

**Phoenix Environmental Safety Ltd.**

# **ASBESTOS SURVEY REPORT**

**(Refurbishment / Demolition Survey)**

**Client: JBA Consulting,  
Greenogue Business Park, Rathcoole, Co. Dublin**

**Location: Old Road Bungalow,  
Hayestown, Rush, Co. Dublin**

**Date: 8<sup>th</sup> June 2020**

**Report No. PE 20-418**



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Client: JBA Consulting, Greenogue Business Park, Rathcoole, Co. Dublin

Location: Old Road Bungalow, Hayestown, Rush, Co. Dublin

Asbestos Survey Report Type: Refurbishment / Demolition Survey

Survey Company: Phoenix Environmental Safety Ltd.

Surveyors: Eoghan Hickey

Testing Laboratory: G & L Consultancy Ltd.

Date of Survey: 29<sup>th</sup> May 2020

Date of Survey Report: 8<sup>th</sup> June 2020

Report issue: Final

Signed: *Eoghan Hickey*

Date: 8<sup>th</sup> June 2020

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 JBA Consulting, we have produced this Refurbishment / Demolition Survey report for the Old Road Bungalow, Hayestown, Rush, Co. Dublin 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 the Old Road Bungalow in Rush which is due for demolition works.

**During the asbestos survey at the Old Road Bungalow in Rush, the following asbestos containing materials were detected in the following locations:**

- Asbestos cement fillet slates were identified along the main roof of the house (15 linear meters approx.)
- Asbestos cement slates were identified under the tank over the boiler unit in the boiler room
- Asbestos containing floor tiles & bitumen adhesive were identified in the rear garage (15 m<sup>2</sup> approx.)
- Asbestos containing bitumen adhesive was identified in the kitchen (8 m<sup>2</sup> approx.)

*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

JBA Consulting have commissioned Phoenix Environmental Safety Ltd. to undertake an asbestos survey at the Old Road Bungalow, Hayestown, Rush, Co. Dublin. The aim of the survey was to locate and identify the presence of asbestos containing materials (ACM's) or suspected ACM's. This report provides a record and assessment of the extent and characteristics of ACM's and is based on information made available on the 29<sup>th</sup> May 2020.

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 Old Road Bungalow in Rush during the forthcoming 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 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 slates, 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, paper and CAF gaskets** 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.

**Vinyl, 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 floor tile 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, stair nosings, 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.

ASBESTOS FIBRE TYPE COMMON NAMES	
<b>Chrysotile</b>	<b>White Asbestos</b>
<b>Amosite</b>	<b>Brown Asbestos</b>
<b>Crocidolite</b>	<b>Blue Asbestos</b>
<b>Fibrous Actinolite</b>	N/A
<b>Fibrous Anthophyllite</b>	N/A
<b>Fibrous Tremolite</b>	N/A



**Chrysotile**



**Amosite**



**Crocidolite**



**Tremolite**



**Actinolite**



**Anthophyllite**

# APPENDIX B

## RESULTS OF LABORATORY ANALYSIS



# APPENDIX C

## ASBESTOS DATA SHEETS



Old Road Bungalow, Hayestown, Rush, Co. Dublin



## PHOENIX ENVIRONMENTAL SAFETY LTD. ASBESTOS DATA SHEET



Created By	Eoghan Hickey
Date	8 <sup>th</sup> June 2020
Site Details	Old Road Bungalow, Hayestown, Rush, Co. Dublin
Client Name	JBA Consulting
Survey Type	R/D Asbestos Survey
Site Ref	PE 20-418
Building Ref.	Old Road Bungalow
Location	Roof barge
Extent/ Amount	15 linear meters approx.



Survey Date	29.5.2020	Sample No.	BS 178141
Survey Company	Phoenix Environmental Safety Ltd.		
Testing Laboratory.	G & L Consultancy Ltd.		

