

Appendix 18.14: Consultation

Content

- Letter to SNC 16 February.2016 seeking agreement on assessment methodology and monitoring positions
- Dialogue with SNC March to July 2017
- Arc6820 Rev 2 Tech Document re SNC comments – as agreed with SNC
- Dialogue with EA March 2017
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Ref: ARC6730/14006

Date: 16 February 2016

Trevor Dixon
Environmental Protection Team
South Northamptonshire Council
The Forum
Moat Lane
Towcester
Northamptonshire

Letter to SNC 16.02.2016
seeking agreement on
assessment methodology
and monitoring positions



Dear Trevor

RAIL CENTRAL - NOISE AND VIBRATION - BASELINE MONITORING AND IMPACT ASSESSMENTS TO BE UNDERTAKEN

We are acting on behalf of Ashfield Land dealing with Noise and Vibration issues that might arise in relation to their application for the Rail Central Strategic Rail Freight Interchange project.

I am writing with details of our plans to undertake unmanned monitoring around this potential site. Most positions relate to locations for noise monitors, however we plan to install a weather station and also carry out some vibration monitoring (close to rail lines) too.

We believe that representative long term noise monitoring is required for this type and size of project in line with recent changes in guidance in BS 4142¹ and also new guidance published by IEMA².

We also wish to share our proposals now for undertaking some limited baseline vibration monitoring of rail vibration, although this was an aspect that SNC suggested in the scoping opinion, may not be necessary. We would expect that baseline measurements made at sensitive receptors should show no measurable vibration from current rail movements (because these are more than 50m from the rail line), and with just an increase in the number of rail movements being projected, rather than any change in the type of train, this would be a potential way of demonstrating that there would be no reason to expect any vibration to be measurable should the new development proceed. Under these circumstances SNC may consider the baseline vibration data when submitted, in the EIA to be sufficient evidence that there will be no significant potential vibration impact from trains, and this aspect might then be able to be scoped out of the EIA assessment.

We also believe there would be some value in discussing the potential vibration impact from road vehicles, which SNC considered ought to be included in the EIA, and how and where this should be evaluated. Our experience suggests that it is only ever a problem at properties on road near potholes or traffic calming locations. Finally, there is a need now to consider the vibration impact on the Grand Union Canal area, and we need to discuss possible ways of doing this with you.

We appreciated the SNC scoping opinion comments on noise and vibration and wish to enter into early dialogue on the detailed scope of the assessments, to ensure that SNC's particular concerns are fully addressed in further baseline studies and moving forward when assessing the potential noise and vibration impacts.

¹ BS 4142:2014 *Methods for rating and assessing industrial and commercial sound*

² Guidelines for Environmental Noise Impact Assessment, IEMA, 2014

Spectrum's head office is in Bedfordshire, and should you consider it helpful I can attend your offices to discuss matters further. I think it would be potentially worthwhile to jointly view the site to agree potential monitoring locations first hand. Either of these visits are something we would be happy to accommodate, so would welcome your response. In the meantime our plans are to install the N and V monitoring equipment in about 2 weeks time.

DRAFT PLAN FOR DETAILED NOISE AND VIBRATION BASELINE MONITORING

We attach a plan of potential unmanned N and V monitoring positions. This follows our earlier short sample of attended measurements made last year and reported within the scoping report. The circular zones identified in green on the attached plan identify groups of potential sensitive receptors for which we are considering obtaining baseline noise data – the positions selected are generally indicated by the arrowhead of each text box, and is sometimes farmland. Where Ashfield Land own residential property, we may be able to use measurement positions within private garden areas. These discussions are currently ongoing with landowners but should be resolved shortly.

It is our plan to monitor noise for at least 3 weeks at each position. We may choose to measure simultaneously at all positions, or monitor at up to 4 positions for 3 weeks, and then move the equipment to another 4 positions for a further 3 weeks. We would locate the weather station at one of the noise monitoring sites, and would correlate the noise data where possible with wind direction. We believe that the noise from road traffic on the A43 to the west and the M1 to the east will be influenced by wind direction.

We do not have any plans for obtaining further additional short term measurements, over and above those taken last year, at any of the positions selected or at any other positions. Your views on whether you believe additional attended measurements have any value when there is a comprehensive unattended baseline monitoring plan proposed, would be very much appreciated.

