

Phoenix Environmental Safety Ltd.

ASBESTOS SURVEY REPORT

(Refurbishment / Demolition Survey)

**Client: Atlas Limited Partnership,
College House, Townsend Street, Dublin 2**

**Location: Belgard House,
Belgard Road, Tallaght, Dublin 24**

Date: 11th September 2017

Report No. PE 17-641



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Client: Atlas Limited Partnership, College House, Townsend Street, Dublin 2

Location: Belgard House, Belgard Road, Tallaght, Dublin 24

Asbestos Survey Report Type: Refurbishment / Demolition Survey

Survey Company: Phoenix Environmental Safety Ltd.

Surveyor: Eoghan Hickey and Jane Hickey

Testing Laboratory: G&L Consultancy Ltd.

Date of Survey: 6th September 2017

Date of Survey Report: 11th September 2017

Report issue: Final

Signed: *Jane Hickey*

Date: 11th September 2017

This report cannot be used for contractual or engineering purposes unless this sheet is signed where indicated by Surveyor. The report must also be designated 'final' on the signatory sheet.

Please note that Phoenix Environmental Safety Ltd. cannot be held responsible for the way in which the Client interprets or acts upon the results.

The report must be read in its entirety including any appendices. Phoenix Environmental Safety Ltd. accepts no responsibility for sub-division of this report. All measurements in this report are approximate and therefore should not be used by the asbestos removal contractor for pricing purposes. The asbestos removal contractors should ascertain for themselves, by site measurements and inspection, the exact nature and extent of the work to be done.

The survey information should be used to help in the tendering process for removal of ACMs from the vessel 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

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SUMMARY

Following a request made by Mr. Eamon Hanlon (Marlet Property Group), we have produced this Refurbishment / Demolition Survey report of Belgard House, Belgard Road, Tallaght, Dublin 24 with the aim of finding asbestos containing materials (ACMs) within the scope of the asbestos survey.

The scope of the asbestos survey was confined to all accessible areas of Belgard House which is due for demolition works in the near future.

Following the asbestos survey of Belgard House, the following asbestos containing materials were detected:

- Compressed Asbestos Fibre (CAF) gaskets were identified on the two boiler units in the plant room on the 1st floor

See Appendix C & F for more details

INTRODUCTION

Background

Asbestos has been used extensively in the building industry for over one hundred years and has proved to be an excellent product for a variety of uses, having many qualities such as insulation, fire and chemical resistance to name a few. Its suitability across a wide range of uses and its relatively cheap cost made it very popular, with over 3,000 different asbestos products having been recorded.

The use of asbestos containing materials (ACM's) was most prevalent between the 1950's and 1970's when it provided an economic, easy to use and versatile material. Unfortunately, given the constitution and make up of asbestos it can give rise to microscopic airborne fibres being released into the working environment. The fibres have carcinogenic properties caused by inhalation of the fibres which can get lodged in the lining of the lungs causing disease and death.

Scope & Purpose

Atlas Limited Partnership has commissioned Phoenix Environmental Safety Ltd. to undertake an asbestos survey of Belgard House, Belgard Road, Tallaght, Dublin 24. The aim of the survey was to locate and identify the presence of asbestos containing materials (ACM's) or suspected ACM's within the scope of the survey. This report provides a record and assessment of the extent and characteristics of ACM's and is based on information made available on the 6th September 2017.

This particular survey comprised of a Refurbishment / Demolition Survey, carried out in accordance with S.I. No. 386 of 2006 Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006, the Health and Safety Executive's (UK) guidance document HSG 264 (Asbestos: The Survey Guide) and HSG 227 (A Comprehensive Guide to managing Asbestos in Premises).

This means that:

- As far as reasonably practicable, locate and describe all ACM's in all reasonably accessible areas within the scope of the survey
- A sampling programme is undertaken to identify possible ACM's and estimates of the volumes and the surface areas of ACM made
- A record of the condition of the ACM's or where additional asbestos debris may be expected to be present is produced

Refurbishment / Demolition Surveys (formerly type 3 surveys)

This type of survey is necessary prior to any refurbishment (including "minor") or demolition work being carried out. These "refurbishment / demolition" surveys will be much more intrusive and destructive compared with management surveys as their intention is to locate all the ACMs so that they can be removed before the refurbishment or demolition takes place. Refurbishment/demolition surveys are required as necessary when the needs or use of the building changes and the fabric of the building will be disturbed or complex fixed plant and equipment are to be dismantled.

The purpose of the report is to:

- Enable the client to take appropriate precautions so that people who work at the Belgard House Site during the forthcoming demolition works are not exposed to asbestos-related health risks
- Provide information to assist the client in developing and implementing an action plan before any refurbishment works or demolition is carried out

Presentation of Findings

Data Sheets

A series of data sheets have been prepared to provide assessments and recommendations for each of the locations where samples were taken. These data sheets are presented in Appendix C.

