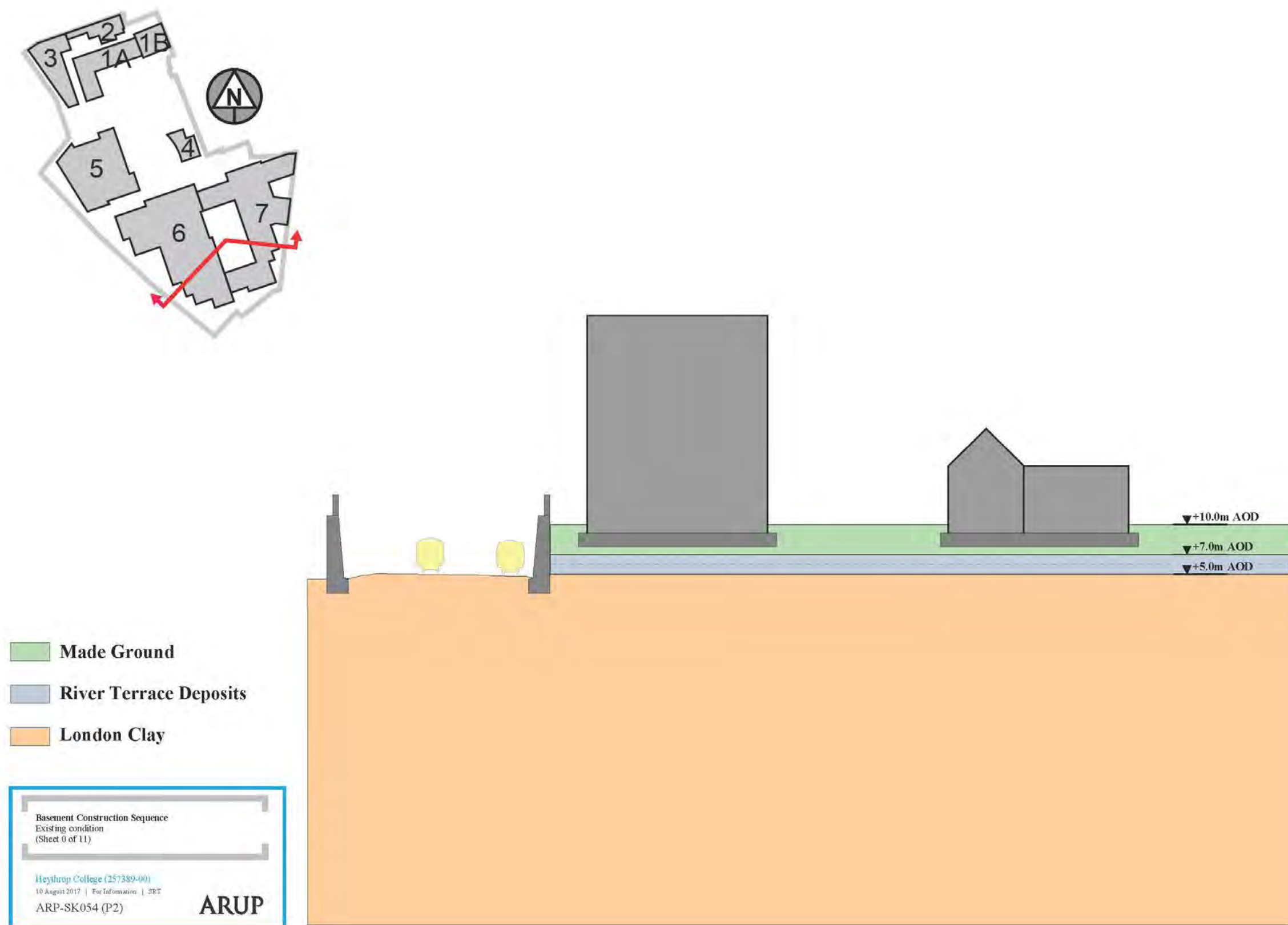
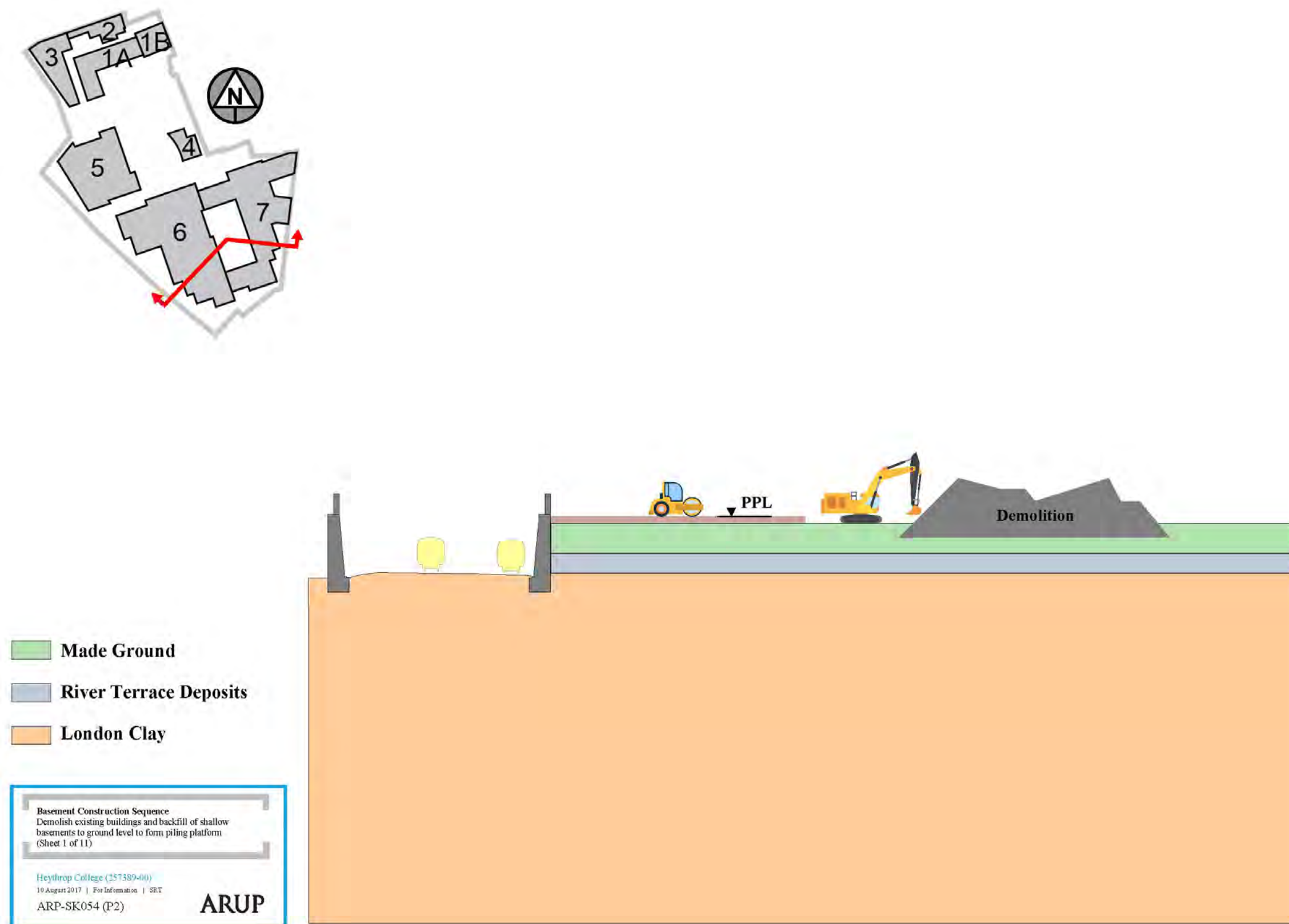
