Ref CMP Q.3 - Environment section (page 36)

Please provide predictions for [noise](http://www.camden.gov.uk/ccm/content/environment/environmental-health--consumer-protection/noise/reducing-noise/noise-from-construction-sites.en?page=2) and vibration levels throughout the proposed works.

The following tables provides a prediction of the airborne noise levels for each activity (as a 10- hour daily estimated LAeq value) at the nearest sensitive facade(s).

The Table 1 shows a daily predicted airborne noise level for each activity at 13-14 King Mews.

| **Activity** | **Start Date** | **End Date** | **Predicted daily Airborne noise Level, dB LAeq,10h (at the nearest sensitive façade)** |
| --- | --- | --- | --- |
| Soft strip out | 18-Apr-17 | 12-May-17 | 74 |
| Demolition phase | 18-Apr-17 | 25-May-17 | 74 |
| Construction of new house, demolition | 18-Apr-17 | 25-May-17 | 74 |
| Roof work | 28-May-17 | 30-Jun-18 | 70 |
| Windows + doors installation | 28-May-17 | 30-Jun-18 | 64 |
| Service Installation | 28-May-17 | 03-Nov-18 | 59 |
| Stairs installation | 28-May-17 | 03-Nov-18 | 70 |
| Wall and floor finishes | 06-Nov-17 | 30-Jun-18 | 56 |
| Furniture fitting | 06-Nov-17 | 30-Jun-18 | 73 |
| Decoration | 06-Nov-17 | 30-Jun-18 | 53 |
| Site clearance and cleaning | 06-Nov-17 | 30-Jun-18 | 52 |

**Table 1: Daily predicted airborne noise level for each activity at 13-14 King Mews**

The Table 2 shows a daily predicted airborne noise level for each activity at the adjoining building at No. 5 Northington Street.

| **Activity** | **Start Date** | **End Date** | **Predicted daily Airborne noise Level, dB LAeq,10h (at the nearest sensitive façade)** |
| --- | --- | --- | --- |
| Soft strip out | 18-Apr-17 | 12-May-17 | 74 |
| Demolition phase | 18-Apr-17 | 25-May-17 | 74 |
| Construction of new house, demolition | 18-Apr-17 | 25-May-17 | 74 |
| Roof work | 28-May-17 | 30-Jun-18 | 71 |
| Windows + doors installation | 28-May-17 | 30-Jun-18 | 68 |
| Service Installation | 28-May-17 | 03-Nov-18 | 63 |
| Stairs installation | 28-May-17 | 03-Nov-18 | 70 |
| Wall and floor finishes | 06-Nov-17 | 30-Jun-18 | 56 |
| Furniture fitting | 06-Nov-17 | 30-Jun-18 | 73 |
| Decoration | 06-Nov-17 | 30-Jun-18 | 52 |
| Site clearance and cleaning | 06-Nov-17 | 30-Jun-18 | 52 |

**Table 1: Daily predicted airborne noise level for each activity at the adjoining building at No. 5 Northington Street.**

The Table 3 shows a daily predicted airborne noise level for each activity at rear residential building at No. 1 Northington Street.

| **Activity** | **Start Date** | **End Date** | **Predicted daily Airborne noise Level, dB LAeq,10h (at the nearest sensitive façade)** |
| --- | --- | --- | --- |
| Soft strip out | 18-Apr-17 | 12-May-17 | 59 |
| Demolition phase | 18-Apr-17 | 25-May-17 | 71 |
| Construction of new house, demolition | 18-Apr-17 | 25-May-17 | 71 |
| Roof work | 28-May-17 | 30-Jun-18 | 70 |
| Windows + doors installation | 28-May-17 | 30-Jun-18 | 71 |
| Service Installation | 28-May-17 | 03-Nov-18 | 69 |
| Stairs installation | 28-May-17 | 03-Nov-18 | 68 |
| Wall and floor finishes | 06-Nov-17 | 30-Jun-18 | 65 |
| Furniture fitting | 06-Nov-17 | 30-Jun-18 | 56 |
| Decoration | 06-Nov-17 | 30-Jun-18 | 62 |
| Site clearance and cleaning | 06-Nov-17 | 30-Jun-18 | 61 |

**Table 1: Daily predicted airborne noise level for each activity at rear residential building at No. 1 Northington Street.**

Please note that all calculations as shown above and in Appendices B1-3 have been calculated using the method and source noise levels stipulated in BS5228. All resultant noise levels have been calculated taking into account the operating hours of the activity/operation/machinery in reference to a 10 hour working day.

Ref CMP Q.4 - Environment section (page 36/37)

Please provide details describing mitigation measures to be incorporated during the construction/[demolition](http://www.camden.gov.uk/ccm/navigation/environment/building-control/demolition/) works to prevent noise and vibration disturbances from the activities on the site, including the actions to be taken in cases where these exceed the predicted levels.

