Issue 2

March 2024



# -LGH Newsletter

## Dear Colleagues,

This newsletter provides an update on the School's major campus redevelopment project; the Firoz Lalji Global Hub Redevelopment Project at 35 Lincoln's Inn Fields.

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Minimising the effect of construction dust.	
How construction dust is measured	
Monitoring vibration/structural borne sound transfer	
Anticipated works in the next reporting period	

# Estates Division Firoz Lalji Global Hub Redevelopment Newsletter

# Firoz Lalji Global Hub

Following the award of the design competition held in 2022, a period of detailed design during 2023, and the selection of a reuse/demolition contractor, works for the partial demolition and construction of the Firoz Lalji Global Hub (FLGH) have now commenced. Works started initially to undertake asbestos removal and removal of the soft fixtures and fittings. These will continue from Jan 2024 until April 2024. A planning application has been submitted to Westminster City Council (WCC) and we anticipate receiving it in May 2024, reuse works will then continue. The reuse/demolition phase is when noise, dust and vibration will become more pronounced. Further details can be found later in this newsletter.

The contractor Deconstruct UK Ltd has taken possession of the site and completed the site set up.



# Minimising the impact of disruption from demolition and construction

Demolition and building works are by their nature disruptive. Delivering the new Firoz Lalji Global Hub building is bound to have some impact on staff and students who are occupying and using the SAL Building. The Estates Division has considerable experience of managing similar projects including the New Academic Building, Saw Swee Hock Student Centre, Centre Building and Marshall Building works.

This newsletter sets out:

- What we are doing to minimise the effect of construction dust
- How construction dust is measured
- Monitoring vibration and structural borne sound transfer.
- Anticipated works in the next reporting period

Yours sincerely

K Kınsılla
Director of Capital Development

**Estates Division**Capital Development

# The Firoz Lalji Global Hub Redevelopment



### What is dust?

Throughout the demolition and construction period, it is likely that dust will be created.

Construction Dust is a general term used for what may be found on a construction site. Silica dust is the main type of dust. Silica is a natural mineral present in large amounts in things like sand, sandstone and granite. It is also commonly found in many construction materials such as concrete and mortar.

# **Dust Monitoring and Control**

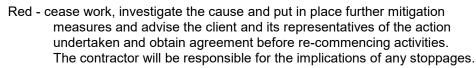
The demolition contractor is required under the Construction Code of Practice (CCoP) published by Westminster City Council to undertake real time dust monitoring throughout the duration of the contract. The CCoP requires the contractor to use a dust monitoring system which uses data logging dust meters at up to 10 pre agreed locations within adjacent occupied space. Data will be accessed remotely and recorded 'real-time' through an accessible online portal that will alert registered users when the following exceedance levels are met.

Amber – Particulate Matters (PM10) 40 µg/m3

Red - Particulate Matters (PM10) 50 µg/m3

The mitigating actions will be:

Amber - continue work but investigate the cause of the exceedance and put in place further mitigation measures and advise the client and its representatives of the action undertaken.





The Employer reserves the right to terminate the contract for failure to adequately address Red exceedances on more than 3 consecutive occasions from any individual source of dust during construction.

### **Proposed Monitoring Locations**

The proposed dust monitoring locations will be subject to an assessment on site by monitoring professionals to identify the practicality of the proposed locations.

Locations have been proposed keeping in mind the prevailing wind direction, and the height, location and proximity of sensitive receptors.

Title:

Noise, Dust and Vibration Monitoring Positions

Project:

Lincoln's Inn

DMP1

VMP1

Royal College of Surgeons

VMP2

NMP2

NMP2

NMP2

NMP2

NMP2

NMP2

Lincoln

Square

Quarter

Lincoln

Square

Quarter

Lincoln

Square

Quarter

Deconstruct

Title:

Noise, Dust and Vibration Monitoring Position (Nepp)

Quarter

Deconstruct

Lincoln

Square

Quarter

Quarter

DMP2

NMP2

NMP2

Lincoln

Square

Quarter

DMP3

Lincoln

Square

Quarter

DMP3

Lincoln

Square

Quarter

DMP4

DMP5

DMP5

DMP6

Square

Quarter

DMP6

DMP6

DMP7

D

The proposed locations are shown in adjacent plan and identified as numbers DMP1 and DMP2.

Proposed monitoring locations were selected based on the following:

 DMP1 – Located upwind of the prevailing wind direction on the site boundary, along Lincoln's Inn Fields. Close to residential receptors.

