

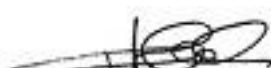


# Asbestos Refurbishment Survey



Saint Mary Somerset Tower, 5 Lambeth Hill, London, EC4V 4AG



<b>Client:</b>	Saint Mary Somerset Tower
<b>Job Reference:</b>	S-01137
<b>Report Date:</b>	01/04/2015
<b>Property Address:</b>	Saint Mary Somerset Tower 5 Lambeth Hill London EC4V 4AG
<b>Date of Survey:</b>	27/03/2015
<b>Survey Type:</b>	Asbestos Refurbishment Survey
<b>Surveyor Name:</b>	Mohammed Waheed
<b>Surveyor Signature:</b>	
<b>Report Prepared By:</b>	Saffron North
<b>Signature:</b>	
<b>Report Proof Read By:</b>	Ian Cook
<b>Signature:</b>	

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## Types of survey

There are two different types of survey: *Management Surveys* and *Refurbishment and Demolition Surveys*.

The type of survey will vary during the lifespan of the premises and several may be needed over time. A management survey will be required during the normal occupation and use of the building to ensure continued management of the ACMs in situ. A refurbishment or demolition survey will be necessary when the building (or part of it) is to be upgraded, refurbished or demolished. It is probable that at larger premises a mixture of survey types will be appropriate, e.g. a boiler house due for demolition will require a refurbishment/demolition survey, while offices at the same site would have a management survey. In later years refurbishment surveys may be required in rooms or floors which are being upgraded. In sectors where there are large numbers of properties (e.g. domestic houses) or internal units (e.g. hotels), only particular rooms may be specified for upgrading, e.g. kitchens, bathrooms and bedrooms. Refurbishment surveys would only be necessary in these locations.

It is important that the client and the surveyor know exactly what type of survey is to be carried out and where, and what the specification will be. So there should be a clear statement and record of the type of survey that is to be carried out, including the reasons for selecting that type of survey, and where it is to be carried out.

### ***Management Survey***

A management survey is the standard survey. Its purpose is to locate, as far as reasonably practicable, the presence and extent of any suspect ACMs in the building which could be damaged or disturbed during normal occupancy, including foreseeable maintenance and installation, and to assess their condition.

Management surveys will often involve minor intrusive work and some disturbance. The extent of intrusion will vary between premises and depend on what is reasonably practicable for individual properties, i.e. it will depend on factors such as the type of building, the nature of construction, accessibility etc. A management survey should include an assessment of the condition of the various ACMs and their ability to release fibres into the air if they are disturbed in some way. This 'material assessment' will give a good initial guide to the priority for managing ACMs as it will identify the materials which will most readily release airborne fibres if they are disturbed. The survey will usually involve sampling and analysis to confirm the presence or absence of ACMs. However a management survey can also involve presuming the presence or absence of asbestos. A management survey can be completed using a combination of sampling ACMs and presuming ACMs or, indeed, just presuming. Any materials presumed to contain asbestos must also have their condition assessed (i.e. a material assessment).

***Management surveys can involve a combination of sampling to confirm asbestos is present or presuming asbestos to be present.***

### ***Refurbishment and Demolition survey***

A refurbishment and demolition survey is needed before any refurbishment or demolition work is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACMs in the area where the refurbishment work will take place or in the whole building if demolition is planned. The survey will be fully intrusive and involve destructive inspection, as necessary, to gain access to all areas, including those that may be difficult to reach. A refurbishment and demolition survey may also be required in other circumstances, e.g. when more intrusive maintenance and repair work will be carried out or for plant removal or dismantling.

There is a specific requirement in CAR 2012 (regulation 7) for all ACMs to be removed as far as reasonably practicable before major refurbishment or final demolition. Removing ACMs is also appropriate in other smaller refurbishment situations which involve structural or layout changes to buildings (e.g. removal of partitions, walls, units etc.). Under CDM, the survey information should be used to help in the tendering process for removal of ACMs from the building before work starts.

