APPENDIX 14.1 CONSTRUCTION & DEMOLITION WASTE MANAGEMENT PLAN

CONSTRUCTION & DEMOLITION WASTE MANAGEMENT PLAN FOR A PROPOSED RESIDENTIAL DEVELOPMENT

MASTERPLAN, SITE 3, SITE 4 AND SITE 5.

APPENDIX 14.1

Report Prepared For

Dublin Central GP Limited or shortened to DCGP Ltd.

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1.0 INTRODUCTION

AWN Consulting Ltd. (AWN) has prepared this Operational Waste Management Plan (OWMP) on behalf of Dublin Central GP Limited or shortened to DCGP Ltd. The Dublin Central project is an expansive (c.2.3 Ha) and complex regeneration project. It needs to be delivered in stages to overcome site and project constraints. A site wide cumulative masterplan has been prepared by 'the Applicant' to set out the overall development vision for the Dublin Central project. 'The Masterplan' area encompasses almost entirely three urban blocks. The area is bounded generally by O'Connell Street Upper and Henry Place to the east, Henry Street to the south, Moore Street to the west, and O'Rahilly Parade and Parnell Street to the north. Moore Lane extends south from Parnell Street through the centre of the masterplan area, as far as its junction with Henry Place.

This plan will provide information necessary to ensure that the management of C&D waste at the site is undertaken in accordance with the current legal and industry standards including the *Waste Management Acts 1996 - 2011* and associated Regulations [1], *Protection of the Environment Act 2003* as amended [2], *Litter Pollution Act 1997* as amended [3] and the *Eastern-Midlands Region Waste Management Plan 2015 – 2021* [4].

In particular, this Plan aims to ensure maximum recycling, reuse and recovery of waste with diversion from landfill, wherever possible. It also seeks to provide guidance on the appropriate collection and transport of waste from the site to prevent issues associated with litter or more serious environmental pollution (e.g. contamination of soil and/or water).

This C&D WMP includes information on the legal and policy framework for C&D waste management in Ireland, estimates of the type and quantity of waste to be generated by the proposed development and makes recommendations for management of different waste streams.

2.0 CONSTRUCTION & DEMOLITION WASTE MANAGEMENT IN IRELAND

2.1 National Level

The Irish Government issued a policy statement in September 1998 known as *'Changing Our Ways'* [5], which identified objectives for the prevention, minimisation, reuse, recycling, recovery and disposal of waste in Ireland. The target for C&D waste in this report was to recycle at least 50% of C&D waste within a five year period (by 2003), with a progressive increase to at least 85% over fifteen years (i.e. 2013).

In response to the *Changing Our Ways* report, a task force (Task Force B4) representing the waste sector of the already established Forum for the Construction Industry, released a report entitled *'Recycling of Construction and Demolition Waste'* [6] concerning the development and implementation of a voluntary construction industry programme to meet the Government's objectives for the recovery of C&D waste.

In September 2020 the government released a new national policy document outlining a new action plan for Ireland and it's waste to cover the period of 2020-2025. This plan 'A Waste Action Plan for a Circular Economy' [7], was prepared in response to the 'European

Green Deal' which sets a roadmap for a transition to a new economy, where climate and environmental challenges are turned into opportunities. Replacing the previous national waste management plan "A Resource Opportunity (2012)".

It aims to fulfil the commitment in the Programme for Government to publish and start implementing a new National Waste Action Plan. It is intended that this new national waste policy will inform and give direction to waste planning and management in Ireland over the coming years. It will be followed later this year by an All of Government Circular Economy Strategy. The policy document shifts focus away from waste disposal and moves it back up the production chain. To support the policy, regulation is already being used (Circular Economy Legislative Package) or in the pipeline (Single Use Plastics Directive). The policy document contains over 200 measures across various waste areas including Circular Economy, Municipal Waste, Consumer Protection & Citizen Engagement, Plastics and Packaging, Construction and Demolition, Textiles, Green Public Procurement and Waste Enforcement.

The National Construction and Demolition Waste Council (NCDWC) was launched in June 2002, as one of the recommendations of the Forum for the Construction Industry, in the Task Force B4 final report. The NCDWC subsequently produced '*Best Practice Guidelines for the Preparation of Waste Management Plans for Construction and Demolition Projects*' [8] in July 2006 in conjunction with the then Department of the Environment, Heritage and Local Government (DoEHLG). The guidelines outline the issues that need to be addressed at the pre-planning stage of a development all the way through to its completion. These guidelines have been followed in the preparation of this document and include the following elements:

- Predicted C&D wastes and procedures to prevent, minimise, recycle and reuse wastes;
- Waste disposal/recycling of C&D wastes at the site;
- Provision of training for waste manager and site crew;
- Details of proposed record keeping system;
- Details of waste audit procedures and plan; and
- Details of consultation with relevant bodies i.e. waste recycling companies, Dublin City Council etc.

Section 3 of the Guidelines identifies thresholds above which there is a requirement for the preparation of a C&D Waste Management Plan for developments. This development requires a C&D WMP under the following criterion:

- New residential development of 10 houses or more;
- New developments other than (1) above, including institutional, educational, health and other public facilities, with an aggregate floor area in excess of 1,250 m2; and
- Demolition/renovation/refurbishment projects generating in excess of 100m3 in volume, of C&D waste;

Other guidelines followed in the preparation of this report include *'Construction and Demolition Waste Management – a handbook for Contractors and Site Managers'* [9] published by FÁS and the Construction Industry Federation in 2002.

These guidance documents are considered to define best practice for C&D projects in Ireland and describe how C&D projects are to be undertaken such that environmental impacts and risks are

2.2 Regional Level

The proposed development is located in the Local Authority area of Dublin City Council (DCC). The *Eastern-Midlands Region Waste Management Plan 2015 – 2021* is the regional waste management plan for the DCC area published in May 2015.

The Regional Plan sets out the strategic targets for waste management in the region and sets a specific target for C&D waste of *"70% preparing for reuse, recycling and other recovery of construction and demolition waste"* (excluding natural soils and stones and hazardous wastes) to be achieved by 2020.

Municipal landfill charges in Ireland are based on the weight of waste disposed. In the Leinster Region, charges are approximately €130 - €150 per tonne of waste which includes a €75 per tonne landfill levy introduced under the *Waste Management (Landfill Levy) (Amendment) Regulations 2012.*

The *Dublin City Development Plan 2016 – 2022* [10] sets out a number of policies and objectives for Dublin City in line with the objectives of the regional waste management plan. The plan identifies the development of recycling in order to minimise the use of landfill as the main objective of the City Council. Waste policies and objectives with a particular relevance to the proposed development are:

Policies:

- *SI19: To support the principles of good waste management and the implementation of best international practice in relation to waste management in order for Dublin City and the region to become self-reliant in terms of waste management.*
- *SI20: To prevent and minimise waste and to encourage and support material sorting and recycling.*
- *SI21: To minimise the amount of waste which cannot be prevented and ensure it is managed and treated without causing environmental pollution.*

Objectives:

- *SIO17: To promote the re-use of building materials, recycling of demolition material and the use of materials from renewable sources. In all developments in excess of 10 housing units and commercial developments in excess of 1000 sqm, a materials source and management plan showing type of materials/proportion of re-use/recycled materials to be used shall be implemented by the developer.*
- *SIO18: To implement the current Litter Management Plan through enforcement of the litter laws, street cleaning and education and awareness campaigns.*
- *SIO19: To implement the Eastern-Midlands Waste Management Plan 2015-2021 and achieve the plan targets and objectives.*

2.3 Legislative Requirements

The primary legislative instruments that govern waste management in Ireland and applicable to the project are:

- Waste Management Act 1996 (No. 10 of 1996) as amended. Sub-ordinate legislation includes:
  - European Communities (Waste Directive) Regulations 2011 (SI 126 of 2011) as amended
  - Waste Management (Collection Permit) Regulations (S.I No. 820 of 2007) as amended
  - Waste Management (Facility Permit and Registration) Regulations 2007, (S.I No. 821 of 2007) as amended
  - Waste Management (Licensing) Regulations 2004 (S.I. No. 395 of 2004) as amended
  - Waste Management (Packaging) Regulations 2014 (S.I. 282 of 2014) as amended
  - Waste Management (Planning) Regulations 1997 (S.I. No. 137 of 1997)
  - Waste Management (Landfill Levy) Regulations 2015 (S.I. No. 189 of 2015)
  - European Union (Waste Electrical and Electronic Equipment) Regulations 2014 (S.I. No. 149 of 2014)
  - European Union (Batteries and Accumulators) Regulations 2014 (S.I. No. 283 of 2014) as amended
  - Waste Management (Food Waste) Regulations 2009 (S.I. 508 of 2009), as amended
  - European Union (Household Food Waste and Bio-waste) Regulation 2015 (S.I. No. 191 of 2015)
  - Waste Management (Hazardous Waste) Regulations, 1998 (S.I. No. 163 of 1998) as amended
  - Waste Management (Shipments of Waste) Regulations, 2007 (S.I. No. 419 of 2007) as amended
  - Waste Management (Movement of Hazardous Waste) Regulations, 1998 (S.I. No. 147 of 1998)
  - European Communities (Transfrontier Shipment of Waste) Regulations 1994 (SI 121 of 1994)
  - European Union (Properties of Waste which Render it Hazardous) Regulations 2015 (S.I. No. 233 of 2015) as amended
- Environmental Protection Act 1992 (No. 7 of 1992) as amended.
- Litter Pollution Act 1997 (No. 12 of 1997) as amended.
- Planning and Development Act 2000 (No. 30 of 2000) as amended [11].

One of the guiding principles of European waste legislation, which has in turn been incorporated into the *Waste Management Act 1996 - 2001* and subsequent Irish legislation, is the principle of *"Duty of Care"*. This implies that the waste producer is responsible for waste from the time it is generated through until its legal recycling, recovery or disposal (including its method of disposal). As it is not practical in most cases for the waste producer to physically transfer all waste from where it is produced to the final destination, waste contractors will be employed to physically transport waste to the final destination. Following on from this is the concept of *"Polluter Pays"* whereby the waste producer is liable to be prosecuted for pollution incidents, which may arise from

the incorrect management of waste produced, including the actions of any contractors engaged (e.g. for transportation and disposal/recovery/recycling of waste).

It is therefore imperative that the client ensures that the waste contractors engaged by demolition and construction contractors are legally compliant with respect to waste transportation, recycling, recovery and disposal. This includes the requirement that a contractor handle, transport and recycle/recover/dispose of waste in a manner that ensures that no adverse environmental impacts occur as a result of any of these activities.

A collection permit to transport waste must be held by each waste contractor which is issued by the National Waste Collection Permit Office (NWCPO). Waste receiving facilities must also be appropriately permitted or licensed. Operators of such facilities cannot receive any waste, unless in possession of a Certificate of Registration (COR) or waste permit granted by the relevant Local Authority under the *Waste Management (Facility Permit & Registration) Regulations 2007 and Amendments* or a waste or IE licence granted by the EPA. The COR/permit/licence held will specify the type and quantity of waste able to be received, stored, sorted, recycled, recovered and/or disposed of at the specified site.

3.0 DESCRIPTION OF THE PROJECT

3.1 Location, Size and Scale of the Development

Master Plan

The Dublin Central project is an expansive (c.2.2 Ha) and complex regeneration project. It needs to be delivered in stages to overcome site and project constraints.

A site wide cumulative masterplan has been prepared by 'the Applicant' to set out the overall development vision for the Dublin Central project.

'The Masterplan' area encompasses almost entirely three urban blocks. The area is bounded generally by O'Connell Street Upper and Henry Place to the east, Henry Street to the south, Moore Street to the west, and O'Rahilly Parade and Parnell Street to the north. Moore Lane extends south from Parnell Street through the centre of the masterplan area, as far as its junction with Henry Place.

Site 3

Located in the south west corner of 'the Masterplan' area, Site 3 is bounded by Henry Street to the south, Moore Street to the west and Henry Place to the north and east. Site 3 includes Nos. 36 – 41 Henry Street, Nos. 1 – 9 Moore Street and Nos. 3 – 13 Henry Place.

Site 3 lies within the O'Connell Street ACA.

The proposed development generally comprises a mixed-use scheme accommodating a hotel, residential units and associated amenities, cultural, retail and café / restaurant uses in 2no. blocks ranging in height from 1 – 9 storeys over existing and new single

storey basements. Provision of a new Passageway linking Henry Street with Henry Place / Moore Lane.

Site 4

Located in the west of 'the Masterplan' area, Site 4 is bounded by Moore Street to the west, Moore Lane to the east, Henry Place to the south and Site 5 to the north. Site 4 includes Nos. 10 – 13 and Nos. 18 – 21 Moore Street, Nos. 5 – 8 and Nos. 10 – 12 Moore Lane.

Site 4 excludes the site of the National Monument and its protection zone at Nos. 14-17 Moore Street (protected structures) and the open area to the rear at Nos. 8 & 9 Moore Lane.

The proposed development generally comprises a mixed-use scheme accommodating residential units and associated amenities, retail and café / restaurant uses, in two parts located north and south of the Nos. 14 – 17 Moore Street (National Monument / Protected Structures). Building height ranges from 1 – 3 storeys, including retained independent single storey basements. Provision of part of the proposed new public plaza and an archway onto the proposed new public plaza.

Site 5

Located in the west of 'the Masterplan' area, Site 5 is bounded by Moore Street to the west, Moore Lane to the east, O'Rahilly Parade to the north and Site 4 to the south. Site 5 includes Nos. 22 – 25 Moore Street, Nos. 1 – 8 O'Rahilly Parade and Nos. 13 – 15 Moore Lane.

The proposed development generally comprises a mixed-use scheme accommodating office and café / restaurant uses in a single building ranging in height from 2 – 6 storeys (top floor set back) over new single storey localised basement. Provision of a part of the new public plaza.

3.2 Details of the Non-Hazardous Wastes to be produced

There will be waste materials generated from the demolition and renovation of the existing buildings, hardstanding areas on site, as well as from the further excavation of the building foundations. The volume of waste generated from demolition will be more difficult to segregate than waste generated from the construction phase, as many of the building materials will be bonded together or integrated i.e. plasterboard on timber ceiling joists, steel embedded in concrete etc.

There will be soil, stones, clay and made ground excavated to facilitate construction of new foundations, underground services, and the installation of the proposed basements. The project engineers (Waterman Group) have estimated 163,490m^3 of material will need to be excavated to do so. There is limited chance for reuse of material onsite and it is envisaged that all material, will need to be removed offsite due to the limited opportunities for reuse on site. This will be taken for appropriate offsite reuse, recovery, recycling and/or disposal.

During the construction phase there may be a surplus of building materials, such as timber off-cuts, broken concrete blocks, cladding, plastics, metals and tiles generated.

There may also be excess concrete during construction which will need to be disposed of. Plastic and cardboard waste from packaging and supply of materials will also be generated. The contractor will be required to ensure that oversupply of materials is kept to a minimum and opportunities for reuse of suitable materials is maximised.

Waste will also be generated from construction workers e.g. organic/food waste, dry mixed recyclables (waste paper, newspaper, plastic bottles, packaging, aluminium cans, tins and Tetra Pak cartons), mixed non-recyclables and potentially sewage sludge from temporary welfare facilities provided on site during the construction phase. Waste printer/toner cartridges, waste electrical and electronic equipment (WEEE) and waste batteries may also be generated infrequently from site offices.

3.3 Potential Hazardous Wastes Arising

3.3.1 Contaminated Soil

In 2008 an initial joint geotechnical and environmental site investigation was undertaken (by O' Callaghan Moran & Associates) comprising the excavation of trial pits, the installation of boreholes in the subsoils and bedrock and the collection and testing of soil and groundwater samples. The intrusive investigations were confined to open areas in the middle of the site and around the site parameter. It is envisaged that further site investigations and environmental soil analysis will be undertaken post demolition and prior to any excavated material being removed from site.

Three (3) samples of the fill material from BH-7, 9 and 10 were analysed for Total Petroleum Hydrocarbons (TPH), BETX (benzene, toluene, ethylbenzene and xylene), PAH (polycyclic aromatic hydrocarbons) and metals (arsenic, barium, cadmium, chromium, copper, mercury, molybdenum, nickel, lead, tin, selenium and zinc).

Nineteen (19) samples, of the fill and natural ground from, BH-7, 9, 10, 12, 14, 15, RC-8 and W-2, were tested for the WAC, which included Total Organic Carbon (TOC), BETX, PCBs (polychlorinated biphenyls, 7 congeners), Mineral Oil (C10 to C40) and PAH sum of 17. They were also subjected to leach testing at a liquid to solid ratio of 10:1 and the leachate analysed for arsenic, barium, cadmium, chromium, copper, mercury, molybdenum, nickel, lead, tin, selenium, zinc, chloride, fluoride, sulphate, phenols, dissolved organic carbon and total dissolved solids.

If any potentially contaminated material is encountered, it will need to be segregated from clean/inert material, tested and classified as either non-hazardous or hazardous in accordance with the EPA publication entitled *'Waste Classification: List of Waste & Determining if Waste is Hazardous or Non-Hazardous'* [12] using the *HazWasteOnline* application (or similar approved classification method). The material will then need to be classified as clean, inert, non-hazardous or hazardous in accordance with the *EC Council Decision 2003/33/EC* [13], which establishes the criteria for the acceptance of waste at landfills.

In the event that Asbestos containing materials (ACMs) are found, the removal will only be carried out by a suitably permitted waste contractor, in accordance with *S.I. No. 386 of 2006 Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010.* All asbestos will be taken to a suitably licensed or permitted facility.

In the event that hazardous soil, or historically deposited waste is encountered during the construction phase, the contractor will notify DCC and provide a Hazardous/Contaminated Soil Management Plan, to include estimated tonnages, description of location, any relevant mitigation, destination for disposal/treatment, in addition to information on the authorised waste collector(s).

3.3.2 Fuel/Oils

Fuels and oils are classed as hazardous materials; any on-site storage of fuel/oil, and all storage tanks and all draw-off points will be bunded and located in a dedicated, secure area of the site. Provided that these requirements are adhered to and the site crew are trained in the appropriate refuelling techniques, it is not expected that there will be any fuel/oil waste generated at the site.

3.3.3 Invasive Plant Species

An ecological site survey was undertaken by Scott Cawley Ecology (SCE) in June 2020. This included a site walkover survey of the entire site, and around part of the outside perimeter to search for any schedule 3 invasive species. Japanese Knotweed *Fallopia japonica*, which is listed on the Third Schedule of the Birds and Habitats Regulations, was not recorded on the site.

Japanese Knotweed (*Fallopia japonica*) is an alien invasive species listed under *schedule 3 of Regulations SI No. 355/2015*. SCE's report concludes that it is not present on this site and there was no indication that it is growing in the immediate vicinity.

3.3.4 Asbestos

Multiple asbestos refurbishment/demolition survey were undertaken by About Safety Ltd in September and October 2020. The scope of the survey's were confined to all accessible areas of the existing buildings which are due for demolition and/or refurbishment in the future. See Appendix A.

Asbestos Containing Materials (ACM) were detected in several locations within some of the buildings including but not limited to floor tiling, roof slates, roof felt, rope seals, bitumen and woven rope.

Removal of asbestos or ACMs will be carried out by a suitably qualified contractor and ACM's will only be removed from site by a suitably permitted/licenced waste contractor. in accordance with *S.I. No. 386 of 2006 Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010.* All material will be taken to a suitably licensed or permitted facility.

3.3.5 Other known Hazardous Substances

Paints, glues, adhesives and other known hazardous substances will be stored in designated areas. They will generally be present in small volumes only and associated waste volumes generated will be kept to a minimum. Wastes will be stored in appropriate receptacles pending collection by an authorised waste contractor.

In addition, WEEE (containing hazardous components), printer toner/cartridges, batteries (Lead, Ni-Cd or Mercury) and/or fluorescent tubes and other mercury containing waste

may be generated from during C&D activities or temporary site offices. These wastes, if generated, will be stored in appropriate receptacles in designated areas of the site pending collection by an authorised waste contractor.

3.4 Main Construction and Demolition Waste Categories

The main non-hazardous and hazardous waste streams that could be generated by the demolition and construction activities at a typical site are shown in Table 3.1. The List of Waste (LoW) code (as effected from 1 June 2015) (also referred to as the European Waste Code or EWC) for each waste stream is also shown.

Table 3.1 *Typical waste types generated and LoW codes (individual waste types may contain hazardous substances)*

Waste Material	LoW/EWC Code
Concrete, bricks, tiles, ceramics	17 01 01-03 & 07
Wood, glass and plastic	17 02 01-03
Treated wood, glass, plastic, containing hazardous substances	17-02-04*
Bituminous mixtures, coal tar and tarred products	17 03 01*, 02 & 03*
Metals (including their alloys) and cable	17 04 01-11
Soil and stones	17 05 03* & 04
Gypsum-based construction material	17 08 01* & 02
Paper and cardboard	20 01 01
Mixed C&D waste	17 09 04
Green waste	20 02 01
Electrical and electronic components	20 01 35 & 36
Batteries and accumulators	20 01 33 & 34
Liquid fuels	13 07 01-10
Chemicals (solvents, pesticides, paints, adhesives, detergents etc.)	20 01 13, 19, 27-30
Insulation materials	17 06 04
Organic (food) waste	20 01 08
Mixed Municipal Waste	20 03 01

** individual waste type may contain hazardous substances*

4.0 WASTE MANAGEMENT

4.1 Demolition Waste Generation

The demolition stage will involve the demolition of multiple brick buildings onsite. The demolition areas are identified in the planning drawings provided with this application. The anticipated demolition waste and rates of reuse, recycling/recovery and disposal is shown in Table 4.1, 4.2, 4.3, 4.4 below

Masterplan

Table 4.1 *Estimated off-site reuse, recycle and disposal rates for demolition waste from the Masterplan*

Waste Type	Tonnes	Reuse		Recycle/Recovery		Disposal	
		%	Tonnes	%	Tonnes	%	Tonnes
Glass	2027.9	0	0.0	85	1723.7	15	304.2
Concrete, Bricks, Tiles, Ceramics	11491.4	30	3447.4	65	7469.4	5	574.6
Plasterboard	901.3	30	270.4	60	540.8	10	90.1
Asphalts	225.3	0	0.0	25	56.3	75	169.0
Metals	3379.8	5	169.0	80	2703.9	15	507.0
Slate	1802.6	0	0.0	85	1532.2	15	270.4
Timber	2703.9	10	270.4	60	1622.3	30	811.2
Asbestos	7.0	0	0.0	0	0.0	100	7.0
Total	**22539.2**		**4157.2**		**15648.6**		**2733.4**

Site 3

Table 4.2 *Estimated off-site reuse, recycle and disposal rates for demolition waste from Site 3.*

Waste Type	Tonnes	Reuse		Recycle/Recovery		Disposal	
		%	Tonnes	%	Tonnes	%	Tonnes
Glass	361.8	0	0.0	85	307.6	15	54.3
Concrete, Bricks, Tiles, Ceramics	2050.5	30	615.1	65	1332.8	5	102.5
Plasterboard	160.8	30	48.2	60	96.5	10	16.1
Asphalts	40.2	0	0.0	25	10.1	75	30.2
Metals	603.1	5	30.2	80	482.5	15	90.5
Slate	321.6	0	0.0	85	273.4	15	48.2
Timber	482.5	10	48.2	60	289.5	30	144.7
Asbestos	1.0	0	0.0	0	0.0	100	1.0
Total	**4021.5**		**741.8**		**2792.3**		**487.5**

Site 4

Table 4.3 *Estimated off-site reuse, recycle and disposal rates for demolition waste from Site 4.*

Waste Type	Tonnes	Reuse		Recycle/Recovery		Disposal	
		%	Tonnes	%	Tonnes	%	Tonnes
Glass	244.4	0	0.0	85	207.7	15	36.7
Concrete, Bricks, Tiles, Ceramics	1384.7	30	415.4	65	900.1	5	69.2
Plasterboard	108.6	30	32.6	60	65.2	10	10.9
Asphalts	27.2	0	0.0	25	6.8	75	20.4
Metals	407.3	5	20.4	80	325.8	15	61.1
Slate	217.2	0	0.0	85	184.6	15	32.6
Timber	325.8	10	32.6	60	195.5	30	97.7
Asbestos	1.0	0	0.0	0	0.0	100	1.0
Total	**2716.1**		500.9		1885.7		329.5

Site 5

Table 4.4 *Estimated off-site reuse, recycle and disposal rates for demolition waste from Site 5.*

Waste Type	Tonnes	Reuse		Recycle/Recovery		Disposal	
		%	Tonnes	%	Tonnes	%	Tonnes
Glass	124.9	0	0.0	85	106.1	15	18.7
Concrete, Bricks, Tiles, Ceramics	707.6	30	212.3	65	459.9	5	35.4
Plasterboard	55.5	30	16.6	60	33.3	10	5.5
Asphalts	13.9	0	0.0	25	3.5	75	10.4
Metals	208.1	5	10.4	80	166.5	15	31.2
Slate	111.0	0	0.0	85	94.3	15	16.6
Timber	166.5	10	16.6	60	99.9	30	49.9
Asbestos	1.0	0	0.0	0	0.0	100	1.0
Total	**1387.4**		**256.0**		**963.5**		**167.9**

4.2 Construction Waste Generation

The below Table 4.5 shows the breakdown of C&D waste types produced on a typical site based on data from the EPA *National Waste Reports* [14] *and the joint EPA & GMIT study* [15].

