



The Sizewell C Project

6.14 Environmental Statement Addendum, Volume 3 Environmental Statement Addendum Appendices Chapter 9 Rail

Appendix 9.3.E: Draft Rail Noise Mitigation Plan - Tracked Changes Version

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1 INTRODUCTION

1.1.1 This document sets out the draft Rail Noise Mitigation ~~Strategy (RNMS Plan)~~ (RNMP), as described in **paragraphs 4.7.10 and 4.7.22** in **Volume 9, Chapter 4** of the **Environmental Statement (ES)** (Doc Ref. 6.10) [APP-545]. It sets out the proposed measures to mitigate and minimise railway noise and vibration that might arise from running construction trains on the East Suffolk line, the Saxmundham to Leiston branch line, and the rail extension route, as part of the Sizewell C project. The final Rail Noise Mitigation ~~Strategy Plan~~ Plan will be concluded following further engagement with Network Rail and freight operating companies, as well as further measurements of groundborne and airborne noise during the ‘early years’ of the project after the Saxmundham to Leiston branch line has been upgraded and all physical mitigation installed.

1.1.2 The ~~RNMS RNMP~~ RNMP has been informed by:

- The noise and vibration assessment contained in **Volume 9, Chapter 4** of the **ES**, and associated appendices and figures (~~Doc Ref. 6.10~~) [~~APP-545 to APP-547, APP-546 and APP-547~~].
- The reference material, guidance, survey results and analysis set out in **Volume 1, Appendix 6G** of the **ES** (~~Doc Ref. 6.2~~) [~~APP-171~~ APP-171, electronic page 135].
- The results of noise and vibration survey work undertaken in summer and autumn 2020, as set out in **Volume 3, Appendix 9.3.A** of the **ES Addendum** (~~Doc Ref. 6.14~~) [~~AS-257, electronic page 3~~].
- The updated noise and vibration assessment presented in **Volume 1, Chapter 9** of the **ES Addendum** (~~Doc Ref. 6.14~~) [~~AS-188, electronic page 8~~].
- Engagement with stakeholders, including Network Rail.

1.1.3 Level 1 control documents will either be certified under the DCO at grant or annexed to the Deed of Obligation. All are secured and legally enforceable. Some Level 1 documents are compliance documents and must be complied with when certain activities are carried out. Other Level 1 documents are strategies or draft plans which set the boundaries for a subsequent Level 2 document which is required to be approved by a body or governance group. The obligations in the draft DCO and Deed of Obligation set out the status of each Level 1 document.

1.1.4 This RNMP is a Level 1 document. A Rail Noise Mitigation Plan in general accordance with this RNMP must be submitted to and approved by East



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Suffolk Council, following consultation with Network Rail, before any freight trains along Work No. 4 are operated under Requirement 25 of the draft DCO. The approved plan must be implemented for the duration of the operation of freight trains along Work No. 4. Any updates to this document must be approved by the East Suffolk Council in accordance with the procedure set out in Schedule 23 of the draft DCO.

1.1.5 Where further documents or details require approval, this document states which body or governance group is responsible for the approval and/or must be consulted. Any approvals by East Suffolk Council will be carried out in accordance with the procedure in Schedule 23 of the draft DCO. The Deed of Obligation establishes the governance groups and sets out how these governance groups will run and, where appropriate, how decisions (including approvals) should be made. Any updates to these further documents or details must be approved by the same body or governance group and through the same consultation and procedure as the original document or details.

1.1.6 Where separate Level 1 or Level 2 control documents include measures that are relevant to the measures within this document, those measures have not been duplicated in this document, but cross-references have been included for context. Where separate legislation, consents, permits and licences are described in this document they are set out in the **Schedule of Other Consents, Licences and Agreements** (Doc Ref 8.11(B)).

1.1.7 ~~b)~~ For the purposes of this document the term ‘SZC Co.’ refers to NNB Nuclear Generation (SZC) Limited (or any other undertaker as defined by the draft DCO), its appointed representatives and the appointed construction contractors.

2 PHYSICAL MITIGATION MEASURES

2.1.1 This section of the ~~RNMS~~ RNMP sets out those measures that are proposed to mitigate and reduce railway noise or vibration and result in a physical change to the rail infrastructure. These measures ~~should~~ will be in place before the operation of the first construction train ~~operates~~, except for sections 2.6 and 2.7, where the stated provisions will apply.