The survey report should be supplied by the client to designers and contractors who may be bidding for the work, so that the asbestos risks can be addressed. In this type of survey, where the asbestos is identified so that it can be

removed (rather than to 'manage' it), the survey does not normally assess the condition of the asbestos, other than to indicate areas of damage or where additional asbestos debris may be present. However, where the asbestos removal may not take place for some time, the ACMs' condition will need to be assessed and the materials managed.

***Refurbishment and demolition surveys*** are intended to locate all the asbestos in the building (or the relevant part), as far as reasonably practicable. It is a disruptive and fully intrusive survey which may need to penetrate all parts of the building structure. Aggressive inspection techniques will be needed to lift carpets and tiles, break through walls, ceilings, cladding and partitions, and open up floors. In these situations, controls should be put in place to prevent the spread of debris, which may include asbestos. Refurbishment and demolition surveys should only be conducted in unoccupied areas to minimise risks to the public or employees on the premises. Ideally, the building should not be in service and all furnishings removed. For minor refurbishment, this would only apply to the room involved or even part of the room where the work is small and the room large. In these situations, there should effective isolation of the survey area (e.g. full floor to ceiling partition), and furnishings should be removed as far as possible or protected using sheeting. The 'surveyed' area must be shown to be fit for reoccupation before people move back in. This will require a thorough visual inspection and, if appropriate (e.g. where there has been significant destruction), reassurance air sampling with disturbance. Under no circumstances should staff remain in rooms or areas of buildings when intrusive sampling is performed.

#### **Duty holder's use of survey information**

The survey report needs to meet the requirements of the client and comply with the tender/contractual obligations. The report should be fit for purpose and the client should check that this is the case. Therefore the client should examine the report and carry out a number of checks to make sure that the survey has been adequate and that the report is suitable and accurate.

#### **The client/duty holder should do to check the accuracy of the survey report**

- Check the report against the original tender.
- Check for un agreed caveats or disclaimers.
- Check that the survey is as requested: Management or refurbishment/demolition (or a combination).
- Check diagrams and plans are clear and accurate.
- Check all rooms and areas have been accessed.
- Check sufficient samples have been taken (usually 1-2 per area/room) and that sample numbers are not disproportionate (e.g. dominated by one ACM type).
- Check sample numbers reflect variations in the same ACMs, e.g. different ceiling tiles in the same room.
- Check for any obvious discrepancies and inconsistencies.

## 1. Introduction

**1.1** An Asbestos Refurbishment Survey of the premises was carried out on behalf of Saint Mary Somerset Tower. The survey and all sampling was carried out in accordance with the requirements of the HSE document 'Surveying, sampling and assessment of asbestos containing material' HSG 264. It was the intention to survey all areas of the premises were surveyed on at the time of survey for materials suspected of containing asbestos.

### 1.2 Scope of Works:

The scope of works was to carry out an Asbestos Refurbishment Survey to a detached tower over six floors.

The scope of the Asbestos Refurbishment Survey was agreed and discussed between Salvum Limited and Saint Mary Somerset Tower prior to the survey being undertaken.

The content of this survey report is intended to provide the client with the information necessary to manage the risks arising from ACM's present within the area.

However, there remains a possibility that further ACM's may be present and exposed and possibly disturbed during any alterations, refurbishment or demolition works.


It is now recognised that even with 'complete' access demolition surveys, all ACMs may not be identified and this only becomes apparent during demolition itself.

**1.3** The areas described in the scope of works were surveyed at the time of the survey. Please refer to the specific exclusions/non-accessed table below for areas not included in this survey.

### 1.4 Site Description

The property consists of a detached tower over six floors. The approximate age of the property is 1600s and is constructed of masonry stonework and brickwork, metal rainwater goods, lead lined flat roof.

### 1.5 Specific Exclusions/Non-Accessed:

Floor	Room	Description	Reason	Photo
Saint Mary Somerset Tower / 2nd Floor	006	W/C (Water heater)	The water heater unit was sealed with rusted screws and could not be fully accessed.	

### 1.6 Specific exclusions relating to surveying;

**1.6.1** Samples have not been taken where the act of sampling would endanger the Surveyor or affect the functional integrity of the item concerned e.g. fuses within electrical boxes, fire doors, gaskets, glazing and power plant.