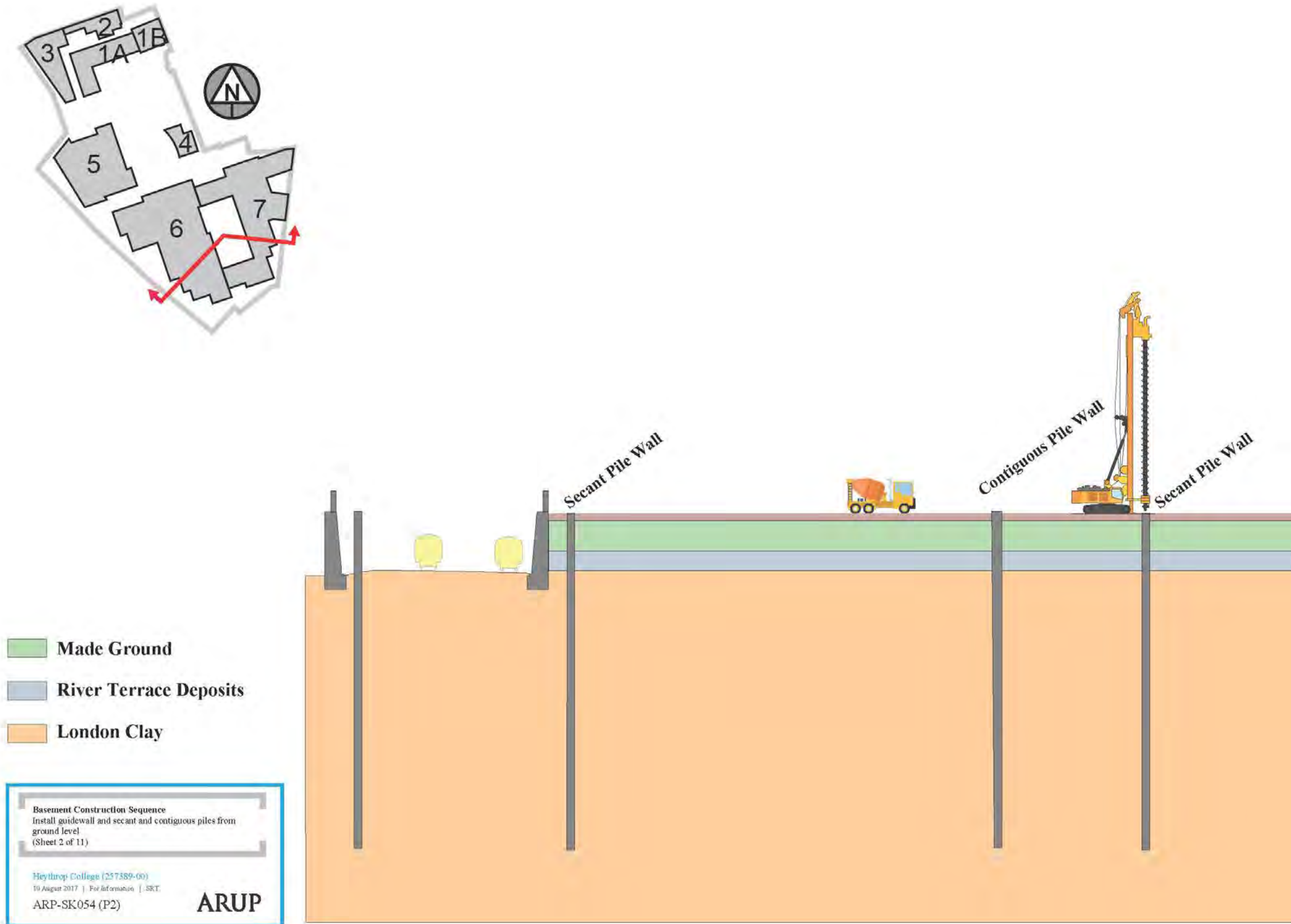
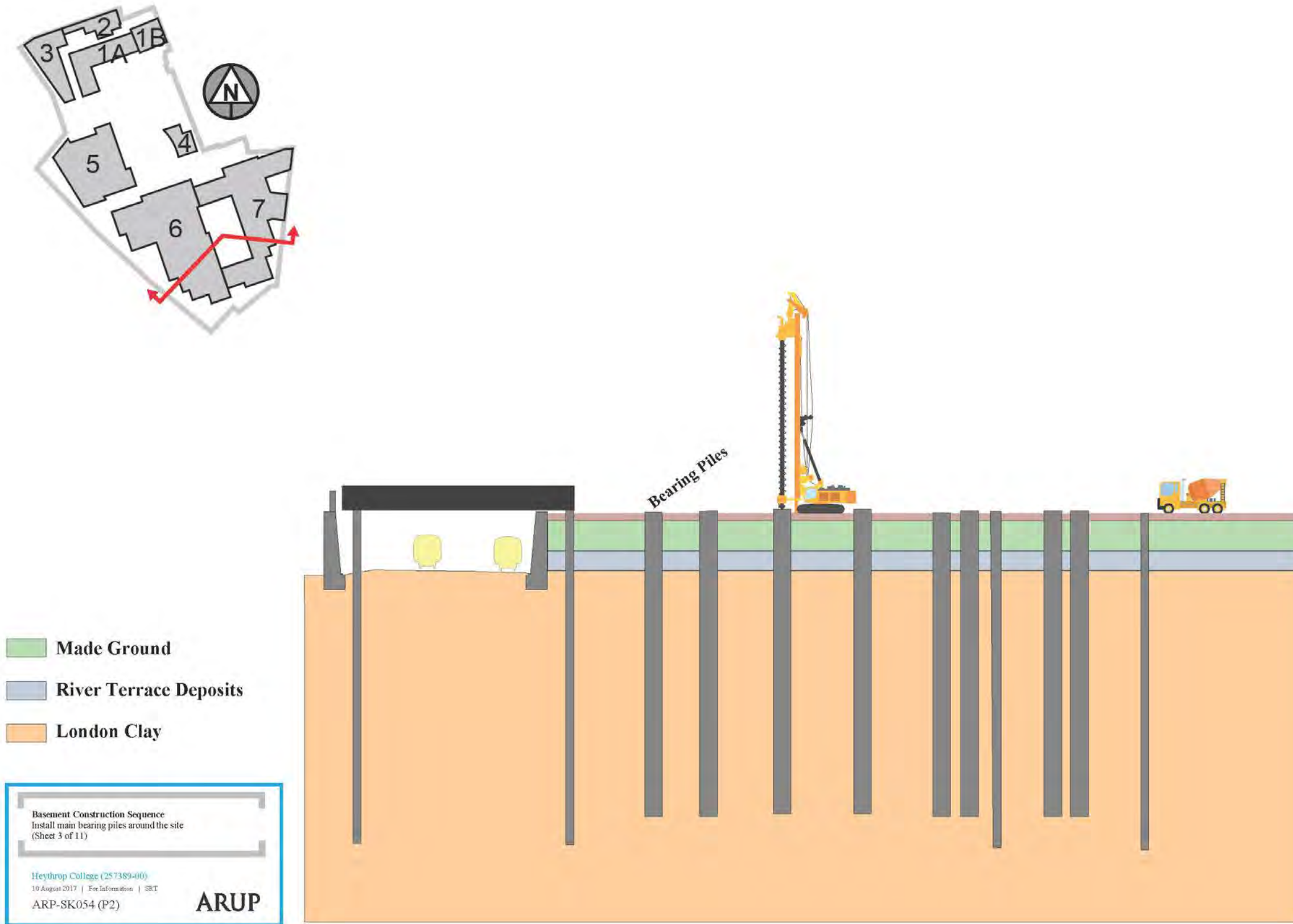


