

15 Signature and and

M25 junction 28 improvement scheme TR010029 6.3 Environmental Statement Appendix 6.3: Noise sensitive receptors

APFP Regulation 5(2)(a) Planning Act 2008 Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

> Volume 6 February 2021



Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

M25 junction 28 scheme Development Consent Order 202[x]

6.3 ENVIRONMENTAL STATEMENT APPENDIX 6.3: NOISE SENSITIVE RECEPTORS

| Regulation Number: | Regulation 5(2)(a) |
|--|---|
| Planning Inspectorate Scheme Reference: | TR010029 |
| Application Document Reference: | TR010029/APP/6.3 |
| Author: | M25 junction 28 scheme, Project Team, Highways England |

| Version Date | | Status of Version |
|--------------|------------------|-------------------|
| 2 | 18 February 2021 | Deadline 3a |
| 1 | May 2020 | Application issue |



Pages

Table of contents

Chapter

| | | 9 | |
|------|--|---|---|
| 6. | Noise sensitive receptors | | 5 |
| 6.1 | Introduction | | 5 |
| 6.2 | Predicted daytime road traffic noise levels | | 5 |
| 6.3 | Predicted night-time road traffic noise levels | | 7 |
| Tabl | es | | |

| Table 6.1 Predicted daytime road traffic noise levels at selected locations | 5 |
|---|---|
| Table 6.2: Predicted night-time road traffic noise levels at selected locations | 7 |

Appendix 6.3 Noise sensitive receptors



6. Noise sensitive receptors

6.1 Introduction

- 6.1.1 This document presents the predicted road traffic noise levels in the operation phase of the Scheme in its opening year (2022) and future assessment year (2037) for a selection of sensitive receptors within the study area.
- 6.1.2 The predicted road traffic noise levels for the following traffic scenarios are provided in this document:
 - Do Minimum 2022 (DM 2022) without the Scheme in the opening year
 - Do Something 2022 (DS 2022) with the Scheme in the opening year
 - Do Minimum 2037 (DM 2037) without the Scheme in the future assessment year
 - Do Something 2037 (DS 2037) with the Scheme in the future assessment year
- 6.1.3 Multiple prediction points were used to establish the level of noise impact at sensitive receptors. For example, at least one prediction point was modelled on each façade of a noise-sensitive building. The results presented in this section are the predicted road traffic noise levels at 1m from the worst affected façade and floor (or prediction point) at each of the selected sensitive receptors. The worst affected façade and floor of noise-sensitive properties was the one where the highest noise levels were predicted.
- 6.1.4 For further details about the assessment methodology, modelling assumptions and limitations, and the significance threshold levels used to appraise the Scheme, please refer to the Noise and Vibration chapter (Chapter 6) of ES (application document TR010029/APP/6.1).

6.2 **Predicted daytime road traffic noise levels**

6.2.1 Table 6.1 below shows the predicted daytime (L_{A10,18h}) road traffic noise levels at a representative selection of residential and non-residential sensitive receptors in the study area.

| Noise-sensitive | Road tra | ffic noise l | evels (L _{A1} | Change (dB) | | |
|---|------------|--------------|------------------------|-------------|----------------|-----------|
| receptor | DM 2022 | DS 2022 | DM 2037 | DS 2037 | Short- term | Long-term |
| 1 Maylands Cottages Colchester Road RM3 0AZ | 62.4 | 61.6 | 62.0 | 61.8 | -0.8 | -0.6 |
| 2 Maylands Cottages Colchester Road RM3 0AZ | 63.7 | 63.3 | 63.6 | 63.6 | -0.4 | -0.1 |
| 10 Woodstock Avenue RM3 9NF | 63.6 | 63.3 | 63.7 | 63.7 | -0.3 | 0.1 |
| 42 Woodstock Avenue RM3 9NF | 60.5 | 59.9 | 60.2 | 60.1 | -0.6 | -0.4 |

