



1 Hampshire Street
London
NW5 2TE

51.548672 -0.130537

Remediation Method Statement

S19-502/RMS
July 2020

Revision 2

Prepared by :

**Southwest Environmental Limited
Long Lane
London
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On behalf of :

**Redtree (North London) Ltd
44 Great Eastern Street
London
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1.0 Introduction

Acting upon instructions received from Redtree (North London) Ltd, a Remediation Method Statement has been carried out in connection with the proposed mixed use development at 1 Hampshire Street.

2.0 The Site

2.1 Site Information

Site Address	1 Hampshire Street London NW5 2TE
Grid Reference	51.548672 -0.130537 (Google Maps)

2.2 Site Description

The site is currently used as a photographic studio, there is a large internal space used for photography, with side rooms for welfare and presumably dressing rooms. External spaces are hard landscaped..

2.3 Previous Reporting

This remediation method statement follows two previous reports:

2.3.1 Phase 1

A desktop study has been carried out by Southwest Environmental Limited. This found a residual risk from soil born contaminants, which found the site to be of low to moderate risk. A Phase 2 investigation was described as required to explore for contamination from printing industries or perhaps brick fields.

2.3.2 Phase 2

The Phase 2 Report by STM Environmental (PH2-2020-000026) issued 9th of June. Conclusions and Recommendations within the report include for mitigatory response, owing to exceedances of Arsenic, Bibenzo (h) anthracene, lead and Benzo (a) anthracene.

2.4 Proposed Development

The proposed dwellings shown on project drawings is for a mixed use development with commercial ground floor use and residential accommodation on 1st and 2nd floors. There are no soft landscaped areas shown on plans.



3.0 Remedial Requirements

The following sections set out the actions that will be required to be undertaken in order to reduce risks to acceptable level.

The proposed construction method is conventional. It is understood that a ventilated layer is used, via use of a proprietary system or appropriately specified open void aggregate.

The basic concept is safe disposal of any excavated made ground, and “capping” of the entire site with hard surfaces (exterior) and ground gas exclusion measures (internal). The process is detailed below:

3.1 Excavation of Made Ground

Made Ground may need to be excavated on order to accommodate foundations and or services.

Made ground will very likely be excavated and should be classified (WAC) and disposed of accordingly.

3.2 Placement of Fill

Any excavated fill where voids remain should be replaced with clean material, such as type 1 ballast.

Project drawings do not show any soft landscaped areas. As such wide spread use of standardised sub soil and top soil can be avoided.

3.2.1 Fill Quality

Fill must be validated as chemically suitable. There are 3 routes that may be applied to importing clean material to site.

3.2.1.1 CL:AIRE

The CL:AIRE method can be utilised, where by verified clean sub soil is transferred from a different site. Under CL:AIRE protocol (CL:AIRE DoWCoP). This process will need to be validated by an accredited assessor.

3.2.1.2 Exemption

1000 tons only of verified clean soil can be imported from other construction sites under a U1 exemption.

If this option were taken, it will be required that soils are tested to ensure suitability.

3.2.1.3 Standardised Materials

Clean fill can be sourced to the following standards:



- BS3882 – Topsoil
- BS 8601:2013 – Subsoil

3.2.1.3 Fill Areas

There are no formal fill areas proposed. Although watching brief may reveal areas necessitating inert fill, as described in preceding chapters.

3.3 Watching Brief

If any unrecorded contamination is discovered at any point during excavations, then London Borough of Camden EHO or Southwest Environmental Limited should be contacted. Recommendations may include additional risk assessment and/or removal of contaminated material if this is deemed necessary.

Any observations of ground conditions out of keeping with those already described in Phase 2 report should be reported to Southwest Environmental Limited or London Borough of Camden EHO immediately so that an assessment of appropriate action can be made. This should include vigilance for the presence of asbestos containing materials.

4.0 Worker Safety

Providing that dust levels are kept within statutory limits and appropriate health and safety procedures are adhered to during the construction phase, the levels of chemical contamination recorded to date are not considered to present an acute risk to human health.