**1.6.2** No inspection of live electrical or mechanical plant or similar requiring the attendance of a specialist engineer was carried out.

**1.6.3** No inspection of any area requiring specialist access equipment other than stepladders was carried out.

**1.6.4** No report has been made on any concealed spaces which may exist within the fabric of the building where the extent and presence of these is not evident due to inaccessibility or insufficient knowledge of the structure of the building at the time of the survey. Unless specifically agreed by Salvum Limited and the client. Please refer to Appendix A for further details.

**1.6.5** Any area not accessed (and where no other information exists) must be presumed to contain asbestos and be managed on that basis.

**1.6.6** No inspection of any area deemed unsafe (e.g. fire damaged premises) or where access was physically impractical was carried out.

## **1.7 Specific exclusions relating to sampling;**

**1.7.1** Samples have not been taken where the act of sampling would endanger the Surveyor or affect the functional integrity of the item concerned e.g. fuses within electrical boxes, fire doors, gaskets, glazing and power plant.

**1.7.2** Samples have not been taken where prohibited by the client.

**1.7.3** Samples have been taken from all materials which, upon initial visual inspection, appeared to contain asbestos with the exception of some items of mastic, resin or rubber, which contain asbestos where the quantity of those materials and the content of asbestos within the material is insignificant in terms of risk to health and safety.

**1.7.4** Materials have been referred to as Asbestos Insulation Board or Asbestos Cement based on their asbestos content and visual appearance alone. Density checks have not been carried out unless otherwise stated.

## **1.8 Caveat**

Every effort has been made to identify all asbestos materials so far as was reasonably practical to do so within the scope of the survey and attached report. Methods used to carry out the survey were agreed with the client prior to any works being commenced.

Survey techniques used involves trained and experienced surveyors using the combined approach with regard to visual examination and necessary bulk sampling. It is always possible after a survey that asbestos based materials of one sort or another may remain in the property or area covered by the survey, this could be due to various reasons:

- Asbestos materials existing within areas not specifically covered by this report are therefore outside the scope of the survey.
- Materials may be hidden or obscured by other items or cover finishes, i.e. paint, over boarding, disguising etc., where this is the case then its detection will be impaired.
- Asbestos may well be hidden as part of the structure to a building and not visible until the structure is dismantled at a later date.
- Debris from previous asbestos removal projects may well be present in some areas; general asbestos debris does not form part of this survey however all good intentions are made for its discovery.
- Where an area has been previously stripped of asbestos, i.e. plant rooms, ducts, etc., and new coverings added, it must be pointed out that asbestos removal techniques have improved steadily over the years since its introduction. Most notably would be the Control of Asbestos Regulations (2012) or other similar subsequent regulations laying down certain enforceable guidelines. Asbestos removal prior to this regulation would not have been of today's standard and therefore debris may be present below new coverings.

- This survey will detail all areas accessed and all samples taken, where an area is not covered by this survey it will be due to No Access for one reason or another, i.e. working operatives, sensitive location or just simply no access. It may have been necessary for the limits of the surveyor's authority to be confirmed prior to the survey.
- Access for the survey may be restricted for many reasons beyond our control such as height, inconvenience to others, immovable obstacles or confined space. Where electrical equipment is present and presumed in the way of the survey no access will be attempted until proof of its safe state is given. Our operatives have a duty of care under the Health and Safety at Work Act (1974) for both themselves and others.
- In the building where asbestos has been located and it is clear that not all areas have been investigated, any material that is found to be suspicious and not detailed as part of the survey should be treated with caution and sampled accordingly.
- Certain materials contain asbestos to varying degrees and some may be less densely contaminated at certain locations (Artex for example). Where this is the case the sample taken may not be representative of the whole product throughout.
- Where a survey is carried out under the guidance of the owner of the property, or his representative, then the survey will be as per his/her instructions and guidance at that time.
- Salvum Ltd cannot accept any liability for loss, injury, damage or penalty issues due to error or omissions within this report.
- Salvum Ltd cannot be held responsible for any damage caused as part of this survey carried out on your behalf. Due to the nature and necessity of sampling for asbestos some damage is unavoidable and will be limited to just that necessary for the taking of the sample.



