Bacton Low Rise

Vicars Road,
Gospel Oak,
North London,
NW5 4PA

Construction Noise Monitoring Report: September 2016

Introduction

Rydon is a successful construction, development, maintenance and management group operating throughout England. We are a multi talented organisation, working across a wide range of market sectors within the built environment. We bring together an immense wealth of experience, expertise and talent, united by common values and principles, focused on partnering with our clients to enhance the quality of living for the communities in which we work.

Rydon has been appointed by the London Borough of Camden for the regeneration of the Bacton Low Rise estate in Gospel Oak for the first stage of a two-stage tender process, which will culminated in a fixed price being submitted in January 2014.

The £50m redevelopment involves the full demolition of the estate, which suffers from inefficient design and is in poor condition, making way for 290 new homes comprising 176 for open market sale, 104 for affordable rent and 10 for shared ownership. Other improvements include a new and altered public realm, landscaping, vehicular and pedestrian links as well as three new retail units.

Demolition started in August with construction commencing at the end of 2013, which will be staged across three phases and built to Code for Sustainable Homes Level 4. The project is due for completion at the end of 2017.

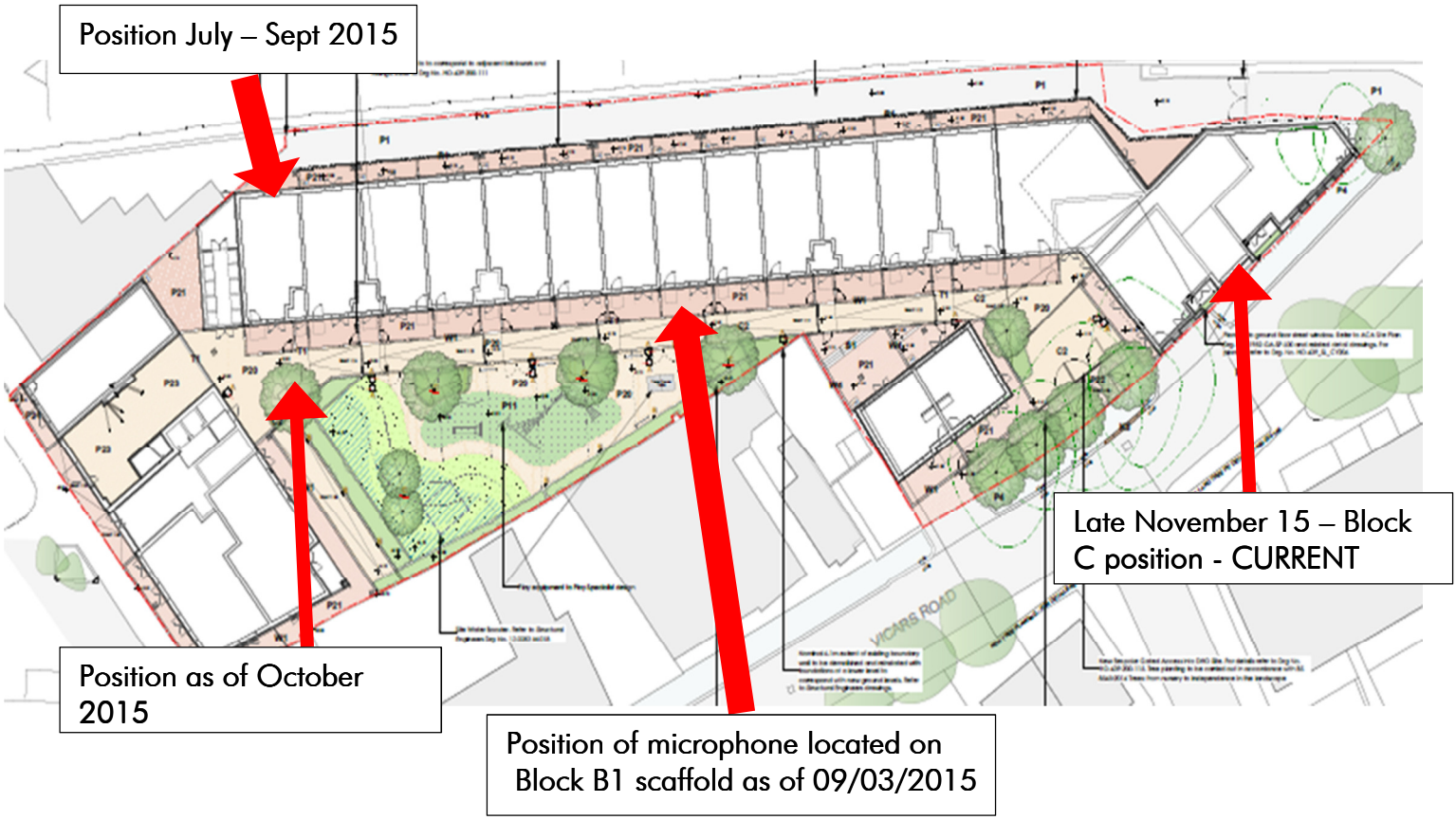
Bacton Low Rise Tenants and Residents Association has led the redevelopment since 2011 and worked with the council to select the architect for the initial designs. The development falls within Camden's Community Investment Programme (CIP), a 15-year plan to invest in schools, homes and community facilities by redeveloping or selling buildings or land that are underused or expensive to maintain. Cabinet Member for Housing Cllr Julian Fulbrook said, "This is a huge step in the regeneration of Gospel Oak, as this is the first time we have been able to build new council homes for rent for nearly 20 years".