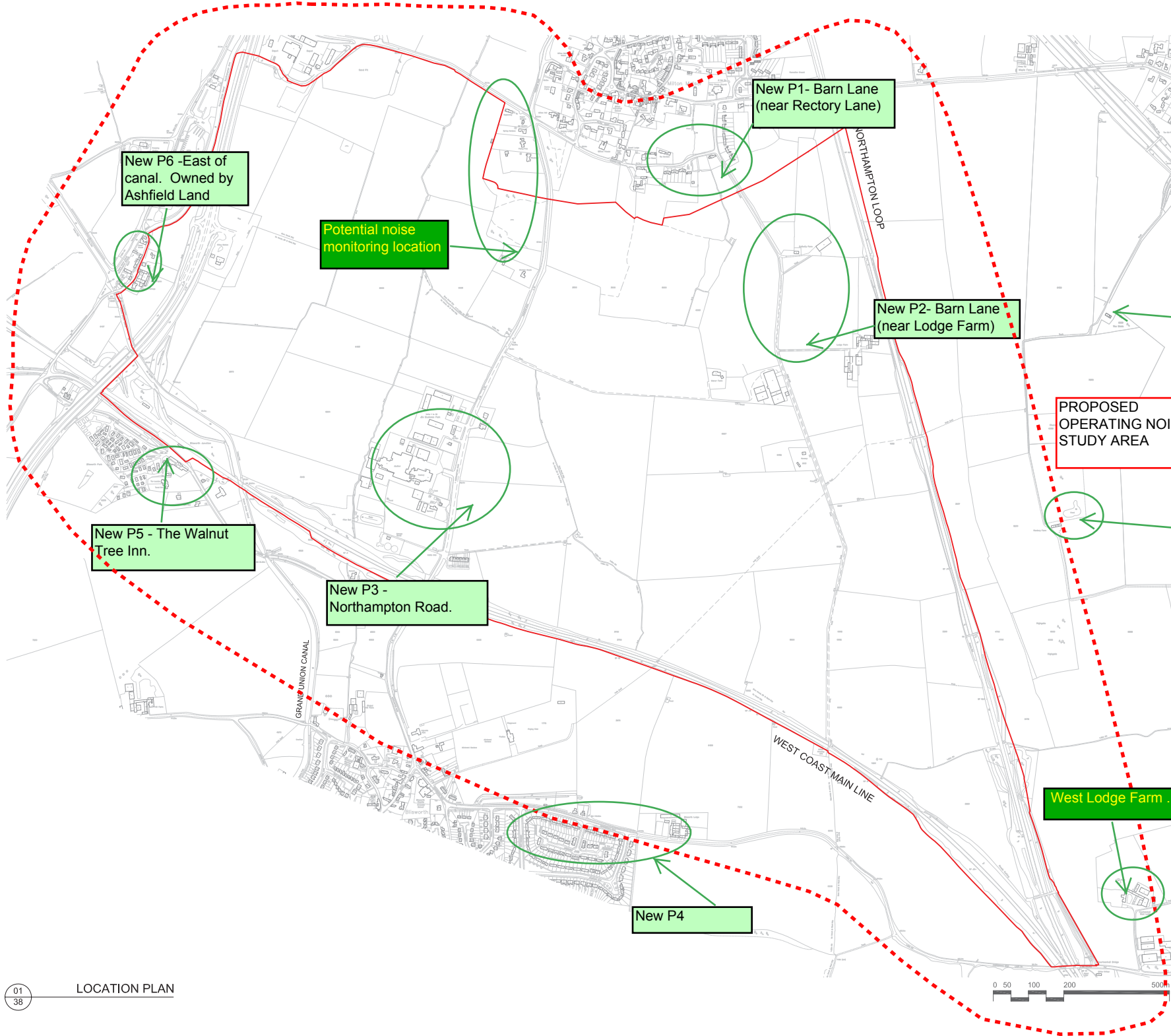
Our optimum location for monitoring rail vibration is at West Lodge Farm which is relatively close to the rail line, southeast of the proposed development. Again your comments on this would be appreciated. We might need only to monitor baseline vibration for one week to obtain a representative sample of rail vibration events.

Yours sincerely



Andrew Corkill
Director

Enc. – Potential N and V baseline monitoring positions for SNC comment



NOTES:

SUBJECT TO STATUTORY COMMENTS

SUBJECT TO SURVEY

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LEGEND

POTENTIAL DEVELOPMENT AREA, BASED ON: DRAWING IN ACCORDANCE WITH GIS SHAPFILE SUBMITTED TO FINS, DATED: 05-05-15.

This building needs to be confirmed as no longer residential.

PROPOSED OPERATING NOISE STUDY AREA

Rectory Farm.

West Lodge Farm .

REV	DATE	NOTE	DRAW	CHK

MICHAEL SPARKS ASSOCIATES

CHARTERED ARCHITECTS

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ASHFIELD LAND

TITLE
RAIL CENTRAL

PROJECT
NINE POTENTIAL NOISE AND VIBRATION MEASUREMENT POSITIONS

REV 1

DRAWING NUMBER
30708-FE-38

From: [John Penny](#)
To: [Andrew Corkill](#)
Cc: "[Claire Cope](#)"; "[Danny James](#)"; [Alex Priestley](#); [Helen Tilton](#)
Subject: RE: Rail Central - Noise - Responses to SNC comments - vibration from HGVs - Rev 2 version of Tech doc arc6820
Date: 17 July 2017 07:54:46
Attachments: [image001.png](#)

Dialogue with SNC March to July 2017

Dear Andrew,

Thanks for these clarifications which adequately respond to the points I had raised in the previous consultations on this subject.

John Penny
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From: Andrew Corkill [<mailto:ACorkill@spectrumacoustic.com>]
Sent: 15 July 2017 14:56
To: John Penny
Cc: 'Claire Cope'; 'Danny James'; Alex Priestley; Helen Tilton
Subject: RE: Rail Central - Noise - Responses to SNC comments - vibration from HGVs - Rev 2 version of Tech doc arc6820

John,

Just as a matter of record, and following our telephone conversation in May, I attach a Rev 2 version of our Tech Document arc6820 hopefully now fully reflecting our conversations and clarifying the scope for noise and vibration assessment in the EIA to your satisfaction. In particular, we discussed the issue of potential vibration from HGVs travelling on public roads. This only arises from pot holes (or speed bumps) and then only up to 50m distance. Whilst a road condition survey might be a sensible precaution, this would be a matter for other agencies to deal with. With no NSRs within 50m of the main public roads adjoining the site, and the actual new site access road also being no closer than around 100m to one residential receptor, we propose not to carry out a formal assessment of vibration from HGVs on public roads and will rely on the quoted TRRL reference to support this view.

You raised the issue of speed bumps on the site access road. We understand that these are not currently planned to be used, however if they become part of the scheme, their proximity to the nearest NSR at around 100m is well above the 50m distance we begin to be concerned about.

I trust the scope for the N and V chapter of this EIA is clearer, and that I have managed to

incorporate your comments and observations as per our telephone discussions.

Kind regards

Regards

Andrew

Andrew Corkill
Director

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From: Andrew Corkill
Sent: 04 May 2017 15:58
To: John Penny <John.Penny@cherwellandsouthnorthants.gov.uk>
Cc: 'Claire Cope' <clc@ashfieldland.co.uk>; 'Danny James' <danny.james@turley.co.uk>; Alex Priestley <APriestley@spectrumacoustic.com>
Subject: RE: Rail Central - Noise - Responses to SNC comments - vibration from HGVs

John

Thanks for your email below.

Firstly, I attach a Rev 1 version of our document arc6820, with no changes except I have added numbers to your comments (SNC1,2 etc). As you suggest this will help reference.

On rereading my responses, I agree it is not as clear as it might be. I will phone you to explain, discuss and see what your views are, if I may.

The relevant comments are now identified I believe in SNC6, SNC 7 (response 2) and SNC8 (response 2).

In SNC6 we respond suggesting clarity is given in later responses.

In SNC7(response 2) we say there are more HGVs during operation phase than construction phase (and will provide vehicle numbers to support this), we therefore propose to consider only the potentially more significant operation phase, and would wish for SNC to agree to this.