Figures

The schematic diagrams presented in Appendix F at the rear of this document shows the locations of all of the asbestos containing materials detected during the asbestos survey.

Caveats

All reasonable steps have been taken to ensure that the contents and findings of this report are true and accurate. Though as stated below, further undetected ACM's may still be present within the premises. The client should therefore be aware of his responsibilities for identifying, locating, removing and/or managing all ACM's within the premises, and for notifying the appropriate authorities where necessary.

Refurbishment / Demolition Surveys

This type of survey employs the use of destructive sampling techniques of an unfamiliar site. Although every effort is made to locate all asbestos containing materials, it is impossible to rule out the possibility that undiscovered asbestos materials may be present. If the building is to undergo major refurbishment or demolition, it is recommended that the persons carrying out the work are made aware of this and take sufficient precautions, as may be appropriate, to ensure the health and safety of their own employees and any other parties who may be affected by the works.

APPENDIX A

ASBESTOS CONTAINING MATERIALS IN BUILDINGS

Sprayed coatings applied in Ireland were typically a mixture of hydrated asbestos cement containing up to 85% asbestos, mainly amosite but crocidolite and mixtures have been used. Primarily used for anti-condensation and acoustic control and fire protection to structural steelwork. It is a friable material but if in a good condition and unlikely to be disturbed presents no immediate danger, however it is likely to release fibres, if disturbed especially during repair and maintenance work. As it ages the binding medium of sprayed asbestos may degrade with the consequent release of more fibres.

Thermal insulation to boilers, vessels, pipe work, valves, pumps etc also known as hand applied lagging. Lagging may have a protective covering of cloth, tape, paper, metal or a surface coating of cement. All types of asbestos may be found in lagging and the content can vary between 15 and 85% asbestos with the protective papers being up to 100% chrysotile. The likelihood of fibre release depends upon its composition, friability and state of repair, but it is particularly susceptible to damage and disturbance through maintenance work or the action of water leaks.

Asbestos insulating boards usually contain between 16 to 40% amosite, although boards may be found to contain other types of asbestos and in other quantities. Insulating boards were developed in the 1950s to provide an economical, lightweight, fire resisting insulating material. As insulation board is semi-compressed it is more likely to release fibres as a result of damage or abrasion. Work on asbestos insulation board can give rise to high levels of asbestos fibre.

Asbestos cement products as in roofing sheets, wall cladding, permanent shuttering, flue, rain water and vent pipes generally contain 10 to 15% of asbestos fibre bounded in Portland cement, some flexible boards contain a small proportion of cellulose. All three types of asbestos have been used in the manufacture of asbestos cement. The asbestos fibres in asbestos cement are usually firmly bound in the cement matrix and will be released only if the material is mechanically damaged or as it deteriorates with age.

Ropes and yarns are usually high in asbestos content, approaching 100% and all three types of asbestos have been used in their manufacture. They were used as in the pipe lagging process and in pipe jointing and also for packing materials as in heat/fire resistant boiler, oven and flue sealing or anywhere thermal or fire protection was required. The risk of fibre release depends upon the structure of the material; bonded gasket material is unlikely to release asbestos but an unbonded woven material may give rise to high fibre release especially if when damaged or frayed.

Cloth thermal insulation and lagging, including fire resistant blankets, mattresses and protective curtains, gloves, aprons, overalls etc. All types of asbestos have been used in the manufacture but since the mid 60's the majority has been chrysotile, the content of which can be up to 100 %.

Millboard, CAF Gaskets and paper products usually have an asbestos content approaching 100% with all three types of asbestos being used in their manufacture. They were used for insulation of electrical equipment and for thermal insulation. Asbestos paper has been used as a laminate for fireproofing to various fibre panels. These materials are on some occasions not well bonded and will release asbestos fibres if subject to abrasion and wear.

Bitumen felts and coatings may contain asbestos either bound in the bitumen matrix or as an asbestos paper liner. These materials are not likely to present a hazard during normal installation or use, but should be removed and disposed of in compliance with any regulation applicable.

Thermoplastic floor tiles can contain up to 25% asbestos usually chrysotile, PVC vinyl floor tiles and unbacked PVC flooring normally 7-10% chrysotile and asbestos paper backed PVC flooring the paper backing may contain up to 100% chrysotile. Fibre release is not normally an issue but may occur when the material is cut or subjected to abrasion.

Textured coatings. Decorative coatings on walls and ceilings usually contain 3-5% chrysotile. Fibre release may occur when subjected to abrasion.

