

Technical Note

Project:	73 Kings Road, Leytonstone	Project Number:	102817
Client:	London Borough of Waltham Forest	MLM Author:	James Williams
Technical Note No:	0001	MLM Project Manager:	James Williams
Date Sent:	01/11/2019		

1 Preliminary Noise and Vibration Study

1.1 Introduction

MLM Consulting Engineers Limited have been commissioned by London Borough of Waltham Forest to undertake a desktop noise and vibration study of the site at 73 Kings Road, Leytonstone, E11 1AU. This document sets out the potential risks associated with noise and vibration with regards to residential development at the site, and sets out the likely requirements for detailed assessment in preparation for a planning application.

1.2 Site Location

The site is located within the jurisdiction of Waltham Forest Council, is in an existing residential area, and is currently used for parking by the Ambulance Service. There are residential properties on Kings Road either side of, and opposite the site. 66 Queens Road is a small commercial office building directly behind the site to the south west.

The nearest, and most significant sources of noise are deemed to be the A12 which is located approximately 95m to the east of the site, and the London Underground Central Line, which runs over ground in a location approximately 150m to the east of the site.

The flight path for westerly arrivals into Heathrow Airport lies above the site, however aircraft are generally at an altitude of approximate 9km in this location, and therefore are not expected to be a significant source of noise. The site is well outside of the 54dBA L_{eq} daytime noise contour, and the 48dBA L_{eq} night time noise contour.

Leytonstone London Underground Station is located approximately 150m from the site. At this distance, vibration from passing trains is not expected to be significant on site.

There are no visible signs of any commercial or industrial premises in the area and therefore the noise climate on site is likely to be dominated by road traffic on the A12, and occasional vehicle movements on Kings Road.



Job Title: 73 Kings Road, Leytonstone, E11 1AU
Document Reference: 102817-MLM-ZZ-XX-RP-YA-0001
MLM Reference: KF/102817/JW
Date: 1 November 2019

Figure 1 below shows the site and the surrounding premises and transport network.