In SNC8(response 2) we consider the potential of vibration from HGVs on public roads only to arise at a sensitive receptor within 50m of a road, and then only if the road is in poor condition (eg pot holes). We indicate that travelling on the A43 to/from the site to the M1(which is the

route for most of the vehicles there appears no sensitive (residential receptor) near the road. Travelling on the A43 south of the site (few vehicles) there are some residential receptors around 20-30m from the road. There might be existing vibration here, however these would only be from pot holes or other major road surface problems.

The issue is that no matter what set back distance housing is, any vibration will arise only if there are pot holes or other major road surface damage. I would propose we discuss this within the EIA and we include numbers of vehicles, however don't predict any vibration levels as this is not really practical, and therefore even for the operating phase a quantified vibration assessment cannot be undertaken. Instead I believe that we should recommend a simple 'road surface condition' survey is carried out on short sections of the main access roads where sensitive receptors are within 50m of the road. There will be a new access road from the A43 to the site and this will cross the Northampton/Towcester Road and will run close to existing residential properties. The new road will have a good quality surface, however we will ensure that if there are any speed reducing measures on this, they are not located close to existing properties.

Perhaps we could have a telephone conversation to discuss your views, and then I propose incorporating changes and clearer text you are happy with in a Rev 2 version of document arc6820.

Thanks for your feedback

Regards

Andrew

Andrew Corkill
Director

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From: John Penny [<mailto:John.Penny@cherwellandsouthnorthants.gov.uk>]
Sent: 27 March 2017 10:52
To: Andrew Corkill <ACorkill@spectrumacoustic.com>
Subject: RE: Rail Central - Noise - Responses to SNC comments

Dear Andrew,

Thank you for this information. It is commented in one of the paragraphs in the document regarding the assessment of vibration from construction road vehicles travelling on public roads that "Assessment during operation phase only is proposed" but in a later paragraph regarding

vibration from operational road vehicles travelling on public roads it states “At the new junction on the A43 the slip road lies 120m from some sensitive residential receptors, however this will be a new well maintained road and vibration impacts at this distance are highly unlikely”.

I don't know whether I have interpreted the statements correctly but please can you clarify whether you will be assessing for impacts of vibration from operational road vehicles on public roads, and at what locations if you are, since the first statement in your document implies that this will be done whilst the later statement suggest this will not be needed for the reasons explained in that paragraph (ps – it would be useful if you could number the paragraphs/box's since that make referencing easier)?

Please do not hesitate to contact me direct on 01327 32280 should you wish to discuss this email further

Yours sincerely

John Penny
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From: Andrew Corkill [<mailto:ACorkill@spectrumacoustic.com>]
Sent: 22 March 2017 09:22
To: John Penny
Cc: David Diggle; Claire Cope; Alex Priestley; Danny James; Denis Winterbottom
Subject: RE: Rail Central - Noise - Responses to SNC comments

John,

We are acting as noise and vibration specialist on behalf of Ashfield Land for their proposed Rail Central SRFI. Denis Winterbottom provided your name as a point of contact at SNC in relation to agreeing noise and vibration matters to be dealt with in the upcoming EIA.

We received some helpful responses on noise and vibration from you in a document dated 17 January 2017. I attach a response to that which shows what your questions and comments were, and has a response from ourselves explaining how we have dealt or are dealing with the particular issues or concerns.

The SNC comments have been very helpful and suggest that we are covering the main issues to your satisfaction. However there remain a few small matters which we would very much

appreciate your further feedback on. I have highlighted these in yellow in the attached technical document arc6820. Please could you review and further comment as we are finalising our study and need to ensure we have covered all matters fully.

Many thanks

Regards

Andrew Corkill
Director

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ARC6820 Rev 2 - responses to SNC comments - now agreed with SNC

Description Rail Central SRFI - Noise and Vibration Issues raised by South Northants Council – Spectrum’s further responses

Date 15 June 2017

Issued by Andrew Corkill and Alex Priestley, Spectrum Acoustic Consultants

Issued to Turley Associates

Ref No ARC6820/14006/Rev 2

A Technical Document ref ARC6805/14006 dated 16.12.16 identified noise and vibration matters that would need to be agreed with South Northampton Council. This document included a copy of an earlier letter dated 16.02.16 addressed to Trevor Dixon from the SNC Environmental Protection Team, giving broad details of the matters of concern.

South Northamptonshire Council have now formally responded to the information contained within the Technical Document in a communication of 17.1.17 indicating that any further dialogue should be with John Penney in Environmental Protection (Tel: 01327 32280).

This Technical Document includes comments and opinions of SNC, along with further responses and clarifications by Andrew Corkill and Alex Priestley of Spectrum Acoustic Consultants.

This revision 2 version follows further discussion with John Penney and is considered to clarify issues raised by him.

Comment Ref	SNC comment or opinion	Spectrum response
SNC1	References to proposed noise and vibration monitoring positions are included on two maps and I assume this consultation relates to the noise and vibration monitoring positions detailed on Map Drawing Number 30708-FE-38 Rev 1	It is accepted that the SNC consultation relates to the map of the proposed monitoring positions shown as red oval potential zones of measurement on Map Drawing Number 30708-FE-38 Rev 1 included, prior to monitoring, in the original 16.02.16 letter to SNC. However it is also assumed that SNC have no further comments in relation to the finally selected monitoring positions advised after the baseline monitoring was complete and also included in the later Technical Document of 16.12.16 which was reviewed by SNC. It is taken that the choice of locations of noise and vibration monitoring positions are acceptable to SNC.
SNC2	I would make the following response to the queries raised within the details of the emails and attachments provided:-	See Below
SNC3	I would make no adverse comment regarding the proposed new noise and vibration monitoring locations detailed on that drawing and would recommend that they also including a location in the area identified as a	An additional Noise Monitoring Location was added as proposed (NML8) and is shown on the map of locations where monitoring finally took place. It should however also be noted that no noise monitoring was undertaken at the potential New P1 location (Barn Lane/Rectory Lane) as it was considered measurements made nearby at New P2