Mastics, sealants, putties and adhesives may contain small amounts of asbestos. The only possible risk is from sanding of hardened material when appropriate precautions should be taken.

Reinforced plastic and resin composites, used for toilet cisterns, seats, banisters, window seals, lab bench tops, brakes and clutches in machines. The plastics usually contain 1-10% chrysotile and were used in for example car batteries to improve the acid resistance. Resins may contain between 20 and 50% amosite, but because of its composition fibre release is likely to be low.

APPENDIX B

RESULTS OF LABORATORY ANALYSIS

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ASBESTOS BULK IDENTIFICATION REPORT				
Report no: PE17-641			Date of Issue: 8 th September 2017	
Client details:				
Atlas Limited Partnership, College House, Townsend Street, Dublin 2				
Identification of asbestos content of suspected asbestos containing material stated to have been sampled from the following location/site:				
Belgard House, Belgard Road, Tallaght, Dublin 24				
No of Samples received: 7		Date of receipt of samples: 6.9.2017		Date of analysis: 8.9.2017
Methodology. Analysis of samples received was carried out in accordance with HSE Method MDHS 77/HGS 248 and documented in-house methods. For samples received from the client and not sampled by Phoenix Environmental Safety Ltd. This report is given in good faith on the basis of the samples and information received. Phoenix Environmental Safety Ltd. can take no responsibility for omissions, unrepresentative samples, inaccuracies or discrepancies in samples and information received.				
TEST RESULTS				
LAB. REF.	SAMPLE NO.	LOCATION	MATERIAL	ASBESTOS TYPE
S 01	BS 152393	2nd Floor - Office area - Centre stairs	Nosing	No asbestos detected in sample
S 02	BS 152394	1st Floor - Kitchenette - Floor	Tile	No asbestos detected in sample
S 03	BS 152395	1st Floor - Ceiling void - Steel beam	Sprayed coating	No asbestos detected in sample
S 04	BS 152396	1st Floor - Plant room - Boiler unit	Gasket	Chrysotile
S 05	BS 152397	1st Floor - Plant room - Pipe work flange	Gasket	No asbestos detected in sample
S 06	BS 152398	1st Floor - Plant room - Flue pipe	Rope	No asbestos detected in sample
S 07	BS 152399	Ground floor - Office area - Steel beam	Sprayed coating	No asbestos detected in sample
LABORATORY ANALYST: G&L Consultancy Ltd.			DATE: 8 th September 2017	

APPENDIX C

ASBESTOS DATA SHEETS



Belgard House, Belgard Road, Tallaght, Dublin 24



Phoenix Environmental Safety Ltd.

ASBESTOS DATA SHEET



Created By	Eoghan Hickey
Date	11 th September 2017
Site Details	Belgard House, Belgard Road, Tallaght, Dublin 24
Client Name	Atlas Limited Partnership
Survey Type	Refurbishment / Demolition
Site Ref	PE 17-641
Building Ref.	Belgard House
Location	1 st floor plant room
Extent/ Amount	One per boiler unit

Survey Date	6.9.2017	Sample No.	BS 152396
Survey Company	Phoenix Environmental Safety Ltd.		
Testing Laboratory.	G&L Consultancy Ltd.		

	MATERIAL ASSESSMENT		PRIORITY ASSESSMENT
Product type	CAF gasket	Normal occupant activity	N/A
Extent of damage	Medium damage	Likelihood of disturbance	N/A
Surface treatment	None	Human exposure potential	N/A
Asbestos type	Chrysotile	Maintenance activity	N/A
	Material assessment score N/A	TOTAL SCORE: N/A	Priority assessment score N/A

CONCLUSIONS AND RECOMMENDATIONS

The Compressed Asbestos Fibre (CAF) Gaskets identified behind the front plate of the boiler unit in the 1st floor boiler room contains Chrysotile (white) asbestos fibers. CAF gaskets contain almost 100% asbestos fibres, with a small amount of binder

The CAF gaskets should be removed by an asbestos removal contractor and disposed of as asbestos waste before the demolition works commence

See Appendix F for more details

All asbestos removal work must be carried out in accordance with S.I. No. 386 of 2006 Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010