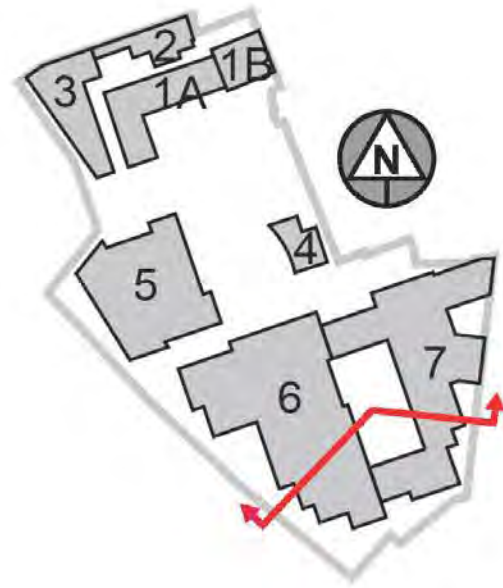
**APPENDIX D: CONSTRUCTION SEQUENCE
SLIDES**







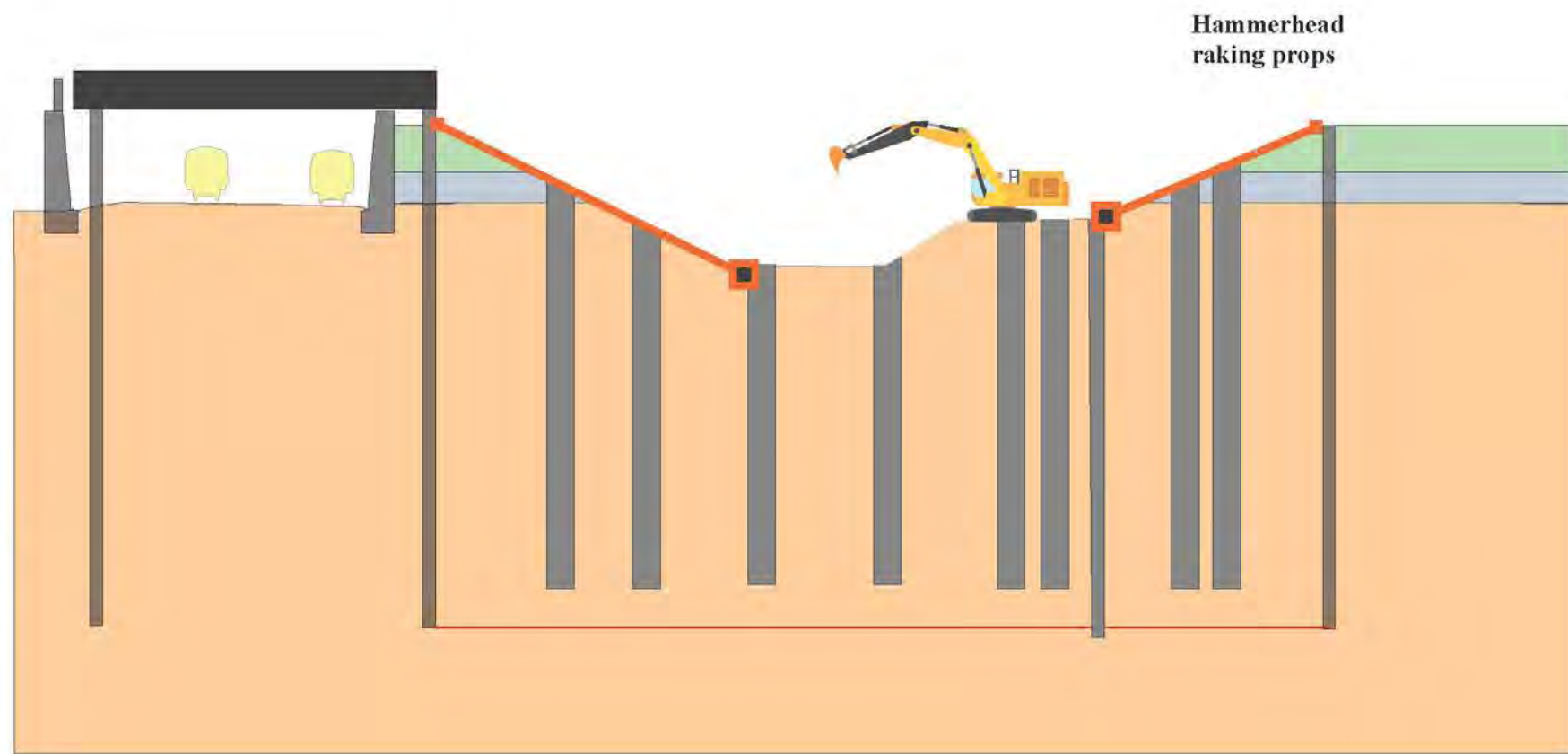


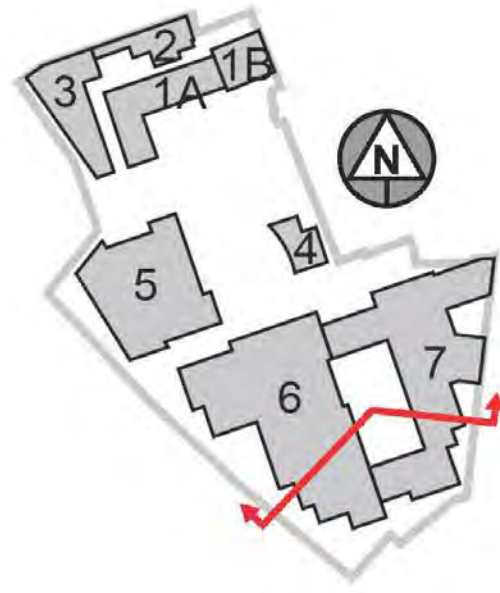





- Made Ground
- River Terrace Deposits
- London Clay

Basement Construction Sequence
Excavate to 1m BGL to install temporary raking prop and construct capping beam
(Sheet 4 of 11)

