

**Leicestershire County Council (A511 Growth Corridor) (Side Roads) Order 2023**

**Leicestershire County Council (A511 Growth Corridor) Compulsory Purchase Order 2023**

PINS Ref: NATTRAN/EM/HAO/299

**Summary of the Proof of Evidence of Matthew Muirhead  
Noise**

**dated 20 May 2024**

## 1 Introduction

### 1.1 Qualifications and Experience

1.2 I, Matthew Muirhead, am the Lead Noise Consultant for the A511 Bardon Link Road. In my role I have led the team undertaking the noise impact assessment.

1.3 Section 1 of my Evidence provides an overview of my qualifications and experience. In summary I have extensive experience in road traffic noise and I am a member of the BSI committee EH/1/2 on transport noise and the ISO TC43/SC1/WG33 on pavement noise and WG42 on vehicle noise.

1.4 This summary proof of evidence (hereinafter referred to as this **Summary**) summarises my Proof of Evidence (my **Evidence**) which is made in support of the Leicestershire County Council (A511 Growth Corridor) (Side Roads) Order 2023 (the **SRO**) and the Leicestershire County Council (A511 Growth Corridor) Compulsory Purchase Order 2023 (the **CPO**) (together, the **Orders**) in connection with the Leicestershire County Council A511 Growth Corridor (also referred to in this Summary and my Evidence as the **Scheme**).

1.5 The facts and matters set out in this Summary are within my own knowledge. The facts set out below are true to the best of my knowledge and belief. Where reference is made to facts which are outside my knowledge, I set out the source of my information and I believe such information to be true.

1.6 I have been assisted by other professional advisors and officers of Leicestershire County Council (the **Council**) with the preparation of my Evidence, some of whom will also provide evidence at the inquiry.

### 1.7 Involvement with the Scheme

1.8 I have been working on the Scheme since 2021. My role has involved:

1.8.1 Scoping the approach to be taken in the noise assessment.

1.8.2 Supervising and checking the noise assessment, including the detailed noise model and final report.

1.8.3 Determining the need for noise mitigation and scoping the environmental barriers to be included with the wider team.

## 2 Scope of Evidence

2.1 The majority of the projects forming the Scheme will give rise to no meaningful change in the current noise environment (please see Section 2 of my Evidence for the relevant details).

2.2 The works to create the Bardon Link Road and the new roundabout on the Bardon Road is the element of the Scheme which has the potential for noise and vibration issues to materially change as a result of the Scheme. As such, my Evidence focuses on this element of the Scheme.

### 3 **Noise and Vibration**

#### 3.1 **Assessment of the Scheme proposals**

3.2 Section 3 of my Evidence provides an overview of the planning policy and guidance relevant to the Scheme including the NPPF, Noise Policy Statement England and Department for Communities and Local Government Planning Practice Guidance on Noise.

#### 3.3 **Construction impacts**

3.4 The noise and vibration impacts of the Scheme were considered in the Noise Assessment submitted as part of the Original Bardon Link Road Planning Application (please see Section 3.13 of my Evidence and document P19 in the List of documents).

3.5 Construction noise and vibration was assessed qualitatively, focussing on the guidance in BS 5228:2009+A1:2014 'Code of practice for noise and vibration control on construction and open sites'.

3.6 The assessment concluded that the impact of construction activities on nearby noise sensitive receptors will vary depending on the nature of the activity in question.

3.7 The potentially worst affected locations are residential properties situated close to the existing A511 on Bardon Road and on John Cooper Way and are likely to experience moderate or major impacts during the daytime, evening/weekend and/or night as a result of construction activities. However, the transitory and short-term nature of the construction activities are unlikely to result in duration trigger thresholds<sup>1</sup> for significant adverse effects being met with respect to evening/weekend or night-time works.

3.8 Given that the major access points to the works will be directly off the A511, which has existing high traffic volumes, significant increases in traffic noise levels as a result of construction traffic are not anticipated.

3.9 In terms of annoyance due to vibration, depending on the size and type of vibratory roller used, there is the potential for the closest properties to the works to experience vibration levels above the SOAEL of 1 mms<sup>-1</sup>, which would be identified as a potential significant adverse effect, assuming the duration trigger thresholds are met. However, the risk of damage to buildings is considered to be negligible.

#### **Operational impacts**

3.10 The operational traffic noise predictions were completed using the standard UK traffic noise prediction methodology (Calculation of Road Traffic Noise). The assessment of the impacts was carried out in accordance with the Design Manual for Roads and Bridges, the standard methodology for assessing road schemes in the UK.

3.11 Significant adverse effects are predicted at 18 properties, covering the closest properties on Bardon Road, John Cooper Way and Cave Crescent, due to increases in road traffic noise from vehicles using the link road. No significant adverse effects, with respect to operational road traffic noise, are expected elsewhere.

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<sup>1</sup> 10 days in any 15 or 40 days over 6 months, as specified in DMRB LA111 Noise and Vibration Revision 2, 2020.

3.12      **Mitigation measures**

3.13      Section 3.24 of my Evidence provides an overview of the mitigation measures that will be put in place.

3.14      A Construction Environmental Management Plan (CEMP) will be submitted pursuant to the Section 73 Bardon link Road Planning Permission. The CEMP will include relevant noise criteria, proposed surveys and a range of best practice measures associated with mitigating potential noise and vibration impacts. Section 3.25 of my Evidence provides a comprehensive list of the matters which will be included in the CEMP.

3.15      During the construction phase of the Bardon Link Road, appropriate mechanisms to communicate with local residents will be set up to highlight potential periods of disruption.

3.16      The Scheme design includes a 1.8m high environmental fence which will help to address the significant adverse effects predicted on Bardon Road and in the vicinity of John Cooper Way.

3.17      **Noise insulation regulations**

3.18      A preliminary assessment identified that no residential buildings are eligible for noise insulation works under the Noise Insulation Regulations. A full Noise Insulation Regulations assessment will be completed in accordance with the timescales set out in the Regulations, following the opening of the Scheme.

4          **Conclusion**

4.1      Although some local properties will be subject to an increase in road traffic noise as a result of the Scheme, given the policy context and the proposed mitigation measures, I consider that the Scheme complies with the relevant policy.