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agreed with SNC

	<p>"Potential Noise Monitoring Location" on the map (i.e. Spectrum Acoustic Consultants dated 16 December 2016 Ref ARC6805/14006).</p>	<p>(Barn Lane, near Lodge Farm) ultimately NML1, would adequately establish the baseline noise in this general area.</p>
SNC4	<p>I have reviewed the approach that was proposed for the baseline noise and vibration monitoring as outlined in the scoping report that was submitted with planning application ref S/2016/2717/NIA and agree that should be sufficient for the purpose of the EIA but as amended in respect of the proposed new noise and vibration monitoring locations detailed in the above bullet point</p>	<p>The monitoring approach carried out in practice was as described earlier within the scoping report. We consider that the proposed approach is therefore agreed.</p>
SNC5	<p>With regard to the scope and methodology appropriate for the vibration assessment. The original scoping report identified a receptor on Collingtree Road located in close proximity to the existing railway and also at properties located at Rathvilly Farm (see para 3.1.119 of the Scoping Report). The expectation in the Spectrum Acoustic Consultants letter dated 16 February 2016 Ref ARC6730/14006 was that baseline measurements of vibration from current movements on the line would show no measureable vibration if receptors are more than 50m away. It is noted from their recent letter that the baseline measurements have been undertaken and I would make no adverse comment regarding approach proposed for the assessment assuming the results show there is no measurable vibration for receptors at that distance and an explanation being provided in the EIA Report reasons why the monitoring location used in this instance is a suitable proxy for the other potentially sensitive locations identified in the scoping report</p>	<p>We are currently unable to identify a para 3.1.119 from the scoping report, nor a proposed monitoring position on Collingtree Road. However, we can confirm that for monitoring of train groundborne vibration, subsequent site visits established the nearest residential receptor to be on the south side of Courteenhall Road near VML1, and at 60m from the Northampton Loop Line. This was the nearest sensitive receptor to this potential source of ground vibration. Baseline Vibration monitoring was carried out at this location and results, showed that there was no significant baseline vibration from train movements.</p> <p>Consideration of the potential for monitoring vibration further north at Rathvilly Farm was dropped following issue of the Scoping Report as this property has since been secured by the developer and will not be a receptor on completion of the development</p>
SNC6	<p>We acknowledge their comment regarding potential vibration impacts from road vehicles but are not clear whether they are advising that these</p>	<p>See responses below relating to vibration from construction and operational vehicles on public roads.</p>

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	are unlikely to be of any significance and can be scoped out of the EIA or not?	
SNC7	With regard to the comment concerning the scope and assessment for the construction phase of the proposed development. The original scoping report did not specifically reference any assessments in respect of potential vibration impacts from the construction phase of the proposed development but this will depend on what construction activities are involved and if this is relevant to these. We would make no adverse comment subject to these being considered in the EIA where relevant in accordance with the procedures detailed in BS5228-2:2009 Code of Practice on Noise & Vibration Control on Construction and Open Sites	<p>There are three potential vibration issues that might be considered during the construction phase.</p> <ol style="list-style-type: none"> 1) <u>Vibration from construction activity on site.</u> This will now be assessed in accordance BS5228-2:2009 and will consider the impact from construction activity on the PD site, including the construction of the new road junction on the A43. 2) <u>Vibration from construction road vehicles (HGVs) travelling on public roads.</u> The numbers of HGVs during construction is well below the numbers during operation, and access to the site is via the same public road system. The EIA will state the numbers of vehicles during construction and operational phases. However no formal assessment of vibration from HGVs travelling on public roads will be made. 3) <u>Vibration from train movements on rail network during construction.</u> There will be no more than 1-2 trains per day during construction depending upon the scope in practice for bringing materials onto site. This is very low in comparison to the existing number of freight trains. There will be many more trains once the site is operating and therefore formal consideration will be given to this more critical condition during operation. Measurements made of baseline vibration at 60m from the junction of the West Coast Main Line and the Northampton loop recorded will be reported in the EIA. Over one week the VDV was 0.013 m/s^{1.75} at night and 0.015 m/s^{1.75} during the day. This compares with a range of VDV associated with a 'low probability of adverse comment; according to BS6472-1 2008, of 0.10 – 0.20 during the night and 0.20 – 0.40 during the day. At one tenth of the level considered to result in just a low probability of adverse comment, the existing baseline is very low. The addition of 1 -2 trains limited to daytime hours, during construction will have no impact on perceived baseline vibration levels at sensitive receptors near the rail lines. The EIA will include this information however no further assessment is proposed of this impact during the construction phase. SNC to comment please.
SNC8	The scoping report also did not specifically identify any potential vibration impacts associated with the operational phases of the proposed development but this may depend on what the operational phase may involve and so we would make no adverse subject to these being considered in the EIA accordance with procedures detailed BS 7385:1993 Evaluation and measurement for vibration in buildings. Guide to damage levels	<ol style="list-style-type: none"> 1) <u>Vibration from operational activity on site.</u> Activity on site will include moving goods into and out of warehouse and storage facilities. Mechanical plant capable of transmitting significant vibration into the ground would not be utilised. Vehicles and equipment in yards generally operate on pneumatic tyres, which do not allow for the transmission of vibration into the ground. The only potential source of ground vibration is from the rail mounted gantry crane and impacts that might arise as a result of stacking containers. However proper site management of this activity including the use of soft landing technology in the Gantry Crane handling protocols, designed to avoid impact noise, will also have the benefit of reducing vibration into the ground. The