 DMP2 – Located downwind of the prevailing wind direction on the site boundary, along Portugal Street. Close to residential receptors.

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# The Firoz Lalji Global Hub Redevelopment



### What is structural borne sound?

According to the British Regulations Approved Document E, structure-borne sound is defined as 'sound that is carried via the structure of a building'. For example, the noise of demolition in the basement of a building may be heard in adjacent buildings and is classified as structure-borne sound.

Structural borne vibration can be a serious concern for any building or structure within or adjacent to a construction zone. These structures may be potentially impacted by vibrations emanating from construction activities such as demolition, compaction, excavation, blasting, pile-driving, and operating heavy earth-moving equipment. In extreme cases, the vibration can cause damage to adjacent buildings and create discomfort and annoyance for building occupants.

Vibration is normal and is an expected consequence of demolition. However, staff and students in buildings surrounding the Firoz Lalji Global Hub site may feel vibration and comment on it and be concerned. Any vibration will be monitored and measured to ensure it is within expected and normal limits.

# **Typical vibration monitor**

During the demolition period the contractor (Deconstruct) will be setting up vibration monitors to monitor adherence to British Standards and to Westminster City Council prescribed limits. The monitors will indicate to the contractor when vibration is close to the limits so they can change the method of demolition accordingly.

# Anticipated works in the next reporting period.

**Soft Demolition:** Internal works to strip out the building with recycling of some materials and safe disposal of others including asbestos. This work has minimal impact on surrounding buildings although vehicle movements may increase. – completion May 2024

Planning approval will be finalised 21 May 2024.

**Hard Demolition:** Following the planning approval the hard demolition will commence. This is the breaking up and removal of the building structure down to basement level. Noise and dust mitigation measures will be completed prior to the start of this element of the work which has the potential to be disruptive to neighbours.

Scaffold protection screens will be installed to the front elevation from level 5 upwards of 35 Lincoln's Inn Fields, full height to the rear, full height to the east elevation and full height around the perimeter of the lightwells. A full height scaffold and noise screen will be installed to the west elevation of the Sir Arthur Lewis Building adjacent to 35 Lincoln's Inn Fields.

The contractor's stipulated working hours are:

Between 08:00 and 18:00 Monday to Friday

Between 08:00 and 13:00 on Saturday

No work will be undertaken outside the stipulated core hours on weekdays or Saturdays, and no work is to be undertaken on Sundays and Bank holidays, without prior arrangement with the LSE and sanctioned by the Environmental Health Officer. This may be granted for certain operations which are influenced by other factors e.g. tower crane erection requiring road closures or transport escorts as dictated by the Police, concrete pours that need to be completed and fitting out work within buildings.

A tower crane will be installed on site in June 2024 which will likely include a road closure to part of Lincoln's Inn Fields, communications and a detailed plan of any road closures will be sent out once the dates have been confirmed.

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# The Firoz Lalji Global Hub Redevelopment



# How long will demolition take?

The bar chart in Table 1 shows the demolition phase taking approximately 34 weeks i.e. approximately 9 months.

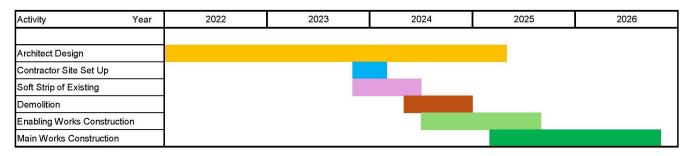


Table 1

There are several stages to the demolition works which will have differing impacts on the School. These are summarised in table 2 below.

Activity	Noise Impact (key - Image1)	Noise Level Comment	Approximate Timescale
	and the last		
Contractor Site Set Up	Quiet	Within Background noise levels	Circa 5 Weeks Commencing December 2023
Soft Strip of Existing	Quiet to Moderate	Within Background noise levels	Circa 20 Weeks Commencing December 2023
Demolition	Moderate to Very Loud	Exceeds background noise levels	Circa 34 Weeks Commencing May 2024
Façade Removal	Moderate to Very Loud	Exceeds background noise levels	Circa 8 Weeks Commencing October 2024
Enabling Works Construction	Moderate to Very Loud	Likely to exceed background noise levels	Circa 52 Weeks Commencing August 2024
Main Works Construction	Moderate to Very Loud	Likely to exceed background noise levels	Circa 80 Weeks Commencing March 2025

Table 2



If you require further information please email: <a href="mailto:estates.35l@lse.ac.uk">estates.35l@lse.ac.uk</a> or contact Francesco Biancelli, Principal Project Manager: f.biancelli@lse.ac.uk

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