**Acoustic Screening**

Any noisy activity within the King Mew’s elevation and rooftop should be controlled by means of a portable acoustic barrier system, such as the Heras Acoustic Barrier system or similar.

Nominal attenuation will also be provided by the hoarding installed around the perimeter of the front area of the site.

**General**

All operatives on site will be trained to ensure that noise minimisation and best practicable means (BPM) are implemented at all times. Works will be checked regularly by Site Engineers to ensure that BPM are being undertaken and where necessary corrective actions implemented.

Employees must show consideration to the sensitive receptors, including residential neighbours, and must not generate unnecessary noise when walking to and from the site, or when leaving and arriving at work.

The Best Practicable Means (BPM) (as defined in Section 72 of the Control of Pollution Act 1974) will be used to reduce noise and vibration levels at all times. Where practicable the control measures set out in BS 5228:2009 + A1:2014 Part 1, Section 8 will also be implemented.

Recommended noise and vibration control measures include:

* Choice of methodology/technique for operations (including site layout) will be considered in order to eliminate or reduce emissions at sensitive locations
* Fixed items of construction plant will be electrically powered in preference to diesel or petrol driven
* If any specialise fabrication is required, this will be undertaken off-site if possible
* Noisy plant will be kept as far away as possible from sensitive areas
* Each item of plant used will comply with the noise limits quoted in the relevant European Commission Directive 2000/14/EC/United Kingdom Statutory Instrument (SI) 2001/1701 [3] where reasonably available
* Equipment will be well-maintained and will be used in the mode of operation that minimises noise and shut down when not in use
* Vehicles shall not wait or queue on the public highway with engines running (unless the engine is required to power the operation of the vehicle e.g. concrete wagon)
* Where possible deliveries will be arranged on a just-in-time basis in order to prevent vehicles queuing outside site.
* All materials will be handled in a manner that minimises noise

Ref CMP Q.6 - Environment section (page 38/39)

Please provide details on how dust nuisance arising from dusty activities, on site, will be prevented.

General advice for all construction and demolition sites, as recommended within the Mayor’s SPG for Control of Dust and Emissions during Construction and Demolition (July 2014) include the following:

* Dust suppression and screening must be carried out to minimise the transfer of dust into neighbouring properties.
* Dust generated by the construction process will be suppressed via a fine directional spray jet of water aimed at the source, and any material to be transported to be wetted down prior to transit.
* Skips, chutes and conveyors should be completely covered and, if necessary, completely enclosed to ensure that dust does not escape.
* Drop heights should be minimised to control the fall of materials
* Material as cement, sand, and other aggregates are sealed after use and stored in enclosed or bunded containers or silos and not allowed to dry out, unless this is required for a particular process, in which case should additional control measures are taken in place.
* Cutting equipment to be used with water suppressant and/or suitable extract system
* No burning of waste wood or other materials on site
* The stockpiling of dust generating materials on site will be minimised
* Wet brushing techniques will be used for cleaning
* Regular checks for visual observation of dust and soiling within 50m of site
* Screening to be erected surrounding site boundaries where possible

Regular monitoring may be necessary during the construction operations on site, in order to ensure that measured pollutants do not exceed safe levels, in positions agreed with the Local Authority. Furthermore, according to IAQM guidelines, it would be necessary to inspect the area in the local vicinity of the construction works to ensure that surfaces are not soiled by dust emissions from the site, with suitable cleaning offered if necessary. In order to minimise this, it would be recommended that screens are erected around the site boundaries as appropriate.

Ref CMP Q.8 - Environment section (page 40)

35. Please provide details describing arrangements for monitoring of [noise](http://www.camden.gov.uk/ccm/content/environment/environmental-health--consumer-protection/noise/reducing-noise/noise-from-construction-sites.en?page=2), vibration and dust levels.

A monitoring regime would be agreed with the Council prior to commencement of any works. The regime would follow the advice as set out in Section 11 of the CoCP. The following is an example of an appropriate Scope of Works for monitoring.

**Noise monitoring**

Class 1 integrating logging sound level meter Svan 958(A), will be installed with calibration verified (before and after) with a class 1 acoustic calibrator. The meters will be set to measure and store samples of various acoustic parameters such as LAeq, LA90, LA10, and LAmax. SMS alerts would be utilised and data would be downloaded remotely on a regular basis.

It is proposed that the meters are configured to log continuous 15min samples of noise throughout the working day, which will be used to calculate a 1h and 10-hour(daily) LAeq. Daily limits and hourly actions levels will be agreed with the Council prior to the works.

**Vibration Monitoring**

Vibration Monitoring will be undertaken during demolition, piling and excavation with the use of triaxial Accelerometer PCB, measuring the peak particle velocity (ppv) continuously over defined activity periods. SMS alerts would utilised and data would be downloaded remotely on a regular basis.

It is proposed that the meters are configured to log continuous 5min samples of maximum ppv levels throughout the working day, which will be used to calculate a 1h and 10-hour(daily) LAeq. Actions levels will be agreed with the Council prior to the works.