In this report you will find our noise monitoring we carry out on site. You'll find information about our noise monitor we use, where it is located out on site and an analysis of results from the month using graphs.

Method

For recording our noise levels on site we are using the Pulsar Model 91. The Model 91 Sound Meter Datalogging is the ideal choice for noise measurements for compliance with the Noise at Work Regulations and EU Directive 2003/10/EC. The sound meter has been designed to be easy to use whilst providing us with the fundamental parameters required complying with current legislation. The instrument is data-logging with the outstanding Pulsar Analyser reporting software package which is where we draw our data from.

Our noise monitor was located on the top lift of scaffold surrounding Block B1's south elevation. It was positioned there as there was a low amount of workers in that area so the equipment is not damaged / moved. It is chained and padlocked to one of our support steel running up the building. It records results every 30 minute intervals 24 hours a day. The noise is recorded in dBc (decibels relative to the carrier) which is the power ratio of a signal to a carrier signal, expressed in decibels. This is what we are interested in seeing. Once the results are recorded, we plug the noise monitor into our computer and download the results. From this we can then see if we have gone over the amount and we can use the results to find out why and how we improve in the future. As of late November 2015, our noise monitor is now located on the 2nd floor of Block C. This has continued to be the position and will continue into 2016.



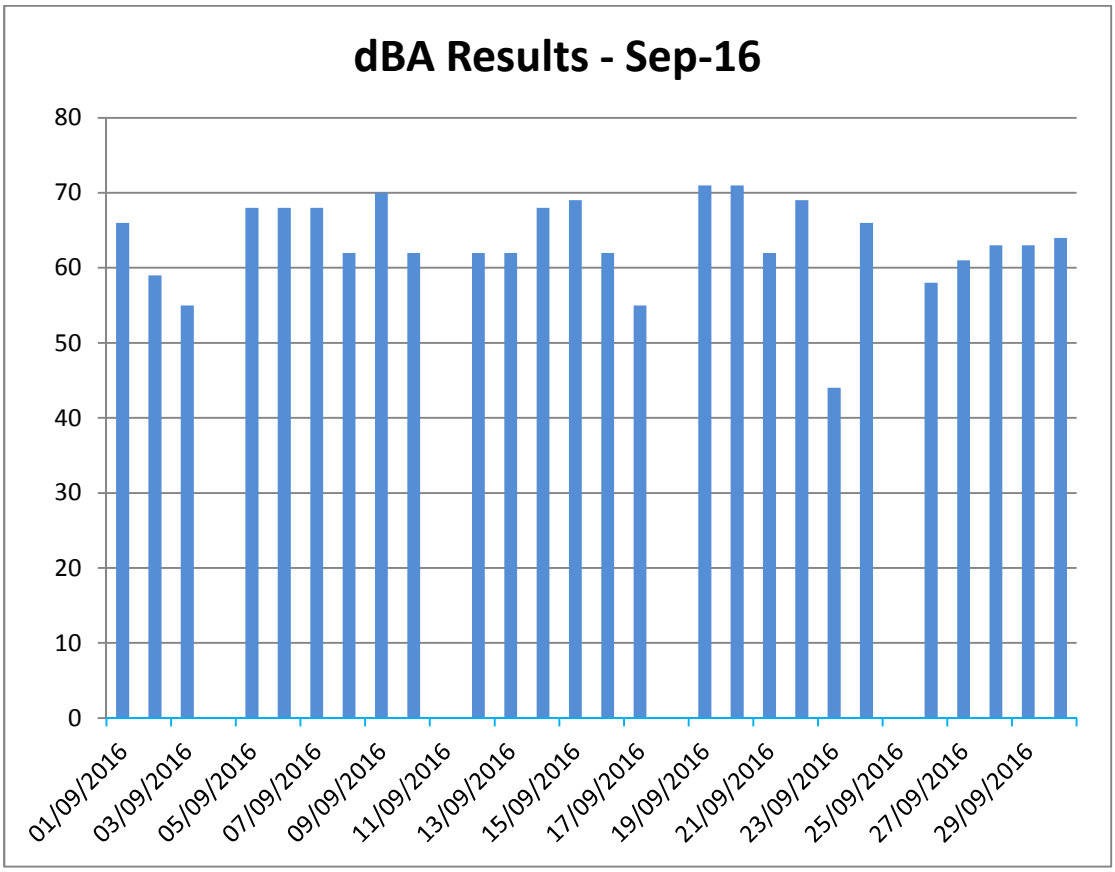
Results

As our data is recorded in a large amount, this result simplifies all the information into a single colour coded bar chart to make for friendly reading. Below is the data from September 2016. It is broken down whereby the highest amount of noise recorded on that day is shown in a breakdown against the number of days worked that week.