Table 4.5: *Waste materials generated on a typical Irish construction site*

Waste Types	%
Mixed C&D	33
Timber	28
Plasterboard	10
Metals	8
Concrete	6
Other	15
Total	**100**

The Tables 4.6, 4.7, 4.8 and 4.9 below show the estimated construction waste generation for the development masterplan and separate breakdowns for Site 3, 4 and 5 based on the gross floor area of construction and other information available to date, along with indicative targets for management of the waste streams. The estimated waste amounts for the main waste types (with the exception of soil, stone, made ground and clay) are based on an average large-scale development waste generation rate per m^2, using the waste breakdown rates shown in Table 4.5. These have been calculated from the schedule of development areas provided by the architect.

Masterplan

Table 4.6: *Predicted on and off-site reuse, recycle and disposal rates for construction waste*

Waste Type	Tonnes	Reuse		Recycle/Recovery		Disposal	
		%	Tonnes	%	Tonnes	%	Tonnes
Mixed C&D	1631.9	10	163.2	80	1305.5	10	163.2
Timber	1384.6	40	553.9	55	761.5	5	69.2
Plasterboard	494.5	30	148.4	60	296.7	10	49.5
Metals	395.6	5	19.8	90	356.0	5	19.8
Concrete	296.7	30	89.0	65	192.9	5	14.8
Other	741.8	20	148.4	60	445.1	20	148.4
Total	**4945.1**		**1122.5**		**3357.7**		**464.8**

In addition to the information in Table 4.6, there will be c.163,490m^3 of soil, stones, clay and made ground excavated to facilitate construction of new foundations, underground services, and the installation of the proposed basement. Any suitable excavated material will be temporarily stockpiled for reuse as fill, where possible, but reuse on site is expected to be limited and all of the excavated material is expected to be removed offsite for appropriate reuse, recovery and/or disposal.

Site 3

Table 4.7: *Predicted on and off-site reuse, recycle and disposal rates for construction waste*

Waste Type	Tonnes	Reuse		Recycle/Recovery		Disposal	
		%	Tonnes	%	Tonnes	%	Tonnes
Mixed C&D	308.4	10	30.8	80	246.7	10	30.8
Timber	261.7	40	104.7	55	143.9	5	13.1
Plasterboard	93.5	30	28.0	60	56.1	10	9.3
Metals	74.8	5	3.7	90	67.3	5	3.7
Concrete	56.1	30	16.8	65	36.5	5	2.8
Other	140.2	20	28.0	60	84.1	20	28.0
Total	**934.7**		**212.2**		**634.6**		**87.9**

In addition to the information in Table 4.7, there will be c.15,165m^3 of soil, stones, clay and made ground excavated to facilitate construction of new foundations, underground services, and the installation of the proposed basement. Any suitable excavated material will be temporarily stockpiled for reuse as fill, where possible, but reuse on site is expected to be limited and all of the excavated material is expected to be removed offsite for appropriate reuse, recovery and/or disposal.

Site 4

Table 4.8: *Predicted on and off-site reuse, recycle and disposal rates for construction waste*

Waste Type	Tonnes	Reuse		Recycle/Recovery		Disposal	
		%	Tonnes	%	Tonnes	%	Tonnes
Mixed C&D	62.3	10	6.2	80	49.9	10	6.2
Timber	52.9	40	21.2	55	29.1	5	2.6
Plasterboard	18.9	30	5.7	60	11.3	10	1.9
Metals	15.1	5	0.8	90	13.6	5	0.8
Concrete	11.3	30	3.4	65	7.4	5	0.6
Other	28.3	20	5.7	60	17.0	20	5.7
Total	**188.9**		**42.9**		**128.2**		**17.8**

In addition to the information in Table 4.8, there will be c.132m^3 of soil, stones, clay and made ground excavated to facilitate construction of new foundations, underground services. Any suitable excavated material will be temporarily stockpiled for reuse as fill, where possible, but reuse on site is expected to be limited and all of the excavated material is expected to be removed offsite for appropriate reuse, recovery and/or disposal.

Site 5

Table 4.9: *Predicted on and off-site reuse, recycle and disposal rates for construction waste*

Waste Type	Tonnes	Reuse		Recycle/Recovery		Disposal	
		%	Tonnes	%	Tonnes	%	Tonnes
Mixed C&D	127.4	10	12.7	80	101.9	10	12.7
Timber	108.1	40	43.2	55	59.4	5	5.4
Plasterboard	38.6	30	11.6	60	23.2	10	3.9
Metals	30.9	5	1.5	90	27.8	5	1.5
Concrete	23.2	30	6.9	65	15.1	5	1.2
Other	57.9	20	11.6	60	34.7	20	11.6
Total	**386.0**		**87.6**		**262.1**		**36.3**

In addition to the information in Table 4.9, there will be c.5,593m^3 of soil, stones, clay and made ground excavated to facilitate construction of new foundations, underground services. Any suitable excavated material will be temporarily stockpiled for reuse as fill, where possible, but reuse on site is expected to be limited and all of the excavated material is expected to be removed offsite for appropriate reuse, recovery and/or disposal.

It should be noted that until final materials and detailed construction methodologies have been confirmed, it is difficult to predict with a high level of accuracy the construction waste that will be generated from the proposed works as the exact materials and quantities may be subject to some degree of change and variation during the construction process.

4.3 Proposed Waste Management Options

Waste materials generated will be segregated on site, where it is practical. Where the on-site segregation of certain wastes types is not practical, off-site segregation will be carried out. There will be skips and receptacles provided to facilitate segregation at source where feasible. All waste receptacles leaving site will be covered or enclosed. The appointed waste contractor will collect and transfer the wastes as receptacles are filled. There are numerous waste contractors in the Dublin Region that provide this service.

All waste arising's will be handled by an approved waste contractor holding a current waste collection permit. All waste arising's requiring disposal off-site will be reused, recycled, recovered or disposed of at a facility holding the appropriate registration, permit or licence, as required.

During construction some of the sub-contractors on site will generate waste in relatively low quantities of waste. The transportation of non-hazardous waste by persons who are not directly involved with the waste business, at weights less than or equal to 2 tonnes, and in vehicles not designed for the carriage of waste, are exempt from the requirement to have a waste collection permit (Ref. Article 30 (1) (b) of the Waste Collection Permit Regulations 2007 as amended). Any sub-contractors engaged that do not generate more than 2 tonnes of waste at any one time can transport this waste offsite in their work vehicles (which are not design for the carriage of waste). However, they are required to ensure that the receiving facility has the appropriate COR / permit / licence.

Written records will be maintained by the contractor(s) detailing the waste arising throughout the C&D phases, the classification of each waste type, waste collection permits for all waste contactors who collect waste from the site and COR/permit or licence for the receiving waste facility for all waste removed off site for appropriate reuse, recycling, recovery and/or disposal

Dedicated bunded storage containers will be provided for hazardous wastes which may arise such as batteries, paints, oils, chemicals etc, if required.

The anticipated management of the main waste streams is outlined as follows:

Soil, Stone, Gravel and Clay

The Waste Management Hierarchy states that the preferred option for waste management is prevention and minimisation of waste, followed by preparing for reuse and recycling/recovery, energy recovery (i.e. incineration) and, least favoured of all, disposal. The excavations are required to facilitate construction works so the preferred option (prevention and minimisation) cannot be accommodated for the excavation phase.

When material is removed off-site it could be reused as a by-product (and not as a waste), if this is done, it will be done in accordance with Article 27 of the *European Communities (Waste Directive) Regulations 2011*. Article 27 requires that certain conditions are met and that by-product notifications are made to the EPA via their online notification form. Excavated material should not be removed from site until approval from the EPA has been received.

The next option (beneficial reuse) may be appropriate for the excavated material pending environmental testing to classify the material as hazardous or non-hazardous in accordance with the EPA *Waste Classification – List of Waste & Determining if Waste is Hazardous or Non-Hazardous* publication. Clean inert material may be used as fill material in other construction projects or engineering fill for waste licensed sites. Beneficial reuse of surplus excavation material as engineering fill may be subject to further testing to determine if materials meet the specific engineering standards for their proposed end-use.

If the material is deemed to be a waste, then removal and reuse/recovery/disposal of the material will be carried out in accordance with the *Waste Management Acts 1996 – 2011* as amended, the *Waste Management (Collection Permit) Regulations 2007* as amended and the *Waste Management (Facility Permit & Registration) Regulations 2007* as amended. Once all available beneficial reuse options have been exhausted, the options of recycling and recovery at waste permitted and licensed sites will be considered.

In the event that contaminated material is encountered and subsequently classified as hazardous, this material will be stored separately to any non-hazardous material. It will require off-site treatment at a suitable facility or disposal abroad via Transfrontier Shipment of Wastes (TFS).

Bedrock

While it is not envisaged that bedrock will be encountered, if bedrock is encountered, it is anticipated that it will not be crushed on site. Any excavated rock is expected to be

removed offsite for appropriate reuse, recovery and/or disposal. If bedrock is to be crushed onsite the appropriate mobile waste facility permit will be obtained from DCC.

Silt & Sludge

During the demolition and construction phase, silt and petrochemical interception should be carried out on runoff and pumped water from site works, where required. Sludge and silt will then be collected by a suitably licensed contractor and removed offsite.

Concrete Blocks, Bricks, Tiles & Ceramics

The majority of concrete blocks, bricks, tiles and ceramics generated as part of the demolition and construction works are expected to be clean, inert material and should be recycled, where possible. If concrete is to be crushed onsite the appropriate mobile waste facility permit will be obtained from DCC.

Hard Plastic

As hard plastic is a highly recyclable material, much of the plastic generated will be primarily from material off-cuts. All recyclable plastic will be segregated and recycled, where possible.

Timber

Timber that is uncontaminated, i.e. free from paints, preservatives, glues etc., will be disposed of in a separate skip and recycled off-site.

Metal

Metals will be segregated where practical and stored in skips. Metal is highly recyclable and there are numerous companies that will accept these materials.

Plasterboard

There are currently a number of recycling services for plasterboard in Ireland. Plasterboard from the demolition and construction phases will be stored in a separate skip, pending collection for recycling. The site manager will ensure that oversupply of new plasterboard is carefully monitored to minimise waste.

Glass

Glass materials will be segregated for recycling, where possible.

Waste Electrical and Electronic Equipment (WEEE)

Any WEEE will be stored in dedicated covered cages/receptacles/pallets pending collection for recycling.

Other Recyclables

Where any other recyclable wastes such as cardboard and soft plastic are generated, these will be segregated at source into dedicated skips and removed off-site.

Non-Recyclable Waste

C&D waste which is not suitable for reuse or recovery, such as polystyrene, some plastics and some cardboards, will be placed in separate skips or other receptacles. Prior to removal from site, the non-recyclable waste skip/receptacle will be examined by a member of the waste team (see Section 7.0) to determine if recyclable materials have been placed in there by mistake. If this is the case, efforts will be made to determine the cause of the waste not being segregated correctly and recyclable waste will be removed and placed into the appropriate receptacle.

Asbestos Containing Materials

Any asbestos or ACM found onsite should be removed by a suitably competent contractor and disposed of as asbestos waste before the demolition works begin. All asbestos removal work or encapsulation 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.*

Other Hazardous Wastes

On-site storage of any hazardous wastes produced (i.e. contaminated soil if encountered and/or waste fuels) will be kept to a minimum, with removal off-site organised on a regular basis. Storage of all hazardous wastes on-site will be undertaken so as to minimise exposure to on-site personnel and the public and to also minimise potential for environmental impacts. Hazardous wastes will be recovered, wherever possible, and failing this, disposed of appropriately.

Onsite Crushing

It is currently not envisaged that the crushing of waste materials will occur onsite, however if the crushing of material is to be undertaken a mobile waste facility permit will first be obtained from DCC and the destination of the excepting waste facility will be supplied to the DCC waste unit.

4.4 Tracking and Documentation Procedures for Off-Site Waste

All waste will be documented prior to leaving the site. Waste will be weighed by the contractor, either by weighing mechanism on the truck or at the receiving facility. These waste records will be maintained on site by the nominated project Waste Manager (see Section 7.0).

All movement of waste and the use of waste contractors will be undertaken in accordance with the *Waste Management Acts 1996 - 2011*, *Waste Management (Collection Permit) Regulations 2007* as amended and *Waste Management (Facility Permit & Registration) Regulations 2007* and amended. This includes the requirement for all waste contractors to have a waste collection permit issued by the NWCPO. The nominated project waste manager (see Section 7.0) will maintain a copy of all waste collection permits on-site.

If the waste is being transported to another site, a copy of the Local Authority waste COR/permit or EPA Waste/IE Licence for that site will be provided to the nominated project waste manager (see Section 7.0). If the waste is being shipped abroad, a copy of the Transfrontier Shipping (TFS) notification document will be obtained from DCC (as the

relevant authority on behalf of all local authorities in Ireland) and kept on-site along with details of the final destination (COR, permits, licences etc.). A receipt from the final destination of the material will be kept as part of the on-site waste management records.

All information will be entered in a waste management recording system to be maintained on site.

5.0 ESTIMATED COST OF WASTE MANAGEMENT

An outline of the costs associated with different aspects of waste management is outlined below. The total cost of C&D waste management will be measured and will take into account handling costs, storage costs, transportation costs, revenue from rebates and disposal costs.

5.1 Reuse

By reusing materials on site, there will be a reduction in the transport and recycle/recovery/disposal costs associated with the requirement for a waste contractor to take the material off-site.

Clean and inert soils, gravel, stones etc. which cannot be reused on site may be used as access roads or capping material for landfill sites etc. This material is often taken free of charge or a reduced fee for such purposes, reducing final waste disposal costs.

5.2 Recycling

Salvageable metals will earn a rebate which can be offset against the costs of collection and transportation of the skips.

Clean uncontaminated cardboard and certain hard plastics can also be recycled. Waste contractors will charge considerably less to take segregated wastes, such as recyclable waste, from a site than mixed waste.

Timber can be recycled as chipboard. Again, waste contractors will charge considerably less to take segregated wastes such as timber from a site than mixed waste.

5.3 Disposal

Landfill charges are currently at around €130 - €150 per tonne which includes a €75 per tonne landfill levy specified in the *Waste Management (Landfill Levy) Regulations 2015*. In addition to disposal costs, waste contractors will also charge a collection fee for skips.

Collection of segregated C&D waste usually costs less than municipal waste. Specific C&D waste contractors take the waste off-site to a licensed or permitted facility and, where possible, remove salvageable items from the waste stream before disposing of the remainder to landfill. Clean soil, rubble, etc. is also used as fill/capping material, wherever possible.

6.0 DEMOLITION PROCEDURES

The demolition stage will involve the demolition of multiple brick style buildings onsite. The demolition areas are identified in the planning drawings. A formal demolition plan including safety procedures will be prepared by the demolition contractor; however, in general, the following sequence of works should be followed during the demolition stage.

Check for Hazards

Prior to commencing works, buildings and structures to be demolished will be checked for any likely hazards including asbestos, asbestos-containing Materials, electric power lines or cables, gas reticulation systems, telecommunications, unsafe structures and fire and explosion hazards, e.g. combustible dust, chemical hazards, oil, fuels and contamination.

Removal of Components

All hazardous materials will be removed first. All components from within the buildings that can be salvaged will be removed next. This will primarily include metal however may also include timbers, doors, windows, wiring and metal ducting, etc.

Removal of Roofing

Steel roof supports, beams etc. will be dismantled and taken away for recycling/salvage.

Excavation of Services, Demolition of Walls and Concrete

Services will be removed from the ground and the breakdown of walls will be carried out once all salvageable or reusable materials have been taken from the buildings. Finally, any existing foundations and hard standing areas will be excavated.

7.0 TRAINING PROVISIONS

A member of the demolition and construction team will be appointed as the project waste manager to ensure commitment, operational efficiency and accountability during the C&D phases of the project.

7.1 Waste Manager Training and Responsibilities

The nominated waste manager will be given responsibility and authority to select a waste team if required, i.e. members of the site crew that will aid them in the organisation, operation and recording of the waste management system implemented on site. The waste manager will have overall responsibility to oversee, record and provide feedback to the client on everyday waste management at the site. Authority will be given to the waste manager to delegate responsibility to sub-contractors, where necessary, and to coordinate with suppliers, service providers and sub-contractors to prioritise waste prevention and material salvage.

The waste manager will be trained in how to set up and maintain a record keeping system, how to perform an audit and how to establish targets for waste management on site. The waste manager will also be trained in the best methods for segregation and

storage of recyclable materials, have information on the materials that can be reused on site and be knowledgeable in how to implement this C&D WMP.

7.2 Site Crew Training

Training of site crew is the responsibility of the waste manager and, as such, a waste training program should be organised. A basic awareness course will be held for all site crew to outline the C&D WMP and to detail the segregation of waste materials at source. This may be incorporated with other site training needs such as general site induction, health and safety awareness and manual handling.

This basic course will describe the materials to be segregated, the storage methods and the location of the Waste Storage Areas (WSAs). A sub-section on hazardous wastes will be incorporated into the training program and the particular dangers of each hazardous waste will be explained.

8.0 RECORD KEEPING

Records should be kept for all waste material which leaves the site, either for reuse on another site, recycling or disposal. A recording system will be put in place to record the waste arising's on site.

A waste tracking log should be used to track each waste movement from the site. On exit from the site the waste collection vehicle driver should stop at the site office and sign out as a visitor and provide the security personnel or waste manager with a waste docket (or WTF for hazardous waste) for the waste load collected. At this time, the security personnel should complete and sign the Waste Tracking Register with the following information:

- Date
- Time
- Waste Contractor
- Company waste contractor appointed by e.g. Contractor or subcontractor name
- Collection Permit No.
- Vehicle Reg.
- Driver Name
- Docket No.
- Waste Type
- EWC/LoW

The waste vehicle will be checked by security personal or the site waste officer to ensure it has the waste collection permit no. displayed and a copy of the waste collection permit in the vehicle before they are allowed to remove the waste from the site.

The waste transfer dockets will be transferred to the site waste manager on a weekly basis and can be placed in the Waste Tracking Log file. This information will be forwarded onto the DCC Waste Regulation Unit when requested.

Alternatively, each subcontractor that has engaged their own waste contractor will be required to maintain a similar waste tracking log with the waste dockets/WTF maintained on file and available for inspection on site by the main contractor as required.

Waste receipts from the receiving waste facility will also be obtained by the site contractor(s) and retained.

A copy of the Waste Collection Permits, CORs, Waste Facility Permits and Waste Licences will be maintained on site at all times. Subcontractors who have engaged their own waste contractors, should provide the main contractor with a copy of the waste collection permits and COR/permit/licence for the receiving waste facilities and maintain a copy on file available for inspection on site as required.

9.0 OUTLINE WASTE AUDIT PROCEDURE

9.1 Responsibility for Waste Audit

The appointed waste manager will be responsible for conducting a waste audit at the site during the C&D phase of the development. Contact details for the nominated Waste Manager will be provided to the DCC Waste Regulation Unit after the main contractor is appointed and prior to any material being removed from site.

9.2 Review of Records and Identification of Corrective Actions

A review of all waste management costs and the records for the waste generated and transported off-site should be undertaken mid-way through the project.

If waste movements are not accounted for, the reasons for this should be established in order to see if and why the record keeping system has not been maintained. The waste records will be compared with the established recovery/reuse/recycling targets for the site. Each material type will be examined, in order to see where the largest percentage waste generation is occurring. The waste management methods for each material type will be reviewed in order to highlight how the targets can be achieved.

Upon completion of the C&D phase, a final report will be prepared, summarising the outcomes of waste management processes adopted and the total recycling/reuse/recovery figures for the development.

10.0 CONSULTATION WITH RELEVANT BODIES

10.1 Local Authority

Once demolition and construction contractors have been appointed, have appointed waste contractors and prior to removal of any C&D waste materials offsite, details of the proposed destination of each waste stream will be provided to the DCC Waste Regulation Unit.

DCC will also be consulted, as required, throughout the demolition, excavation and construction phases in order to ensure that all available waste reduction, reuse and recycling opportunities are identified and utilised and that compliant waste management practices are carried out.

10.2 Recycling/Salvage Companies

The appointed waste contractor for the main waste streams managed by the demolition and construction contractors will be audited in order to ensure that relevant and up-to-date waste collection permits and facility registrations/permits/licences are held. In addition, information will be obtained regarding the feasibility of recycling each material, the costs of recycling/reclamation, the means by which the wastes will be collected and transported off-site, and the recycling/reclamation process each material will undergo off site.

11.0 REFERENCES

1. Waste Management Act 1996 (No. 10 of 1996) as amended. Sub-ordinate and associated legislation includes:
   - European Communities (Waste Directive) Regulations 2011 (S.I. No. 126 of 2011) as amended.
   - Waste Management (Collection Permit) Regulations 2007 (S.I. No. 820 of 2007) as amended.
   - Waste Management (Facility Permit and Registration) Regulations 2007 (S.I No. 821 of 2007) as amended.
   - Waste Management (Licensing) Regulations 2000 (S.I No. 185 of 2000) as amended.
   - European Union (Packaging) Regulations 2014 (S.I. No. 282 of 2014) as amended.
   - Waste Management (Planning) Regulations 1997 (S.I. No. 137 of 1997) as amended.
   - Waste Management (Landfill Levy) Regulations 2015 (S.I. No. 189 of 2015)
   - European Union (Waste Electrical and Electronic Equipment) Regulations 2014 (S.I. No. 149 of 2014)
   - European Union (Batteries and Accumulators) Regulations 2014 (S.I. No. 283 of 2014) as amended.
   - Waste Management (Food Waste) Regulations 2009 (S.I. No. 508 of 2009) as amended.
   - European Union (Household Food Waste and Bio-waste) Regulations 2015 (S.I. No. 430 of 2015)
   - Waste Management (Hazardous Waste) Regulations 1998 (S.I. No. 163 of 1998) as amended.
   - Waste Management (Shipments of Waste) Regulations 2007 (S.I. No. 419 of 2007) as amended.
   - The European Communities (Transfrontier Shipment of Hazardous Waste) Regulations 1988 (S.I. No. 248 of 1988)
   - European Communities (Shipments of Hazardous Waste exclusively within Ireland) Regulations 2011 (S.I. No. 324 of 2011)
   - European Union (Properties of Waste which Render it Hazardous) Regulations 2015 (S.I. No. 233 of 2015) as amended
2. Protection of the Environment Act 2003, (No. 27 of 2003) as amended.
3. Litter Pollution Act 1997 (S.I. No. 12 of 1997) as amended
4. Eastern-Midlands Region Waste Management Plan 2015 – 2021 (2015).
5. Department of Environment and Local Government (DoELG) *Waste Management – Changing Our Ways, A Policy Statement* (1998).
6. Forum for the Construction Industry – *Recycling of Construction and Demolition Waste.*
7. Department of Communications, Climate Action and Environment (DCCAE), *Waste Action Plan for the Circular Economy - Ireland's National Waste Policy 2020-2025* (Sept 2020).
8. Department of Environment, Heritage and Local Government, *Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects* (2006).