Dust suppression measures will be required for works with a dust raising potential. The presence of Asbestos fibres should be assumed, as such a presumptive approach should be taken with regards to health and safety on site, and construction environmental management.

5.0 Gas Protection

An assessment of Ground Gas Risk has been made using RB17 method. The maximum total organic carbon content for made ground is 1.7%.

This would require gas protection measures to CIRIA 655 CS2. As such the below construction methods should be implemented.

Characteristic situation	Residential building (not those which belong to Situation B) ¹		Office/commercial/industrial development	
(From Table 8.5)	Number of levels of protection	Typical scope of protective measures	Number of levels of protection	Typical scope of protective measures
1	None	No special precautions	None	No special precautions
2	2	<p>a. Reinforced concrete cast <i>in situ</i> floor slab (suspended, non-suspended or raft) with at least 1200 g DPM and underfloor venting.</p> <p>b. Beam and block or pre-cast concrete and 2000 g DPM/reinforced gas membrane and underfloor venting.</p> <p>All joints and penetrations sealed.</p>	1 to 2	<p>a) Reinforced concrete cast <i>in situ</i> floor slab (suspended, non-suspended or raft) with at least 1200 g DPM.</p> <p>b) Beam and block or pre cast concrete slab and minimum 2000 g DPM/reinforced gas membrane.</p> <p>c) Possibly underfloor venting or pressurisation in combination with a) and b) depending on use.</p> <p>All joints and penetrations sealed.</p>
3	2	<p>All types of floor slab as above.</p> <p>All joints and penetrations sealed. Proprietary gas resistant membrane and passively ventilated or positively pressurised underfloor sub-space.</p>	1 to 2	<p>All types of floor slab as above.</p> <p>All joints and penetrations sealed. Minimum 2000 g/reinforced gas proof membrane and passively ventilated underfloor sub-space or positively pressurised underfloor sub-space</p>

Figure 1 - Protection Measures (CRIA 665)

From Figure 1 we would suggest above highlighted protection measures. An example detail is included below for illustration purposes. However, the manufacturer's instructions should be followed, paying attention to sealing of service entry points, and inclusion of vapour barrier across cavity.

Details in Figure 2 show the positioning of membranes, and adhesives to create an effective mitigative barrier. The below details products from a particular manufacturer. But any manufactured product could be used that provide adequate performance. An example group of products might consist of:

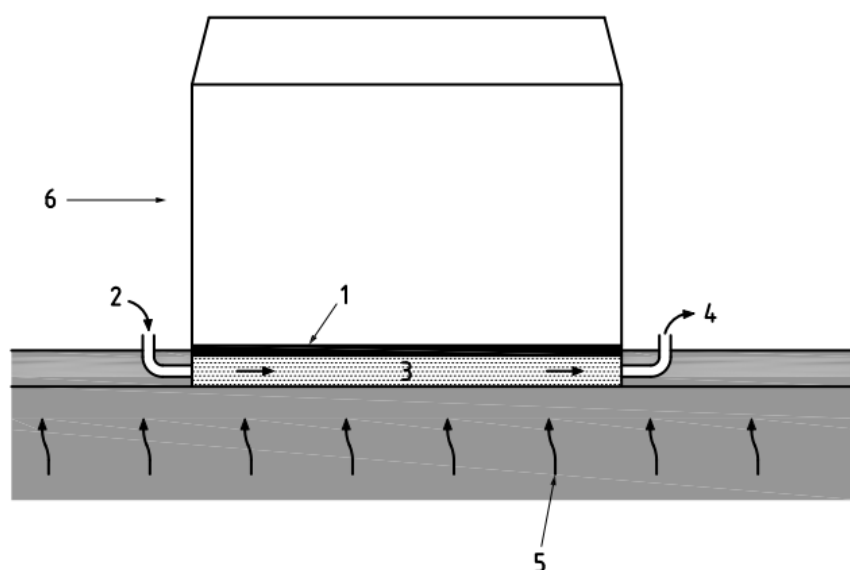
- Visqueen GX Membrane
- Visqueen GX Jointing System
- Visqueen Geocomposite Venting System
- Visqueen GX DPC