Below are the dBA results for the month plotted on a simple bar chart. Leq is the equivalent continuous noise level. Noise levels often fluctuate over a wide range with time. For example in the middle of the night the level might go down as low as 30dB(A) with occasional passing vehicles of 70dB(A) or more. Later comes the dawn chorus followed by the general noises of the day before relative peace returns in the late evening.

"Noise from construction and demolition sites should not exceed the level at which conversation in the nearest building would be difficult with the windows shut. Noise levels, between 07:00 and 19:00, outside the nearest window of the occupied room closest to the site boundary should not exceed:

- 70 decibels (dBA) in rural, suburban areas away from main road traffic and industrial noise;
- 75 decibels (dBA) in urban areas near main roads in heavy industrial areas. These limits are for daytime working outside the living rooms and offices".



Analysis

From the graph recorded, we can see there have been no breaches of the maximum limit throughout the month.

W/C 29/08/16 - Monitored noise levels during this period fell consistently below the daily construction noise limit.

W/C 05/09/16 - Monitored noise levels during this period fell consistently below the daily construction noise limit.

W/C 12/09/16 - Monitored noise levels during this period fell consistently below the daily construction noise limit.

W/C 19/09/16 – Monitored noise levels during this period fell consistently below the daily construction noise limit.

W/C 26/09/16 – Monitored noise levels during this period fell consistently below the daily construction noise limit.

Conclusion

To conclude this report produced a positive outcome with a total of 0 out of 26 working days throughout September exceeding the maximum limit. We will continue to check our working practices however in the meantime we will continue as per our construction plan which is revised monthly. Works to Block C is continuing with external brickwork continuing that has reached 5th floor on all elevations as well as finish works internally such as decorations, testing and finals. We are now operating with approximately 50 people on site each day as Block A and B1 are both handed over. Block B2 timber frame is now complete with the roof finished and felted. Brickwork has commenced to all elevations and the windows have started to be installed.