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ARP-SK054 (P2)




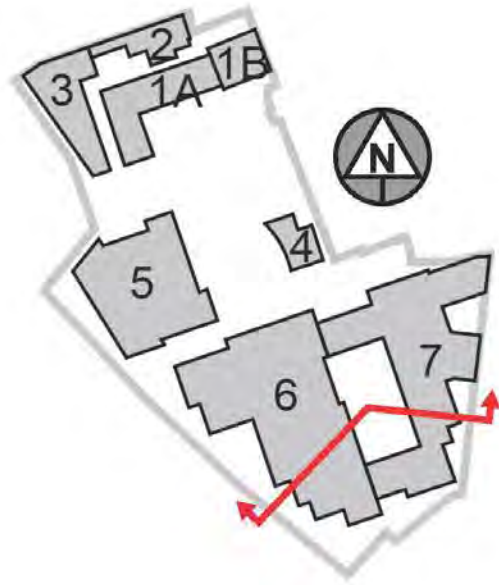





-  **Made Ground**
-  **River Terrace Deposits**
-  **London Clay**

Basement Construction Sequence
Excavate to B1, breaking down existing piles and install temporary props
(Sheet 5 of 11)

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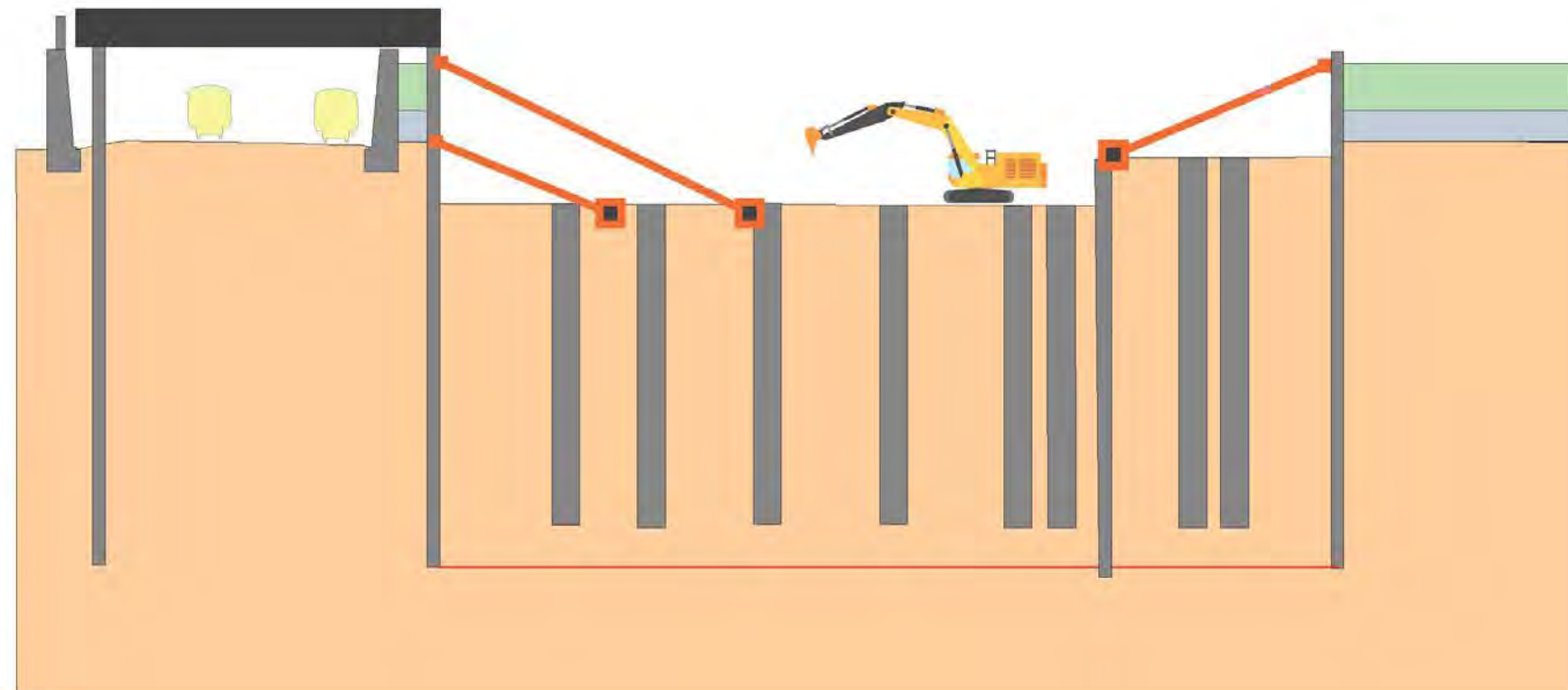