9. FÁS and the Construction Industry Federation (CIF), *Construction and Demolition Waste Management – a handbook for Contractors and Site Managers* (2002).

10. Dublin City Council (DCC), Dublin City Council Development Plan 2016-2022 (2016)

11. Planning and Development Act 2000 (S.I. No. 30 of 2000) as amended

12. EPA, *Waste Classification – List of Waste & Determining if Waste is Hazardous or Non-Hazardous* (2015)

13. Council Decision 2003/33/EC, establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of and Annex II to Directive 1999/31/EC.

14. Environmental Protection Agency (EPA), *National Waste Database Reports 1998 – 2012.*

15. EPA and Galway-Mayo Institute of Technology (GMIT), *EPA Research Report 146 – A Review of Design and Construction Waste Management Practices in Selected Case Studies – Lessons Learned* (2015).

APPENDIX A

Refurbishment & Demolition Asbestos Survey

Refurbishment & Demolition Asbestos Survey

Table of Contents: Sites 3, 4 & 5

- Report 2 – No. 10 Henry Place
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- Report 7 – No. 37 Henry Street
- Report 8 – No. 9 Henry Place
- Report 10 – No. 13 Moore Lane
- Report 11 – No. 13 Moore Street
- Report 16 – No. 1 & 2 Moore Street
- Report 17 – No. 3 Moore Street
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- Report 29 – No. 36 Henry Street
- Report 31 – No. 6 Moore Street
- Report 32 – No. 7 Moore Street
- Report 33 – No. 24-25 Moore Street & 14 Moore Lane
- Report 36 – No. 17 Henry Place

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Refurbishment & Demolition Asbestos Survey

Location: *10 Henry Place*
Dublin 1

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *29th September, 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@aboutsafety.ie
About Safety Ltd. Registered in Ireland: No. 422820

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out of the above residential property which is to be demolished. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to demolition.]
	No visible asbestos containing materials identified.

Ref:	Presumed/Strongly Presumed Asbestos [Requires dismantling and investigation by a competent asbestos contractor prior to demolition.]
1	The roofing felt on the main roof is presumed to contain asbestos. Inaccessible.
7	Cast-iron lead sealed collars are presumed to contain asbestos woven rope packing.
8	Integral areas of old electrical assemblies are presumed to contain asbestos.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Site Full Name:
10 Henry Place
Dublin 1

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

- **S301:** Asbestos and other Fibres
- **P401:** Identification of Asbestos in Bulk Samples (PLM)
- **P402:** Building Surveys and Bulk Sampling for Asbestos
- **P403:** Asbestos Fibre Counting
- **P404:** Air Sampling and Clearance Testing of Asbestos
- **P405:** Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264*, *Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed demolition**
	Structural Details:	**2 storey workshop building of solid construction with pitched roof**
	Date of Construction:	**Not known.**
External Aspects:	***Roofs:***	**Plywood sheeting internally**
Internal Aspects:	***Walls***	**Concrete**
	Ceilings	**Concrete on ground floor.**
	Floors	**Concrete floors**
	Insulation	**n/a**
Services:	***Heating Systems:***	**n/a**
Reservations:	***Access restrictions:***	**Roof was not accessible**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document "Asbestos-containing materials (ACM's) in Workplaces – Practical Guidelines on ACM Management and Abatement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Competent Person

Person provided with adequate information, instruction and training for the task being undertaken and capable of demonstrating adequate and up-to-date understanding of the work being undertaken, the required control measures, the applicable legislation, and having sufficient practicable experience to apply these effectively. There are two categories of competent person, 1) competent asbestos operative and 2) specialist asbestos operative.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

10 Henry Place

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
		No samples required		

Glossary

*NADIS = No Asbestos Detected in Sample
VFT = Vinyl Floor Tile

Chrysotile (white asbestos)
Amosite (brown asbestos)
Crocidolite (blue asbestos)

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	10 Henry Place	Roof		Roofing felts No access		Presumed asbestos until proven otherwise						Investigate prior to work likely to cause disturbance.	
2	10 Henry Place	Ground floor		Plastic rainwater ware.		NAD							
3	10 Henry Place	Ground floor Front of premises		Plasterboard to ceiling		NAD							
4	10 Henry Place	Ground floor Back of premises		Plasterboard to ceiling		NAD							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	10 Henry Place	Ground floor Back room		Concrete under lino		NAD							
6	10 Henry Place	Ground floor WC		Floors, walls and ceilings		NAD							
7	10 Henry Place	Ground floor back room		Lead sealed cast-iron collars		Presumed to contain asbestos woven rope packing						Investigation by a competent contractor prior to work likely to cause disturbance.	
8	10 Henry Place	Stairway to 1st floor		Integral areas of old electrical equipment		Presumed to contain asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	10 Henry Place	1st floor		Plywood sheeting to inner roof		NAD							

Key		Material Assessment Score	Risk
NAD = No asbestos detected AIB = Asbestos insulation board AC = Asbestos cement VFT = vinyl floor tile NQ = Not Quantified/Quantifiable SM = Square Meters LM = Linear Meters	Confirmed Asbestos	≤ 4	Very Low
		5 - 6	Low
	Presumed/Strongly presumed ACM Or Non Accessed Area	7 - 9	Medium
		≥ 10	High
		No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.	

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SURVEYING & TESTING
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Refurbishment & Demolition Asbestos Survey

Location: *8 – 9 Moore Street & 10 – 12 Moore Lane*
[The Paris Bakery]
Dublin 1

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *29th and 30th September, 2020*

Prepared by: *John Kelleher*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@aboutsafety.ie
About Safety Ltd. Registered in Ireland: No. 422820

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out of the above residential property which is to be demolished. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to demolition.]
10	Asbestos cement downpipe in the ground floor back of bakery. Exits through ceiling.
14	Asbestos cement gutters identified to both sides of the back store room. 50 linear meters approximately.
15	Single skin asbestos cement corrugated roof sheeting under the steel cladding on the back store room. 130 square meters approximately.
16	Single skin asbestos cement corrugated roof sheeting on the two vents on the roof of the back store room.
32, 40, 43	Single skin asbestos cement corrugated roof sheeting, ridge tiles and flashings on gable end to the main roof of No. 12 Moore Lane. Miscellaneous debris on the kitchen floor underneath.
36	Asbestos containing brake shoes on the lift motor on the 4th floor of No. 12 Moore Street.
37	Asbestos containing fire door on the 4th floor plantroom in No. 12 Moore Street.
31	Asbestos cement slates on the roofs of No. 20 and 21 Moore Street.

Ref:	Presumed/Strongly Presumed Asbestos [Requires dismantling and investigation by a competent asbestos contractor prior to demolition.]
3, 9	Integral areas of old electrical equipment and assemblies are presumed to contain asbestos.
7	Some areas of raised floors are presumed to contain asbestos and may be encountered during demolition works.
17	Inaccessible flat roofs are presumed to contain substrate roofing felts.
27	Integral areas of the old safe on the 2nd floor are presumed to contain asbestos.
29, 30	The roofs of No's 19 and 20 are presumed to contain asbestos.
34	Integral areas of the old boiler and associated flanges are presumed to contain asbestos.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Site Full Name:
18- 19 Moore Street & 10 – 12 Moore Lane
(Paris Bakery)
Dublin 1

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

- **S301:** Asbestos and other Fibres
- **P401:** Identification of Asbestos in Bulk Samples (PLM)
- **P402:** Building Surveys and Bulk Sampling for Asbestos
- **P403:** Asbestos Fibre Counting
- **P404:** Air Sampling and Clearance Testing of Asbestos
- **P405:** Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed demolition**
	Structural Details:	**Four and two storey buildings of solid construction.**
	Date of Construction:	**Not known**
External Aspects:	***Roofs:***	**Mixture of flat and pitched roofs. Asbestos sheeting on main roof and under the steel cladding on the**
Internal Aspects:	***Walls***	**Solid concrete and block generally. Plasterboard**
	Ceilings	**Plasterboard and concrete**
	Floors	**Concrete generally**
	Insulation	**N/A**
Services:	***Heating Systems:***	**Old boiler on 4th floor**
Reservations:	***Access restrictions:***	**Roofs were not accessible.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document "Asbestos-containing materials (ACM's) in Workplaces – Practical Guidelines on ACM Management and Abatement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Competent Person

Person provided with adequate information, instruction and training for the task being undertaken and capable of demonstrating adequate and up-to-date understanding of the work being undertaken, the required control measures, the applicable legislation, and having sufficient practicable experience to apply these effectively. There are two categories of competent person, 1) competent asbestos operative and 2) specialist asbestos operative.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

Paris Bakery
12 Moore Lane
Dublin 1

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
S01	2027326	Ground floor back of shop	Downpipe	Chrysotile
S02	2027327	2nd floor WC	VFT	NADIS
S03	2027328	2nd floor WC	VFT adhesive	NADIS
S04	2027329	3rd floor Lift car floor	VFT	NADIS
S05	2027330	3rd floor Lift car floor	VFT adhesive	NADIS
S06	2027331	3rd floor lift motor	Brake shoes	Chrysotile
S07	2027332	3rd floor WC	VFT	NADIS
S08	2027333	3rd floor WC	VFT adhesive	NADIS
S09	2027334	3rd floor canteen floor	VFT	NADIS
S10	2027335	3rd floor canteen floor	VFT adhesive	NADIS
S11	2027336	3rd floor roof	debris on floor	Crocidolite/chrysotile

Glossary

*NADIS = No Asbestos Detected in Sample Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
VFT = Vinyl Floor Tile

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	10-11 Moore Lane	Back yard canopy		Modern felt overlay on plywood.		No visible asbestos containing materials identified.							
2	10-11 Moore Lane	Back of premises		Plaster ceiling tiles in drop ceilings.		No visible asbestos containing materials identified.							
3	10-11 Moore Lane	Back of premises. Electrical panels under stairway		Integral of electrical panels		Presumed asbestos						Dismantling and investigation by a competent contractor prior to work likely to cause disturbance.	
4	10-11 Moore Lane	Back of premises		Concrete floor slab over drop ceilings		No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	10-11 Moore Lane	Back of premises WC				No visible asbestos containing materials identified.							
6	10-11 Moore Lane	Back of shop. Former bakery		Drop ceiling with lay-in ceiling tiles.		No visible asbestos containing materials identified.							
7	10-11 Moore Lane	Front of premises		Raised wooden floors original floors		Presumed to contain asbestos in areas.						investigation by a competent contractor prior to work likely to cause disturbance.	
8	10-11 Moore Lane	Front of premises				No visible asbestos containing materials identified.							

Key		Material Assessment Score	Risk
NAD = No asbestos detected AIB = Asbestos insulation board AC = Asbestos cement VFT = vinyl floor tile NQ = Not Quantified/Quantifiable SM = Square Meters LM = Linear Meters	Confirmed Asbestos	≤ 4	Very Low
		5 - 6	Low
	Presumed/Strongly presumed ACM Or Non Accessed Area	7 - 9	Medium
		≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	10-11 Moore Lane	Front of premises		Integral areas of electrical equipment		Presumed asbestos						Dismantling and investigation by a competent contractor prior to work likely to cause disturbance.	
10	10-11 Moore Lane	Back of shop. Former bakery	2027326	AC down pipe on side wall and exiting through ceiling	NQ	Chrysotile	1	0	1	1	3	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
11	10-11 Moore Lane	1st floor Rooms and areas				No visible asbestos containing materials identified.							
12	10-11 Moore Lane	1st floor Rooms and areas				No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
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No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
13	10-11 Moore Lane	1st floor Rooms and areas		Plasterboard ceilings		No visible asbestos containing materials identified.							
14	10-11 Moore Lane	Narrow side building roof Roof		AC gutter to each side of roof.	50 LM approx.	Chrysotile	1	1	1	1	4	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
15	10-11 Moore Lane	Narrow side building roof Roof		Single skin AC corrugated roof sheeting under outer metal cladding	130 SM approx.	Chrysotile	1	1	1	1	4	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
16	10-11 Moore Lane	Narrow side building roof Roof		AC sheeting to vents on roof	8 SM approx.	Chrysotile	1	1	1	1	4	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
17	10-11 Moore Lane	1st floor		Flat roof not accessible		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
18	10-11 Moore Lane	1st floor Rooms and areas.		Plasterboard to walls and ceilings.		No visible asbestos containing materials identified.							
19	10-11 Moore Lane	1st floor Back store room				No visible asbestos containing materials identified.							
20	10-11 Moore Lane	4 storey Building 1st floor				No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
21	10-11 Moore Lane	4 storey Building 1st floor				No visible asbestos containing materials identified.							
22	10-11 Moore Lane	4 storey Building 1st floor		Drop ceiling with lay-in ceiling tiles.		No visible asbestos containing materials identified.							
23	10-11 Moore Lane	4 storey Building 1st floor				No visible asbestos containing materials identified.							
24	10-11 Moore Lane	4 storey Building 2nd floor				No visible asbestos containing materials identified.							

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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
25	10-11 Moore Lane	4 storey Building 2nd floor WC 1	2027327 2027328	VFT and adhesive		No visible asbestos containing materials identified.							
26	10-11 Moore Lane	4 storey Building 2nd floor WC 2		VFT and adhesive		No visible asbestos containing materials identified.							
27	10-11 Moore Lane	4 storey Building 2nd floor		Integral areas of old safe		Presumed to contain asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
28	10-11 Moore Lane	4 storey Building 2nd floor				No visible asbestos containing materials identified.							

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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
29	10-11 Moore Lane	Roof No. 18 Moore Street Occupied		Barrel roof substrate felts.		Strongly presumed asbestos.						Investigation by a competent contractor prior to work likely to cause disturbance.	
30	10-11 Moore Lane	Roof No. 19 Moore Street Occupied		Flat roof substrate felts.		Strongly presumed asbestos.						Investigation by a competent contractor prior to work likely to cause disturbance.	
31	10-11 Moore Lane	No. 20-21 Moore Street		AC slates to roofs.		Chrysotile	1	1	1	1	4	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance	
32	10-11 Moore Lane	4 storey Building 2nd floor		Section of AC downpipe on corner	1 LM approx.	Presumed chrysotile	1	1	1	1	4	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance	

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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
33	10-11 Moore Lane	4 storey Building 2nd floor Open area		Recessed heaters		No visible asbestos containing materials identified.							
34	10-11 Moore Lane	4 storey Building 3rd floor		Integral areas of old boiler and flanges		Strongly presumed to contain asbestos gaskets						Dismantling and investigation by a competent contractor prior to work likely to cause disturbance.	
35	10-11 Moore Lane	4 storey Building 3rd floor Lift Car	2027329 2027330	VFT and adhesive		No visible asbestos containing materials identified.							
36	10-11 Moore Lane	4 storey Building 3rd floor Lift plant	2027331	Brake shoes Intact	2 shoes	Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance	

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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
37	10-11 Moore Lane	4 storey Building 3rd floor	Previously sampled	AIB internally in fire door.	1 door	Amosite	2	0	1	2	5	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance	
38	10-11 Moore Lane	4 storey Building 3rd floor WC		VFT and adhesive		No visible asbestos containing materials identified.							
39	10-11 Moore Lane	4 storey Building 3rd floor WC		Concrete floor		No visible asbestos containing materials identified.							
40	10-11 Moore Lane	4 storey Building 3rd floor Roof	2027336	AC single skin corrugated roof sheeting, ridge tiles and flashings	400 SM approx	Crocidolite and chrysotile	1	1	1	1	4	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance	

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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
41	10-11 Moore Lane	4 storey Building 3rd floor		Plasterboard to ceiling.		No visible asbestos containing materials identified.							
42	10-11 Moore Lane	4 storey Building 3rd floor Kitchen	2027334 2027335	VFT and Evode		NAD							
43	10-11 Moore Lane	4 storey Building 3rd floor Kitchen		AC debris on floor		Crocidolite and chrysotile	1	2	1	1	5	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance	

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ABOUT SAFETY LTD.

ASBESTOS | LEAD BASED PAINT | MOULD | SILICA DUST | HAZMAT
SURVEYING & TESTING
RISK MANAGEMENT | PROJECT MANAGEMENT

Refurbishment & Demolition Asbestos Survey

Location: *5-8 Henry Place*
Dublin

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *30th September 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out for the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to works likely to cause disturbance]
1, 20	Single skin asbestos cement corrugated roof sheeting to main roofs. 500-550 square meters approximately.
2, 3	Asbestos cement flue pipe and cowl on external wall and asbestos cement downpipe over door in Henry Place. 6 linear meters approximately.
22	Asbestos containing thread nosing to steps tbetween rooms. Two steps.

Ref:	Presumed/Strongly Presumed Asbestos & Non-Accessed Areas [Requires investigation by a competent contractor prior to works likely to cause disturbance]
3	Lead sealed cast-iron downpipes were known to contain asbestos woven rope packing and should be dismantled and investigated prior to work likely to cause disturbance.
7	The mezzanine floor No. 5 was occupied by residents and was not surveyed.
24	Asbestos containing woven rope string is strongly presumed in the northlight glazing bars. Northlights on all roofs.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Site Full Name:
5-8 Henry Place
Dublin

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

S301:	Asbestos and other Fibres
P401:	Identification of Asbestos in Bulk Samples (PLM)
P402:	Building Surveys and Bulk Sampling for Asbestos
P403:	Asbestos Fibre Counting
P404:	Air Sampling and Clearance Testing of Asbestos
P405:	Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed demolition**
	Date of Construction:	**Not known**
External Aspects:	***Roofs:***	**Single skin corrugated asbestos cement sheeting to roofs.**
	Other:	
Internal Aspects:	***Walls:***	**Solid concrete walls**
	Ceilings:	**Man mineral fibre ceiling tiles in drop ceilings.**
	Floors:	**Concrete and timber flooring.**
	Insulation:	**n/a**
Services:	***M&E:***	**n/a**
Reservations:	***Access restrictions:***	**No access to external roofs.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document " Guidelines on Working with Materials Containing Asbestos Cement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

6 Henry Place

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
Jkb20093001	2027401	Wall and ceiling boards	VFT	NADIS
Jkb20093002	2027402	Wall and ceiling boards	VFT ADHESIVE	NADIS
Jkb20093003	2027403	Roof sheeting	AC sheeting	Crocidolite/chrysotile
Jkb20093004	2027404	1st floor stairway	Fire door linings	NADIS
Jkb20093005	2027405	1st floor store room at WC	Fire door linings	NADIS

Glossary

*NADIS = No Asbestos Detected in Sample Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
VFT = Vinyl Floor Tile

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	6 Henry Place	Building façade front		Single skin AC sheeting to roof	500/550 SM approx.	Chrysotile	1	1	1	1	4	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
2	6 Henry Place	Building exterior		Cement flue pipe	3 LM approx.	Chrysotile	1	1	1	1	4	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
3	6 Henry Place	Building exterior and various areas internally		Cement flue pipe	3 LM approx.	Chrysotile	1	1	1	1	4	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
4	6 Henry Place	Ground floor entrance corridor		Mineral fibre ceiling tiles in drop ceilings		NAD							

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Confirmed Asbestos
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5 - 6	Low
7 - 9	Medium
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5	6 Henry Place	Ground floor		Mineral fibre ceiling tiles in drop ceilings		NAD							
6	6 Henry Place	Ground floor		Concrete floor		NAD							
7	6 Henry Place	Ground floor stairway		No access at the time of survey. Residents in mezzanine floor		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
8	6 Henry Place	Ground floor		Metal ducting pipe		NAD							

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9	6 Henry Place	1st floor				NAD							
10	6 Henry Place	1st floor corridor		Timber floor throughout		NAD							
11	6 Henry Place	1st floor corridor	2027401	VFT and Adhesive to ceiling		NAD							
12	6 Henry Place	1st floor		VFT sheeting to back of WC		NAD							

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Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
13	6 Henry Place	1st floor	2027404	1st floor store at end of corridor		NAD							
14	6 Henry Place	1st floor freezer unit				NAD							
15	6 Henry Place	1st floor ceiling		Plasterboard to ceilings		NAD							
16	6 Henry Place	1st floor	2027402	VFT and adhesive debris from 3nd floor loft		NAD							

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17	6 Henry Place	1st floor office				NAD							
18	6 Henry Place	Stairway	2027405	Fire door lining.		NAD							
19	6 Henry Place	1st floor store				NAD							
20	6 Henry Place	1st floor back store roofs	2027403	Corrugated roof sheeting		Chrysotile						Removal and disposal by a competent contractor.	

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Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
21	6 Henry Place	1st floor rear store/ office		Timber floors throughout		NAD							
22	6 Henry Place	1st floor back room		Thread	2 LM approx.	Chrysotile						Removal and disposal by a competent contractor.	
23	6 Henry Place	Attic hatch		VFTand Adhesive to backs of sheeting on floor		NAD							
24	6 Henry Place	Attic hatch		Georgian wire rooflights vertical bars	All roofs	Presumed to contain asbestos woven rope beading						Further inspection is required prior to any works likely to cause disturbance.	

Key
NAD = No asbestos detected
NAA = Non Accessed Area
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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Refurbishment & Demolition Asbestos Survey

Location: *6-8 Moore Lane*
Dublin

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *30th September 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out for the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to works likely to cause disturbance]
3	Asbestos containing vinyl floor tile and adhesive to the back entrance area. 40 square meters approximately.
11	Asbestos containing vinyl floor tile and adhesive in the 1st floor back room. 25 square meters approximately.