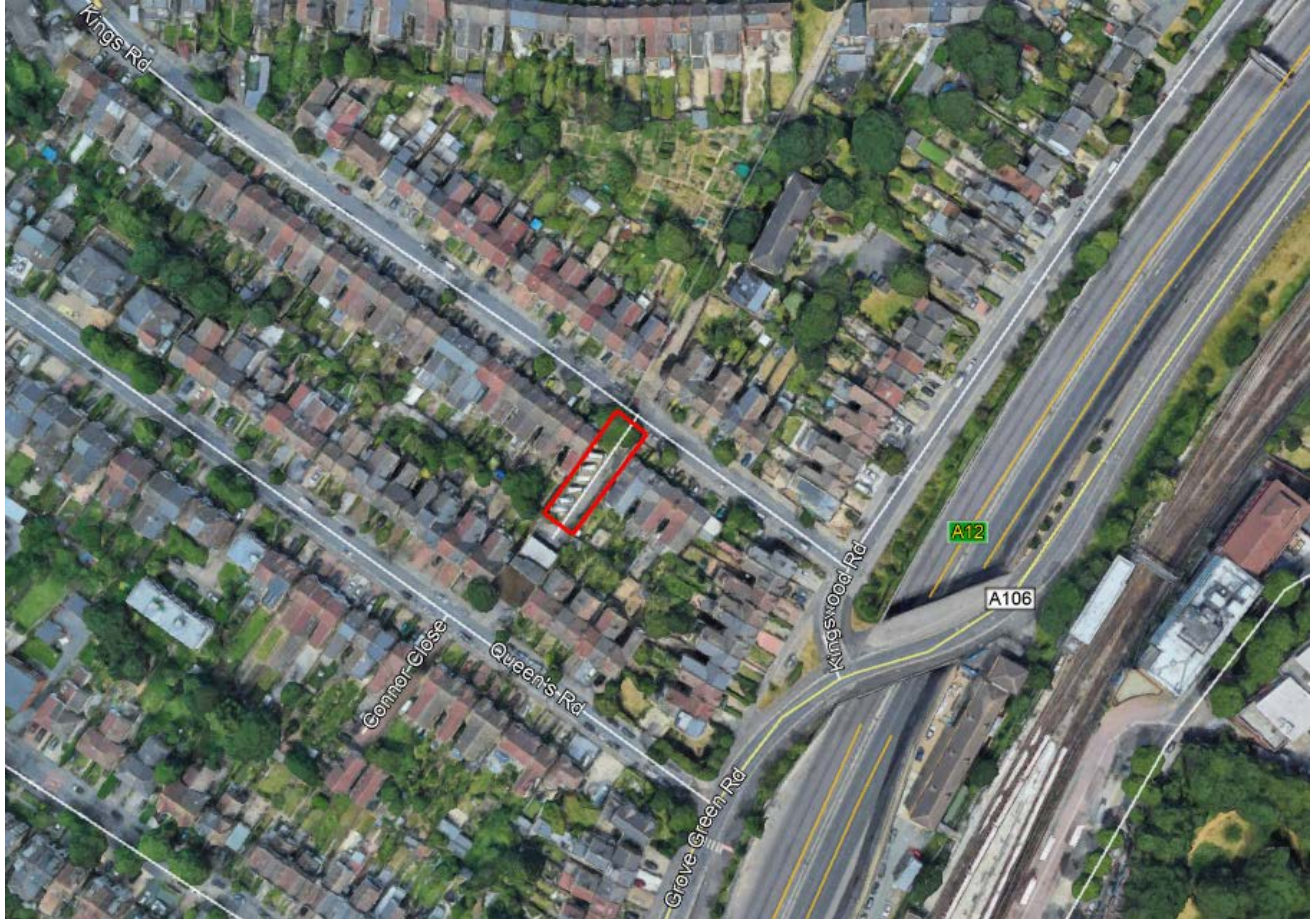


Figure 1: Site Location (approximate red line)

1.3 Applicable Planning Policy

National Planning Policy that will apply to the site with regards to noise and vibration impact

National Planning Policy Framework (2019) - This document makes reference to mitigating and reducing potential adverse impacts resulting from noise to a minimum but it does not set absolute criteria. In this instance the most relevant National and International standards are referred to within this assessment, which provide definitive guidance on noise impacts.

Planning Practice Guidance (2019) - The National Planning Practice Guidance (NPPG) has been revised and updated to be easily accessible and available online. The Noise Guidance advises on how planning can manage potential noise impacts in new development. It sets out when noise is relevant to planning and outlines Observed Effect Levels to determine the noise impact.

London Borough of Waltham Forest Draft Local Plan (July 2019) – Policy 59 states that '*High quality and healthy environments can be encouraged by... supporting new developments that meet appropriate environmental standards to minimise air, water, noise and light pollution, and address the risks arising from contaminated land and hazardous substances, to ensure satisfactory amenity is provided for future and surrounding occupiers*'.



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Policy 62 states 'to deliver high-quality design, development proposals should... Implement design measures that increase climate change resiliency specifically in relation to surface water management, microclimate control, waste management, air and noise pollution'.

Policy 64 states that 'new development should respect the amenity of existing and future occupiers, neighbours and the surrounding area by avoiding adverse impacts through poor microclimate conditions, air pollution, odour, noise and vibration and/or light pollution'.

1.4 Baseline Conditions

Based on the England noise mapping project the noise levels from the A12 and other major roads are below 55dB L_{Aeq} 16 hour during the day and 50dB L_{Aeq} 8 hour at night. However, it is recognized that the England noise map does not include the local road network or other sources. The daytime noise map from Extrium Limited's England Noise Viewer is shown in Figure 2 below.