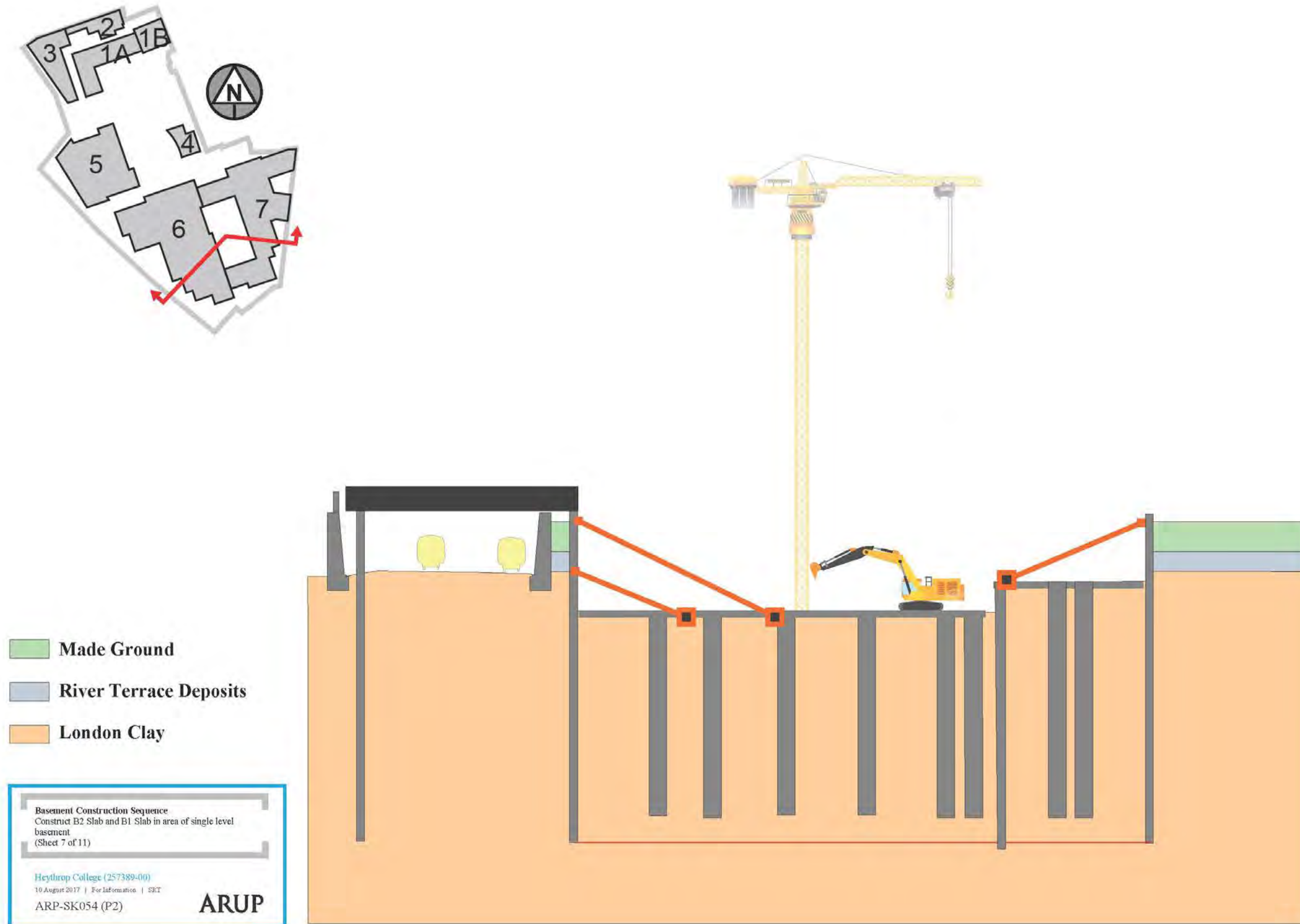


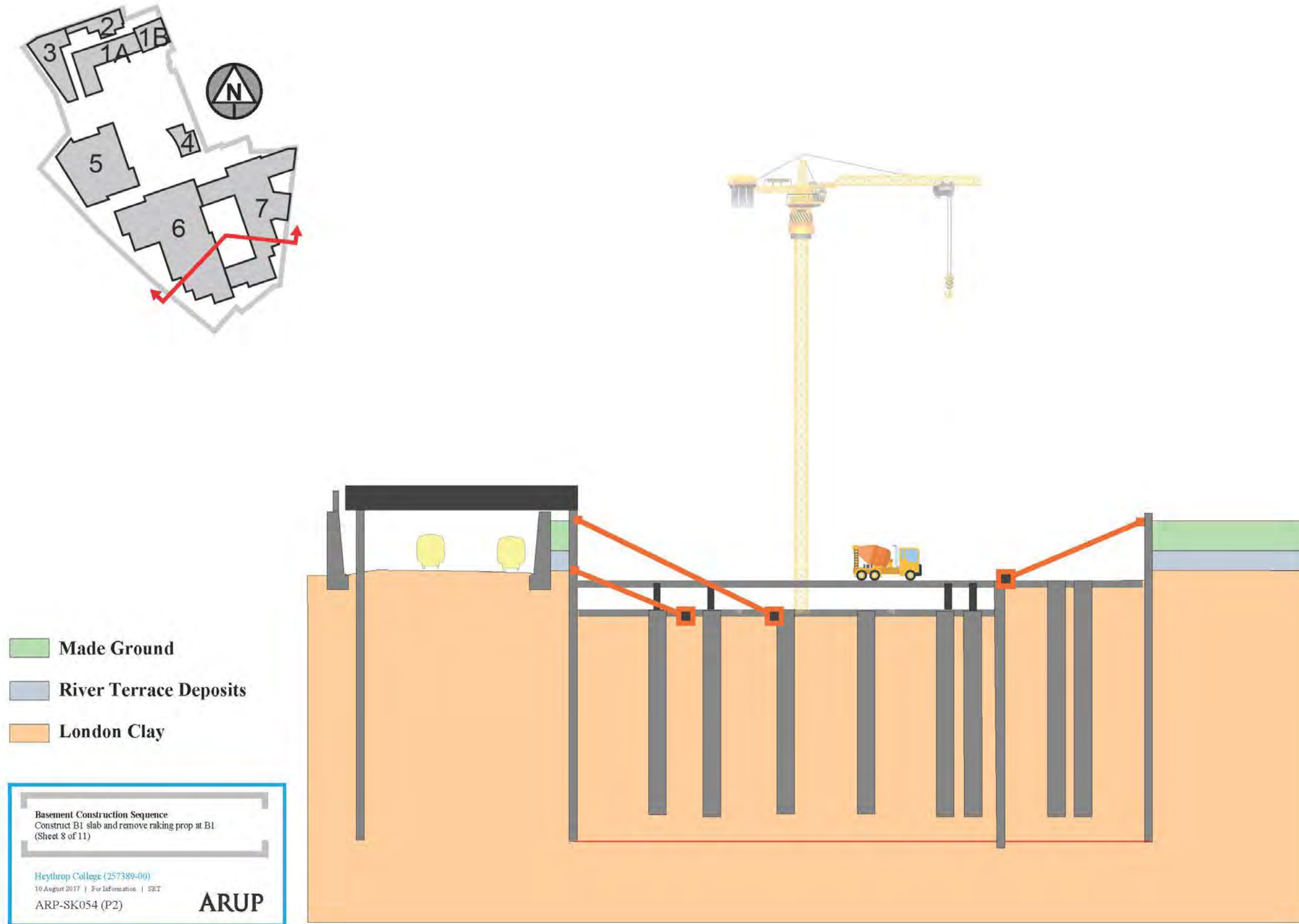
-  **Made Ground**
-  **River Terrace Deposits**
-  **London Clay**