	MATERIAL ASSESSMENT		PRIORITY ASSESSMENT
Product type	Cement fillet slate	Normal occupant activity	N/A
Extent of damage	Low	Likelihood of disturbance	N/A
Surface treatment	Sealed	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 cement fillet slates identified along the roof barge of the house contain Chrysotile (white) asbestos. Asbestos cement products generally contain 10 to 15% asbestos fibres, bound in Portland cement

If the asbestos cement fillet slates should be removed by an asbestos removal contractor and disposed of as asbestos waste before the 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

## PHOENIX ENVIRONMENTAL SAFETY LTD. ASBESTOS DATA SHEET



Created By	Eoghan Hickey
Date	8 <sup>th</sup> June 2020
Site Details	Old Road Bungalow, Hayestown, Rush, Co. Dublin
Client Name	JBA Consulting
Survey Type	R/D Asbestos Survey
Site Ref	PE 20-418
Building Ref.	Boiler room
Location	Under water tank over boiler
Extent/ Amount	Small quantity



Survey Date	29.5.2020	Sample No.	BS 178138
Survey Company	Phoenix Environmental Safety Ltd.		
Testing Laboratory	G & L Consultancy Ltd.		

	MATERIAL ASSESSMENT		PRIORITY ASSESSMENT
Product type	Cement slate	Normal occupant activity	N/A
Extent of damage	Low	Likelihood of disturbance	N/A
Surface treatment	Unsealed	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 cement slates identified under the tank in the boiler room contain Chrysotile (white) asbestos. Asbestos cement products generally contain 10 to 15% asbestos fibres, bound in Portland cement

The asbestos cement slates should be removed by an asbestos removal contractor and disposed of as asbestos waste before the forthcoming 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

## PHOENIX ENVIRONMENTAL SAFETY LTD. ASBESTOS DATA SHEET



Created By	Eoghan Hickey
Date	8 <sup>th</sup> June 2020
Site Details	Old Road Bungalow, Hayestown, Rush, Co. Dublin
Client Name	JBA Consulting
Survey Type	R/D Asbestos Survey
Site Ref	PE 20-418
Building Ref.	Old Road Bungalow
Location	Rear garage
Extent/ Amount	15 m <sup>2</sup> total approx.



Survey Date	29.5.2020	Sample No.	BS 178137
Survey Company	Phoenix Environmental Safety Ltd.		
Testing Laboratory.	G & L Consultancy Ltd.		

	MATERIAL ASSESSMENT		PRIORITY ASSESSMENT
Product type	Floor tiles & bitumen adhesive	Normal occupant activity	N/A
Extent of damage	Low	Likelihood of disturbance	N/A
Surface treatment	Composite & well bound material	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

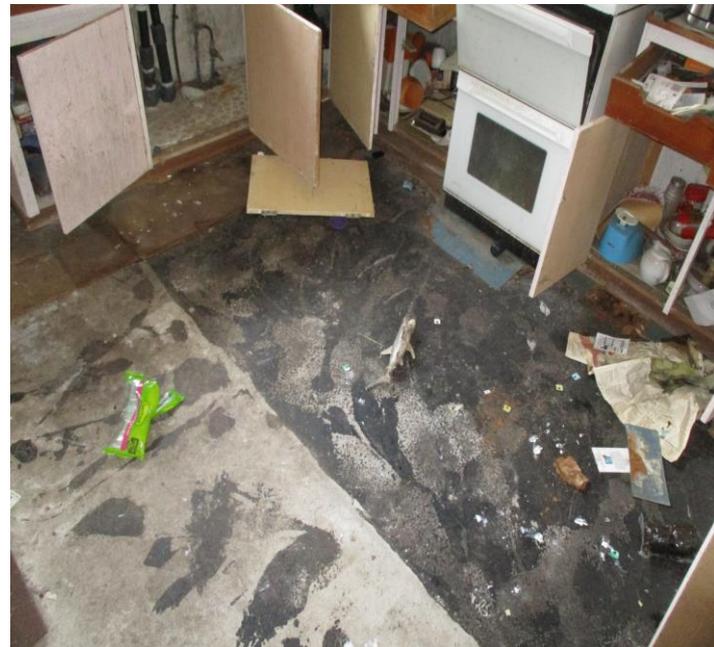
The floor tiles and bitumen adhesive identified in the rear garage contains Chrysotile (white) asbestos fibres. Thermoplastic floor tiles can contain up to 25% asbestos fibres. Bitumen adhesives contain a small quantity of asbestos fibres