Building control could be consulted to provide an alternate system. For example, BS 8485:2015 suggests a less specific set of requirement for barrier systems:

- sufficiently impervious to the gases with a methane gas transmission rate <40.0 ml/day/m²/atm (average) for sheet and joints (tested in accordance with BS ISO 15105-1 manometric method);
- sufficiently durable to remain serviceable for the anticipated life of the building and duration of gas emissions;
- sufficiently strong to withstand in-service stresses (e.g. settlement if placed below a floor slab);
- sufficiently strong to withstand the installation process and following trades until covered (e.g. penetration from steel fibres in fibre reinforced concrete,

- penetration of reinforcement ties, tearing due to working above it, dropping tools, etc);
- capable, after installation, of providing a complete barrier to the entry of the relevant gas; and
- verified in accordance with CIRIA C735 [N1]

It is likely that void will be below ground level, and as such vents will be required to extend upwards, as indicated in Figure 3. A example ventilation layer for ground bearing slab is presented in **Appendix 3**.



Key

- 1 Floor construction including membrane
- 2 Fresh air in
- 3 Gas dispersal layer
- 4 Fresh air and ground gas out
- 5 Ground gases
- 6 Wind direction

Figure 2 - Vent Locations (BS 8485:2015)

6.0 Waste

All excavated waste from site will need to be classified (Inert, General, Hazardous) prior to off-site disposal.

Soils containing visible fragments of asbestos containing materials would be classified as Hazardous Waste. Treatment options should be considered prior to disposal.

Materials, including waste soils which are not to be retained on site, should be removed and disposed of in accordance with all relevant statues including:



- Environmental Protection Act 1990,
- The Controlled Waste Regulations 2012
- The Waste Regulations 2011
- The List of Wastes Regulations 2005
- The Hazardous Waste Regulations 2005 as
- The Waste Management Regulations 2006
- The Environmental Permitting Regulations 2010

In duty of care the most important factors are that any haulier collecting waste should provide a Waste Transfer Note that displays waste type (as classified), the waste carrier licence number, and the destination of the waste. The destination should be a facility licenced to accept the waste.

These actions should be carried out at the time of collection or before, it is nearly impossible to arrange this paperwork retrospectively.

7.0 Record Keeping

It will be required that after the remedial measures in this report have been carried out, records of their completion will have to be submitted to Thurrock Council, and perhaps a Buildings Warranty Provider such as LABC or NHBC.

It is very important these records are kept, ultimately the records should prove that you have followed the instructions in this report. They should include (but not be limited to):

- Waste Transfer Notes
- Import Material Delivery Slips
- Imported Material Standard Certificate
- Imported Materials Test Results
- Photos of Excavations
- Photos of Footings
- Photos of DPC and Gas Membrane Install
- Photos of Service Sealing
- Photos of Vent Installation
- Photos of Barrier Pipe Install
- Photos of Fill Placement (Before and After)

These records can then be bound together in a report and sent to Thurrock District Council to discharge conditions relating to Phase 4 of assessment process.

8.0 Environmental Management

The above works will evidently require moving, and stockpiling of contaminated soils. Careful environmental management will be required to prevent impacts on off site receptors. Issues will need to be considered:

- Dust
- Odour
- Run-Off



As these issues could involve the spread of contaminated materials off site. We would recommend the avoidance of stockpiling on site, and dust suppression at all times during materials handling.

9.0 Soft Landings

All of the above work, to safe guard future occupants can be quickly undone, if they are not informed of precautions. For example, new residents should be informed of the barriers presence, and why external areas should not be excavated.

