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HOLLINGTON STONE QUARRIES LTD

TEARNE QUARRY

NOISE ASSESSMENT REPORT

September 2016

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HOLLINGTON STONE QUARRIES LTD

Tearne Quarry

Noise Assessment Report

September 2016

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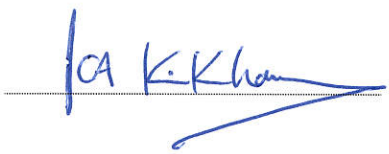

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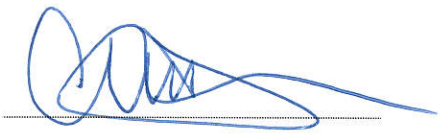

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ST13592-011 Noise Monitoring Locations

1 INTRODUCTION

1.1.1 By email instruction dated 29th July 2016 by Richard Oldham of Hollington Stone Quarries Ltd, Wardell Armstrong LLP was commissioned to undertake a baseline noise assessment at Tearne Quarry, off Hollington Road, Hollington, Staffordshire. The survey work is required to support a planning application for works at the quarry site.

1.1.2 The site is located to the north west of Uttoxeter in Hollington and currently comprises an open stone quarry and associated infrastructure such as car park, offices and plant storage sheds. To the north, the site is bordered by Hollington Road, with agricultural land beyond. To the east, the site is bordered by more agricultural land used for grazing livestock beyond which are residential properties and a public house. To the south, the site is bordered by a densely wooded area, further agricultural land and associated farmsteads. To the west, the site is bordered by a combination of residential properties, densely wooded areas and approximately 200m away, a stone masonry manufacturing facility.

1.1.3 This noise report has been prepared to provide information on the baseline levels of noise in the vicinity of the site and the results of a noise survey carried out in accordance with current guidance.

2 ASSESSMENT METHODOLOGY

2.1 Consultation and Scope of Works

2.1.1 The scope of the noise survey includes consideration of noise at sensitive areas around the site, i.e. residential areas, to establish the baseline noise levels in proximity to the Tearne Quarry site. There were no quarrying activities being undertaken at the site for the duration of the survey.

2.2 Noise Survey

2.2.1 As part of this baseline monitoring assessment, Wardell Armstrong LLP has carried out an attended noise survey to assess the current noise levels at nearby receptor locations.

2.2.2 The potential sources of noise are road traffic on Hollington Road, adjacent to the northern site boundary, the manufacturing facility to the west of site and to a lesser extent the remainder of the local road network.

3 NOISE SURVEY

3.1.1 On the 5th and 8th August2016, Wardell Armstrong LLP carried out a noise survey at the site and at nearby potentially sensitive receptors.

3.1.2 Attended noise measurements were taken at three monitoring locations, which is considered to be representative of residential receptors around the site. The monitoring locations are as follows, and are shown on Drawing Number ST13952-011:

- Monitoring Location 1: In the north western part of the site, at the edge of the 'Old Post Office' residence and approximately 15m from Hollington Road;
- Monitoring Location 2: To the east of the site near to the Star Inn public house, and approximately 20m from Hollington Road; and
- Monitoring Location 3: To the South of the site near to the farmsteads of Lower Whitley Fam and Upper Whitley Farm.

3.1.3 Attended noise monitoring was carried out between 0914 hours and 1251 hours, on 5h August 2016 and between 0914 hours and 1245 hours on the 8th August 2016. The measured noise levels therefore provide an appropriate level of detail of the baseline noise conditions at the site.

3.1.4 The noise measurements were made using Class 1, integrating sound level meters. The sound level meters were mounted vertically on tripods 1.2m above the ground. The sound level meters were calibrated to a reference level of 94dB at 1kHz both before, and on completion of, the noise survey.

3.1.5 On the 5th August, the weather conditions during the survey were as follows:

- Light breeze;
- Dry ground;
- Temperature approximately +24˚C; and
- little cloud cover.

3.1.6 On the 8th August, the weather conditions during the survey were as follows:

- Gentle to moderate breeze;
- Damp ground;
- Temperature approximately +18 ˚C;
- Occasional complete cloud cover frequently clearing to leave a clear sky.

3.1.7 A-weighted[1] L_{eq}[2] noise levels were measured to comply with the requirements of WHO and BS8233. A-weighted L_{90}[3] and L_{10}[4] noise levels, together with the maximum and minimum sound pressure levels, were also measured to provide additional information. The measured noise levels are set out in full in Appendix A.

3.1.8 Attended noise monitoring allows observations and detailed notes to be made of the significant noise sources which contribute to each of the measured levels. The observations identified the following:

Farm Machinery in nearby fields: Noise from tractors mowing and working nearby fields was audible at all locations during monitoring undertaken on 5th August;

Road Traffic Noise: Noise from road traffic and a number of agricultural vehicles on Hollington Road was dominant at both monitoring locations during the daytime baseline monitoring periods; and

Birdsong: Birdsong was frequently audible at all monitoring locations during the daytime periods.

[1] A' Weighting — An electronic filter in a sound level meter which mimics the human ear's response to sounds at different frequencies under defined conditions

[2] L_{eq} — Equivalent continuous noise level; the steady sound pressure which contains an equivalent quantity of sound energy as the time-varying sound pressure levels.

[3] L_{90} — The noise level which is exceeded for 90% of the measurement period.

[4] L_{10} — The noise level which is exceeded for 10% of the measurement period.

4 CONCLUSIONS

4.1.1 Wardell Armstrong has carried out a baseline noise assessment for the Tearne Quarry at a number of potentially sensitive receptor locations near to the site.

4.1.2 The dominant noise source near to the site is road traffic on Hollington Road, together with occasional agricultural machinery which may be operating in the area.

4.1.3 Other minor or infrequent sources of noise were nearby agricultural machinery in operation, birdsong and other animals such as livestock or domestic animals at nearby homesteads.

4.1.4 The measured levels are in accordance with the rural setting of the quarry, away from any major sources of environmental noise.

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