The asbestos containing floor tiles and bitumen adhesive should be removed by an asbestos removal contractor and disposed of as asbestos waste before the 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

## PHOENIX ENVIRONMENTAL SAFETY LTD. ASBESTOS DATA SHEET



Created By	Eoghan Hickey
Date	8 <sup>th</sup> June 2020
Site Details	Old Road Bungalow, Hayestown, Rush, Co. Dublin
Client Name	JBA Consulting
Survey Type	R/D Asbestos Survey
Site Ref	PE 20-418
Building Ref.	Old Road Bungalow
Location	Kitchen
Extent/ Amount	8 m <sup>2</sup> total approx.

Survey Date	29.5.2020	Sample No.	BS 178136
Survey Company	Phoenix Environmental Safety Ltd.		
Testing Laboratory.	G & L Consultancy Ltd.		

	MATERIAL ASSESSMENT		PRIORITY ASSESSMENT
Product type	Bitumen adhesive	Normal occupant activity	N/A
Extent of damage	Low	Likelihood of disturbance	N/A
Surface treatment	Well bound material	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 bitumen adhesive identified in the kitchen contains Chrysotile (white) asbestos fibres. Bitumen adhesives contain a small quantity of asbestos fibres

The asbestos containing bitumen adhesive should be removed by an asbestos removal contractor and disposed of as asbestos waste before the 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 tiles on the main roof and felt on the rear garage