APPENDIX D

NON ASBESTOS CONTAINING MATERIALS

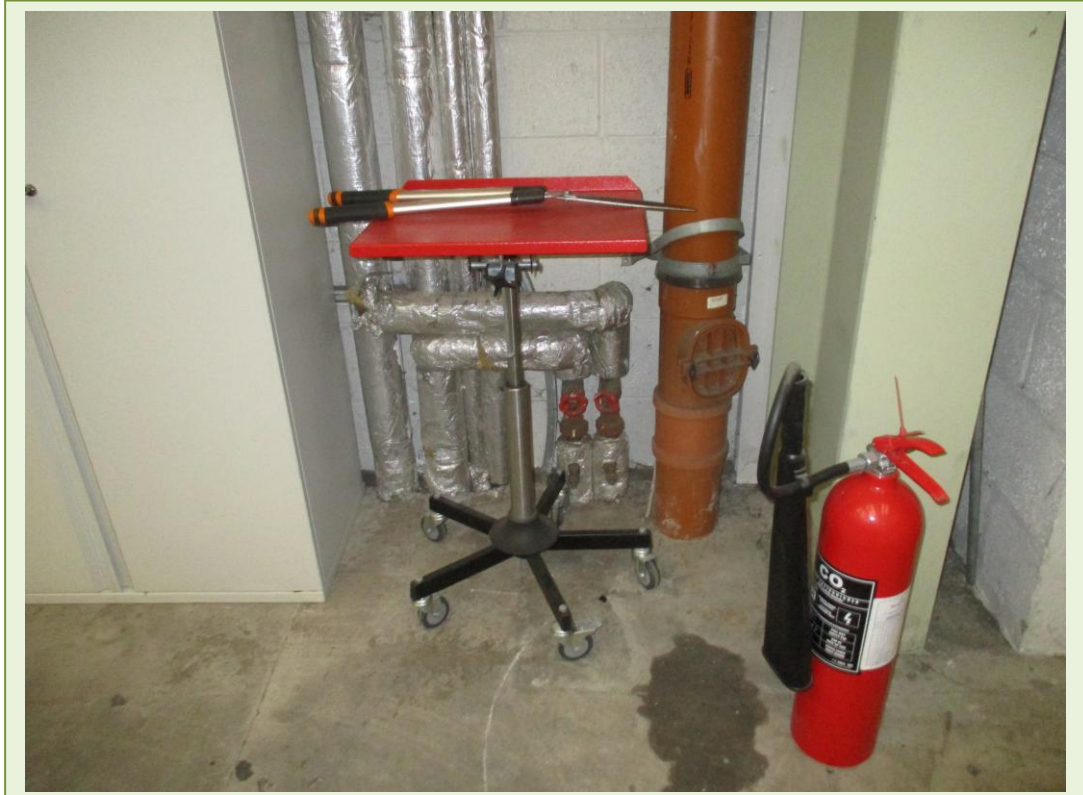


Roof cladding. No Asbestos Containing Materials (ACM's) detected

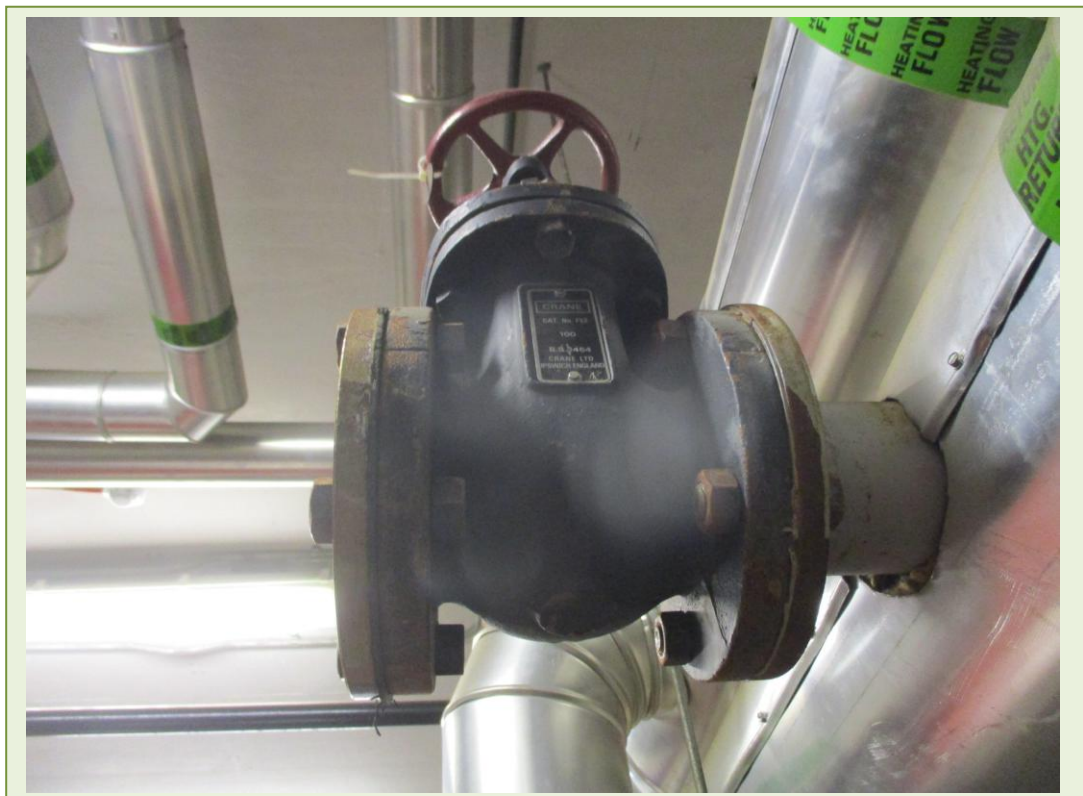


Sprayed coating on the beams in the office areas. No ACM's detected