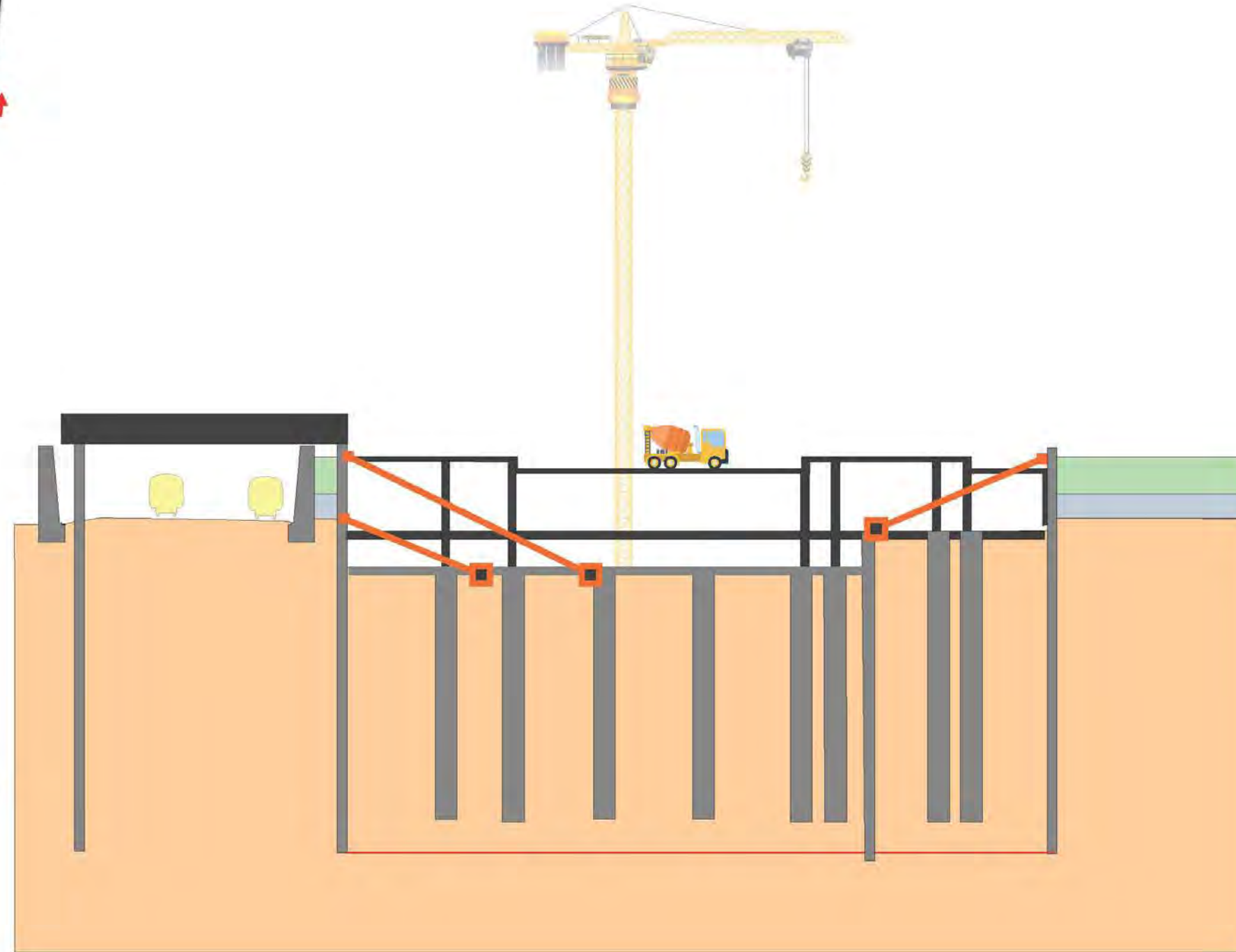
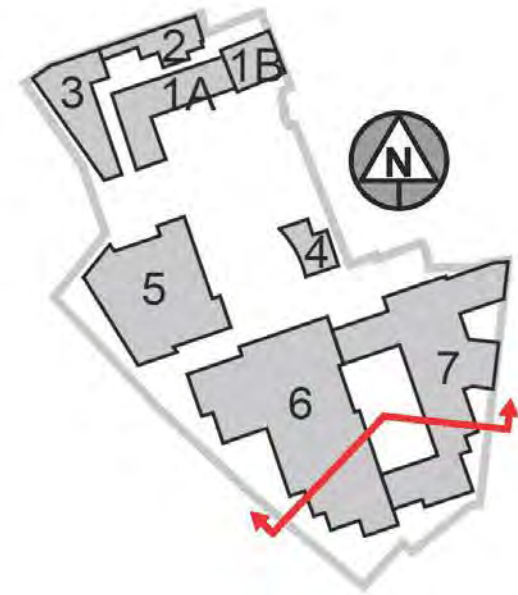
Basement Construction Sequence
Install temporary raking prop at +5.5mOD and excavate to formation level
(Sheet 6 of 11)