## 2 Recommendations

**2.1** The recommendations detailed in the register in Appendix A are based on each item's potential for releasing fibres as described in the Health and Safety Executive guideline HSG 264.

**2.2** A quantifiable assessment of the risk of fibre release has been made by using an algorithm which takes into account all factors relevant to the item and the normal activities of the building occupants. Recommendation will then normally involve removal, encapsulation or management as described below;

- Removal of items vulnerable to damage or in such poor condition that removal is the only practical option, or where refurbishment or demolition work is planned whereby the work will affect the asbestos materials present and render removal necessary.
- Enclosure or encapsulation where the material is in poor condition or is vulnerable to damage.
- Management of the asbestos material present by labelling, registering and periodic inspection as necessary.

### 2.2.1 Definition of terms;

- **Enclosure** - Provision of a physical barrier to provide mechanical protection of the material to prevent it being disturbed or damaged.
- **Encapsulation** - Provision of paint type coating to create a continuous seal to the surface of the material and thereby prevent fibre release.
- **Labelling** - Fixing of labels to the surface of the material to warn of the hazard
- **Registering** - Entering the details, including type, location and extent in a register which is brought to the attention of all persons who might plan or undertake works in the building.
- **Periodic** - Inspection of the material at defined intervals to check that its condition hasn't deteriorated to require enclosure, encapsulation or removal.
- **Repair** - Addition of a seal to the material to prevent the further deterioration of the material. Carried out in conjunction with labelling.
- **Removal** - Complete removal of a material in compliance with CAWR 1998.
- **Manage in situ** - a policy of regular inspections to ensure that the ACM is maintained in good condition.

### 3. Material Assessment Algorithm

In the material assessment process, the main factors influencing fibre release are given a score which can then be added together to obtain a material assessment rating. The four main parameters which determine the amount of fibre released from an ACM when subject to disturbance are:

- Product type;
- Extent of damage or deterioration;
- Surface treatment; and
- Asbestos type.

Each parameter is scored between 1 and 3. A score of 1 is equivalent to a low potential for fibre release, 2 = Medium and 3 = high. Two parameters can also be given a nil score (equivalent to a very low potential for fibre release). The value assigned to each of the four parameters is added together to give a total score of between 2 and 12. Presumed or strongly presumed ACMs are scored as crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise. Examples of scoring for each parameter are given in below.

#### Materials with assessment scores

Scores of 4 or less have a very low potential to release fibres	<4	Very Low
Scores of 5 and 6 a low potential	5-6	Low
Scores of between 7 and 9 are regarded as having a medium potential	7-9	Medium
Scores of 10 or more are rated as having a high potential to release fibres	10+	High
Non--asbestos materials are not scored	0	Not Recorded

## Material Assessment Algorithm Table

Sample Variable	Score	Examples of scores(see notes for more details)
Product type (or debris from product)	1	Asbestos-reinforced composites (plastics, resins, mastics, roofing felts, vinyl floor tiles, semi-rigid paints or decorative finishes, asbestos cement etc.).
	2	AIB, millboards, other low-density insulation boards, asbestos textiles, gaskets, ropes and woven textiles, asbestos paper and felt.
	3	Thermal insulation (e.g. pipe and boiler lagging), sprayed asbestos, loose asbestos, asbestos mattresses and packing.
Extent of damage/deterioration	0	Good condition: no visible damage
	1	Low damage: a few scratches or surface marks, broken edges on boards, tiles etc.
	2	Medium damage: significant breakage of materials or several small areas where material has been damaged revealing loose asbestos fibres.
	3	High damage or delamination of materials, sprays and thermal insulation. Visible asbestos debris.
Surface treatment	0	Composite materials containing asbestos: reinforced plastics, resins, vinyl tiles.
	1	Enclosed sprays and lagging, AIB (with exposed face painted or encapsulated) asbestos cement sheets etc.
	2	Unsealed AIB, or encapsulated lagging and sprays.
	3	Unsealed lagging and sprays.
Asbestos type	1	Chrysotile.
	2	Amphibole asbestos excluding crocidolite.
	3	Crocidolite.