10.0 Notes

It should be noted that this assessment is based solely on the samples collected from shallow horizons. This report is produced for the sole use of the Client, and no responsibility of any kind, whether for negligence or otherwise, can be accepted for any Third Party who may rely upon it.

The conclusions and recommendations given in this report are based on our understanding of the future plans for the site. If, however, the site is developed for a more or less sensitive use, then a different interpretation might be appropriate. Information within this report should not be utilised in making of assumptions and judgements with regard to the financial value of land or property. It is not to be used in conveyancing, valuation, or any other non-planning related purpose.

It necessarily relies on the co-operation of other organizations and the free availability of information and total access.

The scope of this Remediation Method Statement was discussed and agreed with the Client. No responsibility is accepted for conditions not encountered, which are outside of the agreed scope of work.

For the avoidance of doubt, the parties hereby expressly agree that the Consultant takes no liability for and gives not warranty against occurrence of harm to The Client, Client's Property, Environmental Receptors, other property or any damages material or personal in relation to the performance of the service.

This report may suggest an opinion on a possible configuration of strata or conditions between exploratory points and below the maximum depth of investigation. However, this is for guidance only and no liability can be accepted for its accuracy.



APPENDIX 1

Location Plan

Street View

Published 2019

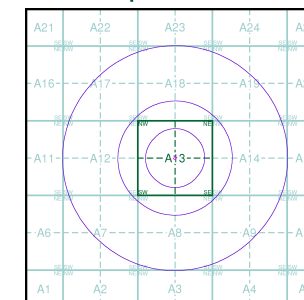
Source map scale - 1:10,000

Street View is a street-level map for the whole of Great Britain produced by the Ordnance Survey. These maps are provided at a nominal scale of 1:10,000

Map Name(s) and Date(s)