Table 6.1 Predicted daytime road traffic noise levels at selected locations



| | Road tra | affic noise l | Change (dB) | | | |
|--|------------|---------------|-------------|------------|----------------|-----------|
| Noise-sensitive receptor | DM 2022 | DS 2022 | DM 2037 | DS 2037 | Short- term | Long-term |
| 1 Mawbery Close RM3 3FB | 57.5 | 56.8 | 56.9 | 56.9 | -0.7 | -0.6 |
| 10 Dagnam Park Square RM3 9YP | 54.1 | 53.7 | 54.0 | 54.0 | -0.4 | -0.1 |
| 29 Dagnam Park Drive RM3 9XH | 55.4 | 55.3 | 55.5 | 55.6 | -0.1 | 0.2 |
| 19 Fairford Way RM3 9YR | 55.7 | 55.5 | 55.7 | 55.8 | -0.2 | 0.1 |
| 1A Harold Court Road RM3 0AE | 72.2 | 72.3 | 72.8 | 72.9 | 0.1 | 0.7 |
| 34 Thurso Close RM3 0YS | 60.8 | 60.8 | 61.1 | 61.3 | 0.0 | 0.5 |
| 9 Church Road RM3 0JX | 51.6 | 51.1 | 51.0 | 51.1 | -0.5 | -0.5 |
| 29 Homeway RM3 0HD | 57.3 | 57.0 | 57.3 | 57.4 | -0.3 | 0.1 |
| 33 Maylands Way RM3 0BQ | 58.5 | 57.8 | 57.7 | 57.7 | -0.7 | -0.8 |
| 12 Craven Gardens RM3 0DF | 60.4 | 59.8 | 59.9 | 59.9 | -0.6 | -0.5 |
| Gardens of Peace Muslim Cemetery RM3 0AW | 59.2 | 58.5 | 58.8 | 58.7 | -0.7 | -0.5 |
| 13 Nags Head Lane CM14 5NJ (NIA 5749) | 72.1 | 72.1 | 70.4 | 70.5 | 0.0 | -1.6 |
| 44 Nags Head Lane CM14 5NL | 64.4 | 64.5 | 64.9 | 64.8 | 0.1 | 0.4 |
| 17 Colchester Road RM3 0AW | 74.4 | 74.5 | 75 | 75.1 | 0.1 | 0.7 |
| 60, Brook Street CM14 5ND (NIA 5750) | 75.0 | 74.5 | 73.5 | 73.8 | -0.5 | -1.2 |
| 63 Brook Street CM14 5NA (NIA 13448) | 73.1 | 73 | 73.2 | 73.1 | -0.1 | 0.0 |
| Caravan 1, Putwell Bridge Caravan Park, Colchester Road RM3 0FF | 74.9 | 74.5 | 75.3 | 75 | -0.4 | 0.1 |
| Grove Farm, Brook Street CM14 5NG | 73.4 | 72.5 | 72.3 | 72.5 | -0.9 | -0.9 |
| 31 Wingrave Crescent CM14 5PA | 66.5 | 66.4 | 66.6 | 66.7 | -0.1 | 0.2 |
| 7 Leonard Way CM14 5PD (NIA 5752) | 69.6 | 69.6 | 70.1 | 70.1 | 0.0 | 0.5 |



| Noise-sensitive | Road tra | ffic noise l | Change (dB) | | | |
|---|------------|--------------|-------------|------------|----------------|-----------|
| receptor | DM 2022 | DS 2022 | DM 2037 | DS 2037 | Short- term | Long-term |
| 44 Spital Lane CM14 5PG | 63.8 | 63.7 | 64.1 | 64.2 | -0.1 | 0.4 |
| 12 Talbrook CM14 4PY (NIA 5751) | 63.7 | 63.7 | 64.0 | 64.1 | 0.0 | 0.4 |
| 40 Brook Road CM14 4PT | 57.6 | 57.7 | 58.1 | 58.1 | 0.1 | 0.5 |
| Weald Hall, Wigley Bush Lane CM14 5QP | 67.1 | 67.1 | 67.3 | 67.4 | 0 | 0.3 |
| 119 London Road CM14 4NP | 72.9 | 72.9 | 73.3 | 73.3 | 0 | 0.4 |
| 101 London Road CM14 4NP (NIA 13446) | 73.8 | 73.8 | 74.2 | 74.2 | 0 | 0.4 |
| 2 Westbourne Drive CM14 4PH | 56.1 | 55.9 | 56.1 | 56.2 | -0.2 | 0.1 |
| 16 Mascalls Gardens CM14 5LT | 58.3 | 57.8 | 57.6 | 57.7 | -0.5 | -0.6 |

6.3 Predicted night-time road traffic noise levels

6.3.1 Table 6.2 below shows the predicted night-time (L_{night}) noise levels at a representative selection of residential and non-residential sensitive receptors in the study area.

| Table 6.2: Predicted night-time road traffic noise levels at selected |
|---|
| locations |

| Noise-sensitive | Road traff | ic noise leve | Change (dB) | | | |
|---|------------|---------------|-------------|---------|----------------|---------------|
| receptor | DM 2022 | DS 2022 | DM 2037 | DS 2037 | Short- term | Long- term |
| 1 Maylands Cottages Colchester Road RM3 0AZ | 57.1 | 56.4 | 56.3 | 56.4 | -0.7 | -0.8 |
| 2 Maylands Cottages Colchester Road RM3 0AZ | 57.2 | 56.6 | 56.5 | 56.6 | -0.6 | -0.7 |
| 10 Woodstock Avenue RM3 9NF | 56.3 | 55.9 | 55.9 | 56.0 | -0.4 | -0.3 |
| 42 Woodstock Avenue RM3 9NF | 55.4 | 54.8 | 54.8 | 54.8 | -0.6 | -0.6 |
| 1 Mawbery Close RM3 3FB | 53.7 | 53.1 | 53.1 | 53.1 | -0.6 | -0.6 |
| 10 Dagnam Park Square RM3 9YP | 50.2 | 49.8 | 49.9 | 49.9 | -0.4 | -0.3 |