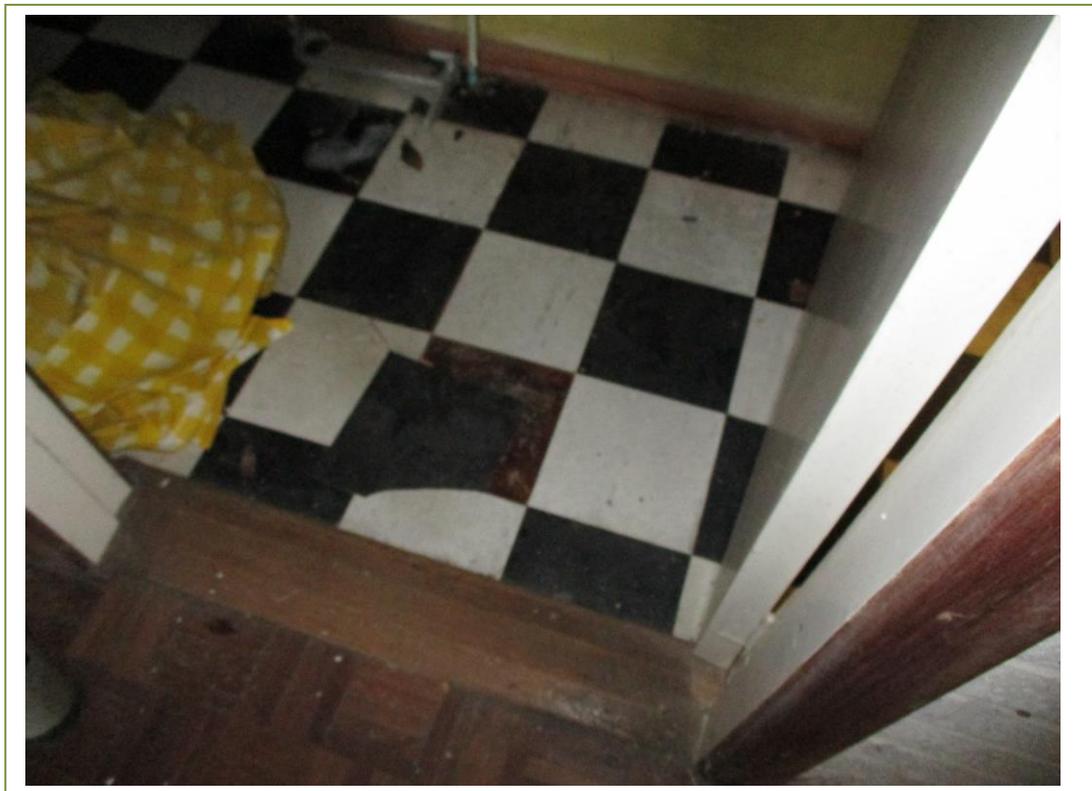


Felt on the side garage roof

## NON ASBESTOS CONTAINING MATERIALS



Plasterboard ceilings in the boiler room



Floor tiles in the W/C

## NON ASBESTOS CONTAINING MATERIALS



Floor tiles in the bedroom corridor



Floor covering in the W/C

# APPENDIX E

## NON ACCESSIBLE LOCATIONS

- The garage at the side of the house was not accessible on the day of the survey. The internal areas of the garage could only be viewed from the door
- No underground services were inspected
- No inspection of live electrical or mechanical plant or similar requiring the attendance of a specialist engineer was carried out
- No inspection of any enclosed areas or 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