NON ASBESTOS CONTAINING MATERIALS



Pipework insulation. No ACM's detected

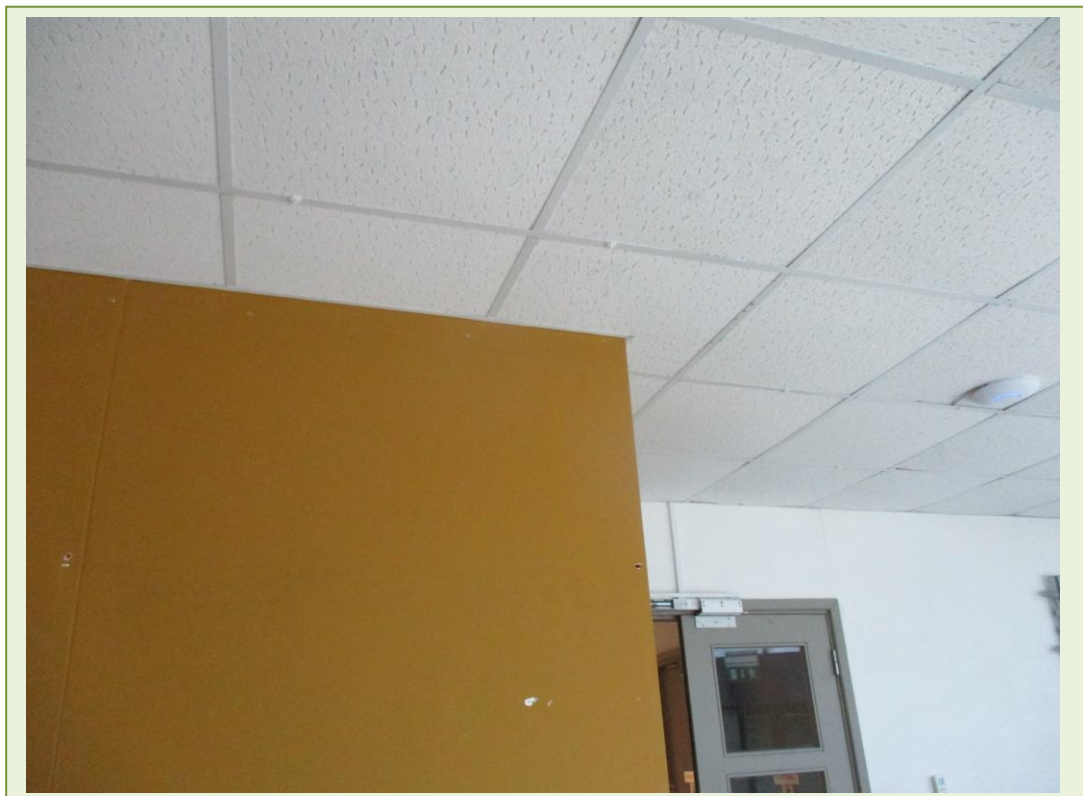


Gaskets found between the pipework flanges in the 1st floor plant room. No ACM's detected

