

## Noise Assessment for Residential Development in Wigan

### Background

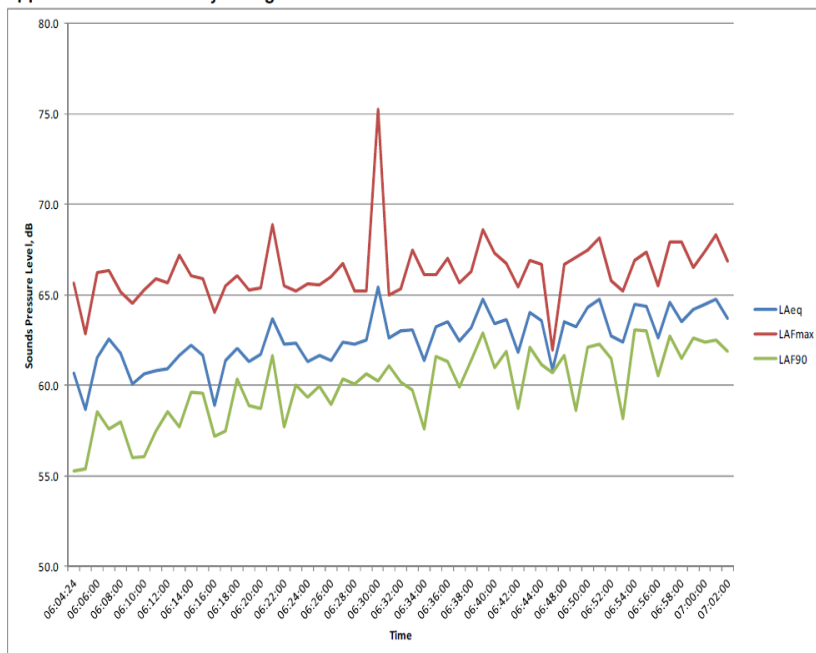
Miller Goodall Ltd (MGL) was appointed to undertake a noise impact assessment to determine the suitability of a site for a proposed residential development. An outline planning application, comprising up to 300 residential dwellings and associated landscaping, was to be submitted for a green-field area located on land to the south of Coldalhurst Lane, Astley.

The A580 East Lancashire Road is located to the immediate south of the site and the A572 Manchester Road to the north west, so potential existed for road traffic noise to impact upon the residents of the proposed new dwellings. A United Utilities waste water pumping station (WwPS), located close to the A580 in the centre of the proposed site, also provided a potential source of disturbance. Works to extend the WwPS west from its current location were also underway at the time of the assessment.

### Action Taken

Noise measurements were taken at various locations and computer software was used to predict the variation in noise levels across the site. Three scenarios were modeled: daytime  $L_{Aeq}$  noise levels affecting the site, night-time  $L_{Aeq}$  noise levels and night-time  $L_{AFmax}$  noise levels.

Appendix 5: Time History of Night-time Sound Pressure Level at Location P5



The models showed that there was relatively little variation in noise levels within the boundaries of the proposed site, with the predicted night-time noise level varying from around 66 dB  $L_{Aeq}$  close to the southern site boundary near the A580, to around 60 dB  $L_{Aeq}$  at the northern boundary near Coldalhurst Lane.

Noise levels were also generally consistent from west to east due to the proximity of the A580, with a small dip in noise levels at the location of the WwPS due to a combination of topography and the shielding effect of buildings. Daytime and night-time  $L_{Aeq}$  levels were also fairly consistent.

Calculations were subsequently carried out to predict likely internal noise levels and external noise levels within amenity areas such as gardens.

### Summary of Findings

As expected, the dominant noise source was found to be road traffic noise from the A580 at the south of the site. At the north west corner of the site, noise from Manchester Road was also evident. The WwPS located in the centre of the site was not a significant noise source, with only the sound of running water and low level pump noise evident when close to the facility; within areas consistent with the likely locations of proposed dwellings, the WwPS was not audible. The findings of the assessment allowed recommendations to be formulated for glazing, ventilation and building envelope constructions to mitigate noise levels across the site and achieve the Local Authority's preferred criteria.

For more information about us, visit our website at [www.millergoodall.co.uk](http://www.millergoodall.co.uk). If you would like to discuss how we can help your project, please contact Miller Goodall on 01204 596166 or email [info@millergoodall.co.uk](mailto:info@millergoodall.co.uk).