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	<p>from ground borne vibration where relevant</p>	<p>intermodal platform is at least 500m from the nearest residential receptor. Vibration transmission through the ground attenuates rapidly with distance such that even very substantial levels of this type of vibration tend to be attenuated to insignificance over distances of more than 50 - 100m. This information will be included within the EIA, but further assessment will not be undertaken</p> <p>2) <u>Vibration from operational road vehicles (HGVs) travelling on public roads.</u> The numbers of HGVs during operation will be greater than during construction. Access for HGV will be via the A 43 road, and the increase in HGV numbers from the baseline will be considered within the EIA. Significant vibration from road vehicles however is considered only to arise when the condition of the road surface is poor (DMRB Annex 2 A2.24) and with proper maintenance any ground vibration should not arise. Even in the event of poor road condition giving rise to ground vibration, this will fall off rapidly with distance, with nothing likely to be measurable from this type of source beyond around 50m (TRRL RR246 'Traffic induced vibration in buildings'). In the critical section of the A43 between the M1 junction and the new junction to the PD, there is no residential receptor within 200m of the road. At the new junction on the A43 the slip road lies 120m from some sensitive residential receptors, however this will be a new well maintained road and is significantly further than the 50m distance where vibration impacts can potentially arise. The site access road will also pass around 100m from a sensitive residential receptor; again this significantly exceeds the 50m distance where vibration impacts can arise. SNC were concerned that traffic calming measures (speed bumps) would potentially generate ground vibration. It is confirmed that whilst this type of measure is not currently being considered on the site access road, if it were to be brought forward, its location close (within 50m) to a NSR would not arise, and so vibration impact would not result. Under these circumstances a formal vibration assessment is not being undertaken within the EIA; the reasons will be explained including reference being made to the TRRL RR246 document.</p> <p>3) <u>Vibration from train movements on rail network during operations.</u> There will be a build-up of train movements as the development is completed leading to up to 16 trains per day onto the Intermodal platform when the SRFI is fully operational. This is expected to be less than the baseline number of freight trains movements per day on the Northampton Loop not associated with the PD. Therefore in terms of increase this is unlikely to be significant. However existing baseline vibration levels have already been measured as being very low. Measurements made of baseline vibration at 60m from the junction of the West Coast Main Line and the Northampton loop recorded will be reported in the EIA. Over one week the VDV was 0.013 m/s^{1.75} at night and 0.015 m/s^{1.75} during the day. This compares with a range of VDV associated with a 'low probability of adverse</p>
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ARC6820 Rev 2 - responses
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		comment; according to BS6472-1 2008, of 0.10 – 0.20 during the night and 0.20 – 0.40 during the day. At one tenth of the level considered to result in just a low probability of adverse comment, the existing baseline is very low. From this very low baseline an increase in the number of freight trains can be calculated as eVDV (estimated). This will be done and will show the increased VDV will still lie comfortably below the levels of vibration that are considered to result in a low probability of adverse comment.
SNC9	<p>The scoping report did not identify potential vibration impacts from the proposed development on the Grand Union Canal or the Blisworth Tunnel;</p> <p>We did not therefore make any comment on this in the response to the scoping opinion. We would however welcome further discussion on this matter and additional information on the risks that might exist before offering any comment on this particular matter</p>	<p>The Blisworth tunnel is 1.1km distant from the nearest section of the PD and is too far for any adverse vibration impacts even during the more active construction phase. However vibration will now be evaluated to a number of recreation receptors, including towpaths along the Grand Union canal, and also the Marina. In this regard consideration will be now given to seeking to comply with 'Code of Practice for Works Affecting the' Canal and River Trust,' May 2012.</p>
	<p><i>If there are any queries or to discuss the above comments with regard to noise and vibration please contact John Penney in Environmental Protection direct on 01327 322280.</i></p>	

Ref: ARC6819/14006/Rev1



Date: 6 March 2017

John O'Neill
Planning Specialist
The Environment Agency
Nene House,
Pytchley Lodge Road
Kettering
NN15 6JQ

Dear John

RAIL CENTRAL SRFI

We are writing to you in our capacity as the noise and vibration specialists supporting the application by Ashfield Land Limited, for the Rail Central Strategic Rail Freight Interchange (SRFI) development. This is an application directly to the Planning Inspectorate being a project of national significance.

A specific request was made by the Planning Inspectorate in the scoping opinion, on the suitability of noise and vibration monitoring locations to define the baseline conditions. In particular paragraph 3.101 from the Scoping Opinion (January 2016) states:

'The Secretary of State notes that the applicant intends to consult with South Northamptonshire Council in respect of further baseline noise surveys and recommends that the methodology and choice of noise receptors are also agreed with the Environment Agency. The location of the noise receptors should be identified on a plan.'

South Northamptonshire Council has been consulted on this matter and they have indicated they are satisfied with the selection of noise and vibration monitoring positions as indicated on the attached Figure 1. We can report that long term noise monitoring was carried out at each position for at least 3 weeks and vibration monitoring was carried out at the single vibration position for 1 week. A weather station was also set up so that background noise levels could be correlated with wind direction. All this monitoring was completed during 2016.

The scoping opinion and subsequent discussions with South Northamptonshire Council have also covered matters such as ensuring all potential noise sensitive receptors in the area are properly identified so that appropriate assessment can be carried out at each position. The location of noise sensitive receptors is shown in Figure 2 attached. The number of potential sensitive receptors is much greater than the number of monitoring positions, especially when amenity receptors are included. It is not practical to undertake long term baseline monitoring at each and every sensitive receptor, however the selection of monitoring locations has been made to be able to fully define the variation in background noise levels across the site and beyond so that where there are to be comparisons with baseline levels in the EIA, data will exist for this comparison obtained at a monitoring location nearby. Please note that in Figure 2, NSR 1- 17 are residential receptors and NSR Rec 1-11 are amenity/recreational receptors including footpaths and canal towpaths.

We would be grateful if could advise whether you have an opinion regarding the selection of monitoring locations and sensitive receptors, and what your opinion might be on their suitability?

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Spectrum Acoustic Consultants Ltd
Registered in England No. 2378475

On a related matter, we understand that there is a need to assess the effect of climate change on the development in general. However we do not expect potential changes in climate to directly affect potential noise and vibration levels generated by the site. It is a viewpoint that South Northamptonshire Council indicated in their contribution to the scoping opinion, they agreed with and believed such an assessment would not be required. We would ask whether this is a matter (only in relation to noise and vibration) the Environment Agency would be prepared could be scoped out. Your opinion on this would be welcomed too.