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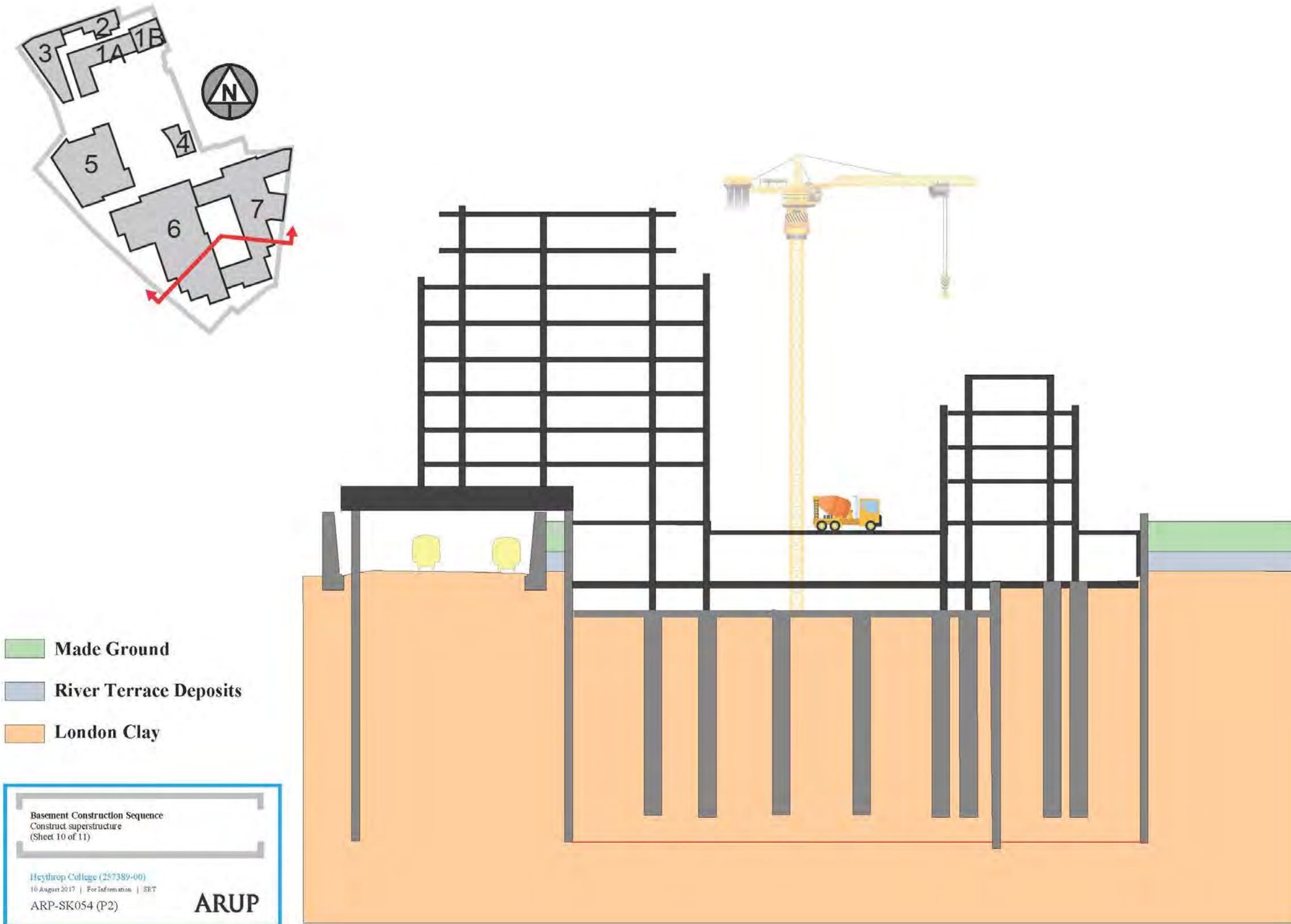