Ref:	Presumed/Strongly Presumed Asbestos & Non-Accessed Areas [Requires investigation by a competent contractor prior to works likely to cause disturbance]
1	Lead sealed cast iron downpipes are presumed to contain asbestos packing. Further inspection by a competent contractor is required prior to disturbance.
2	The roofs were not accessible during the inspect1on and are presumed to contain asbestos slates until proven otherwise.
9	Integral areas of old electrical equipment in the basement are presumed to contain asbestos until proven otherwise.
15	Man made repair slates identified in the natural quarry slated roof. Roofs not accessible.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Site Full Name:
6-8 Moore Lane
Dublin

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

- S301: Asbestos and other Fibres
- P401: Identification of Asbestos in Bulk Samples (PLM)
- P402: Building Surveys and Bulk Sampling for Asbestos
- P403: Asbestos Fibre Counting
- P404: Air Sampling and Clearance Testing of Asbestos
- P405: Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264*, *Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed demolition.**
	Date of Construction:	**Not known**
External Aspects:	***Roofs:***	**Slate to main pitched roof s**
	Other:	
Internal Aspects:	***Walls:***	**Original stone walls. Plasterboard studded partitions.**
	Ceilings:	**Plasterboard and hardboard**
	Floors:	**Concrete and original timber floorboards**
	Insulation:	**n/a**
Services:	***M&E:***	**n/a**
Reservations:	***Access restrictions:***	**Roofs were not accessible**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or

employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document " Guidelines on Working with Materials Containing Asbestos Cement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

6-8 Moore Lane
Dublin

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
Jkb20093021	2027421	Ground floor room at door - 42 SM	VFT	Chrysotile
Jkb20093022	2027422	Ground floor room at door	VFT adhesive	Chrysotile
Jkb20093023	2027423	Basement ceiling	Paint	NADIS
Jkb20093024	2027424	1st floor - 25 SM	VFT	Chrysotile
Jkb20093025	2027425	1st floor	VFT adhesive	Chrysotile

Glossary

*NADIS = No Asbestos Detected in Sample Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
VFT = Vinyl Floor Tile

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	6-8 Moore Lane	Moore Lane		Lead sealed cast iron downpipes		Presumed to contain asbestos woven rope packing						Further inspection is required by a competent contractor prior to any disturbance.	
2	6-8 Moore Lane	Roofs No access		Slates to main roof and rear pitches		Strongly Presumed asbestos						Further inspection is required by a competent contractor prior to any disturbance.	
3	6-8 Moore Lane	Ground floor shop floor	2027421 2027422	VFT/ Adhesive over concrete	40 SM approx.	Chrysotile	1	0	0	1	2	Removal and disposal as asbestos wase by a competent contractor prior to work likely to cause disturbance.	
4	6-8 Moore Lane	Ground floor shop floor		Hardboard to ceilings		No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
NAA = Non Accessed Area
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	6-8 Moore Lane	Ground floor toilet		Ceramic tiles over concrete floor tiles		No visible asbestos containing materials identified.							
6	6-8 Moore Lane	Ground floor		Electrical panel		No visible asbestos containing materials identified.							
7	6-8 Moore Lane	Ground floor fire break		Plasterboard		No visible asbestos containing materials identified.							
8	6-8 Moore Lane	Basement stairway		Original stone stairway		No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
NAA = Non Accessed Area
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos

Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	6-8 Moore Lane	Basement		Integral areas of old electrical plant in corner		Presumed asbestos.						Investigation by a competent contractor prior to work likely to cause disturbance.	
10	6-8 Moore Lane	Basement	2027423	Ceiling paint		NAD							
11	6-8 Moore Lane	1st floor back room RHS	2027424 2027425	VFT/ adhesive	25sm approx.	Chrysotile	1	0	0	1	2	Removal and disposal by a competent contractor.	
12	6-8 Moore Lane	1st floor back storeroom				No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
NAA = Non Accessed Area
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos

Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
13	6-8 Moore Lane	1st floor storeroom				No visible asbestos containing materials identified.							
14	6-8 Moore Lane	1st floor back room LHS				No visible asbestos containing materials identified.							

Key		Material Assessment Score	Risk
NAD = No asbestos detected	Confirmed Asbestos	≤ 4	Very Low
NAA = Non Accessed Area		5 - 6	Low
AIB = Asbestos insulation board	Presumed/Strongly presumed ACM Or Non Accessed Area	7 - 9	Medium
AC = Asbestos cement		≥ 10	High
VFT = vinyl floor tile		No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.	
NQ = Not Quantified/Quantifiable			
SM = Square Meters			
LM = Linear Meters			

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Refurbishment & Demolition Asbestos Survey

Location: *37 Henry Street*
Dublin

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *30th September 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out for the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to works likely to cause disturbance]
28	Asbestos containing thread nosings to front stairway. 22 steps.
36	Asbestos containing insulation board sheeting to the back of the wall mounted electrical heater on the 1st floor front building. Unsealed. 1 square meter approximately.
37	Asbestos containing textured paint used to patch areas of the walls in the 1st floor front room.
40	Asbestos containing black Bakelite cistern in the WC on the 2nd floor.

Ref:	Presumed/Strongly Presumed Asbestos & Non-Accessed Areas [Requires investigation by a competent contractor prior to works likely to cause disturbance]
19	Exterior lead sealed downpipes are presumed to contain asbestos packing. Further inspection is required by a competent contractor prior to any disturbance.
17, 20	Integral areas of safes were known to contain asbestos and should be investigated by a competent contractor prior to disposal.
13, 33, 44	The flat roofs of the building are presumed to contain substrate roofing felts. 4 flat roof areas.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Site Full Name:
37 Henry Street
Dublin

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

- S301: Asbestos and other Fibres
- P401: Identification of Asbestos in Bulk Samples (PLM)
- P402: Building Surveys and Bulk Sampling for Asbestos
- P403: Asbestos Fibre Counting
- P404: Air Sampling and Clearance Testing of Asbestos
- P405: Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed structural alterations, refurbishment and demolition.**
	Date of Construction:	**Not known**
External Aspects:	***Roofs:***	**Flat roofs**
	Extensions:	**Flat roofs.**
	Other:	
Internal Aspects:	***Walls:***	**Original walls with floating plasterboard studded partitions on the ground floor shop area.**
	Ceilings:	**Floating ceiling in the shop area under the original ceiling.**
	Floors:	**Concrete floors generally**
	Insulation:	
Services:	***M&E:***	
Reservations:	***Access restrictions:***	**Roofs were not accessed.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or

employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document " Guidelines on Working with Materials Containing Asbestos Cement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

37 Henry Street
Dublin 1

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
Jkb20093006	2027406	Electrical cupboard	VFT and Evode	NADIS
Jkb20093007	2027407	Ground floor back corridor	VFT and Evode	NADIS
Jkb20093008	2027408	Ground floor back room	VFT and Evode	NADIS
Jkb20093009	2027409	Ground floor stairway lobby	VFT and Evode	NADIS
Jkb20093010	2027410	Ground floor back stairway	VFT and Evode	NADIS
Jkb20093011	2027411	1st floor	VFT and Evode	NADIS
Jkb20093012	2027412	1st floor kitchen	VFT and Evode	NADIS
Jkb20093013	2027413	Basement ceiling	Paint over nap finish	NADIS
Jkb20093014	2027414	Front stairway	VFT and Evode	NADIS
Jkb20093015	2027415	Front stairway 22 threads	Black thread nosing	Chrysotile
Jkb20093016	2027416	Front stairway behind plasterboard	Wall paint	NADIS
Jkb20093017	2027417	1st floor front room	VFT and Evode	NADIS
Jkb20093018	2027418	1st floor front room	Wall paint	NADIS
Jkb20093019	2027419	1st floor front room miscellaneous wall areas	Textured repair paint	Chrysotile
Jkb20093020	2027420	1st floor room – old radiator backing	Insulation board	Amosite

Glossary

*NADIS = No Asbestos Detected in Sample Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
VFT = Vinyl Floor Tile

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	37 Henry Street	Ground floor shop floor		Lino over ceramic tiles and concrete		No visible asbestos containing materials identified.							
2	37 Henry Street	Ground floor rear staff area	2027406	VFT under carpet		No visible asbestos containing materials identified.							
3	37 Henry Street	Ground floor rear staff area	2027407	VFT under carpet		No visible asbestos containing materials identified.							
4	37 Henry Street	Ground floor ladies' toilet		Concrete floor		No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
NAA = Non Accessed Area
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos

Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	37 Henry Street	Ground floor ladies' toilet		Plasterboard ceiling tiles		No visible asbestos containing materials identified.							
6	37 Henry Street	Ground floor gents' toilet		Concrete floor		No visible asbestos containing materials identified.							
7	37 Henry Street	Ground floor rear corridor	2027408	VFT/ Adhesive		No visible asbestos containing materials identified.							
8	37 Henry Street	Ground floor storeroom		Electric radiators		No visible asbestos containing materials identified.							

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≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	37 Henry Street	Ground floor back stairway lobby		Fire door		No visible asbestos containing materials identified.							
10	37 Henry Street	Ground floor back stairway lobby	2027410	VFT and adhesive lobby and stairway		No visible asbestos containing materials identified.							
11	37 Henry Street	Ground floor back stairway lobby closet		Fiberglass to lead sealed downpipe		No visible asbestos containing materials identified.							
12	37 Henry Street	Ground floor back stairway		Thread		No visible asbestos containing materials identified.							

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SM = Square Meters
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Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
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No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
13	37 Henry Street	1st floor flat roof		Subsrate roofing felt		Presumed asbestos						Investigate further prior to work likely to cause disturbance.	
14	37 Henry Street	1st floor canteen	2027411	VFT and Evode		No visible asbestos containing materials identified.							
15	37 Henry Street	1st floor canteen		Plasterboard ceiling under concrete		No visible asbestos containing materials identified.							
16	37 Henry Street	1st floor toilet		VFT and adhesive		No visible asbestos containing materials identified.							

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5 - 6	Low
7 - 9	Medium
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Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
17	37 Henry Street	1st floor office		Integral areas of old safe		Presumed asbestos						Investigate further prior to work likely to cause disturbance.	
18	37 Henry Street	1st floor store area		VFT/ Adhesive		No visible asbestos containing materials identified.							
19	37 Henry Street	1st floor store area		Lead sealed downpipe		Presumed to contain asbestos woven rope packing						Investigate further prior to work likely to cause disturbance.	
20	37 Henry Street	Basement under stairway		Integral areas of old safe		Presumed asbestos						Investigate further prior to work likely to cause disturbance.	

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≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
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No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
21	37 Henry Street	Basement Storage areas	2027413	Paint over nap finish		No visible asbestos containing materials identified.							
22	37 Henry Street	Basement Storage areas				No visible asbestos containing materials identified.							
23	37 Henry Street	Basement Storage areas				No visible asbestos containing materials identified.							
24	37 Henry Street	Basement Storage areas		Ceiling paint		No visible asbestos containing materials identified.							

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Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

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≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
25	37 Henry Street	Basement Redundant stairway				No visible asbestos containing materials identified.							
26	37 Henry Street	Basement former stairway				No visible asbestos containing materials identified.							
27	37 Henry Street	Ground floor front stairway	2027414	VFT and adhesive		No visible asbestos containing materials identified.							
28	37 Henry Street	Ground floor front stairway	2027415	Black Thread nosings. Good condition.	22 approx.	Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	

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Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
29	37 Henry Street	1st floor back room				No visible asbestos containing materials identified.							
30	37 Henry Street	1st floor back room				No visible asbestos containing materials identified.							
31	37 Henry Street	1st floor back room	2027416	Wall paint		No visible asbestos containing materials identified.							
32	37 Henry Street	1st floor back room		Electric radiator		No visible asbestos containing materials identified.							

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Confirmed Asbestos

Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
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7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

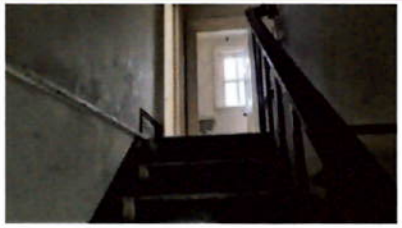
Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
33	37 Henry Street	1st floor back room		Roof felt		Presumed						Investigate further prior to work likely to cause disturbance.	
34	37 Henry Street	1st floor front room	2027417	VFT and adhesive under carpet		No visible asbestos containing materials identified.							
35	37 Henry Street	1st floor front room storage area		VFT and adhesive		No visible asbestos containing materials identified.							
36	37 Henry Street	1st floor front room storage area	2027420	Radiator heat pad	1 SM approx	Amosite	2	1	2	2	7	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	

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Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
37	37 Henry Street	1st floor front room	2027419	Textured paint to miscellaneous areas of walls	NQ	Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
38	37 Henry Street	Stairway to 2nd floor		Ceramic tiles		No visible asbestos containing materials identified.							
39	37 Henry Street	2nd floor front room				No visible asbestos containing materials identified.							
40	37 Henry Street	2nd floor toilet		Black Bakelite toilet cistern		Amosite	1	0	1	2	4	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	

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Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
41	37 Henry Street	2nd floor toilet				No visible asbestos containing materials identified.							
42	37 Henry Street	3rd floor stairway				No visible asbestos containing materials identified.							
43	37 Henry Street	3rd floor front room				No visible asbestos containing materials identified.							
44	37 Henry Street	Building rear flat roof		Roof felts		Presumed to contain asbestos.						Investigate further prior to work likely to cause disturbance.	

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Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

ABOUT SAFETY LTD.

ASBESTOS | LEAD BASED PAINT | MOULD | SILICA DUST | HAZMAT
SURVEYING & TESTING
RISK MANAGEMENT | PROJECT MANAGEMENT

Refurbishment & Demolition Asbestos Survey

Location: *9 Henry Place*
Dublin

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *2nd October, 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out for the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to works likely to cause disturbance]
10	Asbestos containing woven rope gaskets identified to the rear inspection plates on the boiler in the basement.
14, 15, 17, 23	Asbestos containing vinyl floor tiles and adhesive identified throughout the 1st floor ad in the WC's on the 2nd floor. 300 Square meters approximately.

Ref:	Presumed/Strongly Presumed Asbestos & Non-Accessed Areas [Requires investigation by a competent contractor prior to works likely to cause disturbance]
1	The external roofs were not accessible and are presumed to contain asbestos roofing felts.
4	Some rooms were not accessible during the survey.
6, 8, 11, 16	Integral areas of fire doors are presumed to contain asbestos.
9	Integral areas of the old boiler are strongly presumed to contain asbestos. Industry standard at the time of manufacture.
12	Pipework flange gaskets in the boiler room are presumed to contain asbestos. Industry standard at the time of manufacture.
21	Man made slates visible internally in repaired areas of the roof are presumed to contain asbestos.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Site Full Name:
9 Henry Place
Dublin

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

- S301: Asbestos and other Fibres
- P401: Identification of Asbestos in Bulk Samples (PLM)
- P402: Building Surveys and Bulk Sampling for Asbestos
- P403: Asbestos Fibre Counting
- P404: Air Sampling and Clearance Testing of Asbestos
- P405: Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed demolition**
	Date of Construction:	**Not known**
External Aspects:	***Roofs:***	**Slates on main roof. Appears to be covered with felt externally.**
	Extensions:	**Single storey flat roof extensions**
Internal Aspects:	***Walls:***	**Solid concrete and block walls**
	Ceilings:	**Concrete slab**
	Floors:	**Concrete throughout generally.**
	Insulation:	**n/a**
Services:	***M&E:***	**n/a**
Reservations:	***Access restrictions:***	**Roofs were not accessible.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or

employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document " Guidelines on Working with Materials Containing Asbestos Cement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

9 Henry Place
Dublin 1

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
S01	2027601	Basement boiler room, boiler	Woven rope gasket	chrysotile
S02	2027602	1st floor all areas	Common VFT	Chrysotile
S03	2027603	1st floor all areas	Common VFT adhesive	Chrysotile
S04	2027604	2nd floor	sink pad	NADIS

Glossary

*NADIS = No Asbestos Detected in Sample Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
VFT = Vinyl Floor Tile

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	9 Henry Place	Building front façade		Pitched and flat roofs Not accessible		Presumed to contain asbestos felts.						Investigation by a competent contractor prior to work likely to cause disturbance.	
2	9 Henry Place	Ground floor store		Concrete ceiling slab		No visible asbestos containing materials identified.							
3	9 Henry Place	Ground floor store		Heaters		No visible asbestos containing materials identified.							
4	9 Henry Place	Basement room		Inaccessible during the survey		Presumed to contain asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	

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VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
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Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	9 Henry Place	Basement				No visible asbestos containing materials identified.							
6	9 Henry Place	Basement		Old fire door		Presumed to contain asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
7	9 Henry Place	Basement		Hardboard fire break		No visible asbestos containing materials identified.							
8	9 Henry Place	Basement		Old fire door		Presumed to contain asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	

Key
NAD = No asbestos detected
NAA = Non Accessed Area
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	9 Henry Place	Basement boiler room		Integral areas of old boiler		Strongly Presumed to contain asbestos internally						Investigation by a competent contractor prior to work likely to cause disturbance.	
10	9 Henry Place	Basement boiler room	2027601	Woven rope gaskets to back plates of boiler	1 LM approx.	Chrysotile	2	1	2	1	6	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
11	9 Henry Place	Basement		Old fire door		Presumed to contain asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
12	9 Henry Place	Basement pipework		Pipework flange gaskets		Presumed to contain asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	

Key
NAD = No asbestos detected
NAA = Non Accessed Area
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
14	9 Henry Place	1st floor	2027602 2027603	Common VFT and adhesive. Intact	280sm approx.	Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
15	9 Henry Place	1st floor office		Common VFT and adhesive Intact		Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
16	9 Henry Place	1st floor		Integral areas of fire door		Presumed to contain asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
17	9 Henry Place	1st floor toilets		Common VFT and adhesive		Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	

Key
NAD = No asbestos detected
NAA = Non Accessed Area
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
19	9 Henry Place	2nd floor		Concrete floor throughout		NAD							
20	9 Henry Place	2nd floor		Galvanized metal sheeting		NAD							
21	9 Henry Place	2nd floor roof		Replacement asbestos slates to back roof		Presumed chrysotile						Investigation by a competent contractor prior to work likely to cause disturbance.	
22	9 Henry Place	2nd floor Kitchen	2027604	Sink pad		NAD							

Key
NAD = No asbestos detected
NAA = Non Accessed Area
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
23	9 Henry Place	2nd floor toilets		Common VFT and adhesive	8sm approx.	Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	

Key
NAD = No asbestos detected
NAA = Non Accessed Area
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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ASBESTOS | LEAD BASED PAINT | MOULD | SILICA DUST | HAZMAT
SURVEYING & TESTING
RISK MANAGEMENT | PROJECT MANAGEMENT

Refurbishment & Demolition Asbestos Survey

Location: *Basement Car Park Only*
13 Moore Lane
Dublin

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *30th September 2020*

Prepared by: *Lauren Kelleher*

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out for the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to works likely to cause disturbance]
	No asbestos detected.

Ref:	Presumed/Strongly Presumed Asbestos & Non-Accessed Areas [Requires investigation by a competent contractor prior to works likely to cause disturbance]
1	Asbestos containing roofing felt presumed on the flat roofs of the building.
4, 7	Lead sealed cast iron downpipes to the rear and storage areas of the building are presumed to contain asbestos packing.
5, 6, 9	Private lockup areas were not accessible at the time of the survey.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Site Full Name:
13 Moore Lane
Dublin

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

S301:	Asbestos and other Fibres
P401:	Identification of Asbestos in Bulk Samples (PLM)
P402:	Building Surveys and Bulk Sampling for Asbestos
P403:	Asbestos Fibre Counting
P404:	Air Sampling and Clearance Testing of Asbestos
P405:	Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264*, *Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed demolition**
	Date of Construction:	**Not known**
External Aspects:	***Roofs:***	**n/a**
	Extensions:	
	Other:	
Internal Aspects:	***Walls:***	**Solid concrete**
	Ceilings:	**solid concrete**
	Floors:	**Concrete floors**
	Insulation:	
Services:	***M&E:***	**-**
Reservations:	***Access restrictions:***	**Overhead premises were occupied and not accessed at the time of the survey.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or

employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document " Guidelines on Working with Materials Containing Asbestos Cement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

13 Moore Lane
Dublin

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
		No samples taken.		

Glossary

*NADIS = No Asbestos Detected in Sample
VFT = Vinyl Floor Tile

Chrysotile (white asbestos)
Amosite (brown asbestos)
Crocidolite (blue asbestos)

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	13 Moore Lane	Building flat roof		Felt		Presumed to contain asbestos						Further inspection is required prior to any works likely to cause disturbance.	
2	13 Moore Lane	Rear loading bay ramp				No visible asbestos containing materials identified.							
3	13 Moore Lane	Rear loading bay				No visible asbestos containing materials identified.							
4	13 Moore Lane	Rear loading bay		Lead sealed cast iron pipework		Presumed to contain asbestos						Further inspection is required prior to any works likely to cause disturbance.	

Key
NAD = No asbestos detected
NAA = Non Accessed Area
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	13 Moore Lane	Basement private stores		Inaccessible		Presumed to contain asbestos						Further inspection is required prior to any works likely to cause disturbance.	
6	13 Moore Lane	Basement room 21		Inaccessible		Presumed to contain asbestos						Further inspection is required prior to any works likely to cause disturbance.	
7	13 Moore Lane	Basement private store		Cast iron pipework		Presumed to contain asbestos						Further inspection is required prior to any works likely to cause disturbance.	
8	13 Moore Lane	Basement private store		Concrete flooring throughout		No visible asbestos containing materials identified.							

Key	Confirmed Asbestos
NAD = No asbestos detected NAA = Non Accessed Area AIB = Asbestos insulation board AC = Asbestos cement VFT = vinyl floor tile NQ = Not Quantified/Quantifiable SM = Square Meters LM = Linear Meters	Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	13 Moore Lane	Basement private store room 10		Inaccessible		Presumed to contain asbestos						Further inspection is required prior to any works likely to cause disturbance.	
10	13 Moore Lane	Basement stairway to Moore street shop		Concrete stairway		No visible asbestos containing materials identified.							
11	13 Moore Lane	Mezzanine workshop				No visible asbestos containing materials identified.							

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AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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ASBESTOS | LEAD BASED PAINT | MOULD | SILICA DUST | HAZMAT
SURVEYING & TESTING
RISK MANAGEMENT | PROJECT MANAGEMENT

Refurbishment & Demolition Asbestos Survey

Location: *13 Moore Street*
Dublin 1

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *September, 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@aboutsafety.ie
About Safety Ltd. Registered in Ireland: No. 422820

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out of the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to demolition.]
10	Asbestos containing adhesive to the vinyl floor tiles in the front and back rooms on the 1st floor. 42 Square meters approximately.

Ref:	Presumed/Strongly Presumed Asbestos [Requires dismantling and investigation by a competent asbestos contractor prior to demolition.]
8	The roofing felt on the main roof is presumed to contain asbestos. No access.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Instructing Party:
Certo Management Services

Contact:

Contact: **Peter McIlhagger**

Site Full Name:
13 Moore Street
Dublin 1

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

- **S301:** Asbestos and other Fibres
- **P401:** Identification of Asbestos in Bulk Samples (PLM)
- **P402:** Building Surveys and Bulk Sampling for Asbestos
- **P403:** Asbestos Fibre Counting
- **P404:** Air Sampling and Clearance Testing of Asbestos
- **P405:** Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed demolition**
	Structural Details:	**2 storey terraced building with flat roofs**
External Aspects:	***Roofs:***	**Felt to flat roofs.**
Internal Aspects:	***Walls***	**Original brick walls. Studded plasterboard partitions**
	Ceilings	**Plaster board ceilings.**
	Floors	**Original ceramic tiles and concrete. Timber on 1st floor.**
	Insulation	**n/a**
Services:	***Heating Systems:***	**n/a**
Reservations:	***Access restrictions:***	**1st storey roof not accessible.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document "Asbestos-containing materials (ACM's) in Workplaces – Practical Guidelines on ACM Management and Abatement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Competent Person

Person provided with adequate information, instruction and training for the task being undertaken and capable of demonstrating adequate and up-to-date understanding of the work being undertaken, the required control measures, the applicable legislation, and having sufficient practicable experience to apply these effectively. There are two categories of competent person, 1) competent asbestos operative and 2) specialist asbestos operative.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

No. 113 Moore Street
Dublin 1

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
S01	2027801	1st floor back and front rooms	VFT	NADIS
S02	2027802	1st floor back and front rooms	VFT adhesive	Chrysotile
S03	2027803	Extension roof	Felt	NADIS

Glossary

*NADIS = No Asbestos Detected in Sample Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
VFT = Vinyl Floor Tile

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	13 Moore Street	Ground floor		Ceramic tiles and concrete		No visible asbestos containing materials identified.							
2	13 Moore Street	Ground floor		Plasterboard ceilings		No visible asbestos containing materials identified.							
3	13 Moore Street	Ground floor		Back of shop		No visible asbestos containing materials identified.							
4	13 Moore Street	Ground floor		Front of shop		No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	13 Moore Street	Ground floor Kitchen				No visible asbestos containing materials identified.							
6	13 Moore Street	Ground floor Extension				No visible asbestos containing materials identified.							
7	13 Moore Street	Ground floor Extension roof	2027803	Modern felt to extension roof over plywood.		No visible asbestos containing materials identified.							
8	13 Moore Street	High roofs		Roofing felts		Presumed to contain asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	13 Moore Street	1st floor kitchen		Plasterboard to ceiling and walls		No visible asbestos containing materials identified.							
10	13 Moore Street	1st floor Front and back rooms	2027802	VFT adhesive under lino.	42 SM approx.	Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste prior to work likely to cause disturbance.	