#### 4. References

- Work with materials containing asbestos. Control of Asbestos Regulations 2012. Approved Code of Practice and guidance L143 HSE Books 2006
- Managing health and safety in construction. Construction (Design and Management) Regulations 2007. Approved Code of Practice L144 HSE Books
- A comprehensive guide to managing asbestos in premises HSG227 HSE Books 2002 ISBN 978 0 7176 2381 5
- A short guide to managing asbestos in premises Leaflet INDG223(rev4) HSE Books 2009 (single copy free or priced packs of 10 ISBN 978 0 7176 6375 0)
- Asbestos: The Survey Guide HSG264 HSE Books 2012 ISBN 978 0 7176 6502 0
- Asbestos: The licensed contractors' guide HSG247 HSE Books 2006 ISBN 978 0 7176 2874 2
- The management of asbestos in non-domestic premises. Regulation 4 of the Control of Asbestos Regulations 2006. Approved Code of Practice and guidance L127 (Second edition) HSE Books 2006 ISBN 978 0 7176 6209 8
- Health and Safety at Work etc. Act 1974 (c.37) The Stationery Office 1974 ISBN 978 0 10 543774 1
- Management of health and safety at work. Management of Health and Safety at Work Regulations 1999. Approved Code of Practice and guidance L21 (Second edition) HSE Books 2000 ISBN 978 0 7176 2488 1
- BS EN ISO/IEC 17020:2004 General criteria for the operation of various types of bodies performing inspection British Standards Institution
- BS EN ISO/IEC 17024:2003 Conformity Assessment. General requirements for bodies operating certification of persons British Standards Institution
- BS EN ISO 9001:2008 Quality management systems. Requirements British Standards Institution
- BS 6002--4:2006 ISO 3951--5:2006 Sampling procedures for inspection by variables. Sequential sampling plans indexed by acceptance quality limit (AQL) for inspection by variables (known standard deviation) British Standards Institution
- BS EN ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories British Standards Institution
- Asbestos in system buildings: Control of Asbestos Regulations 2012. Guidance for duty holders HSE 2008 [www.hse.gov.uk/services/education/claspguidance.pdf](http://www.hse.gov.uk/services/education/claspguidance.pdf)
- Asbestos: The analysts' guide for sampling, analysis and clearance procedures HSG248 HSE Books 2005 ISBN 978 0 7176 2875 9
- BS EN 60335 Specification for safety of household and similar electrical appliances British Standards Institution
- Asbestos essentials: A task manual for building, maintenance and allied trades on non-licensed asbestos work HSG210 (Second edition) HSE Books 2008 ISBN 978 0 7176 6263 0
- Accreditation of bodies surveying for asbestos in premises Edition 2 RG8 8/8 UKAS 2008 (for the application of ISO/IEC 17020)