2.2 Change Arrangements at Saxmundham

2.2.1 A crossover north of Saxmundham station and an upgrade to the line signalling system will be delivered as part of the Development Consent Order (DCO), allowing the potential for construction trains to enter or leave the Saxmundham to Leiston branch line without stopping. This removes the

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need to pull away from a stationary position and will deliver lower locomotive noise levels in the area around the junction.

2.2.2 The crossover will be located 457 to 528 metres of the northernmost point of the Saxmundham station platforms. For reference, the existing junction onto the branch line is 529 metres north of the northernmost point of the Saxmundham station platforms and will move approximately 11 metres further north if the DCO is consented.

2.2.3 The precise position of the crossover may change as the detailed design progresses. The revised position will be between 140 metres and 20 metres to the south of the position stated above.

2.2.4 The crossover will include either:

- NR56DV switches, with 1 in 15 crossings and concrete bearers; or
- NR56CV switches, with 1 in 13 crossings and concrete bearers.

2.2.5 Prior to the installation of the final crossover ~~design~~, a ~~further~~ noise and vibration assessment will be submitted to ~~the local planning authority~~ East Suffolk Council, setting out the expected noise and vibration levels at the closest receptors.

2.3 Saxmundham to Leiston Branch Line - Track

2.3.1 The Saxmundham to Leiston branch line will be upgraded with a refurbished trackbed, concrete or steel sleepers and new welded rails. New rails with a consistent cross-section, consistent gauge, and smooth running surface will reduce noise and vibration.

2.3.2 The track will be continuous as-rolled rail, but ~~shall~~ will avoid aluminothermic joints within 25 metres of any sensitive receptors, wherever possible.

2.3.3 The specification of the Saxmundham to Leiston branch line track is subject to ongoing design with Network Rail.

2.4 Saxmundham to Leiston Branch Line - Track Support System

2.4.1 Where the Saxmundham to Leiston branch line passes within 15 metres of a residential property, the track bed will be further upgraded to include an under-ballast mat for a minimum distance of 10 metres either side of the property.

2.4.2 The specification of the under-ballast mat is included in **Appendix A** of this ~~RNMS~~ RNMP.

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2.4.3 An equal and approved alternative to the under ballast mat may be proposed [in the final Rail Noise Mitigation Plan submitted to East Suffolk Council for approval pursuant to Requirement 25](#).

2.5 Rail Extension Route - Track

2.5.1 The rail extension route will be a newly-installed track, using concrete or steel sleepers and welded rails. New rails with a consistent cross-section, consistent gauge, and smooth running surface will reduce noise and vibration.

2.5.2 The track will be continuous as-rolled rail, but ~~shall~~will avoid aluminothermic joints within 25 metres of any sensitive receptors, wherever possible.

2.5.3 The specification of the rail extension route is subject to ongoing design with Network Rail.

2.6 [Acoustic barriers](#)

[2.6.1](#) [SZC Co. must consider the installation of acoustic noise barriers and consult with ESC through the process. The objective is of installing acoustic noise barriers in selected locations where this is agreed to be beneficial, practical and deliverable. The outcome of this process and any agreed acoustic noise barriers must be included in the final Rail Noise Mitigation Plan submitted to ESC for approval pursuant to Requirement 25. Any acoustic noise barriers identified in the final Rail Noise Mitigation Plan must be in place prior to the first operation of Sizewell C trains.](#)

[2.6.2](#) [In order to achieve this, SZC Co. must take the following steps. However, the success and extent of the process set out below is contingent upon ESC engaging with the process and the findings where required. SZC Co. must:](#)

- [Develop high level indicative schemes and feasibility studies for acoustic fencing in each of the following locations, which includes those identified by ESC in its Examination document “Comments on Deadline 6 Submissions from the Applicant” \[REP7-109, starting at electronic page 13\]. That document identifies locations at:](#)

- [= Woodbridge Central](#)
- [= Deben Road, Melton](#)
- [= New Quay Court, Melton](#)
- [= Riverview, Melton](#)