Key		Material Assessment Score	Risk
NAD = No asbestos detected AIB = Asbestos insulation board AC = Asbestos cement VFT = vinyl floor tile NQ = Not Quantified/Quantifiable SM = Square Meters LM = Linear Meters	Confirmed Asbestos	≤ 4	Very Low
		5 - 6	Low
	Presumed/Strongly presumed ACM Or Non Accessed Area	7 - 9	Medium
		≥ 10	High
		No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.	

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SURVEYING & TESTING
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Refurbishment & Demolition Asbestos Survey

Location:	*No. 1 & 2 Moore Street. Dublin 1*
Client:	*Dublin Central GP Ltd*
Instructing Party:	*Certo Management Services*
Survey Date:	*October 8th, 2020*
Prepared by:	*John Kelleher, About Safety Ltd.*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@aboutsafety.ie
About Safety Ltd. Registered in Ireland: No. 422820

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out of the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to demolition.]
	No asbestos containing materials identified.

Ref:	Presumed/Strongly Presumed Asbestos [Requires dismantling and investigation by a competent asbestos contractor prior to work likely to cause disturbance.]
10	The roofs were not accessible during the investigation.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Site Full Name:
No. 1 & 2 Moore Street.
Dublin 1

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

S301:	Asbestos and other Fibres
P401:	Identification of Asbestos in Bulk Samples (PLM)
P402:	Building Surveys and Bulk Sampling for Asbestos
P403:	Asbestos Fibre Counting
P404:	Air Sampling and Clearance Testing of Asbestos
P405:	Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed demolition**
	Structural Details:	**3 storey building of solid brick construction with flat roof**
	Date of Construction:	**Not known**
External Aspects:	***Roofs:***	**Flat roof**
Internal Aspects:	***Walls***	**Original brick construction with lime plaster render.**
	Ceilings	**Original lat and plaster and plasterboard.**
	Floors	**timber on upper floors. Concrete on ground floor.**
Services:	***Heating Systems:***	**n/a**
Reservations:	***Access restrictions:***	**Roofs were not accessible. The retail areas of the building were occupied during the inspection.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document "Asbestos-containing materials (ACM's) in Workplaces – Practical Guidelines on ACM Management and Abatement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Competent Person

Person provided with adequate information, instruction and training for the task being undertaken and capable of demonstrating adequate and up-to-date understanding of the work being undertaken, the required control measures, the applicable legislation, and having sufficient practicable experience to apply these effectively. There are two categories of competent person, 1) competent asbestos operative and 2) specialist asbestos operative.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

No. 1 & 2 Moore St.
Dublin 1

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
		No samples taken		

Glossary

*NADIS = No Asbestos Detected in Sample
VFT = Vinyl Floor Tile

Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	No. 1 &2 Moore St.	No 1 Ground floor retail outlet				No visible asbestos containing materials identified.							
2	No. 1 &2 Moore St.					No visible asbestos containing materials identified.							
3	No. 1 &2 Moore St.	No. 2 Shop		Modern drop ceilings		No visible asbestos containing materials identified.							
4	No. 1 &2 Moore St.	No. 2 Stairway				No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	No. 1 &2 Moore St.	No. 2 1st floor Store rooms				No visible asbestos containing materials identified.							
6	No. 1 &2 Moore St.	No. 2 1st floor Store rooms				No visible asbestos containing materials identified.							
7	No. 1 &2 Moore St.	No. 2 1St floor WC				No visible asbestos containing materials identified.							
8	No. 1 &2 Moore St.	No. 2 2nd floor Front rooms				No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	No. 1 &2 Moore St.	No. 2 2nd floor Back rooms				No visible asbestos containing materials identified.							
10	No. 1 &2 Moore St.	No. 2 2nd floor		Roof not accessible		Presumed to contain asbestos felts						Investigation prior to work likely to cause disturbance.	

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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SURVEYING & TESTING
RISK MANAGEMENT | PROJECT MANAGEMENT

Refurbishment & Demolition Asbestos Survey

Location: *No. 3 Moore Street*
Dublin 1

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *October 8th, 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@aboutsafety.ie
About Safety Ltd. Registered in Ireland: No. 422820

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Appendix A – Asbestos Bulk Identification Report 9

Appendix B – Schedule of Survey Sheets 10

Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out of the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to demolition.]
9, 10	Asbestos containing textured paint was identified to the back of the stairway and in the 1st floor room and is presumed to be all other similar homogenous paints throughout the building. Removal of textured paint has a statutory notification of 14 day which is required to be given to the H.S.A. by the contractor appointed for the works. Samples were only taken where the material was damaged and flaking.

Ref:	Presumed/Strongly Presumed Asbestos [Requires dismantling and investigation by a competent asbestos contractor prior to work likely to cause disturbance.]
6	A section of the downpipe to the rear of the building is strongly presumed to contain asbestos.
7	Substrate roofing felts on the main and lower roofs are presumed to contain asbestos.
8	Integral areas of the old blue wall mounted air handling unit is presumed to contain asbestos.
11, 12, 13, 16, 17, 18	Textured paints in the rooms and areas on the 1st and 2nd floor are strongly presumed to contain asbestos based on the results of sampling carried out.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Site Full Name:
No. 3 Moore Street
Parnell Street
Dublin 1

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

S301:	Asbestos and other Fibres
P401:	Identification of Asbestos in Bulk Samples (PLM)
P402:	Building Surveys and Bulk Sampling for Asbestos
P403:	Asbestos Fibre Counting
P404:	Air Sampling and Clearance Testing of Asbestos
P405:	Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed demolition.**
	Structural Details:	**3 storey building of solid construction with flat roof.**
	Date of Construction:	**Not known**
External Aspects:	***Roofs:***	**Flat roofs with roofing felts.**
Internal Aspects:	***Walls***	**Original brick walls with lat and plaster render.**
	Ceilings	**Original lime plaster and plasterboard.**
	Floors	**Concrete on ground floor and timber on upper floors.**
Services:	***Heating Systems:***	**n/a**
Reservations:	***Access restrictions:***	**Roofs were not accessed. Sampling was restricted due to occupancy. Ground floor was trading at time of the inspection.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document "Asbestos-containing materials (ACM's) in Workplaces – Practical Guidelines on ACM Management and Abatement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Competent Person

Person provided with adequate information, instruction and training for the task being undertaken and capable of demonstrating adequate and up-to-date understanding of the work being undertaken, the required control measures, the applicable legislation, and having sufficient practicable experience to apply these effectively. There are two categories of competent person, 1) competent asbestos operative and 2) specialist asbestos operative.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

No. 3 Moore Street
Dublin 1

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
S01	2028440	1st floor ceiling	Textured paint	Chrysotile
S02	2028441	1st floor floor debris	Textured paint	Chrysotile

Glossary

*NADIS = No Asbestos Detected in Sample
VFT = Vinyl Floor Tile

Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	No. 3 Moore Street	Ground floor Electrical panel in hall		Modern electrical board and assemblies.		No visible asbestos containing materials identified.							
2	No. 3 Moore Street	Ground floor Front of shop		Concrete and ceramic tiles to floors		No visible asbestos containing materials identified.							
3	No. 3 Moore Street	Ground floor Back of shop				No visible asbestos containing materials identified.							
4	No. 3 Moore Street	Ground floor Kitchen				No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	No. 3 Moore Street	Ground floor WC				No visible asbestos containing materials identified.							
6	No. 3 Moore Street	Back elevation		Section of AC downpipe	2 LM approx.	Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
7	No. 3 Moore Street	Back roof		Substrate roof felt.		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance. The integrity of the roof was not compromised due to occupancy.	
8	No. 3 Moore Street	Under arch between No. 2 and 3		Integral areas of AH unit.		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	No. 3 Moore Street	Stairway to 1st floor	2028440	Textured paint to back of stairway		Chrysotile	1	1	0	1	3	Removal and disposal as asbestos waste by a specialist asbestos contractor prior to work likely to cause disturbance.	
10	No. 3 Moore Street	1st floor Store rooms	2028441	Textured paint to back of stairway		Chrysotile						Removal and disposal as asbestos waste by a specialist asbestos contractor prior to work likely to cause disturbance.	
11	No. 3 Moore Street	1st floor Store rooms		Textured paint		Strongly presumed asbestos						Investigation and sampling when the premised is vacant.	
12	No. 3 Moore Street	1st floor Store rooms		Textured paint		Strongly presumed asbestos						Investigation and sampling when the premised is vacant.	

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
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No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
13	No. 3 Moore Street	1st floor Store rooms		Textured paint		Strongly presumed asbestos						Investigation and sampling when the premised is vacant.	
14	No. 3 Moore Street	1st floor		AH ductwork with MMMF insulation		No visible asbestos containing materials identified.							
15	No. 3 Moore Street	2nd floor		Old ceiling collapsed		No visible asbestos containing materials identified.							
16	No. 3 Moore Street	2nd floor Front room		Over PVC cladding		Presumed to contain textured paint						Investigation and sampling prior to work likely to cause disturbance.	

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
17	No. 3 Moore Street	2nd floor Front room		Over PVC cladding		Presumed to contain textured paint						Investigation and sampling prior to work likely to cause disturbance.	
18	No. 3 Moore Street	2nd floor Front room		Over PVC cladding		Presumed to contain textured paint						Investigation and sampling prior to work likely to cause disturbance.	

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

ABOUT SAFETY LTD.

ASBESTOS | LEAD BASED PAINT | MOULD | SILICA DUST | HAZMAT
SURVEYING & TESTING
RISK MANAGEMENT | PROJECT MANAGEMENT

Refurbishment & Demolition Asbestos Survey

Location: *No. 4 Moore Street*
Dublin 1

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *October 8th, 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@aboutsafety.ie
About Safety Ltd. Registered in Ireland: No. 422820

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out of the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to demolition.]
	No asbestos containing materials were identified.

Ref:	Presumed/Strongly Presumed Asbestos [Requires dismantling and investigation by a competent asbestos contractor prior to work likely to cause disturbance.]
2, 3, 4, 6 – 10, 12	Textured paints were identified in rooms and areas throughout the building are presumed to contain asbestos. Due to occupancy no samples were taken.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Site Full Name:
No. 4 Moore Street
Parnell Street
Dublin 1

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

- S301: Asbestos and other Fibres
- P401: Identification of Asbestos in Bulk Samples (PLM)
- P402: Building Surveys and Bulk Sampling for Asbestos
- P403: Asbestos Fibre Counting
- P404: Air Sampling and Clearance Testing of Asbestos
- P405: Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed demolition.**
	Structural Details:	**3 storey building of solid construction with flat roof.**
	Date of Construction:	**Not known**
External Aspects:	***Roofs:***	**Flat roofs with roofing felts.**
Internal Aspects:	***Walls***	**Original brick walls with lat and plaster render.**
	Ceilings	**Original lime plaster and plasterboard.**
	Floors	**Concrete on ground floor and timber on upper floors.**
Services:	***Heating Systems:***	**n/a**
Reservations:	***Access restrictions:***	**Roofs were not accessed. Sampling was restricted due to occupancy.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document "Asbestos-containing materials (ACM's) in Workplaces – Practical Guidelines on ACM Management and Abatement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Competent Person

Person provided with adequate information, instruction and training for the task being undertaken and capable of demonstrating adequate and up-to-date understanding of the work being undertaken, the required control measures, the applicable legislation, and having sufficient practicable experience to apply these effectively. There are two categories of competent person, 1) competent asbestos operative and 2) specialist asbestos operative.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

No. 4 Moore Street
Dublin 1

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
		No samples taken		

Glossary

*NADIS = No Asbestos Detected in Sample
VFT = Vinyl Floor Tile

Chrysotile (white asbestos)
Amosite (brown asbestos)
Crocidolite (blue asbestos)

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	No. 4 Moore Street	Ground floor CE Fones outlet		Ceramic tiles to front of shop		NAD							
2	No. 4 Moore Street	Ground floor CE Fones outlet		Under existing lino at back of shop		Presumed to contain VFT and adhesive						Investigation and sampling prior to work likely to cause disturbance.	
3	No. 4 Moore Street	Ground floor CE Fones outlet		Textured paint to back of shop		Presumed to contain asbestos						Investigation and sampling prior to work likely to cause disturbance.	
4	No. 4 Moore Street	Ground floor CE Fones outlet		Textured paint to back of shop		Presumed to contain asbestos						Investigation and sampling prior to work likely to cause disturbance.	

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	No. 4 Moore Street	1st floor CE Fones outlet stairway				No visible asbestos containing materials identified.							
6	No. 4 Moore Street	1st floor CE Fones outlet Store rooms		Textured paint to ceiling		Presumed to contain asbestos						Investigation and sampling prior to work likely to cause disturbance.	
7	No. 4 Moore Street	1st floor CE Fones outlet Store rooms		Textured paint to ceiling		Presumed to contain asbestos						Investigation and sampling prior to work likely to cause disturbance.	
8	No. 4 Moore Street	1st floor CE Fones outlet Store rooms		Textured paint to ceiling		Presumed to contain asbestos						Investigation and sampling prior to work likely to cause disturbance.	

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
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No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	No. 4 Moore Street	2nd floor CE Fones outlet Storerooms		Textured paint to ceiling		Presumed to contain asbestos						Investigation and sampling prior to work likely to cause disturbance.	
10	No. 4 Moore Street	2nd floor CE Fones outlet Storecooms		Textured paint to ceiling		Presumed to contain asbestos						Investigation and sampling prior to work likely to cause disturbance.	
11	No. 4 Moore Street	Ground Floor Grocery Outlet		Ceramic tiles to floors		No visible asbestos containing materials identified.							
12	No. 4 Moore Street	Ground Floor Grocery Outlet		Textured paint to ceiling		Presumed to contain asbestos						Investigation and sampling prior to work likely to cause disturbance.	

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
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No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
13	No. 4 Moore Street	Ground Floor Grocery Outlet Back of shop		Ceramic tiles to floor		No visible asbestos containing materials identified.							
14	No. 4 Moore Street	Ground Floor Grocery Outlet Back of shop		Ceilings		No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos

Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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Refurbishment & Demolition Asbestos Survey

Location: *No. 5 Moore Street.*
Dublin 1

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *October 8th, 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@aboutsafety.ie
About Safety Ltd. Registered in Ireland: No. 422820

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out of the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to demolition.]
4, 5	Asbestos containing Bakelite toilet cisterns in the WC's on the 1st floor.
7	Asbestos containing bitumen pads to the kitchen sink unit on the 1st floor.

Ref:	Presumed/Strongly Presumed Asbestos [Requires dismantling and investigation by a competent asbestos contractor prior to work likely to cause disturbance.]
2	Asbestos containing textured paint is presumed over the drop ceilings in the shop area.
	Roofs were not accessible.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Site Full Name:
No. 5 Moore Street
Dublin 1

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

- **S301:** Asbestos and other Fibres
- **P401:** Identification of Asbestos in Bulk Samples (PLM)
- **P402:** Building Surveys and Bulk Sampling for Asbestos
- **P403:** Asbestos Fibre Counting
- **P404:** Air Sampling and Clearance Testing of Asbestos
- **P405:** Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed demolition.**
	Structural Details:	**3 storey building of solid construction with flat roof.**
	Date of Construction:	**Not known**
External Aspects:	***Roofs:***	**Flat roofs with roofing felts.**
Internal Aspects:	***Walls***	**Original brick walls with lat and plaster render.**
	Ceilings	**Original lime plaster and plasterboard.**
	Floors	**Concrete with ceramic tiles on ground floor and timber on upper floors.**
Services:	***Heating Systems:***	**n/a**
Reservations:	***Access restrictions:***	**Roofs were not accessed.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document "Asbestos-containing materials (ACM's) in Workplaces – Practical Guidelines on ACM Management and Abatement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Competent Person

Person provided with adequate information, instruction and training for the task being undertaken and capable of demonstrating adequate and up-to-date understanding of the work being undertaken, the required control measures, the applicable legislation, and having sufficient practicable experience to apply these effectively. There are two categories of competent person, 1) competent asbestos operative and 2) specialist asbestos operative.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

No. 5 Moore Street.
Dublin 1

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
S01	2028442	Stairway wall	Nap plaster	NADIS
S02	2028443	1st floor kitchen sink unit	Bitumen pads	Chrysotile

Glossary

*NADIS = No Asbestos Detected in Sample Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
VFT = Vinyl Floor Tile

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	No. 5 Moore Street	Ground floor retail outlet		Ceramic tiles to floors		No visible asbestos containing materials identified							
2	No. 5 Moore Street	Ground floor retail outlet Ceiling over drop ceilings		Possible textured paint		Presumed to contain asbestos						Investigation prior to work likely to cause disturbance.	
3	No. 5 Moore Street	Stairway to 1st floor	2028442	Painted nap plaster		NAD							
4	No. 5 Moore Street	1st floor		Bakelite cistern	1	Amosite	1	0	1	2	4	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	No. 5 Moore Street	1st floor		Bakelite cistern	1	Amosite	1	0	1	2	4	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
6	No. 5 Moore Street	1st floor Rooms				No visible asbestos containing materials identified							
7	No. 5 Moore Street	1st floor	2028443	Bitumen pads to sink unit	Small pads	Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
8	No. 5 Moore Street	2nd floor Stairway		Plasterboard linings around door		No visible asbestos containing materials identified							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	No. 5 Moore Street	2nd floor Rooms		Old ceilings		No visible asbestos containing materials identified							
10	No. 5 Moore Street	2nd floor Rooms		Old ceilings		No visible asbestos containing materials identified							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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Refurbishment & Demolition Asbestos Survey

Location: *No. 8 & 9 Moore Street & 11/13 Henry Place Dublin 1*

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *October 8th, 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@aboutsafety.ie
About Safety Ltd. Registered in Ireland: No. 422820

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out of the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to demolition.]
	No visible asbestos containing materials identified.

Ref:	Presumed/Strongly Presumed Asbestos [Requires dismantling and investigation by a competent asbestos contractor prior to work likely to cause disturbance.]
7	Integral areas of the gas boiler on the 1st floor are presumed to contain asbestos.
15	The brake shoes on the dumb waiter lift motor are presumed to contain asbestos.
25	The flat roofs were not accessible and are presumed to contain asbestos roofing felts.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Site Full Name:
8/9 Moore St. and 11/13 Henry St.
Dublin

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

S301:	Asbestos and other Fibres
P401:	Identification of Asbestos in Bulk Samples (PLM)
P402:	Building Surveys and Bulk Sampling for Asbestos
P403:	Asbestos Fibre Counting
P404:	Air Sampling and Clearance Testing of Asbestos
P405:	Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed demolition.**
	Structural Details:	**3 storey building of solid construction with flat roofs. Building area covers No. 8/9 Moore St., and 11-13 Henry Street**
	Date of Construction:	**Not known**
External Aspects:	***Roofs:***	**Flat roofs with roofing felts.**
Internal Aspects:	***Walls***	**Original brick walls with lat and plaster render.**
	Ceilings	**Original lime plaster and plasterboard.**
	Floors	**Concrete with ceramic tiles on ground floor and timber on upper floors.**
Services:	***Heating Systems:***	**n/a**
Reservations:	***Access restrictions:***	**Roofs were not accessed. High and low roofs.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document "Asbestos-containing materials (ACM's) in Workplaces – Practical Guidelines on ACM Management and Abatement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Competent Person

Person provided with adequate information, instruction and training for the task being undertaken and capable of demonstrating adequate and up-to-date understanding of the work being undertaken, the required control measures, the applicable legislation, and having sufficient practicable experience to apply these effectively. There are two categories of competent person, 1) competent asbestos operative and 2) specialist asbestos operative.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

No. 8/9 Moore Street & 11/12 Henry Street
Dublin 1

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
S01	2028444	1st floor sink unit	Bitumen pad	NADIS
S02	2028445	1st floor ceiling	Textured coating	NADIS
S03	2028446	2nd floor stairway	VFT	NADIS
S04	2028447	2nd floor stairway	VFT adhesive	NADIS

Glossary

*NADIS = No Asbestos Detected in Sample Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
VFT = Vinyl Floor Tile

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	No. 8/9 Moore St. No. 11/12 Henry St.	No. 8 Basement				No visible asbestos containing materials identified.							
2	No. 8/9 Moore St. No. 11/12 Henry St.	No. 8 Basement Cold stores				No visible asbestos containing materials identified.							
3	No. 8/9 Moore St. No. 11/12 Henry St.	No. 8 Basement				No visible asbestos containing materials identified.							
4	No. 8/9 Moore St. No. 11/12 Henry St.	No. 8 Basement Storerooms				No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	No. 8/9 Moore St. No. 11/12 Henry St.	Basement WC				No visible asbestos containing materials identified.							
6	No. 8/9 Moore St. No. 11/12 Henry St.	Basement		Parquet flooring		No visible asbestos containing materials identified.							
7	No. 8/9 Moore St. No. 11/12 Henry St.	1st floor Via spiral stairway		Integral areas of the gas boiler		Presumed asbestos						Dismantling and investigation by a competent contractor prior work likely to cause disturbance.	
8	No. 8/9 Moore St. No. 11/12 Henry St.	Upper floors over all areas				No visible asbestos containing materials identified.							

Key	Confirmed Asbestos
NAD = No asbestos detected AIB = Asbestos insulation board AC = Asbestos cement VFT = vinyl floor tile NQ = Not Quantified/Quantifiable SM = Square Meters LM = Linear Meters	Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
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No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	No. 8/9 Moore St. No. 11/12 Henry St.	Upper floors over all areas	2028445	Textured coating to ceiling.		No visible asbestos containing materials identified.							
10	No. 8/9 Moore St. No. 11/12 Henry St.	Upper floors over all areas		Original ceilings over drop ceiling		No visible asbestos containing materials identified.							
11	No. 8/9 Moore St. No. 11/12 Henry St.	Upper floors over all areas				No visible asbestos containing materials identified.							
12	No. 8/9 Moore St. No. 11/12 Henry St.	Upper floors over all areas				No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
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VFT = vinyl floor tile
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Confirmed Asbestos
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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
13	No. 8/9 Moore St. No. 11/12 Henry St.	Upper floors over all areas				No visible asbestos containing materials identified.							
14	No. 8/9 Moore St. No. 11/12 Henry St.	1st floor		Integral areas of dumb waiter		No visible asbestos containing materials identified.							
15	No. 8/9 Moore St. No. 11/12 Henry St.	1st floor		Brake shoes to dumb waiter motor		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
16	No. 8/9 Moore St. No. 11/12 Henry St.	1st floor		WC		No visible asbestos containing materials identified.							

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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
17	No. 8/9 Moore St. No. 11/12 Henry St.	1st floor Ductwork				No visible asbestos containing materials identified.							
18	No. 8/9 Moore St. No. 11/12 Henry St.	1st floor Kitchen				No visible asbestos containing materials identified.							
19	No. 8/9 Moore St. No. 11/12 Henry St.	1st floor				No visible asbestos containing materials identified.							
20	No. 8/9 Moore St. No. 11/12 Henry St.	Ground floor				No visible asbestos containing materials identified.							

