Rev3 – JR 19th July 2017

**SOAS NORTH BLOCK SENATE HOUSE: LTHW Remedial Works**

**Overview**

Following the refurbishment project recently completed at SOAS North Block, Senate House (See drawing [SOAS-SITE-01-001.pdf](file:///C%3A%5CUsers%5CJason.Roles%5CDropbox%20%28Graham%29%5CAftercare%5CPost%20PC%20Sites%5CSOAS%5CLTHW%20Replacement%5CNew%20folder%5CSOAS%20-%20LTHW%20Remedial%20Works%20LBC%20Application%20BWIC%20Method%20Statment%5CSOAS%20-%20LTHW%20Remedial%20Works%20LBC%20Application%20BWIC%20Method%20Statment%5CSOAS-SITE-01-001.pdf)). Graham has identified numerous leaks within the heating system. Following this, a subsequent investigation has been confirmed that the pipe work has been joined incorrectly and will now need to be replaced.

In order to facilitate the replacement of the pipe work, the existing floor finishes will need to be removed to expose the relevant areas. Some of the areas that require builders work in connection (BWIC) are listed as Moderate Historic significance. The purpose of this document is to identify which areas of historical significance will be affected, and how we plan to manage those in order to reduce the impact of the works on them.

**Method of Removing, Storing and Re-instating Grade 2 Listed Elements of Moderate Historic Significance**

Please refer to the below drawings which clearly show the locations of the builders work in connection with, as well as the historic building fabric that will be disturbed by the replacement of the low temperature hot water (LTHW) pipe work:

*3rd Floor - Floor cut plan:* [*SOAS-LTHW-03-006.pdf*](file:///C%3A%5CUsers%5CJason.Roles%5CAppData%5CLocal%5CTemp%5Cwz5e26%5CSOAS%20-%20LTHW%20Remedial%20Works%20LBC%20Application%20BWIC%20Method%20Statment%5CSOAS-LTHW-03-006.pdf)

*2nd Floor – Floor cut plan:* [*SOAS-LTHW-02-005.pdf*](file:///C%3A%5CUsers%5CJason.Roles%5CAppData%5CLocal%5CTemp%5Cwz5e26%5CSOAS%20-%20LTHW%20Remedial%20Works%20LBC%20Application%20BWIC%20Method%20Statment%5CSOAS-LTHW-02-005.pdf)

*1st Floor – Floor cut plan:* [*SOAS-LTHW-01-004.pdf*](file:///C%3A%5CUsers%5CJason.Roles%5CAppData%5CLocal%5CTemp%5Cwz5e26%5CSOAS%20-%20LTHW%20Remedial%20Works%20LBC%20Application%20BWIC%20Method%20Statment%5CSOAS-LTHW-01-004.pdf)

*Ground floor – Floor cut plan:* [*SOAS-LTHW-00-003.pdf*](file:///C%3A%5CUsers%5CJason.Roles%5CAppData%5CLocal%5CTemp%5Cwz5e26%5CSOAS%20-%20LTHW%20Remedial%20Works%20LBC%20Application%20BWIC%20Method%20Statment%5CSOAS-LTHW-00-003.pdf)

*Basement – Ceiling cut plan:* [*SOAS-LTHW-BH-002.pdf*](file:///C%3A%5CUsers%5CJason.Roles%5CAppData%5CLocal%5CTemp%5Cwz5e26%5CSOAS%20-%20LTHW%20Remedial%20Works%20LBC%20Application%20BWIC%20Method%20Statment%5CSOAS-LTHW-BH-002.pdf)

*Basement – Floor cut plan:* [SOAS-LTHW-BL-001.pdf](file:///C%3A%5CUsers%5CJason.Roles%5CAppData%5CLocal%5CTemp%5Cwz5e26%5CSOAS%20-%20LTHW%20Remedial%20Works%20LBC%20Application%20BWIC%20Method%20Statment%5CSOAS-LTHW-BL-001.pdf)