Yours sincerely

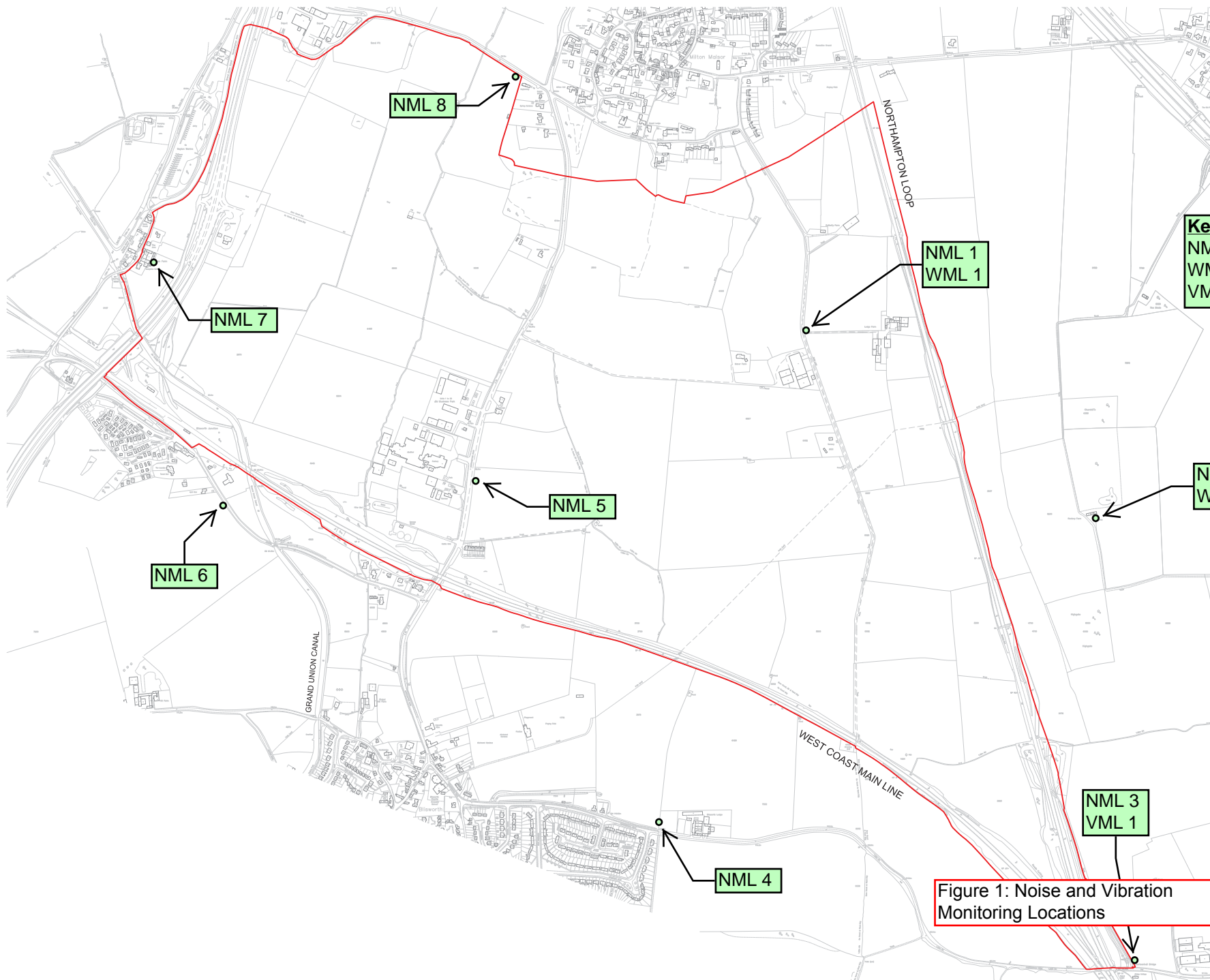
A handwritten signature in blue ink, appearing to read 'Andrew Corkill', is positioned above the printed name.

Andrew Corkill
Director

Enclosures:

Figure 1 – Noise and vibration baseline monitoring locations.

Figure 2 – Noise sensitive receptors



NOTES:

SUBJECT TO STATUTORY CONSENTS

SUBJECT TO SURVEY

BASED ON OS MAP REPRODUCED BY PERMISSION OF CONTROLLER OF HM STATIONARY OFFICE (C) CROWN COPYRIGHT

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LEGEND

POTENTIAL DEVELOPMENT AREA, BASED ON: DRAWING IN ACCORDANCE WITH GIS SHAPFILE SUBMITTED TO FMS, DATED: 05/01/15.

Key:

NML - Noise Monitoring Location

WML - Weather Monitoring Location

VML - Vibration Monitoring Location

REV	DATE	NOTE	DRAW	CHK



CHARTERED ARCHITECTS

11 PLATO PLACE

STANDISH ROAD

LONDON SW6 4TU

TELEPHONE 020 7736 6162

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TITLE

RAIL CENTRAL

DRAWING

APPENDIX 1 - LOCATION PLAN

INDICATING THE POTENTIAL DEVELOPMENT AREA

CLIENT

ASHFIELD LAND

DATE	SCALE	DRAWN
DEC 2015	1:5000@A1	PF
STATUS	FEASIBILITY	CHECKED
		MS

DRAWING NUMBER

30708-FE-38

Dialogue with EA March 2017



0 m 700 m

scale = 1 : 17503

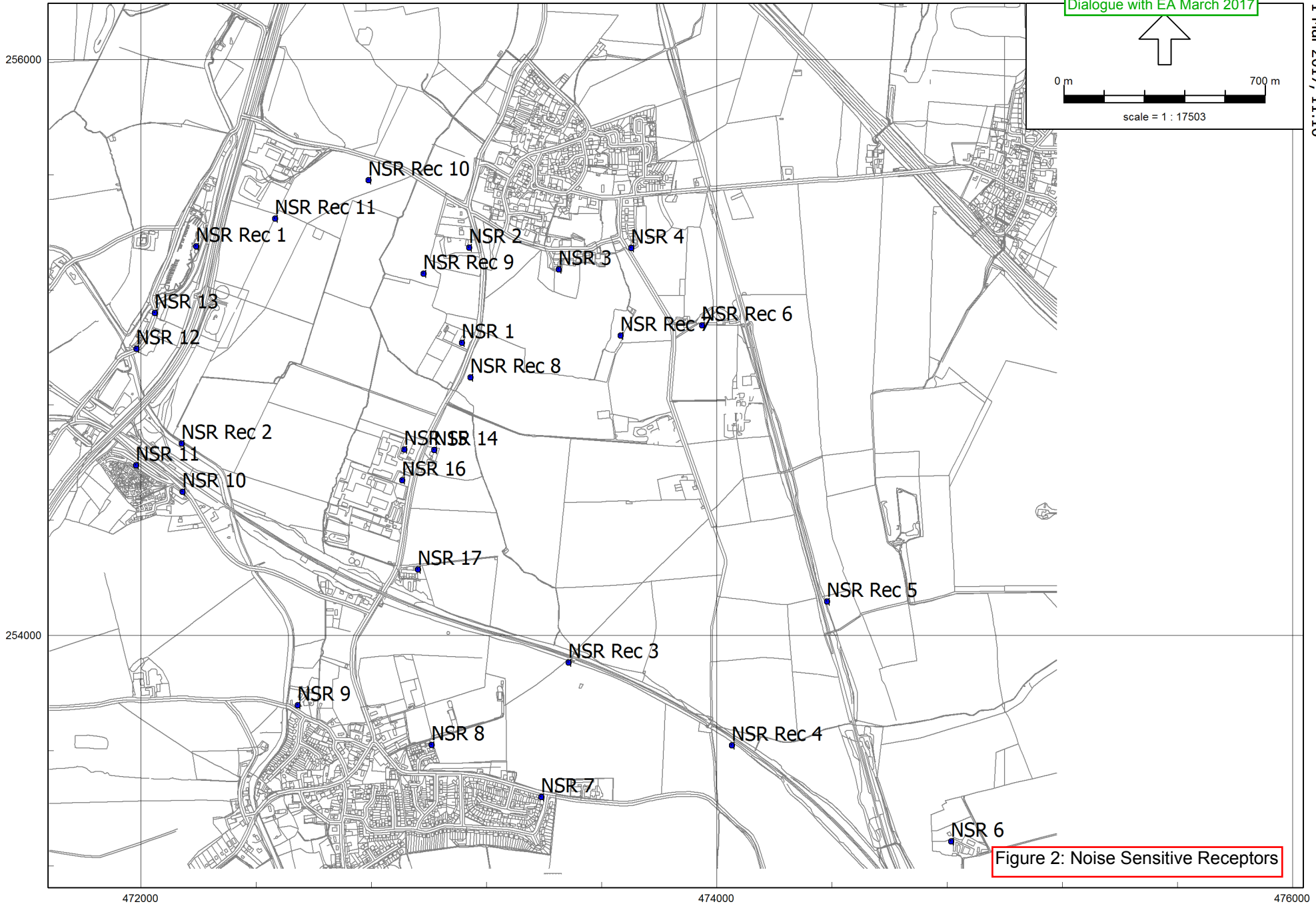


Figure 2: Noise Sensitive Receptors



Andrew Corkill
Spectrum Acoustic Consultants
27-29 High Street
Biggleswade
Central Bedfordshire
SG18 0JE

Our ref: AN/2017/125304/01-L01
Your ref: ARC6819/14006/Rev1
Date: 13 March 2017

Dear Andrew

RAIL Central SRFI - Noise

Thank you for your letter of 06 March 2017.

We have no objection to the methodology and choice of noise receptors as indicated on Figure 1 subject to their approval by the Canal & River Trust. The Canal & River Trust scoping opinion response questioned whether there are likely to be any vibration effects in respect of the canal infrastructure.

Contact: ian.dickinson@canalrivertrust.org.uk

We agree that the need to assess the impact of climate change (only in relation to noise and vibration) should be scoped out.

Should you require any additional information, or wish to discuss these matters further, please do not hesitate to contact me on the number below.

Yours faithfully

John O'Neill
Planning Specialist

Direct dial 02030253492
Direct e-mail john-edward.oneill@environment-agency.gov.uk



Awarded to the Lincolnshire & Northamptonshire Area

Environment Agency
Nene House (Pythley Lodge Industrial Estate),
Pythley Lodge Road, Kettering, Northants, NN15 6JQ
Email: planningkettering@environment-agency.gov.uk
www.gov.uk/environment-agency

*Customer services line: 03708 506 506
Calls to 03 numbers cost the same as calls to standard
geographic numbers (i.e. numbers beginning with 01 or 02).*

End

Andrew Corkill

From: Ian Dickinson <Ian.Dickinson@canalrivertrust.org.uk>
Sent: 09 June 2017 09:59
To: Andrew Corkill
Cc: Alex Priestley
Subject: RE: Proposed Rail Central SRFI near Blisworth - Noise and Vibration assessment as part of the Planning Application - Impact to Grand Union Canal assets and users

Dear Andrew,

Further to your email below and my recent meeting also attended by your colleague Alex Priestley, I have been trying to obtain some information and advice from various colleagues on issues to consider in relation to noise and vibration impacts associated with the proposed Rail Central SRFI DCO potentially affecting the canal and canal users.

From an engineering and technical point of view, construction impacts on the canal structure itself are probably best discussed with our Infrastructure Services Team, who may be able to assist with more detailed advice. Please contact Osi Ivowi, Regional Manager South at osi.ivowi@canalrivertrust.org.uk or on 07776 472644 for further advice.

In terms of identifying the extent of potential impacts on canal users, to assist in your assessments, we would offer the following advice:

We suggest that you consider the potential noise and vibration impacts on boaters, towpath users and local wildlife, both during construction and any subsequent operational impacts. This last category does overlap with the ecological assessments no doubt also being undertaken, but the potential for noise impacts arising from construction and also operation of the new A43 road junction should be considered as part of this. Canal corridors often support a diverse range of flora and fauna, and any likely adverse effects on this should be assessed and mitigation measures identified if necessary. This would reflect the advice contained in the National Policy Statement for National Networks (Dec 2014), which specifically highlights noise impacts on wildlife and biodiversity as requiring careful consideration (para 5.187)

In assessing impacts on boaters, you should have particular regard to the presence of Gayton Marina very close to the proposed A43 junction. Boaters can moor in the marina and also along the canal itself, and the extent of noise impacts on all boaters mooring in the vicinity should be considered.

In identifying baseline noise levels, it may be appropriate to consider taking readings both on the canal and at the marina to assist in understanding the extent of any noise impacts. Our concern is to be sure that boaters' amenity is properly taken into account, and that any increased noise impact on them is identified and assessed. Whilst construction noise may well be more disruptive, it is at least temporary, but impacts arising from the operational use of the new road junction need to be considered as well, as these are likely to have long-term effects.