# Appendix A

Executive Summary

Register of Asbestos Containing Material

Non-Asbestos Register

## Executive Summary

No asbestos containing materials were detected

## Asbestos Register

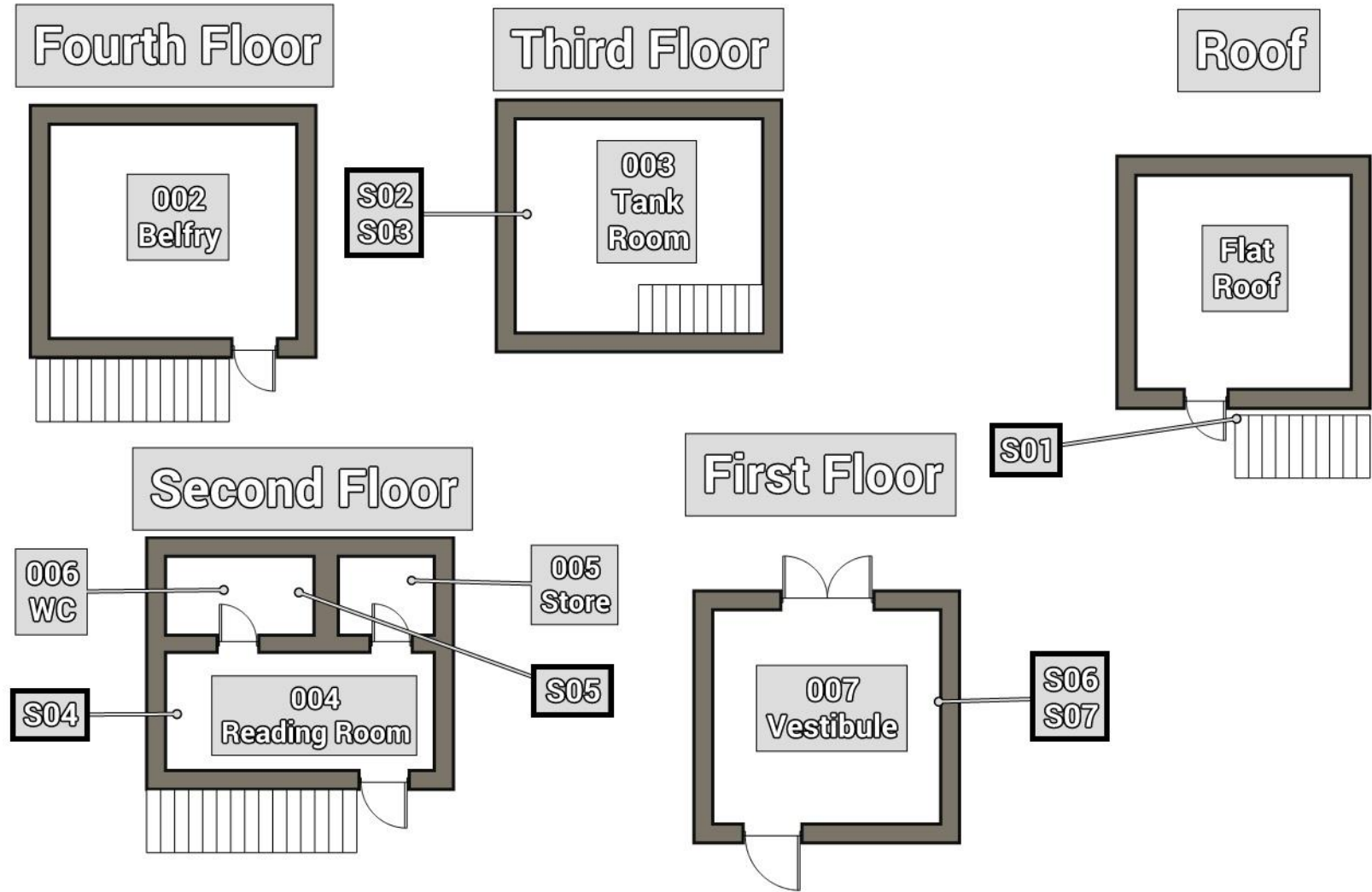
## Non-Asbestos Register

Item	Level	Location/Room Number	Survey Type	Sample Description	Sample Reference	Photo	Material Assessment
1.	Saint Mary Somerset Tower / 1st Floor	Stairwell (001)	Asbestos Refurbishment Survey	Seal to roof door - Putty	S1		No Asbestos Detected
2.	Saint Mary Somerset Tower / 1st Floor	Vestibule (005)	Asbestos Refurbishment Survey	Seal to fuse box lid - Rope	S6		No Asbestos Detected
3.	Saint Mary Somerset Tower / 1st Floor	Vestibule (005)	Asbestos Refurbishment Survey	Lining to rear of flashes -	S7		No Asbestos Detected
4.	Saint Mary Somerset Tower / 2nd Floor	Reading Room (004)	Asbestos Refurbishment Survey	Flooring - Vinyl Products	S4		No Asbestos Detected
5.	Saint Mary Somerset Tower / 2nd Floor	Store (005)	Asbestos Refurbishment Survey				No suspect material found
6.	Saint Mary Somerset Tower / 2nd Floor	W/C (006)	Asbestos Refurbishment Survey	Toilet seat - Reinforced Plastics	S5		No Asbestos Detected
7.	Saint Mary Somerset Tower / 3rd Floor	Tank room (003)	Asbestos Refurbishment Survey	Lining to water tank - Roof Felt	S2		No Asbestos Detected
8.	Saint Mary Somerset Tower / 3rd Floor	Tank room (003)	Asbestos Refurbishment Survey	Water Tank lining - Loose Fill Insulation	S3		No Asbestos Detected
9.	Saint Mary Somerset Tower / 4th Floor	Belfry (002)	Asbestos Refurbishment Survey				No suspect material found