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- Campsea Ashe
- Whitearch Park
- Saxmundham South
- Saxmundham North
- Locations along the Saxmundham to Leiston branch line and green rail route must also be considered;
- SZC Co. will meet with ESC in order to review the feasibility studies for these locations and agree which of them SZC Co. will work up in more detail;
- Where ESC and SZC Co. agree that there is a reasonable prospect that barriers in those locations would be materially beneficial for local residents in mitigating railway noise impact and potentially acceptable in planning terms, SZC Co. will develop outline proposals for those locations and undertake targeted community consultation with local residents and businesses who may be directly affected by the installation of the barriers in those locations;
- SZC Co. will engage with appropriate regulatory and statutory bodies where there is a prospect of an effect on other assets and/or where other consents or licences are required. This will include Historic England where barriers are considered on the green rail route in order to take account of the potential effects on the setting of the Second Leiston Abbey Site;
- SZC Co. will feedback to ESC and ESC and SZC Co. will agree which locations SZC Co. will develop to the next stage;
- SZC Co. will engage directly with the landowners whose agreement will be necessary to implement barriers in those locations and seek to secure rights for the erection of barriers on reasonable terms;
- where SZC Co. reports to ESC that those negotiations have been successful, SZC Co. will prepare and submit planning applications to ESC for the erection of the barriers and apply for any other necessary consents and licences;
- where planning and any other necessary consents and licences have been granted, SZC Co. will install the barriers and maintain them for a period to be agreed with ESC;

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- subject to any alternative agreement between SZC Co. and ESC, the barriers will be removed once the Sizewell C trains are no longer running.

2.6.3 SZC Co. must include a programme for these actions in the final Rail Noise Mitigation Plan submitted to ESC for approval pursuant to Requirement 25 of the dDCO.

2.6.4 In the event of any dispute between SZC Co. and ESC over these provisions concerning barriers (section 2.6), either SZC Co. or ESC may refer the dispute to the Planning Group established by (Schedule 17 of the DoO) and escalation if necessary through the governance and dispute resolution revisions set out in the Sizewell C Deed of Obligation.

2.7 Track Renewal

2.7.1 SZC Co. must consider the replacement of replacing rail lines or joints or welds on the East Suffolk line (ESK) where there is a worthwhile, material benefit resulting in reduced noise and/or vibration affecting local residents. SZC Co. must engage with Network Rail and ESC in this process and include the conclusions of this process in the final Rail Noise Mitigation Plan submitted to ESC for approval pursuant to Requirement 25 of the dDCO.

2.7.2 In accordance with that objective, SZC Co. will:

- seek to contract with Network Rail to fund Network Rail to undertake a detailed survey of the full length of the ESK between Westerfield and the junction north of Saxmundham station with the Saxmundham to Leiston branch line;
- report the outcome of the detailed surveys to ESC, together with a report from SZC Co. advising where there will be a worthwhile and material acoustic benefit from track renewal;
- agree with ESC which sections of track it will be worthwhile and materially beneficial to replace;
- seek to contract with Network Rail to fund the renewal of the identified sections of track.

2.7.3 SZC Co. must include a programme for these actions within final Rail Noise Mitigation Plan submitted to ESC for approval pursuant to Requirement 25 of the dDCO. This will include the required timing for any track renewal works.

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2.7.4 In the event of any dispute between SZC Co. and ESC over these provisions concerning track renewal (section 2.7), either SZC Co. or ESC may refer the dispute to the Planning Group established by (Schedule 17 of the DoO) and escalation if necessary through the governance and dispute resolution revisions set out in the Sizewell C Deed of Obligation.

2.8 Level Crossings

2.8.1 SZC Co. will seek to contract with Network Rail to fund Network Rail to undertake upgrades to the following level crossings on the East Suffolk line:

- Kingston Farm UWCT & FPG
- Uffold UWCT
- Blackstock UWCT
- Redhouse farm UWCT
- Ellingers UWCT
- Brick Kiln UWCT (Downgrade to Bridleway)

2.8.2 SZC Co. will work with Network Rail and ESC with the objective of exploring the means of controlling level crossing alarms to a level that is agreed by all parties to be acceptable.

2.8.3 b) Where such discussions result in agreed mechanism for controlling level crossing alarms, they must be included in the final Rail Noise Mitigation Plan submitted to ESC for approval pursuant to Requirement 25 of the dDCO.

3 OPERATIONAL MITIGATION MEASURES

3.1.1 This section of the ~~RNMS~~-RNMP sets out those measures that will be implemented through the operation of the construction trains. These measures will be used to manage all construction trains.

3.2 Speed Limits

3.2.1 The speed of night-time construction trains will be limited to 10mph at Woodbridge/Melton, Campsea Ashe and Saxmundham. These locations are covered by three speed limit zones, as shown in **Figures 4.2, 4.3 and 4.4** from **Volume 9, Appendix 4B** of the **ES (Doc Ref. 6.10) [APP-547 [APP-547, electronic page 3]**. The figures are replicated in **Appendix B** of this ~~RNMS~~-RNMP for ease of reference.