Please see below key to indicate which item of historical significance is being indicated on the marked up drawing:

* Travertine Panels – Purple
* Oak Tongue and Groove Flooring Boards – Yellow
* Oak Skirting – Not Applicable
* Terrazzo Flooring and Skirting – Not Applicable
* Polished Oak Herringbone Parquet - Orange
* Polished Oak T & G Flooring – Red

Non-listed flooring and ceiling such as plywood and concrete planks will also be disturbed during the works, with this being indicated on the above drawings using the following key:

* Non-listed Flooring / Ceiling – Blue
* Raised Access Flooring (no cuts required) – Green

**BWIC - Method Statement for Grade 2 Listed elements**

**Travertine Panels – Purple**

Travertine Panels are used as a cover in front of most the radiators in the building. To replace the pipework connected to the radiators, where required the panels will be individually removed. To start, the two small wooden batons holding the panel in place at the top of the radiator assembly will be unscrewed and placed in a numbered grip-seal bag, for storage with the panel. The travertine panels will then be carefully removed by two persons from the existing metal frame and lifted to be placed on a purpose made timber “A” frames within the rooms. The panels will be secured and covered by plywood while works take place. Please see drawing *ref: DIA SK .01* (Appendix 1) for more information regarding the stillage’s. Upon completion of the works, the travertine panels will be carefully lifted back into place by a team of joiners closely managed by out project team.

**Oak Tongue and Groove Flooring Boards – Yellow**

Oak tongue and groove flooring boards make up the floor of a selection of rooms in the building. The new floor finishes, such as carpet tiles and 6 mm ply currently installed on top of the oak flooring boards will be removed where required and stored safely. The oak flooring boards will be carefully cut where required to minimise disruption to the other floor boards and skirting, before being uplifted, de-nailed and numbered on the underside. They will then be carefully moved and wrapped in polyethylene foam wrap before stacked within the room, so they are protected while works take place. When being reinstalled, a small brass trim to match the existing historic service duct will be fitted flush to the floor along any cut lines so no gaps are present. Following our experience of the original project works, we anticipate circa 20% breakages when lifting the existing boards, due to the age of them, and the secret fixings used previously. This is why we will only intend to remove the minimum amount required to complete the works. We anticipate being able to reduce the percentage of additional damaged boards as some are now new, as well by using highly skilled labour. If required, these will be replaced with new boards to match the specification of the original.

**Oak Skirting**

It is intended to avoid any builder’s works that will damage the oak skirting. If absolutely required this will be carefully removed, denailed, numbered and wrapped in polyethylene foam wrap before being stored in the room *(as piping is run through the centre of most rooms, it is anticipated that only a very small quantity of the listed skirting will be removed in total*). Upon completion of the works, this will be re fitted by a small team of experienced carpenters, whilst being closely managed by our project team.

**Polished Oak Herringbone Parquet - Orange**

The polished Oak Herringbone Parquet flooring wood blocks will be carefully uplifted using a purpose made broad blade hand tool. From there it will be cleaned, numbered on the underside with its position recorded and then stored in a designated storage area. When it is to be refitted, the Oak wood blocks will be re-laid by a team of experienced floor fixers after which it will be re-sanded to a level, high quality finish and subsequently polished to leave as original.

**Polished Oak T & G Flooring – Red**

These polished Oak Tongue and grooved boards will be carefully uplifted, numbered, de-nailed. From there it will be cleaned and protected to be stored in a designated area. When it is to be refitted, the Oak wood T & G boards will be re-laid by a team of experienced floor fixers after which it will be re-sanded with a orbital floor sanding machine using a fine grit paper give a to a level, high quality finish. It will then be varnished by a specialist sub-contractor with a clear heavy duty floor varnish to leave as original.

**Terrazzo Flooring and Skirting**

It is intended to avoid any builder’s works that will damage the Terrazzo flooring and skirting.

**Appendix 1**

**DIA SK. 01** – Timber A-Frame Design for Travertine Panels