in the updated Tracker (Doc 6.11A [REP3-003]) but it is not clear what steps should be taken if monitoring indicates that the results are worse than expected or permitted. The second part of question ExQ1.1.34 is reiterated; could the Applicant explain the extent to which monitoring measures are required to demonstrate the efficacy of the mitigation measures proposed and how such monitoring measures would be secured?</p> <p>(i) Please will the Applicant, SNC, NBC and NCC comment on what should be included, if anything, in the DCO, if made?</p> <p>(ii) Given the relative newness of the need to consider monitoring and remediation, please will those parties set out their understanding of the approach the SoS should take, and criteria, in deciding whether to require either or</p>	

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		both monitoring or remediation?	
2.5			
2.5.3	NCC	Does the County Council agree with the conclusions of the Archaeology Trial Trenching Report (Roade Bypass) ES Chapter 10 Addendum (Doc 8.12 [REP4-013]) that construction impacts of the Roade bypass on the archaeological remains found in the additional trial trenching would be of 'minor adverse significance'? If not, please indicate its assessment of impact.	<p>The evaluation did not take in the entire route due to access issues areas C and F. The areas that were evaluated identified two areas of Iron Age activity possibly related to settlement within area G and two cremations of uncertain date and content within D.</p> <p>The trenching within the south west of area G was not targeted as it was undertaken within an area that has not been included in the geophysical survey. This identified a possible roundhouse and it is likely that further activity is present within this area. The evaluation has provided further information on the archaeological activity within the Roade Bypass corridor. The use of geophysical survey and trial trenching has provided an informed assessment of the archaeological activity within the corridor.</p> <p>The results of the evaluation would suggest that the Iron Age activity is likely to be of regional significance and of high sensitivity. NCC therefore disagree with conclusions of the Archaeology Trial Trenching Report (Roade Bypass) ES Chapter 10 Addendum (Doc 8.12 [REP4-013]) paragraph 10.12.3 that area G is likely to be of local interest and are also considered to be of low sensitivity. NCC do however agree that the construction works would result in "minor adverse" and high magnitude of effect, which could be reduced to Minor Adverse impact with mitigation.</p>
2.5.4	The Applicant, NCC	Paragraph 10.7.3 of ES Chapter 10 (Cultural Heritage) (Doc 5.2 [APP-113]) notes that post-consent works would commence	Yes, within the areas which were excluded from the original evaluation. Area C and Area F could not be investigated. This would be undertaken based on the final development proposals. It would be undertaken as part of the mitigation scheme included within the DCO. The undertaking of the

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		<p>with a further stage of archaeological trial trench evaluation across the Main Site and bypass corridor. In light of the recent trial trenching that has been carried out within the bypass corridor, is it envisaged that, should the Proposed Development proceed, any additional trenching within the corridor would be required?</p>	<p>trenching within the Roade Bypass corridor is a positive step but does not negate the need for the undertaking of the outstanding trenching within the main site. NCC disagree with document 8.12 paragraph 10.14 that further trenching will be undertaken with the main site post consent to inform the mitigation. NCC have previous stated the trenching should be undertaken pre consent not post consent.</p> <p>The National Policy Statement for Networks paragraph 5.127 requires that the applicant should describe the significance of any heritage assets affected. NCC would challenge the statement in paragraph 10.10.2 that the applicants have followed the guidance with a less than 1% trenching strategy. The acknowledgment in 10.14 that further evaluation works are required would suggest that currently they cannot describe the impact of the development on the significance of the heritage assets within the site apart from in localised areas and within the Roade corridor bypass.</p>
2.5.5	NCC	<p>At ISH2 the County Council suggested that there is an industry norm of 2/3% archaeological field investigation coverage of sites. This is within the context of trial trenching having been done on the Proposed Development's Main Site of 0.38%. Can the County Council direct the ExA to any document or source which backs up the assertion of a 2/3% norm?</p>	<p>NCC would like to clarify that the use of the term "industry standard" was possibly not the best use of terminology. A better wording may have involved the use of the "Current practice". NCC was attempting to provide a background to its concerns over the use of such a low trenching percentage in contrast to the level which is normally undertaken in other developments. The figure of 2-3% was based on the advisors experience in general of undertaking archaeological works within the three Counties she has worked in in a curatorial capacity over the last 20 years: Leicestershire, Bedfordshire and NCC.</p> <p>The advisor has provided an evidence base although it is not exhaustive. She has included references to a number of reports/ project which have been undertaken and She has also taken the opportunity to ask fellow development control archaeologists what approaches they take. It is</p>