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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
21	No. 8/9 Moore St. No. 11/12 Henry St.	Ground floor				No visible asbestos containing materials identified.							
22	No. 8/9 Moore St. No. 11/12 Henry St.	Ground floor Shop				No visible asbestos containing materials identified.							
23	No. 8/9 Moore St. No. 11/12 Henry St.	Ground floor Hairdressers				No visible asbestos containing materials identified.							
24	No. 8/9 Moore St. No. 11/12 Henry St.	Ground floor Ceilings				No visible asbestos containing materials identified.							

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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
25	No. 8/9 Moore St. No. 11/12 Henry St.	Roofs		Roofing felts		Presumed to contain asbestos						Investigation prior to work likely to cause disturbance.	

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ABOUT SAFETY LTD.

ASBESTOS | LEAD BASED PAINT | MOULD | SILICA DUST | HAZMAT
SURVEYING & TESTING
RISK MANAGEMENT | PROJECT MANAGEMENT

Refurbishment & Demolition Asbestos Survey

Location: *No. 10-12 Moore Street*
Dublin 1

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *October 8th, 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@aboutsafety.ie
About Safety Ltd. Registered in Ireland: No. 422820

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out of the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to demolition.]
17	Asbestos containing roofing felt was identified on old discarded sections of roof on No. 12.
28	Small pieces of asbestos containing slates were identified on the 1st floor in rubble in No. 10

Ref:	Presumed/Strongly Presumed Asbestos [Requires dismantling and investigation by a competent asbestos contractor prior to work likely to cause disturbance.]
1	Repair slates in the valley on the roof of No. 10 are presumed to contain asbestos.
2, 14, 19, 20	Substrate roofing felts to all flat roofs are presumed to contain asbestos.
3, 4	The ceiling voids in the restaurant area of No. 10 are presumed to contain asbestos. Occupied and trading.
5	Beneath fixed laminate flooring is presumed to contain asbestos.
23, 34	Integral areas of old safes are presumed to contain asbestos linings and seals.
30	Textured paint in 1st floor store room presumed to contain asbestos.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Site Full Name:
No. 10-12 Moore Street
Dublin 1

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

- **S301:** Asbestos and other Fibres
- **P401:** Identification of Asbestos in Bulk Samples (PLM)
- **P402:** Building Surveys and Bulk Sampling for Asbestos
- **P403:** Asbestos Fibre Counting
- **P404:** Air Sampling and Clearance Testing of Asbestos
- **P405:** Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed demolition**
	Structural Details:	**3 storey over basement building of solid brick construction with pitched and flat roofs.**
	Date of Construction:	**Not known**
External Aspects:	***Roofs:***	**Pitched roof on No. 10 with natural quarry slates. Flat roofs with roofing felt.**
Internal Aspects:	***Walls***	**Original brick walls with lime plaster render.**
	Ceilings	**Original lat and plaster and plasterboard. Drop ceilings with plasterboard ceiling tiles in the restaurant areas.**
	Floors	**Concrete floors in the basement ground floors and upper floors in No. 11/12. Timber floors in No. 10.**
Services:	***Heating Systems:***	**n/a**
Reservations:	***Access restrictions:***	**The integrity of flat roofs were not compromised as the building is occupied.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey

(e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document "Asbestos-containing materials (ACM's) in Workplaces – Practical Guidelines on ACM Management and Abatement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Competent Person

Person provided with adequate information, instruction and training for the task being undertaken and capable of demonstrating adequate and up-to-date understanding of the work being undertaken, the required control measures, the applicable legislation, and having sufficient practicable experience to apply these effectively. There are two categories of competent person, 1) competent asbestos operative and 2) specialist asbestos operative.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

No. 10-12 Moore Street

TEST RESULT

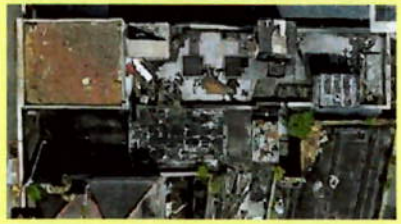
SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
S01	2028448	1st floor No. 11 ceiling	Nap plaster painted	NADIS
S02	2028449	1st floor No. 11 ceiling	Nap plaster painted	NADIS
S03	2028450	1st floor No. 10/11 Stairway	Black thread nosing	NADIS
S04	2028451	Roof	Felt debris	Chrysotile
S05	2028452	Basement ceiling	Nap plaster painted	NADIS
S06	2028453	Basement stairway	Black thread nosing	NADIS
S07	2028454	Basement old stair section	VFT	NADIS
S08	2028455	Basement old stair section	VFT adhesive	NADIS
S09	2028456	2nd floor	VFT debris on floor	NADIS
S10	2028457	2nd floor under existing floor	VFT adhesive	NADIS
S11	2028458	2nd floor front room	Slate debris	Chrysotile

Glossary

*NADIS = No Asbestos Detected in Sample Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
VFT = Vinyl Floor Tile

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	No.s 10-12 Moore Street	Roof of No. 10		Misc. repaired areas in the valley of natural quarry slates.		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
2	No.s 10-12 Moore Street	Roofs to No. 11 and 12		Felts to all flat		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
3	No.s 10-12 Moore Street	No. 10 Ground floor		Plasterboard tiles in drop ceiling.		No access over ceiling. Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
4	No.s 10-12 Moore Street	No. 10 Ground floor		Plasterboard tiles in drop ceiling.		No access over ceiling. Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
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NQ = Not Quantified/Quantifiable
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LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	No.s 10-12 Moore Street	No. 10 Ground floor		Beneath laminate flooring		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
6	No.s 10-12 Moore Street	No. 10 Ground floor Pool room				No visible asbestos containing materials identified.							
7	No.s 10-12 Moore Street	No. 10 Ground floor Store room				No visible asbestos containing materials identified.							
8	No.s 10-12 Moore Street	No. 10 Ground floor Store room Freezer units				No visible asbestos containing materials identified.							

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9	No.s 10-12 Moore Street	No. 10 Ground floor Store rooms Prep rooms		Concrete ceilings		No visible asbestos containing materials identified.							
10	No.s 10-12 Moore Street	No. 10 Ground floor Store rooms Prep rooms				No visible asbestos containing materials identified.							
11	No.s 10-12 Moore Street	No. 11/12 1st floor Rooms	2028448	Nap plaster and paint		NAD							
12	No.s 10-12 Moore Street	No. 11/12 1st floor Rooms	2028449	Nap plaster and paint		NAD							

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13	No.s 10-12 Moore Street	No. 11/12 1st floor Rooms				No visible asbestos containing materials identified.							
14	No.s 10-12 Moore Street	No. 11/12 1st floor Rooms		Substrate roofing back of No. 11.		Presumed to contain asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
15	No.s 10-12 Moore Street	No. 11/12 1st floor Rooms				No visible asbestos containing materials identified.							
16	No.s 10-12 Moore Street	No. 11/12 1st floor Rooms		Steel decking to flat roofs of No. 11		No visible asbestos containing materials identified.							

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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
17	No.s 10-12 Moore Street	No. 12 Roof	2028451	Felt to old timber on stairway roof	Small amounts.	Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
18	No.s 10-12 Moore Street	No. 12 Tank room		Flange gaskets to galvanised tanks		presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
19	No.s 10-12 Moore Street	No. 12 All flat roofs		Roofing felts		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
20	No.s 10-12 Moore Street	No. 11 All flat roofs		Roofing felts		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	

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≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
21	No.s 10-12 Moore Street	No. 10 Basement	2028452	Textured paint to nap plaster debris		NAD							
22	No.s 10-12 Moore Street	No. 10 Basement		Textured paint to nap plaster debris		NAD							
23	No.s 10-12 Moore Street	No. 10 Basement		Integral areas of old safe in side room		Presumed to contain asbestos linings.						Dismantling and investigation by a competent contractor prior to work likely to cause disturbance.	
24	No.s 10-12 Moore Street	No. 10 Basement	2028454 2028455 2028453	VFT and adhesive. Black thread nosing.		NAD NAD							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
25	No.s 10-12 Moore Street	No. 10 1st floor				No visible asbestos containing materials identified.							
26	No.s 10-12 Moore Street	No. 10 1st floor				No visible asbestos containing materials identified.							
27	No.s 10-12 Moore Street	No. 10 1st floor	2028456 2028457	VFT and adhesive debris on floor		NAD							
28	No.s 10-12 Moore Street	No. 10 1st floor	2028458	Slate debris in rubble on floor	Small amount	Chrysotile	1	1	1	1	4	Removal and disposal as asbestos waste prior to work likely to cause disturbance..	

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SM = Square Meters
LM = Linear Meters

Confirmed Asbestos

Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
29	No.s 10-12 Moore Street	No. 10 1st floor				No visible asbestos containing materials identified.							
30	No.s 10-12 Moore Street	No. 10 1st floor Store room		Textured paint to ceiling		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
31	No.s 10-12 Moore Street	No. 10 1st floor Stairway to 2nd floor				No visible asbestos containing materials identified.							
32	No.s 10-12 Moore Street	2nd floor Front room				No visible asbestos containing materials identified.							

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VFT = vinyl floor tile
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SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
33	No.s 10-12 Moore Street	No. 10 2nd floor Rooms				NAD							
34	No.s 10-12 Moore Street	No. 10 2nd floor		Integral areas of old safe on floor		Presumed to contain asbestos linings.						Dismantling and investigation by a competent contractor prior to work likely to cause disturbance.	
35	No.s 10-12 Moore Street	No. 10 2nd floor WC's				No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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ASBESTOS | LEAD BASED PAINT | MOULD | SILICA DUST | HAZMAT
SURVEYING & TESTING
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Refurbishment & Demolition Asbestos Survey

Location: *No. 41 Henry Street*
Dublin 1

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *14th and 16th October, 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@aboutsafety.ie
About Safety Ltd. Registered in Ireland: No. 422820

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out of the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to demolition.]
11	Asbestos containing grey thread nosing to the stairway from the 2nd floor to the 3rd floor.

Ref:	Presumed/Strongly Presumed Asbestos [Requires dismantling and investigation by a competent asbestos contractor prior to work likely to cause disturbance.]
	Due to occupancy the existing fabric of the building was not disturbed. Floors are over-covered with new laminate flooring on the upper floors.
	The flat roof was not accessible and is presumed to contain asbestos roofing felts until proven otherwise.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Site Full Name:
No. 41 Henry Street
Dublin 1

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

- **S301:** Asbestos and other Fibres
- **P401:** Identification of Asbestos in Bulk Samples (PLM)
- **P402:** Building Surveys and Bulk Sampling for Asbestos
- **P403:** Asbestos Fibre Counting
- **P404:** Air Sampling and Clearance Testing of Asbestos
- **P405:** Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed structural alterations, refurbishment and/or demolition.**
	Structural Details:	**4 storey over basement corner property with flat roof**
	Date of Construction:	**Not known**
External Aspects:	***Roofs:***	**Flat roof.**
Internal Aspects:	***Walls***	**Original walls. PVC sheeting to basement areas.**
	Ceilings	**Plasterboard ceilings**
	Floors	**Timber floors on upper levels. Concrete in basement.**
Services:	***Heating Systems:***	**n/a**
Reservations:	***Access restrictions:***	**Flat roof.** **The internal fabric of the building was not disturbed**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document "Asbestos-containing materials (ACM's) in Workplaces – Practical Guidelines on ACM Management and Abatement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Competent Person

Person provided with adequate information, instruction and training for the task being undertaken and capable of demonstrating adequate and up-to-date understanding of the work being undertaken, the required control measures, the applicable legislation, and having sufficient practicable experience to apply these effectively. There are two categories of competent person, 1) competent asbestos operative and 2) specialist asbestos operative.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

No. 41 Henry Street
Dublin 1

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
S01	2029113	Stairway 2nd to 3rd floor	Grey thread nosing	Chrysotile

Glossary

*NADIS = No Asbestos Detected in Sample
VFT = Vinyl Floor Tile

Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	No. 41 Henry Street	Ice cream shop Ground floor		Modern refurb. Occupied		No visible asbestos containing materials identified.							
2	No. 41 Henry Street	Ice cream shop Basement Store rooms		Modern refurb. Occupied		No visible asbestos containing materials identified.							
3	No. 41 Henry Street	Ice cream shop Basement Store rooms		Modern refurb. Occupied		No visible asbestos containing materials identified.							
4	No. 41 Henry Street	Ice cream shop Basement WC's		Modern refurb. Occupied		No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	No. 41 Henry Street	Stairway to 1st floor.		Modern refurb.		No visible asbestos containing materials identified.							
6	No. 41 Henry Street	1st floor. Reception and treatment room		Modern refurb		No visible asbestos containing materials identified.							
7	No. 41 Henry Street	2nd floor Treatment Room 4		Modern refurb.		No visible asbestos containing materials identified.							
8	No. 41 Henry Street	2nd floor Treatment Room 3		Modern refurb.		No visible asbestos containing materials identified.							

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No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	No. 41 Henry Street	2nd floor Treatment Room 2		Modern refurb.		No visible asbestos containing materials identified.							
10	No. 41 Henry Street	2nd floor Treatment Room 1		Modern refurb.		No visible asbestos containing materials identified.							
11	No. 41 Henry Street	Stairway from 2nd to 3rd floor	20	Grey thread nosings	10 LM approx.	Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
12	No. 41 Henry Street	3rd floor WC				No visible asbestos containing materials identified.							

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LM = Linear Meters

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Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
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7 - 9	Medium
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No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
13	No. 41 Henry Street	3rd floor Bedrooms		Modern refurb.		No visible asbestos containing materials identified.							
14	No. 41 Henry Street	3rd floor bedrooms		Modern refurb.		No visible asbestos containing materials identified.							

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No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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Refurbishment & Demolition Asbestos Survey

Location: *38 Henry Street (Diesel)*
Dublin 1

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *October 14th, 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@aboutsafety.ie
About Safety Ltd. Registered in Ireland: No. 422820

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out of the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to demolition.]
11	Asbestos containing grey thread nosings to 1st floor steps. 14 threads.

Ref:	Presumed/Strongly Presumed Asbestos [Requires dismantling and investigation by a competent asbestos contractor prior to work likely to cause disturbance.]
15	Integral areas of the wall mounted safe is presumed to contain asbestos.
18	The lead sealed collars on the cast-iron downpipes are presumed to contain asbestos woven rope packing. Often used to prevent molten lead running through joint.
23 - 27	Substrate roofing felts are presumed to contain asbestos until proven otherwise.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Site Full Name:
No. 38 Henry Street
Dublin 1

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

- **S301:** Asbestos and other Fibres
- **P401:** Identification of Asbestos in Bulk Samples (PLM)
- **P402:** Building Surveys and Bulk Sampling for Asbestos
- **P403:** Asbestos Fibre Counting
- **P404:** Air Sampling and Clearance Testing of Asbestos
- **P405:** Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Structural alterations, refurbishment and/or demolition.**
	Structural Details:	**4 storey over basement building of solid construction with flat roofs**
	Date of Construction:	**Not known**
External Aspects:	***Roofs:***	**Flat roofs.**
Internal Aspects:	***Walls***	**Original walls with plasterboard in studded partitions.**
	Ceilings	**Original ceilings exposed in areas. Plasterboard generally.**
	Floors	**Concrete floors in the basement and 1st floor. Timber floors.**
Services:	***Heating Systems:***	**n/a**
Reservations:	***Access restrictions:***	**Roofs were not disturbed or were inaccessible.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document "Asbestos-containing materials (ACM's) in Workplaces – Practical Guidelines on ACM Management and Abatement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Competent Person

Person provided with adequate information, instruction and training for the task being undertaken and capable of demonstrating adequate and up-to-date understanding of the work being undertaken, the required control measures, the applicable legislation, and having sufficient practicable experience to apply these effectively. There are two categories of competent person, 1) competent asbestos operative and 2) specialist asbestos operative.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

No. 38 Henry Street
Dublin 1

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
S01	2029114	1st floor walls	Textured paint	NADIS
S02	2029115	1st floor	White VFT & Evode	NADIS
S03	2029116	1st floor stairway	Grey thread nosings X14	Chrysotile
S04	2029117	Stairway wall	Nap plaster paint	NAD
S05	2029118	1st floor half landing	Red lino	NADIS
S06	2029119	2nd floor sink unit	Heat pads	NADIS

Glossary

*NADIS = No Asbestos Detected in Sample Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
VFT = Vinyl Floor Tile

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	No. 38 Henry Street	Ground Shop				No visible asbestos containing materials identified							
2	No. 38 Henry Street	Ground Shop				No visible asbestos containing materials identified							
3	No. 38 Henry Street	Basement				No visible asbestos containing materials identified							
4	No. 38 Henry Street	Basement Under footpath				No visible asbestos containing materials identified							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	No. 38 Henry Street	Basement Under footpath		Ceramic tiles to wall and floors in old WC.'s		No visible asbestos containing materials identified							
6	No. 38 Henry Street	Basement Changing rooms				No visible asbestos containing materials identified							
7	No. 38 Henry Street	Stairway to 1st floor				No visible asbestos containing materials identified							
8	No. 38 Henry Street	1st floor Wall at back of store	2029114	Textured paint		No visible asbestos containing materials identified							

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Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	No. 38 Henry Street	1st floor Storeroom	2029115	White VFT and Evode		No visible asbestos containing materials identified							
10	No. 38 Henry Street	1st floor Storeroom				No visible asbestos containing materials identified							
11	No. 38 Henry Street	1st floor Stairway	2029116	Old grey thread nosings. Intact	14 threads	Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
12	No. 38 Henry Street	2nd floor stairway	2029117	Nap plaster painted wall		No visible asbestos containing materials identified							

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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
13	No. 38 Henry Street	Stairway to 2nd floor	2029118	Red lino		No visible asbestos containing materials identified							
14	No. 38 Henry Street	2nd floor Store rooms				No visible asbestos containing materials identified							
15	No. 38 Henry Street	2nd floor Store room		Integral areas of wall mounted		Presumed to contain asbestos						Investigation by a competent asbestos contractor prior to work likely to cause disturbance.	
16	No. 38 Henry Street	2nd floor Storage areas				No visible asbestos containing materials identified							

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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
17	No. 38 Henry Street	2nd floor WC				No visible asbestos containing materials identified							
18	No. 38 Henry Street	3rd floor		Lead sealed cast-iron collars to downpipes		Presumed to contain asbestos woven rope packing						Investigation by a competent asbestos contractor prior to work likely to cause disturbance.	
19	No. 38 Henry Street	3rd floor Old				No visible asbestos containing materials identified							
20	No. 38 Henry Street	3rd floor	2029119	Heat pads to sink unit		No visible asbestos containing materials identified							

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21	No. 38 Henry Street	3rd floor Front room				No visible asbestos containing materials identified							
22	No. 38 Henry Street	Stairway to roof				No visible asbestos containing materials identified							
23	No. 38 Henry Street	Stairway Cover		Substrate roofing felts		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
24	No. 38 Henry Street	Main flat roof		Substrate roofing felts		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	

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No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
25	No. 38 Henry Street	Lower flat roof		Substrate roofing felts		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
26	No. 38 Henry Street	Flat roofs over windows		Substrate roofing felts		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
27	No. 38 Henry Street	Flat roofs over windows		Substrate roofing felts		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	

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No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

ABOUT SAFETY LTD.

ASBESTOS | LEAD BASED PAINT | MOULD | SILICA DUST | HAZMAT
SURVEYING & TESTING
RISK MANAGEMENT | PROJECT MANAGEMENT

Refurbishment & Demolition Asbestos Survey

Location: *39 Henry Street (Starbucks)*
Dublin 1

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *October 8th, 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@aboutsafety.ie
About Safety Ltd. Registered in Ireland: No. 422820

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out of the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to demolition.]
13	Asbestos containing green thread nosings on the stairway between the 1st and 2nd floors. 40 threads approximately. Good condition and intact.
14	Asbestos containing black Bakelite Shires cistern in the 2nd floor WC.
17	The second floor safe contains asbestos containing webbing to the safe and door closure points. Worn and fibrous. It is recommended that the seals are either removed, encapsulated with a polymeric bond or the safe closed and sealed.

Ref:	Presumed/Strongly Presumed Asbestos [Requires dismantling and investigation by a competent asbestos contractor prior to work likely to cause disturbance.]
1	The pitched roof on the access room contains slates are strongly presumed to contain asbestos – no access -razor wire between 38 and 39. Substrate roofing felts on all of the flat roofs to the bulding are presumed to contain asbestos.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Site Full Name:
39 Henry Street (Starbucks)
Dublin 1

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

- **S301:** Asbestos and other Fibres
- **P401:** Identification of Asbestos in Bulk Samples (PLM)
- **P402:** Building Surveys and Bulk Sampling for Asbestos
- **P403:** Asbestos Fibre Counting
- **P404:** Air Sampling and Clearance Testing of Asbestos
- **P405:** Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Structural alterations, refurbishment and/or demolition.**
	Structural Details:	**4 storey over basement building of solid construction with flat roofs**
	Date of Construction:	**Not known**
External Aspects:	***Roofs:***	**Flat roofs. Small building (access) on roof has slates. Observed form No. 38**
Internal Aspects:	***Walls***	**Original walls with plasterboard in studded partitions.**
	Ceilings	**Original ceilings exposed in areas. Plasterboard generally.**
	Floors	**Concrete floors in the basement and 1st floor. Timber floors.**
Services:	***Heating Systems:***	**n/a**
Reservations:	***Access restrictions:***	**Roofs were not disturbed or were inaccessible.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

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Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

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Legislation and Codes of Practice

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In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document "Asbestos-containing materials (ACM's) in Workplaces – Practical Guidelines on ACM Management and Abatement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

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Person provided with adequate information, instruction and training for the task being undertaken and capable of demonstrating adequate and up-to-date understanding of the work being undertaken, the required control measures, the applicable legislation, and having sufficient practicable experience to apply these effectively. There are two categories of competent person, 1) competent asbestos operative and 2) specialist asbestos operative.