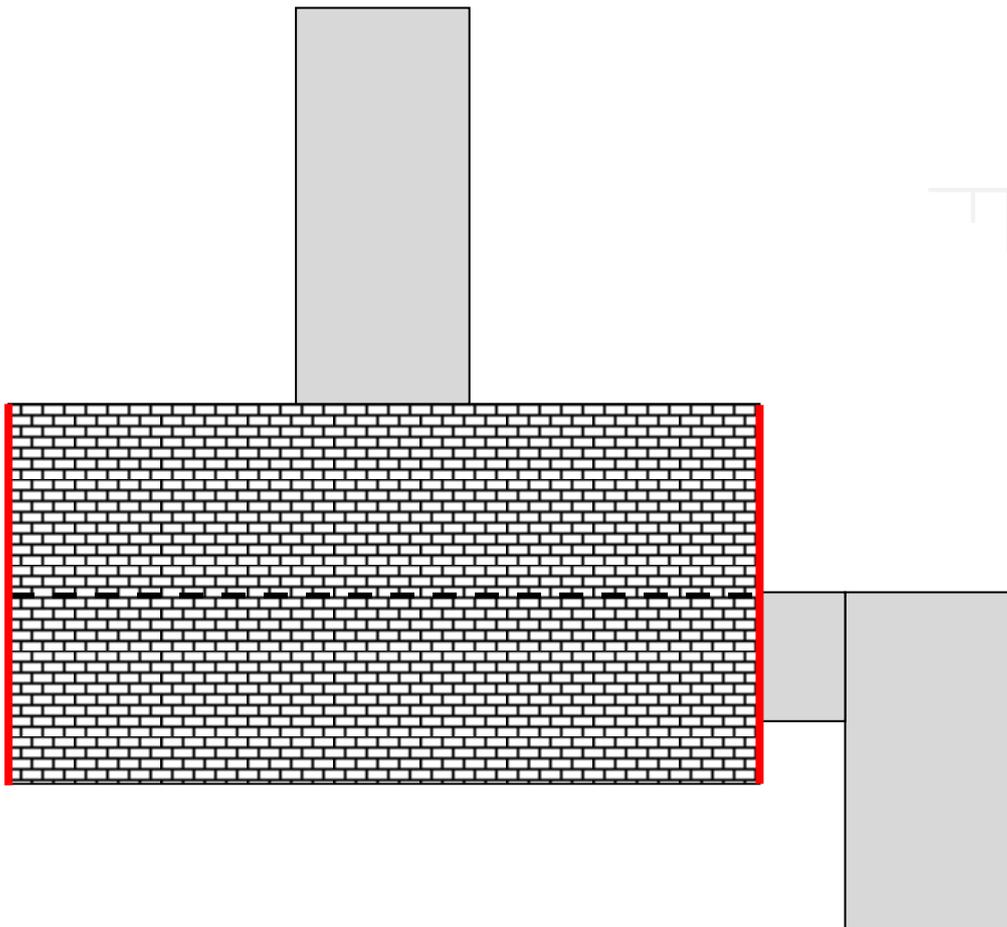
# APPENDIX F

## FLOOR PLANS & LOCATION OF ASBESTOS CONTAINING MATERIALS

Schematic diagram only  
Not to scale  
8<sup>th</sup> June 2020

Old Road Bungalow,  
Hayestown, Rush,  
Co. Dublin

### ROOF PLAN

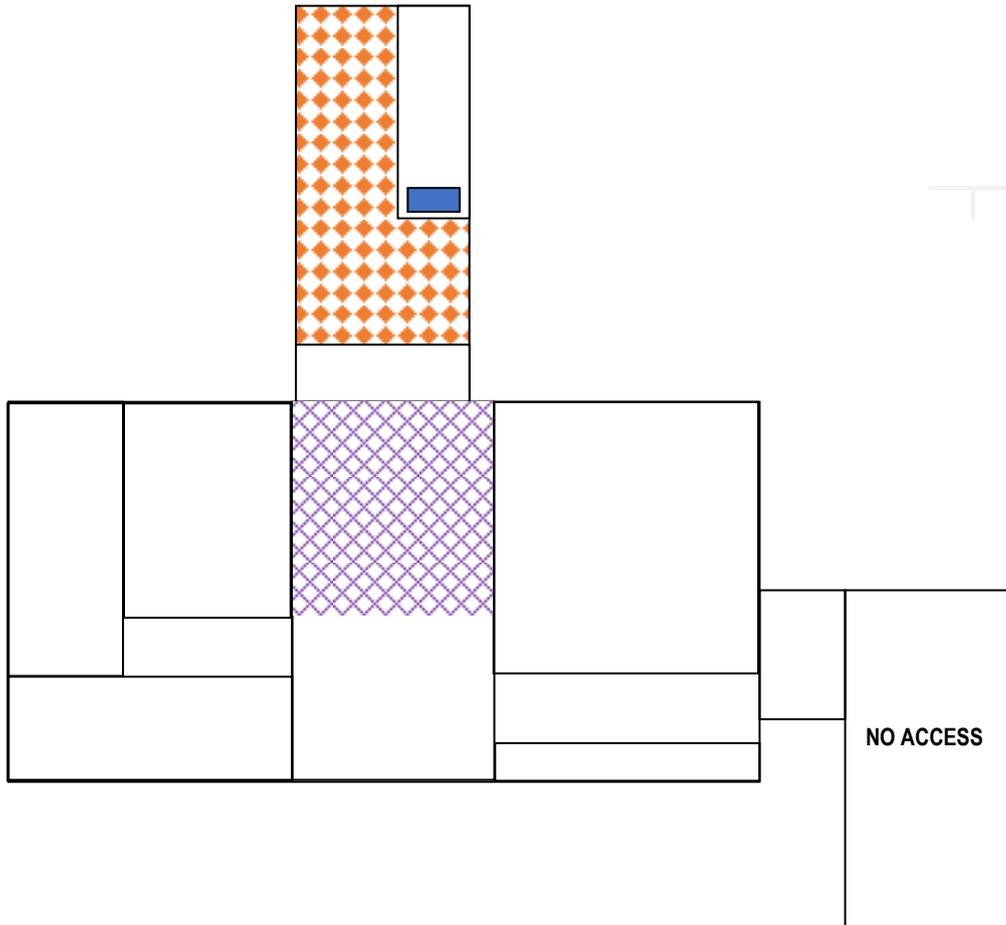


	Areas where asbestos cement fillet slates were identified

Schematic diagram only  
Not to scale  
8<sup>th</sup> June 2020

Old Road Bungalow,  
Hayestown, Rush,  
Co. Dublin

### FLOOR PLAN



-  Areas where asbestos cement slates were identified
-  Areas where asbestos containing bitumen adhesive was identified
-  Areas where asbestos containing floor tiles & bitumen adhesive were identified