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			<p>interesting to note that there is a variation in the percentages undertaken but in general NCC have identified that they go for the higher percentage over 3%. Bedford Borough 4% plus 1% contingency, Cambridgeshire 3-5%, Derbyshire 2-4%, Essex 4% plus 1% contingency, Leicestershire starting point 5% but with geophysical survey 3% plus 1 contingency, Lincolnshire never less than 2% as the results would be meaningless Norfolk 3%-5%, Suffolk 3.5-5% and Hertfordshire 2-3% predetermination.</p> <p>The figure of 2% for evaluation as the advisor understands and as mentioned in the PhD of Ruth Waller came from Paul Chadwick in a presentation to <i>The Standing Conference of Archaeological Unit Managers and RESCUE The British Archaeological Trust in 1990</i>. The 2% "Sample as the minimum requirement was made in a model specification for Project Designs presented to a conference on Competitive Tendering in 1990 (Chadwick 1990). Based on an Archaeological Curator's estimate of minimum percentage with the factored in issues of "Reasonableness" Waller concluded that the case studies within her thesis had demonstrated that this as a minimum percentage was flawed providing incomplete knowledge (Waller 2011 p209)</p> <p>Hay and Lacey revisited the issue of trenching percentage in 2001. Hey and Lacey analysed the assessment methodologies employed on twelve large archaeological projects where a variety of evaluation techniques had been applied to sites that had subsequently been investigated and recorded in detail. They concluded that although most of the non-intrusive methods employed had their merits: "Machine trenching was the only effective means of predicting the character of the sites in [the] study and, even though it was more expensive than other methods, the improved quality of information and greater certainty from which to devise a mitigation strategy,</p>

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			<p>made it cost effective.” (Hay & Lacey, 2001) Computer simulation techniques were applied to the excavated archaeological remains recorded during the Hey and Lacey study to investigate increases in sample fractions. This demonstrated that a 2% sample was a high-risk methodology for the prediction of the full range of archaeological remains on a site. A significant gain in qualitatively measured information was suggested with a sample- fraction of between 5 % and 10% (Hey and Lacey 2001).</p> <p>The sampling frequencies used will also have a significant effect on the reliability of the results. This is applicable to survey work (eg the spacing of fieldwalking transects or the sampling frequency for magnetic susceptibility) but is particularly relevant to trial-trenching. The low percentage of trenching has an impact on the information provided by the survey.</p> <p>The PLANARCH study (Hey and Lacey 2001) seems to demonstrate that trenching markedly out-scores any other technique for identification of remains from each period.</p> <p>R Waller (2011) wrote that “The percentage of a site which is sampled by Trial Trenching currently follows an industry standard of around 2.5% which seems to have been adopted following the publication of the Berkshire and Hampshire study (Champion et al 1995)” Hey and Lacey’s much more detailed study of twelve sites also records a similar average use of 2.4% with sample percentages of between 0 .8% and 5.4% (Hey and Lacey 2001). P125 (Waller 2011)</p> <p>Waller stated that “The Propositions presented by the PLANARCH study have acted as the most recent updating to the archaeological profession’s basic philosophical approach to the effectiveness of archaeological Field Evaluation. The results of the quantitative measurement of the effectiveness of techniques has tested the Soundness of some of these</p>

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			<p>basic propositions” Waller p197. Despite these propositions, Waller found within her case study that the majority of archaeological trenching interventions used a smaller percentage of the site which is based around the accepted industry standard of 2%. The origins of sample percentages used in Field Evaluation seem to lie in estimation rather than any statistically proven methodologies. Waller 2011.</p> <p>The Archaeological Resource Assessment of the Aggregates Producing Areas of Warwickshire and Solihull Aggregates Levy Sustainability Fund English Heritage Project No 4681 published in 2008 was an assessment of archaeological investigations carried out in connection with mineral extraction. It included an assessment of archaeological field work carried out as part of the minerals process and an assessment of the success of the development management process which is relevant to the percentage discussion. Within their Management of the Archaeological Resource Section 7 p139 they identified that “At best it seems that the desk-based assessment was only very moderately successful at identifying potential archaeology and obviously was not capable of determining its extent, state of preservation or significance” They went on later to identify from their assessment that “Trial trenching at a 2% sample rate is too low to give a reliable indication of the presence of significant archaeology. At a 3% sample rate trial trenching appeared to be better at identifying the presence of significant remains but some key features of sites were missed and they were not always well characterised. The nature of the case studies means that it is difficult to be sure about the success of this level of sampling. Whilst a 5% sample can be too low to give much information about the nature of any deposits it does appear to detect their presence reasonably reliably”p141</p>

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			<p>In their conclusions after looking at the case studies within the assessment the authors concluded “that trial trench sampling of 3-5% may be adequate for certain periods, but that higher sampling frequencies (6-10%) may be necessary in order to detect others. It is also necessary to build contingency into evaluation specifications that allow for additional trenching to answer specific questions that emerge during standard trenching” p144.</p> <p>In the more recent publication, What Value? Archaeological evaluation & mitigation in Worcestershire 1990-2014 Project Report Project No: 6912 the effectiveness of trial trenching is again explored. The report identifies that although Hey and Lacy suggested that a higher percentage of trenching could potentially be more effective curators have approached the results in a pragmatic way and this is seen in the variation of trenching percentages requested.</p> <p>The Worcestershire assessment concludes that “The issue of sample size is still one that does not have clear answers. The results of the project show that sample size has steadily increased over the last 25 years, from around 2% in the early days to broadly 4%. P90</p> <p>In conclusion it is clear that the trenching strategy is determined by a number of factors such as the nature of the site, the geology, topology, the type of archaeology anticipated and the previous levels of fieldwork undertaken in the vicinity and other forms of evaluation that have been undertaken within the application area. The information within the reports and studies clearly provide details of the evolution of evaluation strategies from 1990 with introduction of PPG16, the publication of Hey and Lacey, the more recent reports from Warwickshire and Worcestershire which indicate that a higher trench percentage provides a more informed level of assessment. It is also clear in the studies that while geophysical survey is a</p>