Street View Map - Slice A

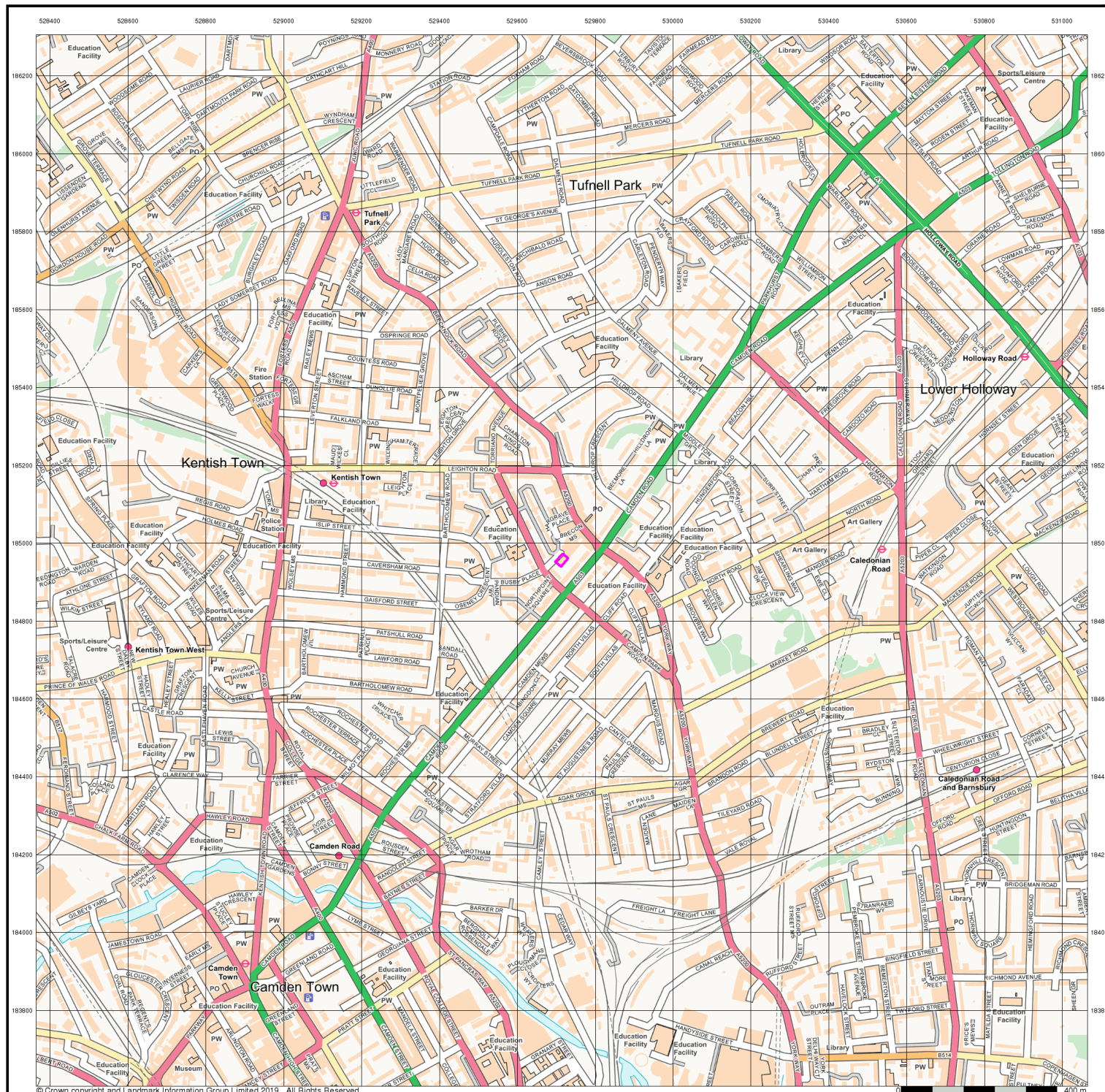


Order Details

Order Number: 214739835_1_1
 Customer Ref: S19-502
 National Grid Reference: 529710, 184960
 Slice: A
 Site Area (Ha): 0.06
 Search Buffer (m): 1000

Site Details

The Hampshire Studios, 1, Hampshire Street, LONDON, NW5 2TE





APPENDIX 2

RMS Plan



RMS Plan

PMCL No LAN1001682

Key
 Purple: Gas Protection CS2
 Orange: Contiguous Impermeable Hard Landscaping

Notes: This plan is from Appendix 2 of report S19-502/RMS. There are details in the report that need to be read that are related to this plan.

Notes: It is important to keep records of everything you do. The records will be needed to discharge planning conditions pre-occupancy.