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No. 39 Henry Street
Dublin 1

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
S01	2029120	Basement WC	Grey VFT and Evode	NADIS
S02	2029121	Basement under grey floor paint	Black paint	NADIS
S03	2029122	1st floor WC	VFT and Evode	NADIS
S04	2029123	1st to 2nd floor stairway	Green thread nosings	Chrysotile
S05	2029124	2nd floor back room cabinet safe	Webbing seals	Chrysotile
S06	2029125	3rd floor sink unit	Heat pads	NADIS

Glossary

*NADIS = No Asbestos Detected in Sample Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
VFT = Vinyl Floor Tile

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

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1	No. 39 Henry Street	Roofs (no access)		AC slates to roof access. Substrate roofing felts		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
2	No. 39 Henry Street	Ground floor Shop (Trading)		Modern refurb.		No visible asbestos containing materials identified.							
3	No. 39 Henry Street	Basement Stairway				No visible asbestos containing materials identified							
4	No. 39 Henry Street	Basement Storerooms				No visible asbestos containing materials identified							

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NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	No. 39 Henry Street	Basement Canteen				No visible asbestos containing materials identified							
6	No. 39 Henry Street	Basement				No visible asbestos containing materials identified							
7	No. 39 Henry Street	Basement	2029120	Grey VFT and Evode		No visible asbestos containing materials identified							
8	No. 39 Henry Street	Basement	2029121	Black paint to floor under grey paint.		No visible asbestos containing materials identified							

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≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	No. 39 Henry Street	Stairway to 1st floor		Plastic threads		No visible asbestos containing materials identified							
10	No. 39 Henry Street	1st floor Half landing WC		Modern refurb in this area.		No visible asbestos containing materials identified							
11	No. 39 Henry Street	1st floor Restaurant		Modern refurb in this area.		No visible asbestos containing materials identified							
12	No. 39 Henry Street	1st floor		Modern refurb in this area.		No visible asbestos containing materials identified							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
13	No. 39 Henry Street	Stairway 1st to 2nd floor	2029123	Green thread nosings. Intact	40 threads	Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
14	No. 39 Henry Street	2nd floor WC		Black Bakelite cistern. Intact.	1 unit	Amosite	1	0	1	2	4	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
15	No. 39 Henry Street	2nd floor Board room				No visible asbestos containing materials identified							
16	No. 39 Henry Street	2nd floor Back room				No visible asbestos containing materials identified							

Key
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AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
17	No. 39 Henry Street	2nd floor Back room	2029124	Asbestos containing webbing to the door and safe. Fibrous. Not sealed.	4 LM approx.	Chrysotile	2	2	2	1	7	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance. is recommended that the seals are removed, encapsulated or the safe closed and sealed.	
18	No. 39 Henry Street	3rd floor WC				No visible asbestos containing materials identified							
19	No. 39 Henry Street	3rd floor				No visible asbestos containing materials identified							
20	No. 39 Henry Street	3rd floor Rooms				No visible asbestos containing materials identified							

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NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
21	No. 39 Henry Street	3rd floor Rooms				No visible asbestos containing materials identified.							
22	No. 39 Henry Street	3rd floor Rooms				No visible asbestos containing materials identified.							
23	No. 39 Henry Street	3rd floor Rooms	2029125	Sink pad		NAD							
24	No. 39 Henry Street	3rd floor landing		Plastic water tanks in cupboard over stairway.		No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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RISK MANAGEMENT | PROJECT MANAGEMENT

Refurbishment & Demolition Asbestos Survey

Location: *22-23 Moore Street*
Dublin 1

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *October, 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@aboutsafety.ie
About Safety Ltd. Registered in Ireland: No. 422820

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out of the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to demolition.]
	No visible asbestos containing materials identified.

Ref:	Presumed/Strongly Presumed Asbestos [Requires investigation by a competent asbestos contractor prior to work likely to cause disturbance.]
7	The room at the back exit mezzanine floor was not accessible due to storage.
18	Roofs were not accessible during the inspection.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Site Full Name:
22/23 Moore Street
Dublin 1

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

- **S301:** Asbestos and other Fibres
- **P401:** Identification of Asbestos in Bulk Samples (PLM)
- **P402:** Building Surveys and Bulk Sampling for Asbestos
- **P403:** Asbestos Fibre Counting
- **P404:** Air Sampling and Clearance Testing of Asbestos
- **P405:** Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed demolition**
	Structural Details:	**3 storey**
	Date of Construction:	**Circa 1960's**
External Aspects:	***Roofs:***	**Flat roofs.**
Internal Aspects:	***Walls***	**Solid block walls**
	Ceilings	**Concrete slab.**
	Floors	**concrete**
Services:	***Heating Systems:***	**n/a**
Reservations:	***Access restrictions:***	**The roofs were not accessed. The fabric of the building was not disturbed.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document "Asbestos-containing materials (ACM's) in Workplaces – Practical Guidelines on ACM Management and Abatement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Competent Person

Person provided with adequate information, instruction and training for the task being undertaken and capable of demonstrating adequate and up-to-date understanding of the work being undertaken, the required control measures, the applicable legislation, and having sufficient practicable experience to apply these effectively. There are two categories of competent person, 1) competent asbestos operative and 2) specialist asbestos operative.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

22/23 Moore Street
Dublin 1

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
		No samples taken		

Glossary

*NADIS = No Asbestos Detected in Sample
VFT = Vinyl Floor Tile

Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	22-23 Moore Street	Ground floor Oriental Pantry		Ceramic tiles to floors.		No visible asbestos containing materials identified.							
2	22-23 Moore Street	Ground floor Oriental Pantry Supermarket		Exposed concrete blocks to ceiling.		No visible asbestos containing materials identified.							
3	22-23 Moore Street	Ground floor Oriental Pantry Cold stores		Modern freezer units.		No visible asbestos containing materials identified.							
4	22-23 Moore Street	Ground floor Oriental Pantry Office				No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	22-23 Moore Street	Street Oriental Pantry				No visible asbestos containing materials identified.							
6	22-23 Moore Street	Street Oriental Pantry Back fire exit				No visible asbestos containing materials identified.							
7	22-23 Moore Street	Street Oriental Pantry Back fire exit		No access due to storage		Presumed to contain asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
8	22-23 Moore Street	Gymnasium Entrance stairway				No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
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VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	22-23 Moore Street	Gymnasium 1st floor Reception				No visible asbestos containing materials identified.							
10	22-23 Moore Street	1st floor Gymnasium				No visible asbestos containing materials identified.							
11	22-23 Moore Street	1st floor Gymnasium				No visible asbestos containing materials identified.							
12	22-23 Moore Street	1st floor Gymnasium				No visible asbestos containing materials identified.							

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AC = Asbestos cement
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SM = Square Meters
LM = Linear Meters

Confirmed Asbestos

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Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
13	22-23 Moore Street	1st floor Gymnasium Changing rooms				No visible asbestos containing materials identified.							
14	22-23 Moore Street	1st floor Gymnasium WC's				No visible asbestos containing materials identified.							
15	22-23 Moore Street	2nd floor Gymnasium				No visible asbestos containing materials identified.							
16	22-23 Moore Street	2nd floor Gymnasium Store room				No visible asbestos containing materials identified.							

Key			
NAD = No asbestos detected AIB = Asbestos insulation board AC = Asbestos cement VFT = vinyl floor tile NQ = Not Quantified/Quantifiable SM = Square Meters LM = Linear Meters	Confirmed Asbestos	Material Assessment Score	Risk
		≤ 4	Very Low
		5 - 6	Low
	Presumed/Strongly presumed ACM Or Non Accessed Area	7 - 9	Medium
		≥ 10	High
		No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.	

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
17	22-23 Moore Street	2nd floor Gymnasium Plantroom		Modern heating and storage equipment.		No visible asbestos containing materials identified.							
18	22-23 Moore Street	Flat roofs		No access		Presumed to contain asbestos roofing felts.						Investigation by a competent contractor prior to work likely to cause disturbance.	

Key
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SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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RISK MANAGEMENT | PROJECT MANAGEMENT

Refurbishment & Demolition Asbestos Survey

Location: *No. 20-21 Moore Street*
Dublin 1

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *October, 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@aboutsafety.ie
About Safety Ltd. Registered in Ireland: No. 422820

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out of the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to demolition.]
9, 17	Red and black asbestos containing slates to the roofs of No. 20 and 21 with the exception of the inside pitch of No. 21 which has natural quarry slates. Slate debris from the damaged roof on the floor.
10	Asbestos containing black Bakelite cistern in a WC on the 1st floor.
12	Asbestos containing adhesive to vinyl floors under the raised floor in the big room on the 1st floor.
16	Grey asbestos containing thread nosings to the stairway between the 1st and 2nd floors.

Ref:	Presumed/Strongly Presumed Asbestos [Requires dismantling and investigation by a competent asbestos contractor prior to work likely to cause disturbance.]
6, 7, 13	Various roofs over the supermarket including the canopy are presumed to contain asbestos.
8, 20	Lead sealed cast-iron pipe collars are presumed to contain asbestos woven rope packing.
21	Integral areas of the wall mounted safe and the electric storage heater on the 1st floor are presumed to contain asbestos.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Site Full Name:
20-21 Moore Street
Dublin 1

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

- **S301:** Asbestos and other Fibres
- **P401:** Identification of Asbestos in Bulk Samples (PLM)
- **P402:** Building Surveys and Bulk Sampling for Asbestos
- **P403:** Asbestos Fibre Counting
- **P404:** Air Sampling and Clearance Testing of Asbestos
- **P405:** Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed demolition**
	Structural Details:	**Original 3 storey building of solid construction with pitched roofs. Brick facades. Extension to rear over supermarket.**
	Date of Construction:	**Not known.**
External Aspects:	***Roofs:***	**Pitched roofs with slates to front pitched roofs with metal sheeting and flat roof with roofing felt to back of main building.**
Internal Aspects:	***Walls***	**Brick with lime plaster**
	Ceilings	**Plasterboard and original lat and plaster.**
	Floors	**Timber floors on 1st and 2nd floors.**
Services:	***Heating Systems:***	**n/a**
Reservations:	***Access restrictions:***	**The back overclad roofs were not accessible.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document "Asbestos-containing materials (ACM's) in Workplaces – Practical Guidelines on ACM Management and Abatement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Competent Person

Person provided with adequate information, instruction and training for the task being undertaken and capable of demonstrating adequate and up-to-date understanding of the work being undertaken, the required control measures, the applicable legislation, and having sufficient practicable experience to apply these effectively. There are two categories of competent person, 1) competent asbestos operative and 2) specialist asbestos operative.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

20-21 Moore Street
Dublin 1

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
S01	2029208	Stairway	Grey thread nosings	Chrysotile
S02	2029209	1st floor under raised floor	Grey VFT	NADIS
S03	2029210	1st floor under raised floor	Grey VFT adhesive	Chrysotile
S04	2029211	2nd floor	Red lino and felt	NADIS
S05	2029212	2nd floor	Red lino and felt	NADIS
S06	2029213	2nd floor	Slate debris from roof	Chrysotile

Glossary

*NADIS = No Asbestos Detected in Sample Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
VFT = Vinyl Floor Tile

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	No. 20/21 Moore Street	Ground floor Supermarket				No visible asbestos containing materials identified							
2	No. 20/21 Moore Street	Ground floor Supermarket				No visible asbestos containing materials identified							
3	No. 20/21 Moore Street	Ground floor Supermarket				No visible asbestos containing materials identified							
4	No. 20/21 Moore Street	Ground floor Supermarket				No visible asbestos containing materials identified							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

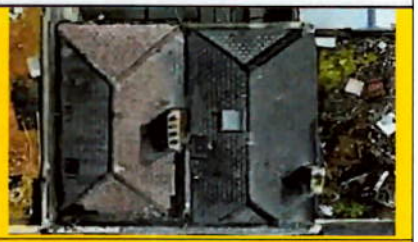
Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	No. 20/21 Moore Street	Ground floor Supermarket Back service alley				No visible asbestos containing materials identified							
6	No. 20/21 Moore Street	Supermarket Centre pitched roof roof		No access to ceiling void		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
7	No. 20/21 Moore Street	Supermarket Centre flat roof roof		Substrate roofing felts		Presumed asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
8	No. 20/21 Moore Street	Rear façade to main building		Lead sealed cast-iron collars to downpipes		Presumed asbestos woven rope packing.						Investigation by a competent contractor prior to work likely to cause disturbance.	

Key
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VFT = vinyl floor tile
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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	No. 20/21 Moore Street	1st floor		Slates to main roofs. Black slates on No. 21 and red slates on No. 22.	120 SM approx.	Chrysotile	1	1	1	1	4	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
10	No. 20/21 Moore Street	1st floor WC 1		Black Bakelite cistern		Amosite	1	0	0	2	3	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
11	No. 20/21 Moore Street	1st floor WC 2		Ceramic cistern.		No visible asbestos containing materials identified							
12	No. 20/21 Moore Street	1st floor	2029209 2029210	Adhesive to VFT under raised floor in big room	60 SM approx.	Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	

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Presumed/Strongly presumed ACM Or Non Accessed Area

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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
13	No. 20/21 Moore Street	1st floor		Roof canopy		Presumed to contain asbestos felts						Investigation by a competent contractor prior to work likely to cause disturbance.	
14	No. 20/21 Moore Street	1st floor		Box storage heater		No visible asbestos containing materials identified							
15	No. 20/21 Moore Street	1st floor				No visible asbestos containing materials identified							
16	No. 20/21 Moore Street	Stairway	2029208	Grey threads to stairway	16 steps	Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	

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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
17	No. 20/21 Moore Street	2nd floor	2029213	Roof slate debris on floor		Chrysotile	1	2	1	1	5	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
18	No. 20/21 Moore Street	2nd floor Room flooring.	2029211 2029212	Red lin0 and felt backing under floor coverings		NAD							
19	No. 20/21 Moore Street	2nd floor Ceiling s		Original lat and plaster ceilings.		No visible asbestos containing materials identified							
20	No. 20/21 Moore Street	2nd floor		Lead sealed cast-iron collars to downpipes		Presumed asbestos woven rope packing.						Investigation by a competent contractor prior to work likely to cause disturbance	

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NAD = No asbestos detected
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AC = Asbestos cement
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SM = Square Meters
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Presumed/Strongly presumed ACM Or Non Accessed Area

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No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
21	No. 20/21 Moore Street	1st floor		Integral areas of the storage heater and the wall mounted safe		Presumed to contain asbestos						Dismantling and investigation by a competent contractor prior to work likely to cause disturbance.	

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NAD = No asbestos detected
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AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
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No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

ABOUT SAFETY LTD.

ASBESTOS | LEAD BASED PAINT | MOULD | SILICA DUST | HAZMAT
SURVEYING & TESTING
RISK MANAGEMENT | PROJECT MANAGEMENT

Refurbishment & Demolition Asbestos Survey

Location: *No. 36 Henry Street (Apple Shop)*
(includes No. 3 Henry Place)
Dublin 1

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *October, 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@aboutsafety.ie
About Safety Ltd. Registered in Ireland: No. 422820

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out of the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to demolition.]
3, 4, 5	Orange asbestos containing vinyl floor tile and adhesive to the basement floors. Good condition and intact. 80 square meters approximately.
23	Asbestos containing adhesive identified under the carpet on the 1st floor landing. Extent not determined.

Ref:	Presumed/Strongly Presumed Asbestos [Requires dismantling and investigation by a competent asbestos contractor prior to work likely to cause disturbance.]
6	Integral areas of fireproof filing cabinets are presumed to contain asbestos.
21, 22, 24, 25, 26, 27	Asbestos containing adhesive presumed under the existing fixed carpets and flooring in No. 3 Henry Place, upper floors.
28	The orange vinyl floor tile and adhesive under the carpet in the office is strongly presumed to contain asbestos (areas occupied).

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Site Full Name:
No. 36 Henry Street
Dublin 1

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

S301:	Asbestos and other Fibres
P401:	Identification of Asbestos in Bulk Samples (PLM)
P402:	Building Surveys and Bulk Sampling for Asbestos
P403:	Asbestos Fibre Counting
P404:	Air Sampling and Clearance Testing of Asbestos
P405:	Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed structural alterations, refurbishment and/or demolition.**
	Structural Details:	**4 storey over basement retail outlet of brick construction with flat roof.**
	Date of Construction:	**Not known**
External Aspects:	***Roofs:***	**Flat roofs**
Internal Aspects:	***Walls***	**Original walls with lime plaster render.**
	Ceilings	**Plasterboard and lat and plaster**
	Floors	**Concrete on ground floor and basement. Timber in upper areas. Concrete floors in No. 3 Henry Place.**
Services:	***Heating Systems:***	**n/a**
Reservations:	***Access restrictions:***	**Roofs. Occupied areas were not disturbed.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document "Asbestos-containing materials (ACM's) in Workplaces – Practical Guidelines on ACM Management and Abatement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Competent Person

Person provided with adequate information, instruction and training for the task being undertaken and capable of demonstrating adequate and up-to-date understanding of the work being undertaken, the required control measures, the applicable legislation, and having sufficient practicable experience to apply these effectively. There are two categories of competent person, 1) competent asbestos operative and 2) specialist asbestos operative.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

No. 36 Henry Street
Dublin 1

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
S01	2029214	1st floor back room fire place – hearth	Black VFT and Evode	NADIS
S02	2029215	Basement stairway	Grey lino	NADIS
S03	2029216	Basement floor	Orange VFT	Chrysotile
S04	2029217	Basement floor	Orange VFT adhesive	Chrysotile
S05	2029218	Service Department stairway	Adhesive under carpet	Chrysotile

Glossary

*NADIS = No Asbestos Detected in Sample Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
VFT = Vinyl Floor Tile

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	No. 36 Henry Street	Ground floor Shop retail areas.				No visible asbestos containing materials identified.							
2	No. 36 Henry Street	Basement	2029215	Grey lino		NAD							
3	No. 36 Henry Street	Basement Office		Orange VFT and adhesive. Intact	30 SM approx.	Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
4	No. 36 Henry Street	Basement corridor		Orange VFT and adhesive. Intact	10 SM approx.	Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

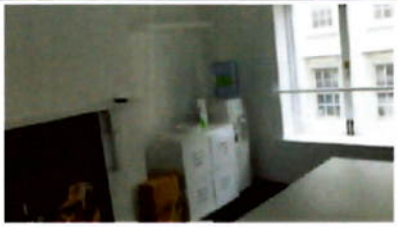
Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	No. 36 Henry Street	Basement	2029216 2029217	Orange VFT and adhesive	40 SM approx.	Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
6	No. 36 Henry Street	Basement		Integral areas of fireproof cabinets.		Presumed to contain asbestos						Investigation by a competent contractor prior to work likely to cause disturbance.	
7	No. 36 Henry Street	1st floor	2029214	Black tiles on hearth		NAD							
8	No. 36 Henry Street	2nd floor Front room		Modern drop ceiling with lay-in ceiling tiles over drop ceilings.		No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	No. 36 Henry Street	2nd floor Backroom		Modern drop ceiling with lay-in ceiling tiles over drop ceilings.		No visible asbestos containing materials identified.							
10	No. 36 Henry Street	3rd floor Front room				No visible asbestos containing materials identified.							
11	No. 36 Henry Street	3rd floor Gents WC				No visible asbestos containing materials identified.							
12	No. 36 Henry Street	3rd floor Ladies WC				No visible asbestos containing materials identified.							

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Confirmed Asbestos
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7 - 9	Medium
≥ 10	High

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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
13	No. 36 Henry Street	4th floor kitchen				No visible asbestos containing materials identified.							
14	No. 36 Henry Street	4th floor Front room				No visible asbestos containing materials identified.							
15	No. 36 Henry Street	4th floor Store room				No visible asbestos containing materials identified.							
16	No. 36 Henry Street	4th floor Storage tank.				No visible asbestos containing materials identified.							

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SM = Square Meters
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Confirmed Asbestos
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Material Assessment Score	Risk
≤ 4	Very Low
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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
17	No. 36 Henry Street	Ground floor No. 3 Henry Place		Laminate flooring		No visible asbestos containing materials identified.							
18	No. 36 Henry Street	Ground floor No. 3 Henry Place		Rear door block up.		No visible asbestos containing materials identified.							
19	No. 36 Henry Street	Ground floor No. 3 Henry Place		Concrete floor under lino		No visible asbestos containing materials identified.							
20	No. 36 Henry Street	Ground floor No. 3 Henry Place		Modern electrical panels		No visible asbestos containing materials identified.							

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7 - 9	Medium
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Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
21	No. 36 Henry Street	No. 3 Henry Place Stairway to 1st floor.		Adhesive under floor coverings		Presumed asbestos						Investigation and sampling prior to work likely to cause disturbance.	
22	No. 36 Henry Street	No. 3 Henry Place 1st floor		VFT and/or adhesive under floor coverings.		Presumed asbestos						Investigation and sampling prior to work likely to cause disturbance.	
23	No. 36 Henry Street	No. 3 Henry Place Stairway landing	2029218	Adhesive under carpet		Chrysotile	1	0	0	1	2	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
24	No. 36 Henry Street	No. 3 Henry Place 1st floor WC		VFT and/or adhesive under floor coverings.		Presumed asbestos						Investigation and sampling prior to work likely to cause disturbance.	

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SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
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≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
25	No. 36 Henry Street	No. 3 Henry Place Stairway to 2nd floor. (occupied)		VFT and/or adhesive under floor coverings.		Presumed asbestos						Investigation and sampling prior to work likely to cause disturbance.	
26	No. 36 Henry Street	No. 3 Henry Place Store room 2nd floor.		VFT and/or adhesive under floor coverings.		Presumed asbestos						Investigation and sampling prior to work likely to cause disturbance.	
27	No. 36 Henry Street	2nd Floor No. 3 Henry Place (occupied)		VFT and/or adhesive under floor coverings.		Presumed asbestos						Investigation and sampling prior to work likely to cause disturbance.	
28	No. 36 Henry Street	No. 3 Henry Place 2nd floor Office (occupied)		Orange VFT under carpet		Strongly presumed asbestos.						Investigation and sampling prior to work likely to cause disturbance.	

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Confirmed Asbestos
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No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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SURVEYING & TESTING
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Refurbishment & Demolition Asbestos Survey

Location: *6 Moore Street*
Dublin

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *14th October 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@eircom.net
About Safety Ltd. Registered in Ireland: No. 422820

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out for the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to works likely to cause disturbance]
	No asbestos containing materials found.

Ref:	Presumed/Strongly Presumed Asbestos & Non-Accessed Areas [Requires investigation by a competent contractor prior to works likely to cause disturbance]
14	Immersion flange gasket to the 1st floor toilet is presumed to contain asbestos. further inspection is required by a competent contractor prior to disposal.
21	Internal linings of the Chubb safe to the ground floor stairway to basement areas is presumed to contain asbestos. further inspection is required by a competent contractor prior to disposal.
24, 25	Some basement areas were inaccessible during the inspection.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Site Full Name:
6 Moore Street
Dublin

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

- S301: Asbestos and other Fibres
- P401: Identification of Asbestos in Bulk Samples (PLM)
- P402: Building Surveys and Bulk Sampling for Asbestos
- P403: Asbestos Fibre Counting
- P404: Air Sampling and Clearance Testing of Asbestos
- P405: Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Planned demolition of part of the above dwelling.**
	Date of Construction:	**Not known**
External Aspects:	***Roofs:***	**Flat roofs**
	Extensions:	**Not known**
	Other:	
Internal Aspects:	***Walls:***	**Plasterboard**
	Ceilings:	**Drop ceiling with lay-in ceilings in areas.**
	Floors:	**Concrete on ground floor and timber on upper floors**
	Insulation:	**-**
Services:	***M&E:***	**-**
Reservations:	***Access restrictions:***	**Roofs were not accessible.** **Small lock up outlets were trading and not accessible.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or

employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document " Guidelines on Working with Materials Containing Asbestos Cement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

6 Moore Street
Dublin

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
		No samples taken		

Glossary

*NADIS = No Asbestos Detected in Sample
VFT = Vinyl Floor Tile

Chrysotile (white asbestos)
Amosite (brown asbestos)
Crocidolite (blue asbestos)

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	No. 6 Moore Street	Front of shop Trading				No visible asbestos containing materials identified.							No photo taken
2	No. 6 Moore Street	Lycamobile ground floor Back of shop				No visible asbestos containing materials identified.							
3	No. 6 Moore Street	Basement store rooms				No visible asbestos containing materials identified.							
4	No. 6 Moore Street	Basement				No visible asbestos containing materials identified.							