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- 3.2.2 Night-time is defined as 23:00 hours to 07:00 hours.
- 3.2.3 The speed limit zones will not be conventionally signed along the route, but the speed limit zones start and end at clearly identifiable points along the route, such as footpath crossings, overbridges, or level crossings to facilitate easy identification en-route. The exact mechanism to identify speed limit zones on an operational level will be determined through liaison with Network Rail and the Freight Operating Company.
- 3.2.4 A suitable mechanism for the communication and implementation of the speed limit zones will be put in place between SZC Co. and the Freight Operating Company.
- 3.2.5 In the ‘early years’, the speed limit on the Saxmundham to Leiston branch line for construction trains will be 10mph during both the daytime and night-time.
- 3.2.6 Subject to further airborne and groundborne noise measurements once the Saxmundham to Leiston branch line is upgraded and all physical mitigation installed, the speed limit may be reviewed for the later years.
- 3.2.7 The speed limit on the rail extension route will match that applied to the Saxmundham to Leiston branch line. This will enable constant train speeds to be maintained, thereby avoiding accelerating locomotive noise close to the north-western corner of Leiston.
- 3.2.8 Other than where stated above, construction train speeds will ~~be~~ not be limited for the purposes of noise and vibration control.
- ### 3.3 Locomotive Selection
- 3.3.1 SZC Co. will ~~seek to~~ use Class 66 locomotives where there is equivalent choice and availability. The submitted noise assessments show that Class 66 and Class 68 locomotives fall within the assessment envelope, but Class 66 locomotives are preferred, where there is equivalent choice.
- 3.3.2 A suitable mechanism for delivering this preference, where there is equivalent choice, will be put in place between SZC Co. and the Freight Operating Company.
- ### 3.4 Night-time Leiston Restrictions
- 3.4.1 No construction trains will be permitted to operate between the two points shown in **Figure C.1** in **Appendix C** between 23:00 hours and 07:00 hours during the early years, before the rail extension route is in operation.

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- 3.4.2 Any construction trains that would not be able to fully pass through the restricted Leiston zone shown in **Figure C.1** in **Appendix C** before 23:00 hours will be held at the locations shown in **Figure C.2** in **Appendix C**.
- 3.4.3 Any locomotives held on the Saxmundham to Leiston branch line during the night will not be permitted to idle; all such locomotives will be required to shut down until departure the following morning.
- 3.4.4 A suitable mechanism will be agreed between SZC Co. and the Freight Operating Company to enforce these restrictions.

[3.5](#) [Number of Trains](#)

- [3.5.1](#) [No more than four trains per day \(eight movements\) will be run.](#)

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APPENDIX A: UNDER BALLAST MAT SPECIFICATION

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APPENDIX B: NIGHT-TIME SPEED LIMIT ZONES

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[APPENDIX : SAXMUNDHAM TO LEISTON BRANCH LINE LOCATIONS](#)

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Figure C.1: Leiston Restricted Night-time Zone – Early Years