Boaters on the canal are usually allowed to moor for up to 14 days before moving on, unless it is signed otherwise for a shorter period, or restricted altogether.

In terms of the use and operation of Gayton Marina, I would recommend that you contact the marina operator to understand the type and nature of their mooring provision and current occupancy levels. Contact details can be found on their website (<http://www.gaytonmarina.com/>).

Other users, such as walkers and cyclists on the towpath should be considered as well. Canal towpaths are often regarded as valuable leisure and recreational resources, providing a pleasant environment for the local community to use, as well as visitors. Again, the National Policy Statement for National Networks highlights the importance of open space of public value (which includes waterspace such as canals) and how this is affected (see paragraphs

5.162, 5.186 and 5.188) Significant increases in noise levels again risks creating a deterrent to use of the canal as a recreational resource.

The likely need to make alterations to Junction 15a on the M1 was also raised at our meeting. This will affect the canal at the Rothersthorpe Lock Flight. Whilst the presence of the lock flight will mean that mooring in the immediate vicinity of the works will not be permitted, we would again advise that you should consider whether or not the junction alterations will create any additional impacts on canal users. The fact that boaters using the locks will not be able to pass by as quickly as they would on an open stretch should also be borne in mind when identifying potential noise impacts. For identifying potential direct impacts on the canal structure from noise and vibration associated with this aspect of the scheme, again please contact Osi Ivowi direct for advice on our requirements.

I hope that this information is of assistance, but we would be happy to discuss any matters further or review any reports you prepare for inclusion in the Environmental Statement prior to submission of the DCO application.

Regards,

Ian Dickinson MRTPI
Area Planner (East and West Midlands)

T: 01636 675790

M: 07825 608321

E-Mail: ian.dickinson@canalrivertrust.org.uk

Canal & River Trust, The Kiln, Mather Road, Newark, Notts NG24 1FB

The Canal & River Trust is a registered charity entrusted with the care of 2,000 miles of waterways in England and Wales. **Get involved, join us - Visit | Donate | Volunteer** at www.canalrivertrust.org.uk Please visit www.canalrivertrust.org.uk to find out more about the Canal & River Trust. Follow [@canalrivertrust](https://twitter.com/canalrivertrust) from the Canal & River Trust on Twitter.

From: Andrew Corkill [mailto:ACorkill@spectrumacoustic.com]

Sent: 03 April 2017 13:27

To: Ian Dickinson

Subject: FW: Proposed Rail Central SRFI near Blisworth - Noise and Vibration assessment as part of the Planning Application - Impact to Grand Union Canal assets and users

From: Andrew Corkill

Sent: 03 April 2017 13:15

To: ian.dickenson@canalrivertrust.org.uk

Cc: O'Neill, John-Edward <john-edward.oneill@environment-agency.gov.uk>; Danny James <danny.james@turley.co.uk>; David Diggle <david.diggle@turley.co.uk>; Claire Cope <clc@ashfieldland.co.uk>; Alex Priestley <APriestley@spectrumacoustic.com>

Subject: Proposed Rail Central SRFI near Blisworth - Noise and Vibration assessment as part of the Planning Application - Impact to Grand Union Canal assets and users

Ian,

We are noise and vibration advisors and consultants on the team advising Ashfield Land on their proposed Rail Central Strategic Rail Freight Interchange in Northamptonshire. This is a planning application made under the arrangements for nationally significant infrastructure projects.

The reason for contacting you is that we are undertaking noise and vibration studies as part of the Environmental Impact Assessment for the project. This involves measurements, predictions and assessments. Critical however is for

us to identify all appropriate noise and vibration sensitive receptor positions so that we can assess impacts at these locations. Some of the impacts are temporary during construction, others are more permanent once the Interchange starts operating. We need to consider both.

During our consultation process we have had a dialogue both with officers within South Northants Council and also with the Environment Agency. We have been aware of the need to consider impacts to users of the Grand Union Canal and also the assets and structure of the canal itself and Gayton Marina. We are for example aware of the importance of the Blisworth Tunnel on the canal system, although its north end, at over 1km distance from the site, is too far for there to be any impact from the development.

In the Scoping Opinion issued by the Planning Inspectorate, in addition to consulting South Northamptonshire Council on baseline surveys, they recommended consultation also with the Environment Agency. I have attached a letter from John O'Neill from the agency confirming they have no objection to the methodology and choice of receptors, subject to the approval of the Canal and River Trust, giving your email address as a point of contact.

I therefore attach a copy of the information we submitted to the EA, and would ask that you review this and formally respond with a letter to ensure that we have captured all sensitive receptors and carrying out the methodology that you consider is appropriate to protecting the assets and users of the Grand Union Canal and Gayton Marina. If there are issues that you wish to discuss first, please phone or email me in the first instance.

I would like to add that the attached map shows monitoring locations for baseline noise and vibration. In relation to the potential impact to the assets and users of the canal and marina, we would look at the impacts from the proposed site to any part of the canal/marina. The proposed site boundary extends right up to, but obviously not beyond, the canal, however there will be a substantial landscaped zone between the boundary and any building development, which will be further described in the full application. When considering noise, we generate noise level maps for the whole area, which will provide information on impact. For vibration we will undertake predictions also during different phases. For vibration we are aware of the need in particular to ensure vibration levels do not cause damage to canal assets, especially sensitive canal structures and the canal wall/ canal side structures. In this regard it would be helpful if you could advise any locations alongside the canal you consider to be particularly sensitive. We would like to be able to consider these within the detailed assessment.

In relation to considering the impact to canal assets we will take note of the Code of Practice for Works Affecting the Canal and River Trust (May 2012). Perhaps you could confirm that this is the latest version of this Code and that there have been no revisions.

I also attach for your information a copy of a working document that shows points raised by South Northants Council, in relation to details of the proposed noise and vibration assessment, along with responses by Spectrum on behalf of the Developer. You will see that we have given more details here of the assessment work we are undertaking in relation to both noise and vibration and would draw your attention to the last point raised by SNC, in relation particularly to the Canal, and the response made to this by ourselves.

Many thanks and look forward to hearing from you.

Regards

Andrew Corkill
Director

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