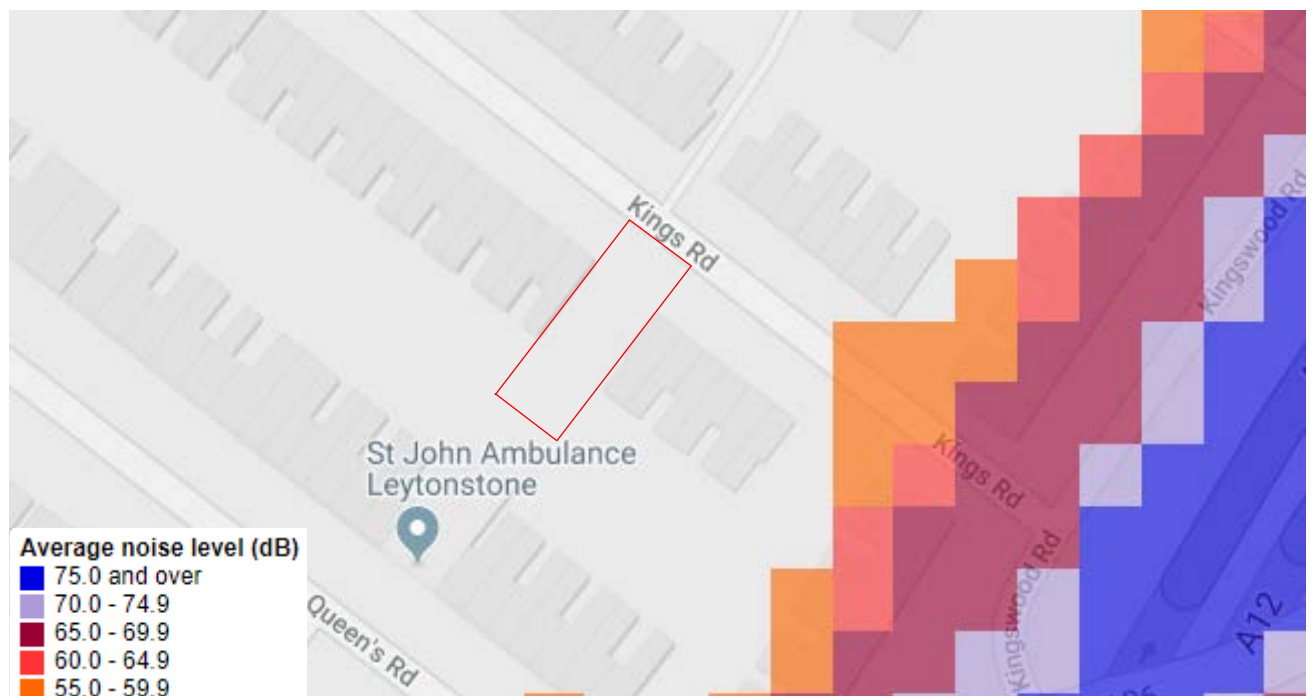


Figure 2: Daytime Noise Contour Map from Extrium Limited (site approximate red line shown)

Traffic noise levels in this region would be considered in the 'low risk' category when assessed in accordance with ProPG: Planning & Noise 2017. ProPG states that 'at low noise levels this level the site is likely to be acceptable from a noise perspective provided that a good acoustic design process is followed and is demonstrated in an acoustic design statement which confirms how the adverse impacts of noise will be mitigated and minimized in the finished development'.

There are no sources of environmental vibration in close proximity of the site and therefore vibration is not considered likely to adversely impact on any proposed development.

1.5 Noise and Vibration Works for Planning

It is recommended that an environmental noise survey is carried out on site, to inform a noise impact assessment written in support of a planning application for residential development.



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Measurements should be carried out by a consultant certified as competent in environmental noise measurement (such as a member company of the Association of Noise Consultants), using instrumentation conforming to Type 1 Specification, as set out in BS EN 61672: 2013: Electroacoustics. Sound Level Meters. Part 1 Specifications and in accordance with the principles of BS 7445: 2003: Description and Measurement of Environmental Noise.

The assessment should consider the following aspects of noise impact:

- Environmental noise impact from the nearby transport network on the proposed development;
- Noise impact of the proposed development on the surrounding area, likely to consist of proposed plant noise only.

A vibration survey, or assessment is not considered necessary for this site.

Provided a good acoustic design process is followed, and the appropriate impact assessment is carried out in support of an application, there are no foreseeable reasons why noise and vibration should prevent residential development at this site.

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