# Appendix B

## Site Floor Plans



SITE PLAN	THIS SITE PLAN SHOULD BE READ IN CONJUNCTION WITH THE FULL ASBESTOS SURVEY REPORT	KEY	Sample Numbers		Unit 28, Essex Technology & Innovation Centre, The Gables, Fyfield Road, Ongar, CM5 0GA	NOT TO SCALE	<p><b>Limitations of reported information</b></p> <p>The information contained within this report which identifies the locations of asbestos containing materials (ACMs) should not be treated as either exhaustive or definitive. It should always be assumed that there may be other ACMs present, hidden or undetected within the fabric of the building. Further investigations may be necessary when carrying out works likely to disturb the fabric of the building.</p>
			Negative Sample Number				
			Positive Sample Number				

# Appendix C

## Laboratory Sample Certificates

**CERTIFICATE FOR IDENTIFICATION OF ASBESTOS FIBRES**
 STANDARD ☐  
 PREMIUM ☐  
 EMERGENCY ☐

Client:	SALVUM LIMITED		
Address:	ESSEX TECHNOLOGY & INNOVATION CENTRE THE GABLES FYFIELD ROAD ONGAR ESSEX CM5 0GA		
Attention:	TECHNICAL MANAGER		
Site Address:	SAINT MARY SOMERSET TOWER 5 LAMBETH HILL LONDON EC4V 4AG		
Date sample taken:	27/03/15		
Date sample received:	31/03/15		
Date of Analysis:	31/03/15		
Analysis Report No.	SCO/15/9543		
Report Date:	31/03/15		
Site Ref No.	S-01137		
Page No:	1	Of	1
No. of Samples:	7		
Obtained:	DELIVERED		

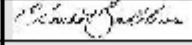
Samples of material, referenced below, have been examined to determine the presence of asbestos fibres, using Scopes Asbestos Analysis "in house" method of transmitted/polarised light microscopy and centre stop dispersion staining, based on HSE's HSG248.  
 If samples have been DELIVERED the site address and actual sample location is as given by the client at the time of delivery. Scopes Asbestos Analysis Services Limited are not responsible for the accuracy or competence of the sampling by third parties. Under these circumstances Scopes Asbestos Analysis Services Limited cannot be held responsible for the interpretation of the results shown.

SCOPES SAMPLE No.	CLIENT SAMPLE No.	Sample Location	Fibre Type Detected
1	B01	001 STAIRWELL- PUTTY SEAL TO ROOF DOORWAY	NADIS
2	B02	003 TANK ROOM- FELT LINING TO WATER TANK	NADIS
3	B03	003 TANK ROOM- LOOSE FILL INSULATION	NADIS
4	B04	004 READING ROOM- VINYL FLOORING	NADIS
5	B05	006 WC- RESIN TOILET SEAT	NADIS
6	B06	007 VESTIBULE- ROPE SEAL TO FUSE BOX LID	NADIS
7	B07	007 VESTIBULE- PAPER BACKING TO FUSES	NADIS

KEY: NADIS - No Asbestos Detected in Sample

Note: All samples will be retained for a minimum of six months.

Note: This Certificate for Identification of Asbestos Fibres shall not be reproduced except in full without the written approval of the Laboratory.

Analysed by:	N WILLIAMSON	Authorised signatory:	
		Print name:	C.BOLTON - ADMINISTRATION MANAGER

**BULK 001-VER 5 12-AUGUST-09-QCM**