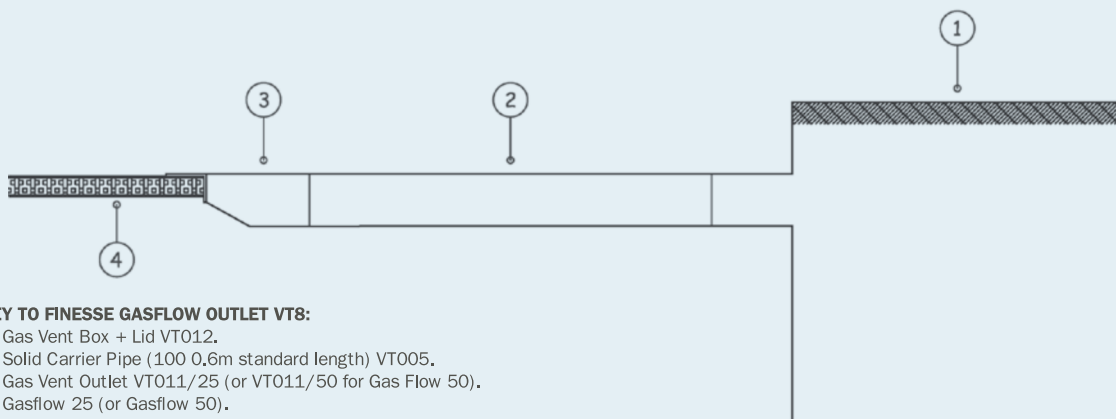
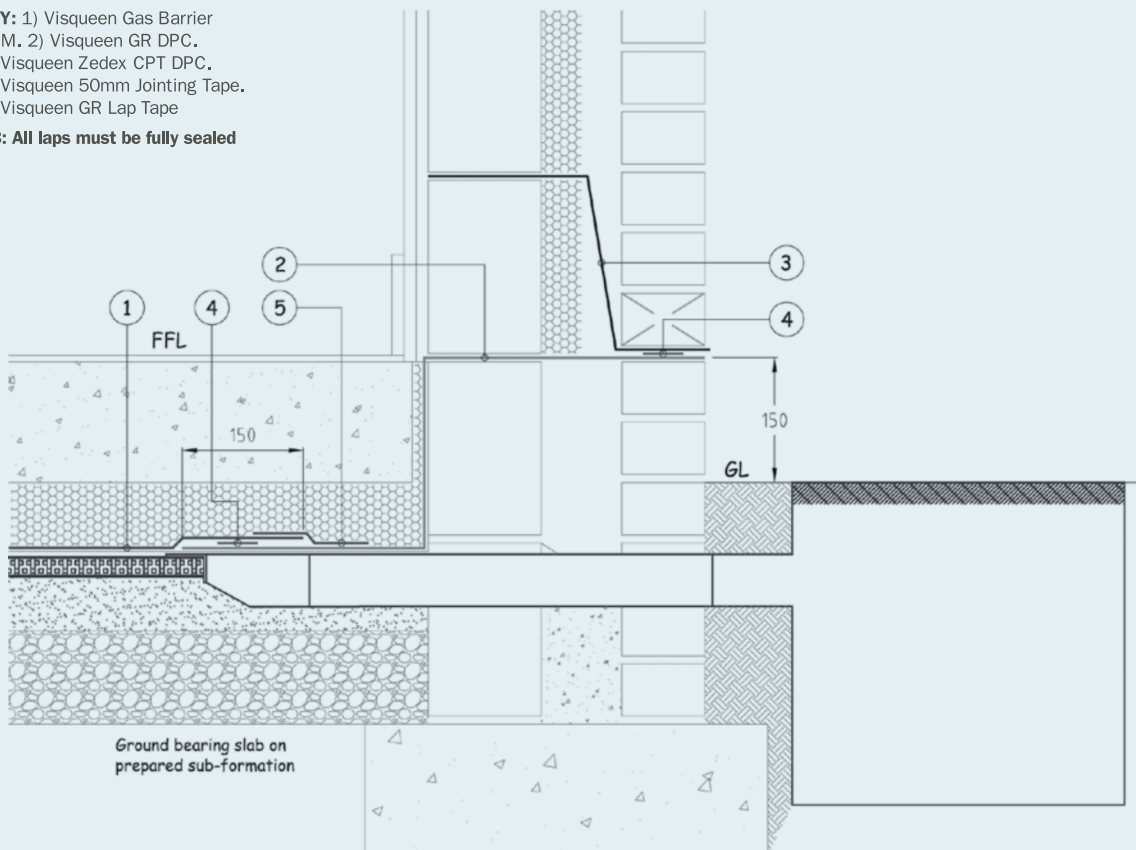
APPENDIX 3

Details

TYPICAL GAS DISPERSAL DETAILS USING GAS VENTING BOX

KEY: 1) Visqueen Gas Barrier DPM, 2) Visqueen GR DPC, 3) Visqueen Zedex CPT DPC, 4) Visqueen 50mm Jointing Tape, 5) Visqueen GR Lap Tape

NB: All laps must be fully sealed



KEY TO FINESSE GASFLOW OUTLET VT8:

- 1) Gas Vent Box + Lid VT012.
- 2) Solid Carrier Pipe (100 0.6m standard length) VT005.
- 3) Gas Vent Outlet VT011/25 (or VT011/50 for Gas Flow 50).
- 4) Gasflow 25 (or Gasflow 50).