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			<p>valuable tools it is not considered to be a reliable means of locating archaeological features in all cases.</p> <p>The responses from the curators is also informative as although there is variation none of them would advise a trenching percentage lower than 2%. It is clear that in general a higher percentage is requested.</p> <p><i>References</i></p> <p>Archaeological Resource Assessment of the Aggregates Producing Areas of Warwickshire and Solihull Final Report Draft Version 2.0 31/03/2008 By Magnus Alexander with Stuart Palmer and Laurence Chadd Aggregates Levy Sustainability Fund English Heritage Project No 4681</p> <p><i>Link</i> https://historicengland.org.uk/content/docs/research/what-value-archaeological-evaluation-and-mitigation-in-worcestershire-1990-2014/</p> <p>Chadwick, P, 1990. <i>Competitive Tendering in Archaeology: The Curator's Role</i>. In <i>Competitive Tendering in Archaeology. Papers presented at a One Day Conference in June 1990</i> (ed H Swain), 7-11. The Standing Conference of Archaeological Unit Managers and RESCUE The British Archaeological Trust.</p> <p><i>Link</i> http://www.solihull.gov.uk/Portals/0/Planning/LDF/Archaeological_Resource_Assessment_of_Aggregate_Prod.pdf</p> <p>Hey, G & Lacey, M 2001, <i>Evaluation of archaeological decision-making processes and sampling strategies</i>, Oxford Archaeological Unit and Kent County Council, Oxford</p>

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			<p>What Value? Archaeological evaluation & mitigation in Worcestershire 1990-2014 Project Report Project No: 6912 Aisling Nash, Historic Environment Advisor James Dinn, Worcester City Archaeological Officer Rachel Edwards, Independent Consultant Emma Hancox, Historic Environment Policy & Advisory Manager September 2017 February 2018 Link : https://historicengland.org.uk/content/docs/research/what-value-archaeological-evaluation-and-mitigation-in-worcestershire-1990-2014/ Waller, R, 2011 <i>Archaeological Evaluation, Land Use and Development: An application of decision theory to current practices within the local government development control processes in England</i>, BAR Brit Ser 541 Link: http://eprints.bournemouth.ac.uk/10417/</p>
2.7			
2.7.5	The Applicant, Highways England (HE), NCC	In answer to ExQ1.8.11 (Doc 8.2 [REP1-020]) in respect of road traffic-induced ground vibration, the Applicant noted that “When all of the road construction and highway mitigation works have been completed, the associated road surfaces will be newer and smoother than existing, which will represent an improved position, over and above that existing for current traffic, traffic growth and the development traffic” and it is not expected that any significant increase in road	NCC will agree the specification for works on their network in accordance with Schedule 13 Part 3. Therefore the County Council will consider any proposal for low noise surfacing to be installed as appropriate.

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		<p>traffic-induced ground-borne vibration will occur.</p> <p>The ExA understands Highways England's intention nationally to employ a new road surfacing technique that will reduce noise, particularly in built-up areas (reported in The Times, 29 January 2019):</p> <p>i) is such a technique likely to be employed in respect of road works resulting from the Proposed Development (including those not within the ambit of Highways England) and, if so, please comment on the potential impact on the noise climate?; and</p> <p>ii) if such surfacing is to be used, what implications might this have for road traffic-induced ground-borne vibration?</p>	
2.15.			

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2.15. 8.	HE, NCC	Para 14.1 – Routing of construction traffic – the project manager, as the para stands at the moment, is to obtain the agreement of both Highways England AND the County Council but “as appropriate for the relevant component”. Should this read “OR the County Council?	NCC has been fortunate to see the Applicants proposed response to this question and agrees with the explanation provided by them. NCC is content that the wording is correct.

Abbreviations used

CEMP	<i>Construction Environmental Management Plan</i>
dDCO	<i>Draft DCO</i>
ES	<i>Environmental Statement</i>
ExA	<i>Examining authority</i>
FTP	<i>Framework Travel Plan</i>
FWQ	<i>First Written Questions</i>
IP	<i>Interested Party</i>
LIR	<i>Local Impact Report</i>
NBC	<i>Northampton Borough Council</i>
NCC	<i>Northamptonshire County Council</i>
NPSNN	<i>National Policy Statement for National Networks</i>
para	<i>Paragraph</i>
PTS	<i>Public Transport Strategy</i>

RPA	<i>Relevant Planning Authority</i>
SI	<i>Statutory Instrument</i>
SNC	<i>South Northamptonshire Council</i>
SoCG	<i>Statement of Common Ground</i>
SoS	<i>Secretary of State</i>