NON ASBESTOS CONTAINING MATERIALS

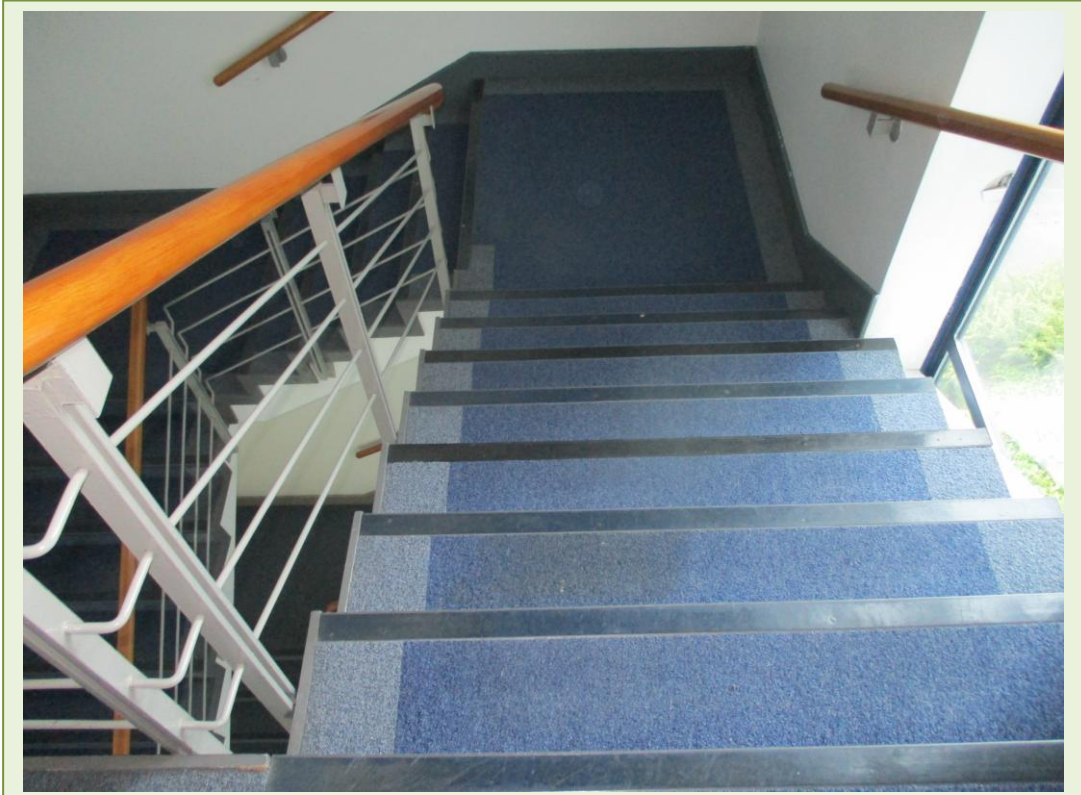


Rope between the ducting flanges in the 1st floor plant room. No ACM's detected

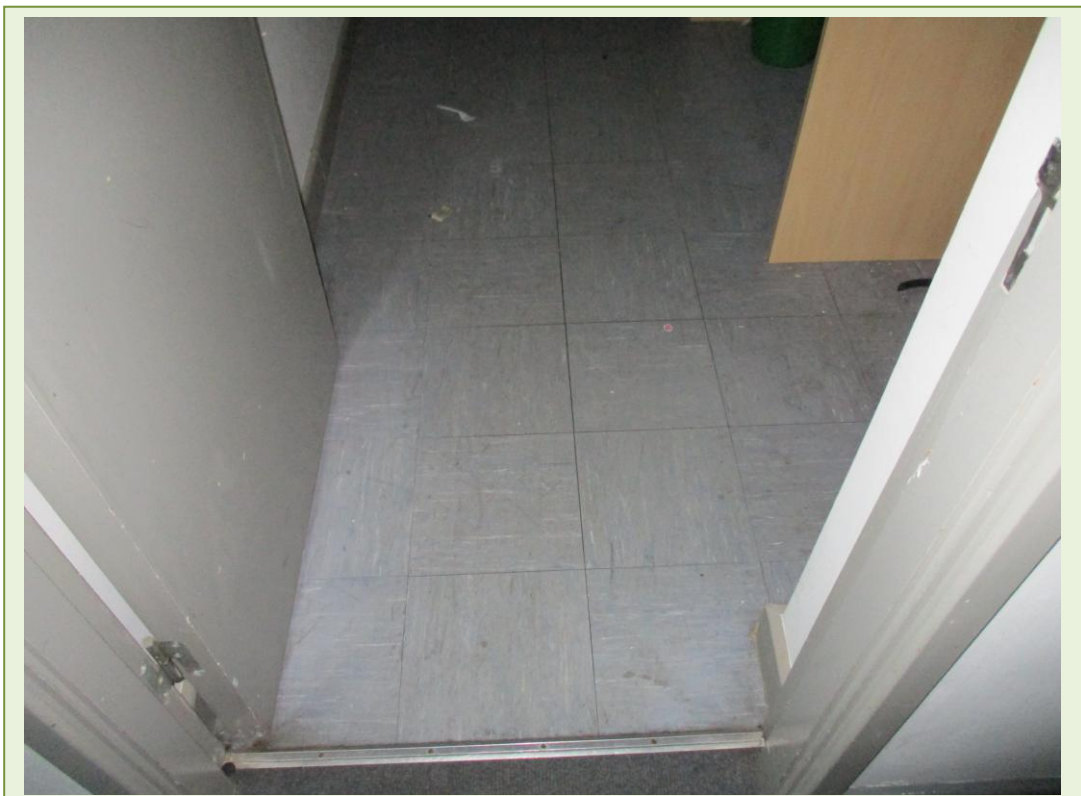


Ceiling tiles in the office areas. No ACM's detected

NON ASBESTOS CONTAINING MATERIALS



Stair nosing. No ACM's detected



Floors tiles in kitchette areas in office block. No ACM's detected

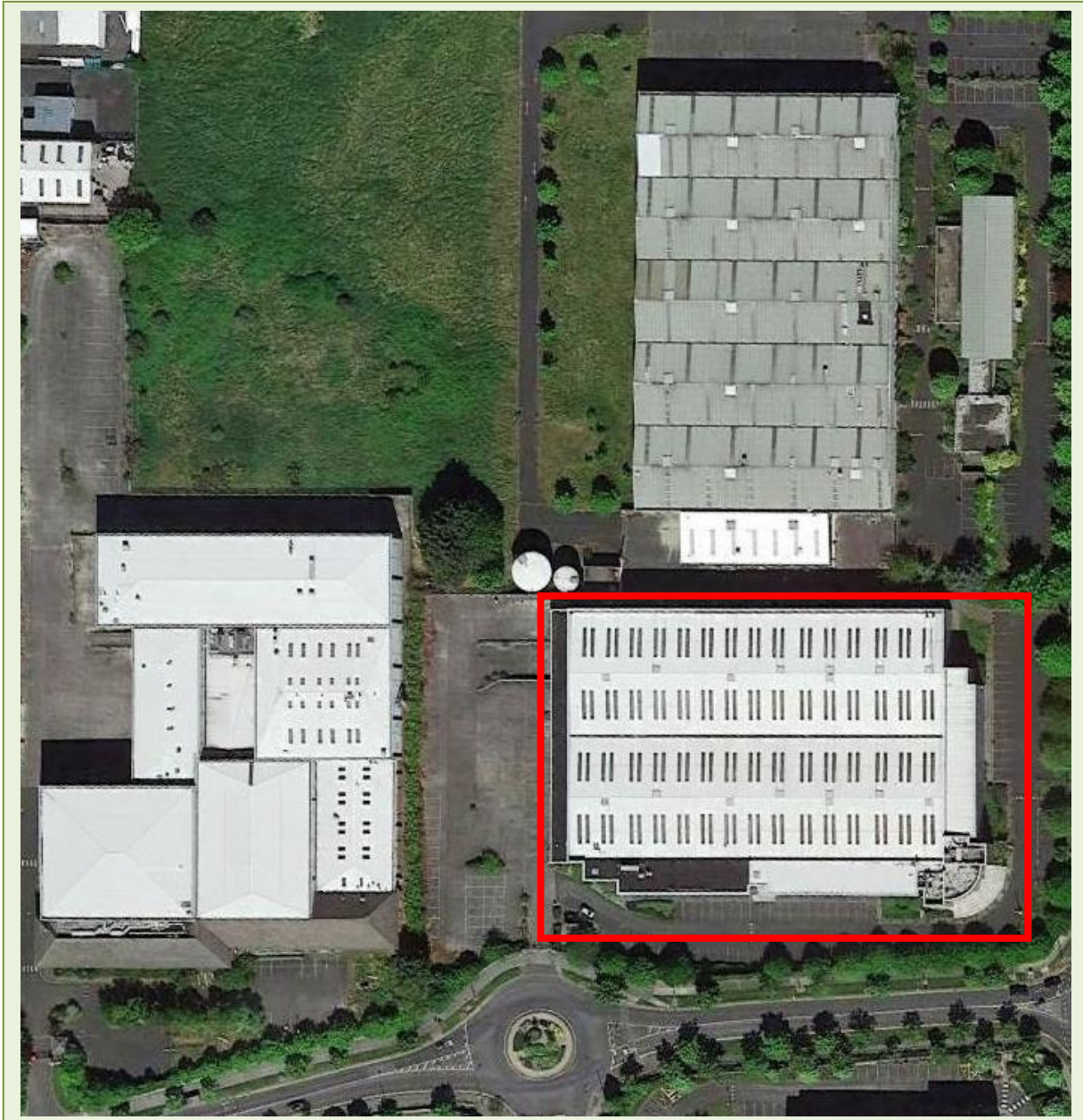
APPENDIX E

NON ACCESSIBLE LOCATIONS

- The property was live during the course of the asbestos survey and no intrusive sampling was carried out in the occupied areas. Once the building becomes a live building site it is recommended that a more intrusive survey is carried out to determine if further ACM's may be present throughout the property
- No inspection of live electrical or mechanical plant was carried out
- No inspection of any areas requiring specialist access equipment other than telescopic ladder was carried out
- All contractors working on the site should always remain vigilant to the possibility that concealed asbestos containing materials may be present on site. If any suspect asbestos containing materials are uncovered during the course of the work, works must stop in that area and the suspect material should be sampled and analysed immediately for the presence of asbestos