| Noine consitius | Road traff | Change (dB) | | | | |
|---|------------|-------------|---------|----------------|---------------|------|
| Noise-sensitive receptor | | | DS 2037 | Short- term | Long- term | |
| 29 Dagnam Park Drive RM3 9XH | 49.7 | 49.4 | 49.3 | 49.4 | -0.3 | -0.3 |
| 19 Fairford Way RM3 9YR | 50.6 | 50.2 | 50.1 | 50.3 | -0.4 | -0.3 |
| 1A Harold Court Road RM3 0AE | 61.4 | 61.5 | 61.9 | 62.0 | 0.1 | 0.6 |
| 34 Thurso Close RM3 0YS | 52.9 | 52.7 | 52.8 | 52.9 | -0.2 | 0.0 |
| 9 Church Road RM3 0JX | 48.0 | 47.5 | 47.1 | 47.3 | -0.5 | -0.7 |
| 29 Homeway RM3 0HD | 51.5 | 51.1 | 51.1 | 51.2 | -0.4 | -0.3 |
| 33 Maylands Way RM3 0BQ | 54.3 | 53.6 | 53.3 | 53.3 | -0.7 | -1.0 |
| 12 Craven Gardens RM3 0DF | 55.5 | 54.8 | 54.5 | 54.6 | -0.6 | -0.8 |
| Gardens of Peace Muslim Cemetery RM3 0AW | 54.1 | 53.4 | 53.3 | 53.3 | -0.7 | -0.8 |
| 13 Nags Head Lane CM14 5NJ (NIA 5749) | 66.5 | 66.9 | 65.4 | 65.5 | 0.4 | -1.1 |
| 44 Nags Head Lane CM14 5NL | 56.8 | 56.8 | 56.8 | 56.8 | 0.0 | 0.0 |
| 17 Colchester Road RM3 0AW | 63.8 | 63.7 | 64.1 | 64.2 | -0.1 | 0.3 |
| 60 Brook Street CM14 5ND (NIA 5750) | 69.4 | 69.0 | 68.0 | 68.3 | -0.4 | -1.4 |
| 63 Brook Street CM14 5NA (NIA 13448) | 63.5 | 63.2 | 63.2 | 63.2 | -0.3 | -0.3 |
| Caravan 1 Putwell Bridge Caravan Park Colchester Road RM3 0FF | 64.5 | 64.1 | 64.7 | 64.4 | -0.4 | 0.2 |
| Grove Farm, Brook Street CM14 5NG | 67.6 | 66.9 | 66.7 | 66.9 | -0.7 | -0.9 |
| 31 Wingrave Crescent CM14 5PA | 57.8 | 57.6 | 57.5 | 57.6 | -0.2 | 0.3 |
| 7 Leonard Way CM14 5PD (NIA 5752) | 59.5 | 59.4 | 59.8 | 59.8 | -0.1 | 0.0 |
| 44 Spital Lane CM14 5PG | 55.1 | 54.8 | 55.0 | 55.1 | -0.3 | 0.2 |
| 12 Talbrook CM14 4PY (NIA 5751) | 54.5 | 54.4 | 54.6 | 54.7 | -0.1 | 0.2 |



| Noise-sensitive | Road traffi | Change (dB) | | | | |
|--|-------------|-------------|---------|---------|----------------|---------------|
| receptor | DM 2022 | DS 2022 | DM 2037 | DS 2037 | Short- term | Long- term |
| 40 Brook Road CM14 4PT | 49.1 | 49.0 | 49.3 | 49.3 | -0.1 | 0.2 |
| Weald Hall, Wigley Bush Lane CM14 5QP | 58.2 | 58.0 | 58.1 | 58.1 | -0.2 | -0.1 |
| 119 London Road CM14 4NP | 62.0 | 62.0 | 62.3 | 62.3 | 0.0 | 0.3 |
| 101 London Road CM14 4NP (NIA 13446) | 62.8 | 62.8 | 63.1 | 63.1 | 0.0 | 0.3 |
| 2 Westbourne Drive CM14 4PH | 49.8 | 49.4 | 49.3 | 49.3 | -0.4 | -0.5 |
| 16 Mascalls Gardens CM14 5LT | 53.7 | 53.2 | 52.8 | 52.9 | -0.5 | -0.8 |

© Crown copyright (2021).

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence:

visit **www.nationalarchives.gov.uk/doc/open-government-licence**/ write to the Information Policy Team, **The National Archives, Kew, London TW9 4DU**, or email **psi@nationalarchives.gsi.gov.uk**.

Printed on paper from well-managed forests and other controlled sources.

Registered office Bridge House, 1 Walnut Tree Close, Guildford GU1 4LZ Highways England Company Limited registered in England and Wales number 09346363