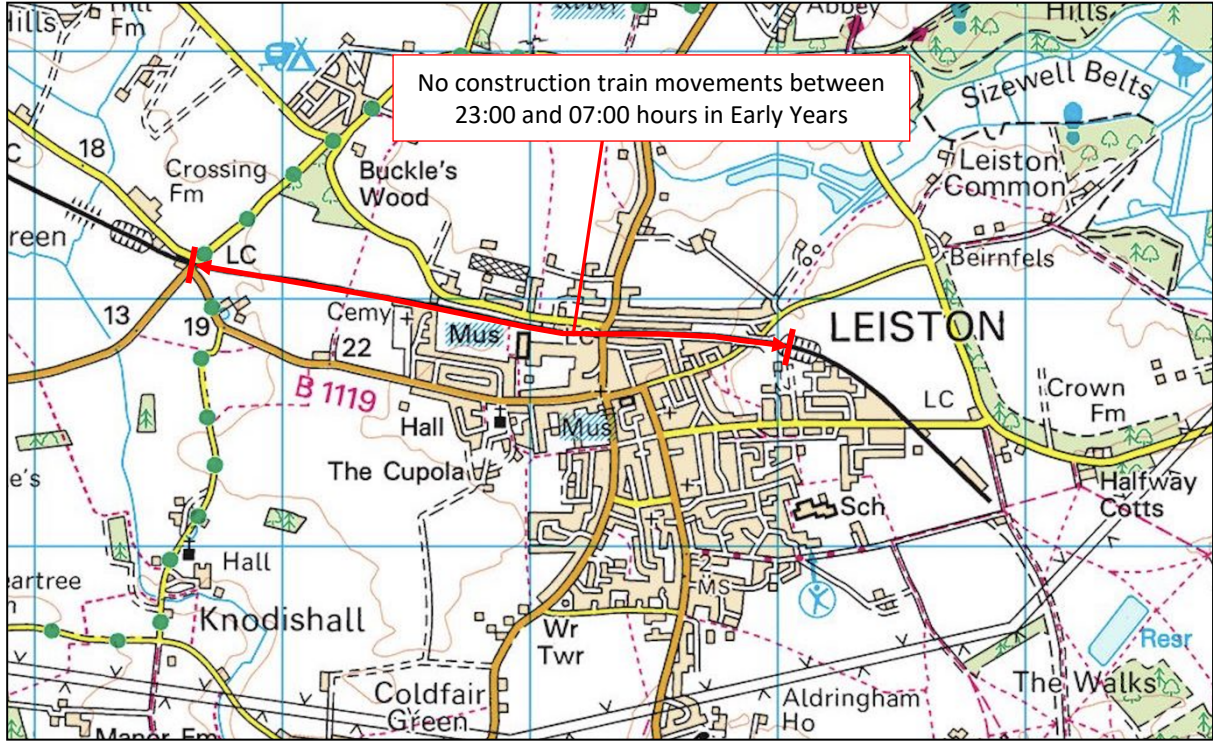
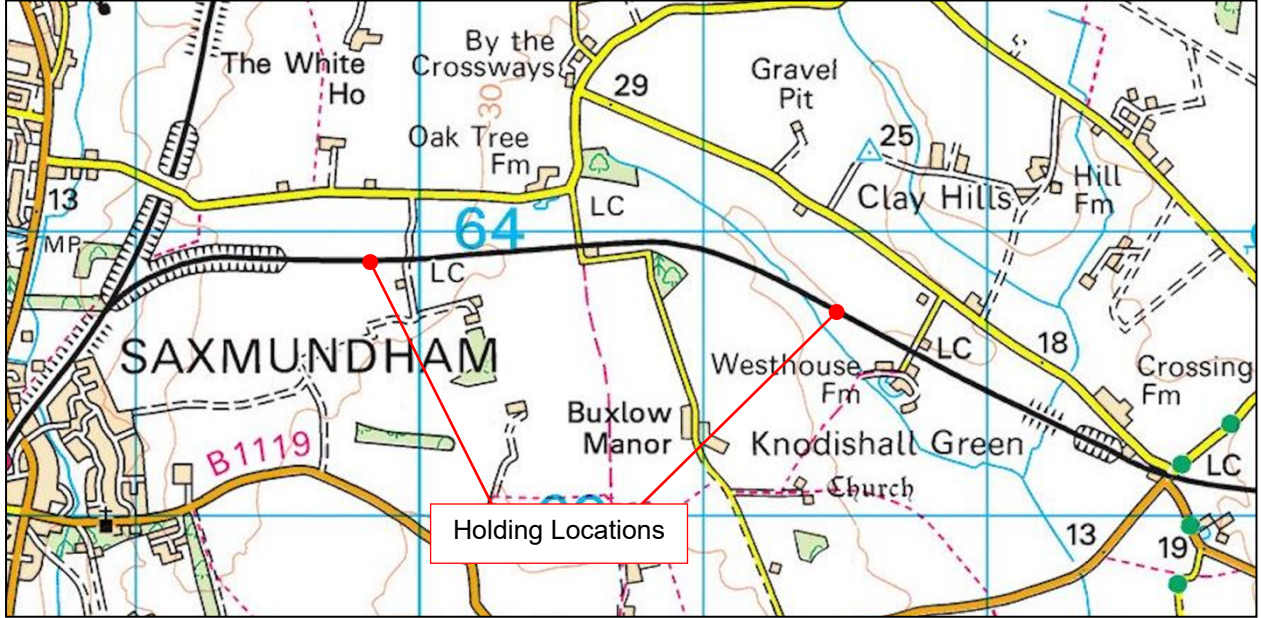


Figure C.2: Saxmundham to Leiston Branch Line Construction Train Holding Areas – Early Years



Note: locations shown are intended to be the locomotive positions for eastbound trains and the rear of the train for westbound trains.