APPENDIX F

FLOOR PLANS & LOCATION OF ASBESTOS CONTAINING MATERIALS

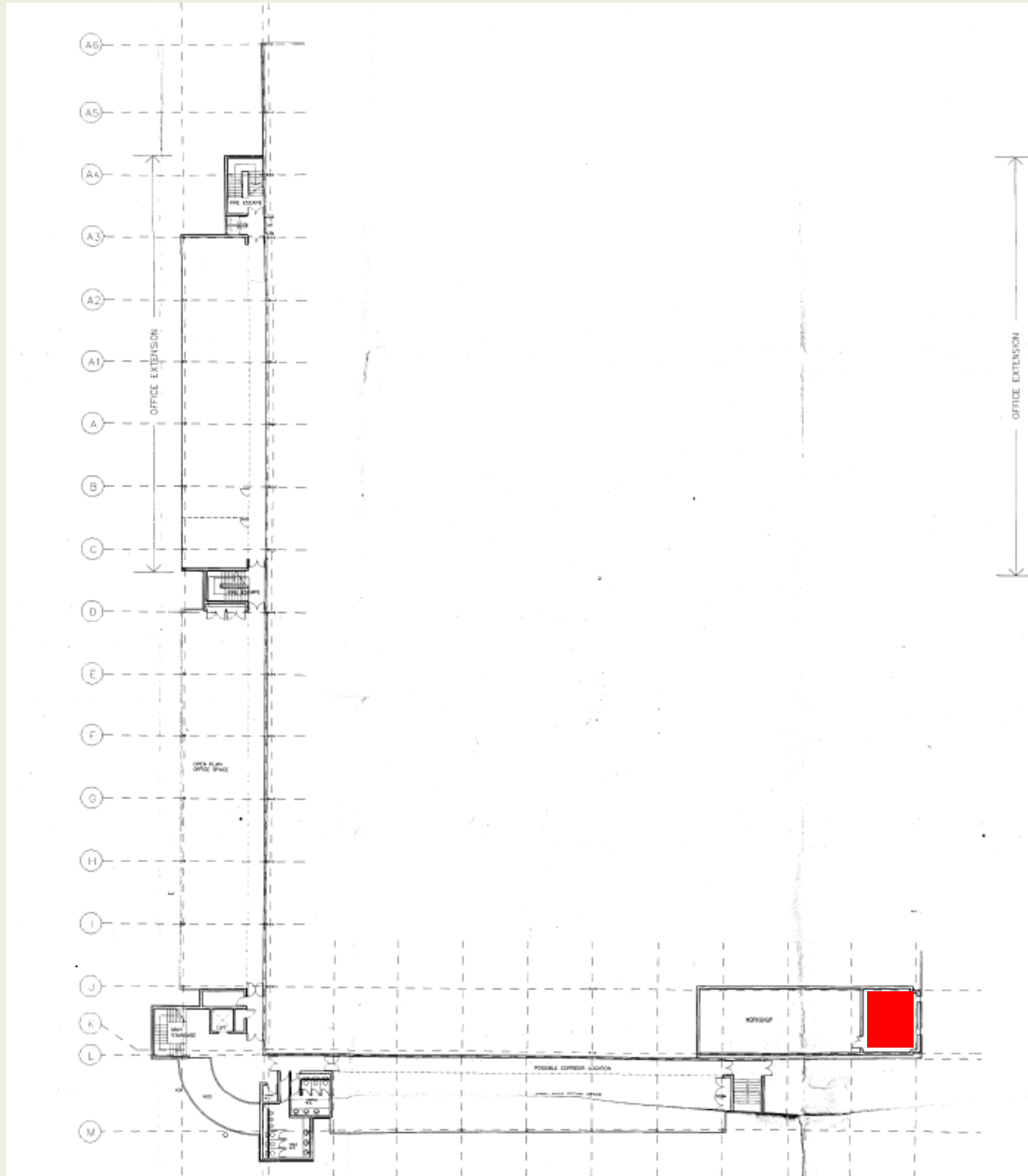





Belgard House, Belgard Road, Tallaght, Dublin 24

Schematic diagram only
Not to scale
11th September 2017

Belgard House,
Belgard Road,
Tallaght, Dublin 24

1ST FLOOR PLAN



	Areas where the presence of asbestos containing gaskets were identified
	
	

Schematic diagram only
Not to scale
11th September 2017

Belgard House,
Belgard Road,
Tallaght, Dublin 24

GROUND FLOOR PLAN