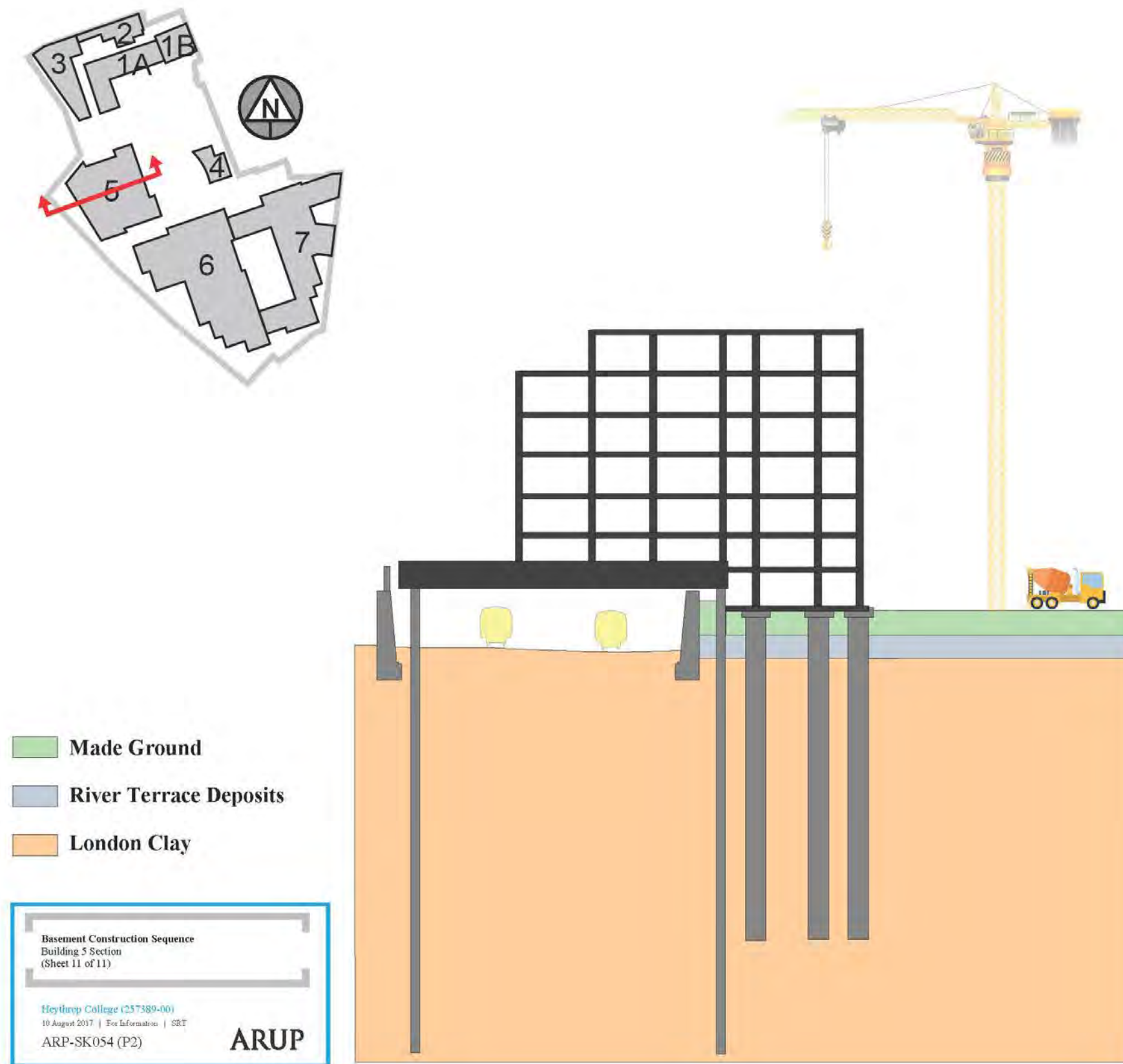


- Made Ground
- River Terrace Deposits
- London Clay

Basement Construction Sequence
Construct GF slab and remove GF prop
(Sheet 9 of 11)

Heythrop College (257389-00)
10 August 2017 | For Information | SRT
ARP-SK054 (P2)





**APPENDIX E: BASELINE NOISE AND
VIBRATION MONITORING REPORT.**

SANDY BROWN

Consultants in Acoustics, Noise & Vibration

Memo: M002-B **Date:** 3 January 2018

Project: 17430 **Pages:** 4

From: Ben Southgate **Reviewer:** Robert Burrell

Heythrop College

Baseline noise and vibration monitoring

Introduction

Sandy Brown has been commissioned by Leopard UK Kensington Propco Limited to provide acoustic advice in relation to the proposed development at Heythrop College, London.

An environmental noise and vibration survey has been carried out, the purpose of which was to establish the existing ambient and background sound levels in the vicinity of the site and nearby noise sensitive premises, as well as the vibration levels affecting the site.

This memo presents a summary of the noise and vibration survey methods and key results of the surveys.

Further details on the survey methodology and results are provided in Sandy Brown report 17430-R03-A *Environmental noise and vibration survey report*, dated 2 January 2018.

Method

Measurements of noise and vibration have been undertaken at multiple locations around the site. The locations of the various measurements are shown in Figure 1. The measurement locations relate to the following measurements:

- 'A', 'B' and 'C': Unattended noise measurement position over 15 minute intervals for a minimum of 7 days at each position
- 1-6: Attended noise measurement position over 5 minute intervals for a minimum of 15 minutes at each position
- V1-V4: Vibration measurement position

Measurements were carried out on multiple dates between 27 October 2017 and 17 November 2017.

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Figure 1 Site map indicating noise and vibration measurement positions (courtesy of Google Earth Pro)

Results

Noise surveys

Based on the results of the baseline noise survey, the existing noise levels at each of the measurement periods are shown in Figure 1.

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Table 1 Summary of baseline noise data for daytime measurements

Measurement position	Baseline noise level (dB)	
	L_{Aeq}	Typical $L_{A90,15min}$
Unattended position A	69 ¹	48 ³
Unattended position B	67 ¹	51 ³
Unattended position C	50 ¹	40 ³
Attended position 1	57 ²	49 ¹
Attended position 2	63 ²	51 ⁴
Attended position 3	55 ²	45 ⁴
Attended position 4	55 ²	41 ⁴
Attended position 5	57 ²	46 ⁴
Attended position 6	55 ²	44 ⁴

¹ Logarithmic average noise levels over daytime period

² Logarithmic average of all noise levels measured at each location

³ Representative background noise level in accordance with BS4142

⁴ Arithmetic average of all noise levels measured at each location

Vibration survey

The minimum, maximum and average baseline vibration PPV levels measured at each vibration measurement position during the vibration survey are shown in Table 2.

Table 2 Summary of baseline vibration PPV data

Vibration measurement position	Peak Particle Velocity (mm/s)		
	Minimum	Maximum	Average
V1	0.200	0.531	0.347
V2	0.581	1.249	0.852
V3	0.066	0.146	0.105
V4	0.074	0.154	0.106

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Construction noise and vibration monitoring

In order to ensure that construction noise and vibration is adequately managed, the requirements within the Royal Borough of Kensington & Chelsea’s Code of Construction Practice on minimizing noise (April 2016) will be adhered to.

In order to do this, monitoring will be undertaken at strategic points around the site. This will be formed from a minimum of two unattended noise monitors as well as some attended noise monitors, as detailed below. However, additional noise and/or vibration monitors may also be used, based on the layout of the site in relation to works causing high levels of noise and vibration.

Unattended noise monitoring

The monitoring will include:

- Installation of two semi-permanent Class 1 sound level meters at appropriate site boundary locations, continuously monitoring a range of noise metrics, including L_{max} , L_{min} , L_{Aeq} , L_{A90} at 15 minute intervals.
- Alerts via SMS when levels breach specified noise levels (first Action Trigger Level 73 dB, $L_{Aeq,1h}$) or are reaching the daily noise levels (70 dB, $L_{Aeq,1h}$), allowing site staff to undertake immediate investigation and take remedial action where necessary.
- Provision of weekly/monthly reports to the Council on request, detailing daily noise emissions, and listing and discussing of any noise level triggers by text alert.

Attended noise monitoring

This will include attended noise monitoring at representative locations for a period of one hour per month for the duration of the high impact work elements of a project.

Unattended vibration monitoring

Where vibration monitoring is considered necessary the monitoring will include:

- Installation of two semi-permanent vibration level meters at appropriate site boundary locations, continuously monitoring Peak Particle Velocity (PPV) levels.
- Alerts via SMS when levels breach specified PPV levels (Action Trigger Levels of PPV 3.0 mm/s and PPV 5.0 mm/s) allowing site staff to review works, methodology and undertake remedial action where necessary.
- Provision of weekly/monthly reports to the Council on request, detailing daily maximum PPV levels, and listing and discussing of any vibration level triggers by text alert.