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NAA = Non Accessed Area
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SM = Square Meters
LM = Linear Meters

Confirmed Asbestos

Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	No. 6 Moore Street	Ground floor (outlets occupied)		Ceramic tiles in corridor		No visible containing materials identified							
6	No. 6 Moore Street	Ground floor		Plasterboard ceiling tiles in drop ceilings		No visible containing materials identified							
7	No. 6 Moore Street	Ceiling void				No visible containing materials identified							
8	No. 6 Moore Street	Ground floor back of shop		Occupied outlets		No visible containing materials identified							

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Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	6 Moore Street	1st floor		Original ceilings		No visible containing materials identified							
10	6 Moore Street	1st floor		Timber floorboards throughout		No visible containing materials identified							
11	6 Moore Street	1st floor front room				No visible containing materials identified							
12	6 Moore Street	1st floor front room				No visible containing materials identified							

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Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
13	6 Moore Street	1st floor toilet				No visible containing materials identified							
14	6 Moore Street	1st floor toilet		Immersion flange gasket		Presumed asbestos						Further inspection is required by a competent contractor prior to disposal.	
15	6 Moore Street	Stairway to 2nd floor				No visible containing materials identified							
16	6 Moore Street	2nd floor stairway				No visible containing materials identified							

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Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
17	6 Moore Street	2nd floor front room				No visible containing materials identified							
18	6 Moore Street	2nd floor corridor				No visible containing materials identified							
19	6 Moore Street	2nd floor front room ceiling				No visible containing materials identified							
20	6 Moore Street	2nd floor				No visible containing materials identified							

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Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
21	6 Moore Street	Ground floor stairway to basement		Old Chubb safe		Presumed to contain asbestos linings						Further inspection is required by a competent contractor prior to disposal.	
22	6 Moore Street	Basement stairway				No visible containing materials identified							
23	6 Moore Street	Basement		Concrete walls and ceiling		No visible containing materials identified							
24	6 Moore Street	Basement back room		Inaccessible		Presumed to contain asbestos						Investigation by a competent contractor prior to works likely to cause disturbance	

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Ref No.	Building	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
25	6 Moore Street	Basement back room		Inaccessible		Presumed to contain asbestos						Investigation by a competent contractor prior to works likely to cause disturbance	

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SURVEYING & TESTING
RISK MANAGEMENT | PROJECT MANAGEMENT

Refurbishment & Demolition Asbestos Survey

Location: *No. 7 Moore Street*
Dublin 1

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *October, 2020*

Prepared by: *John Kelleher, About Safety Ltd.*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@aboutsafety.ie
About Safety Ltd. Registered in Ireland: No. 422820

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out of the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to demolition.]
	No asbestos containing materials found

Ref:	Presumed/Strongly Presumed Asbestos [Requires dismantling and investigation by a competent asbestos contractor prior to work likely to cause disturbance.]
13	The flat roof was not accessible and is presumed to contain asbestos substrate roofing felt.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Site Full Name:
No. 7 Moore Street
Dublin 1

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

- **S301:** Asbestos and other Fibres
- **P401:** Identification of Asbestos in Bulk Samples (PLM)
- **P402:** Building Surveys and Bulk Sampling for Asbestos
- **P403:** Asbestos Fibre Counting
- **P404:** Air Sampling and Clearance Testing of Asbestos
- **P405:** Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed demolition**
	Structural Details:	**3 storey over basement brick building of solid construction with flat roof.**
	Date of Construction:	**Not known**
External Aspects:	***Roofs:***	**Flat roofs**
Internal Aspects:	***Walls***	**Original walls with retail areas partitioned off.**
	Ceilings	**Original ceilings in the upper floors.**
	Floors	**Timber in the upper floors.**
Services:	***Heating Systems:***	**n/a**
Reservations:	***Access restrictions:***	**Ground floor retail areas were occupied and trading at the time of the inspection.** **Roofs were not accessible.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document "Asbestos-containing materials (ACM's) in Workplaces – Practical Guidelines on ACM Management and Abatement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Competent Person

Person provided with adequate information, instruction and training for the task being undertaken and capable of demonstrating adequate and up-to-date understanding of the work being undertaken, the required control measures, the applicable legislation, and having sufficient practicable experience to apply these effectively. There are two categories of competent person, 1) competent asbestos operative and 2) specialist asbestos operative.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

No. 7 Moore Street
Dublin 1

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
		No samples taken		

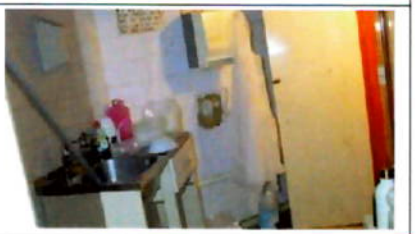
Glossary

*NADIS = No Asbestos Detected in Sample
VFT = Vinyl Floor Tile

Chrysotile (white asbestos)
Amosite (brown asbestos)
Crocidolite (blue asbestos)

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	No. 7 Moore Street	Ground floor areas Retail areas trading at time of visit.				No visible asbestos containing materials identified.							No photo taken
2	No. 7 Moore Street	Stairway to 1st floor				No visible asbestos containing materials identified.							
3	No. 7 Moore Street	1st floor landing		Red lino		NAD							
4	No. 7 Moore Street	1st floor Kitchen				No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	No. 7 Moore Street	1st floor WC				No visible asbestos containing materials identified.							
6	No. 7 Moore Street	1st floor Front room				No visible asbestos containing materials identified.							
7	No. 7 Moore Street	1st floor Front room		Polystyrene over lat and plaster ceilng		No visible asbestos containing materials identified.							
8	No. 7 Moore Street	1st floor Back rooms				No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	No. 7 Moore Street	Stairway to 2nd floor		Guano from stairway to upper floors		No visible asbestos containing materials identified.							
10	No. 7 Moore Street	2nd floor Rooms and areas				No visible asbestos containing materials identified.							
11	No. 7 Moore Street	2nd floor Rooms and areas				No visible asbestos containing materials identified.							
12	No. 7 Moore Street	2nd floor Rooms and areas				No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos

Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
13	No. 7 Moore Street	2nd floor Roof hatch		No access to flat roof.		Presumed to contain asbestos roofing felts.						Investigation by a competent contractor prior to work likely to cause disturbance.	

Key		Material Assessment Score	Risk
NAD = No asbestos detected AIB = Asbestos insulation board AC = Asbestos cement VFT = vinyl floor tile NQ = Not Quantified/Quantifiable SM = Square Meters LM = Linear Meters	Confirmed Asbestos	≤ 4	Very Low
		5 - 6	Low
	Presumed/Strongly presumed ACM Or Non Accessed Area	7 - 9	Medium
		≥ 10	High
		No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.	

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ASBESTOS | LEAD BASED PAINT | MOULD | SILICA DUST | HAZMAT
SURVEYING & TESTING
RISK MANAGEMENT | PROJECT MANAGEMENT

Refurbishment & Demolition Asbestos Survey

Location:	*24-25 Moore Street & 14 Moore Lane Dublin 1*
Client:	*Dublin Central GP Ltd*
Instructing Party:	*Certo Management Services*
Survey Date:	*21st October, 2020*
Prepared by:	*John Kelleher, About Safety Ltd.*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@aboutsafety.ie
About Safety Ltd. Registered in Ireland: No. 422820

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General Caveat *Error! Bookmark not defined.*

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out of the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to demolition.]
19	Asbestos containing sheeting sections over the old brick wall next to No. 23. Presumed to be from an original asbestos sheeted roof on the site.

Ref:	Presumed/Strongly Presumed Asbestos [Requires dismantling and investigation by a competent asbestos contractor prior to work likely to cause disturbance.]
20	Asbestos containing cement sheeting debris is presumed under the car park hard stand as a consequence of a corrugated roof being present previously. May have been used as aggregate in the foundation.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Site Full Name:
No. 24/25 Moore Street
& 14 Moore Lane
Dublin 1

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

- **S301:** Asbestos and other Fibres
- **P401:** Identification of Asbestos in Bulk Samples (PLM)
- **P402:** Building Surveys and Bulk Sampling for Asbestos
- **P403:** Asbestos Fibre Counting
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- **P405:** Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed demolition**
	Structural Details:	**3 storey building of solid concrete construction with pitched roof.**
	Date of Construction:	**Circa 1980's.**
External Aspects:	***Roofs:***	**Man made mineral fibre slates to roof.**
Internal Aspects:	***Walls***	**Concrete block**
	Ceilings	**Plasterboard**
	Floors	**Concrete with ceramic tiles and carpet generally.**
Services:	***Heating Systems:***	
Reservations:	***Access restrictions:***	**The main roof was not accessed.** **Miscellaneous store rooms were not accessible.**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document "Asbestos-containing materials (ACM's) in Workplaces – Practical Guidelines on ACM Management and Abatement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Competent Person

Person provided with adequate information, instruction and training for the task being undertaken and capable of demonstrating adequate and up-to-date understanding of the work being undertaken, the required control measures, the applicable legislation, and having sufficient practicable experience to apply these effectively. There are two categories of competent person, 1) competent asbestos operative and 2) specialist asbestos operative.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

No. 24-25 Moore Street
Dublin 1

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
S01	2029501	Attic	Slate on floor	NADIS
S02	2029502	Roof	Slate at Velux window	NADIS

Glossary

*NADIS = No Asbestos Detected in Sample Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
VFT = Vinyl Floor Tile

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	No. 24/25 Moore Street	Roof	2029501	Slates on main roof		NAD							
2	No. 24/25 Moore Street	Attic floor	202950	Slates on attic floor		NAD							
3	No. 24/25 Moore Street	Attic		MMMF insulation between joists		No visible asbestos containing materials identified.							
4	No. 24/25 Moore Street	Attic		Roof slate under Velux window		NAD							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
5	No. 24/25 Moore Street	Ground floor Store room				No visible asbestos containing materials identified.							
6	No. 24/25 Moore Street	Ground floor Store room WC				No visible asbestos containing materials identified.							
7	No. 24/25 Moore Street	Ground floor Garage				No visible asbestos containing materials identified.							
8	No. 24/25 Moore Street	Ground floor Lobby		Ceramic tiles to floors		No visible asbestos containing materials identified.							

Key		Material Assessment Score	Risk
NAD = No asbestos detected AIB = Asbestos insulation board AC = Asbestos cement VFT = vinyl floor tile NQ = Not Quantified/Quantifiable SM = Square Meters LM = Linear Meters	Confirmed Asbestos	≤ 4	Very Low
		5 - 6	Low
	Presumed/Strongly presumed ACM Or Non Accessed Area	7 - 9	Medium
		≥ 10	High
		No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.	

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
9	No. 24/25 Moore Street	Ground floor Hallway				No visible asbestos containing materials identified.							
10	No. 24/25 Moore Street	1st floor Canteen				No visible asbestos containing materials identified.							
11	No. 24/25 Moore Street	1st floor Canteen Kitchen				No visible asbestos containing materials identified.							
12	No. 24/25 Moore Street	1st floor Office				No visible asbestos containing materials identified.							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
13	No. 24/25 Moore Street	1st floor Store rooms				No visible asbestos containing materials identified.							
14	No. 24/25 Moore Street	1st floor Ladies WC				No visible asbestos containing materials identified.							
15	No. 24/25 Moore Street	2nd floor Inspectors office				No visible asbestos containing materials identified.							
16	No. 24/25 Moore Street	2nd floor WC				No visible asbestos containing materials identified.							

Key		Material Assessment Score	Risk
NAD = No asbestos detected	Confirmed Asbestos	≤ 4	Very Low
AIB = Asbestos insulation board		5 - 6	Low
AC = Asbestos cement	Presumed/Strongly presumed ACM Or Non Accessed Area	7 - 9	Medium
VFT = vinyl floor tile		≥ 10	High
NQ = Not Quantified/Quantifiable		No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.	
SM = Square Meters			
LM = Linear Meters			

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
17	No. 24/25 Moore Street	2nd floor Showers				No visible asbestos containing materials identified.							
18	No. 24/25 Moore Street	2nd floor Locker room				No visible asbestos containing materials identified.							
19	14 Moore Lane Yard	Party wall		AC corrugated sheeting debris sections over old wall	Small amounts	Crocidolite and/or chrysotile	1	2	1	1	5	Removal and disposal as asbestos waste by a competent contractor prior to work likely to cause disturbance.	
20	14 Moore Lane Yard	Yard		Under carpark hardstand		AC sheeting and/or debris presumed under the hardstand.						Investigation by a competent contractor prior to work likely to cause disturbance.	

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

ABOUT SAFETY LTD.

ASBESTOS | LEAD BASED PAINT | MOULD | SILICA DUST | HAZMAT
SURVEYING & TESTING
RISK MANAGEMENT | PROJECT MANAGEMENT

Refurbishment & Demolition Asbestos Survey

Location: *17 Henry Place*
Dublin 1

Client: *Dublin Central GP Ltd*

Instructing Party: *Certo Management Services*

Survey Date: *October, 2020*

Prepared by: *John Kelleher, About Safety Ltd*

About Safety Limited, 24 Ocean Crest, Arklow, Co. Wicklow Tel: 0402 91186 | E-mail: asbestos@aboutsafety.ie
About Safety Ltd. Registered in Ireland: No. 422820

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Executive Summary

A Refurbishment and Demolition Asbestos Survey was carried out of the above property. Below is a summary of the survey.

Ref:	Confirmed Asbestos [Requires removal and disposal as asbestos waste by a competent asbestos contractor prior to demolition.]
	No asbestos containing materials found.

Names and Addresses

Client Name:
Dublin Central GP Ltd

Contact:
Phone:

Instructing Party:
Certo Management Services

Contact: **Peter McIlhagger**
Phone:

Site Full Name:
No. 17 Henry Place
Dublin 1

Report Author:
About Safety Limited
24 Oceancrest
Arklow
Co. Wicklow

Contact: **John Kelleher**
Phone: [redacted]

Asbestos Surveyor: John Kelleher

British Occupational Hygiene Society (BOHS) Asbestos Proficiency Certification

- **S301:** Asbestos and other Fibres
- **P401:** Identification of Asbestos in Bulk Samples (PLM)
- **P402:** Building Surveys and Bulk Sampling for Asbestos
- **P403:** Asbestos Fibre Counting
- **P404:** Air Sampling and Clearance Testing of Asbestos
- **P405:** Management of Asbestos in Buildings (Safe Removal & Disposal)

iosh Chartered Safety and Health Practitioner

Introduction

About Safety Ltd. was instructed to carry out a Refurbishment and Demolition Asbestos Survey of the above property. The survey and sampling was carried out taking cognizance of the requirements of the Health and Safety Executive (UK) document, *HSG 264, Asbestos: The Survey Guide.*

Objectives

The objectives of this survey were to:

To carry out a survey to ascertain the presence of asbestos based materials.
To carry out a survey to locate and describe, as far as reasonably practicable, all asbestos containing materials prior to refurbishment/demolition.
To gain access to all areas, as necessary, to determine the extent of any asbestos that may be present.
To sample and estimate the extent and volume of any asbestos materials that may be present.
To generate asbestos material assessments where the period between the survey and event is significant i.e. more that 3 months.
To produce a report identifying areas containing asbestos to be used as a basis for tendering their removal.
To instigate asbestos removal works prior to refurbishment/demolition.

NB: The extent of asbestos containing materials if identified in this report are only approximate and should not be relied upon as a basis for tendering removal works. Contractors tendering works are expected to satisfy themselves by site visit and measurement the exact nature and extent of any works which is proposed.

Scope of Works & Site Description

General Information	***Scope of Works:***	**Proposed demolition**
	Structural Details:	**Single storey building with flat roof**
	Date of Construction:	
External Aspects:	***Roofs:***	**Galvanised sheeting**
Internal Aspects:	***Walls***	**Brick walls**
	Ceilings	**n/a**
	Floors	**Concrete floors**
Services:	***Heating Systems:***	**n/a**
Reservations:	***Access restrictions:***	**n/a**

Survey Limitations

All areas accessed for proposed refurbishment works were subjected to a survey taking cognisance of the requirements of HSG 264, Asbestos: The Survey Guide. The investigation consisted of an inspection of each room and area to be impacted by the works.
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, lack of building drawings or insufficient knowledge of the structure of the building at the time of the survey.

Inaccessible Areas: Electrical equipment such as, boiler units, water heaters, storage heaters, fuse or switch boards. Within floor or wall structures, behind wall or ceiling cladding or within blocked up chimneys. Within internal areas of fire doors unless asbestos observed from keyhole or other damaged areas. Care should always be exercised when working on any electrical equipment in particular the older styles as asbestos-containing materials may be present.

Asbestos Refurbishment & Demolition Survey: Definition

A refurbishment and demolition survey is needed before any refurbishment or demolition works is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACM's in the area where the refurbishment works 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 and maintenance and repair work will be carried out or for plant removal and dismantling.
Where the refurbishment or demolition works may not take place for a significant period after the survey (e.g. three months), then the information required for a management survey should be obtained.

Asbestos Contaminated Soils (ACS)

The first point of contact with soil or ground contaminated with asbestos will be during site

investigations and exploratory ground works. This may be defined as asbestos operative related work and applies where there is a potential for sporadic or low intensity exposure. People directly involved in these preliminary works, geotechnical engineers and ground workers, should receive formal training enabling them to work safely where asbestos could be present in the ground as a consequence of legacy use issues with the land. In principle, the general tiered approach to the assessment and management of potential risks posed by ACS is the same as that for any other contaminant. However, the unique nature of asbestos means that different methods of analysis, exposure estimation and risk estimation are required. Importantly, soil and air analysis methods need to be more detailed than those currently and commonly used to demonstrate compliance with the Asbestos Regulations.

Material Assessment

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

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 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 ACM's are scored as Crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise.

Materials with assessment scores of 10 or more are rated as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres.

Analytical Techniques

Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication, HSG 248).

Samples were returned to About Safety Ltd. Laboratory for Analysis. Photographs were taken at all of the sample locations (unless otherwise stated).
Materials of a similar type were only occasionally sampled and it was assumed that other materials visually inspected to where the sample was taken, were of a similar composition.
Each area was viewed for suspect materials thought or known to contain asbestos and samples taken where it was considered necessary.

General Caveat

This report is based on a Refurbishment & Demolition survey of an un-occupied building.

During the course of the survey all reasonable efforts were made to identify the physical presence of materials containing asbestos. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definite. It must remain a possibility that asbestos containing materials may be found during demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

It should be noted that the term "No visible asbestos containing materials identified" was used in retail and other parts of properties which were occupied or partially occupied during the inspection. It must remain a possibility that asbestos containing materials may be entombed under existing floors, above ceilings or behind walls, fixtures and fittings. Therefore, any future works in these areas should be preceded by an invasive investigation.

This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the survey took place.

Specific Notes

Legislation and Codes of Practice

The Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 to 2010, apply to work where there is or may be asbestos fibres present. These regulations apply in particular to any person or employer working with or removing asbestos.

In addition, Safety, Health and Welfare at Work (Construction) Regulations 2013 (SI 291 of 2013) also apply to any building, installation, repair, demolition and asbestos removal work.

Information about working with material containing asbestos cement is containing in Health and Safety Authority's document "Asbestos-containing materials (ACM's) in Workplaces – Practical Guidelines on ACM Management and Abatement".

Provision of information

It is recommended that this report is brought to the attention of any person likely to be involved in refurbishment/demolition works.
Once asbestos materials have been identified it is essential that appropriate remedial measures be introduced prior to any structural alterations, refurbishment or demolition works commencing. All the asbestos removal works should be carried out by a competent asbestos removal contractor in accordance with Asbestos at Work Regulations 2006 to 2010. Statutory notification requirements of 14 days are required under the provisions of the Asbestos Regulations for certain works involving asbestos. The contractor appointed for removal works is responsible for deciding if a 14 day notification is required and for drawing up a plan of work for any removal works.

Competent Person

Person provided with adequate information, instruction and training for the task being undertaken and capable of demonstrating adequate and up-to-date understanding of the work being undertaken, the required control measures, the applicable legislation, and having sufficient practicable experience to apply these effectively. There are two categories of competent person, 1) competent asbestos operative and 2) specialist asbestos operative.

Appendix A – Asbestos Bulk Identification Report

ASBESTOS BULK IDENTIFICATION REPORT

Report on:
Identification of asbestos content of suspected asbestos containing materials (ACM's) sampled from the following location/site:

No. 17 Henry Place
Dublin 1

TEST RESULT

SAMPLE NO	LAB. REF.	SAMPLE LOCATION	MATERIAL DESCRIPTION	ASBESTOS TYPE IDENTIFIEID
		No sample taken.		

Glossary

*NADIS = No Asbestos Detected in Sample Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)
VFT = Vinyl Floor Tile

Analyst: John Kelleher

Appendix B – Schedule of Survey Sheets

Ref No.	Building or Area of Site	Location or Functional Space	Sample No.	Material Description, surface treatment and condition	Extent	Asbestos identified (presumed, strongly presumed or identified)	Product type	Condition	Surface treatment	Asbestos type	Material assessment score	Recommendations	Photo
1	No. 17 Henry Place	Roof		Galvanised sheeting		NAD							
2	No. 17 Henry Place	Wall		Flue from adjoining premises		NAD							
3	No. 17 Henry Place	Internal walls		Plasterboard to partitions		NAD							
4	No. 17 Henry Place	Internal walls		Plasterboard to partitions		NAD							

Key
NAD = No asbestos detected
AIB = Asbestos insulation board
AC = Asbestos cement
VFT = vinyl floor tile
NQ = Not Quantified/Quantifiable
SM = Square Meters
LM = Linear Meters

Confirmed Asbestos
Presumed/Strongly presumed ACM Or Non Accessed Area

Material Assessment Score	Risk
≤ 4	Very Low
5 - 6	Low
7 - 9	Medium
≥ 10	High

No condition assessment is normally necessary for refurbishment and demolition surveys but, where the period between survey and the event is significant, e.g. more than 3 months, then a material assessment should be conducted and interim management arrangements put in place.

APPENDIX 14.2 OPERATIONAL WASTE MANAGEMENT PLAN

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OPERATIONAL WASTE MANAGEMENT PLAN FOR PROPOSED RESIDENTIAL DEVELOPMENT

MASTERPLAN, SITE 3, SITE 4 AND SITE 5.

APPENDIX 14.2

Report Prepared For

Dublin Central GP Limited or shortened to DCGP Ltd.

Report Prepared By

Chonaill Bradley, Senior Environmental Consultant

Our Reference

CB/20/11784WMR02

Date of Issue

30 April 2021

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Signature		
Name	Chonaill Bradley	Fergal Callaghan
Title	Senior Environmental Consultant	Director Callaghan
Date	30 April 2021	30 April 2021

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1.0 INTRODUCTION

AWN Consulting Ltd. (AWN) has prepared this Operational Waste Management Plan (OWMP) on behalf of Dublin Central GP Limited or shortened to DCGP Ltd. The Dublin Central project is an expansive (c.2.3 Ha) and complex regeneration project. It needs to be delivered in stages to overcome site and project constraints. A site wide cumulative masterplan has been prepared by 'the Applicant' to set out the overall development vision for the Dublin Central project. 'The Masterplan' area encompasses almost entirely three urban blocks. The area is bounded generally by O'Connell Street Upper and Henry Place to the east, Henry Street to the south, Moore Street to the west, and O'Rahilly Parade and Parnell Street to the north. Moore Lane extends south from Parnell Street through the centre of the masterplan area, as far as its junction with Henry Place.

This OWMP has been prepared to ensure that the management of waste during the operational phase of the proposed development is undertaken in accordance with the current legal and industry standards including, the *Waste Management Act 1996 – 2011* as amended and associated Regulations [1], *Protection of the Environment Act 2003* as amended [2], *Litter Pollution Act 2003* as amended [3], the *'Eastern-Midlands Region (EMR) Waste Management Plan 2015 – 2021'* [4] and Dublin City Council (DCC) *'Dublin City Council (Storage, Presentation and Segregation of Household and Commercial Waste) Bye-Laws' 2018* [5]. In particular, this OWMP aims to provide a robust strategy for storing, handling, collection and transport of the wastes generated at site.

This OWMP aims to ensure maximum recycling, reuse and recovery of waste with diversion from landfill, wherever possible. The OWMP also seeks to provide guidance on the appropriate collection and transport of waste to prevent issues associated with litter or more serious environmental pollution (e.g. contamination of soil or water resources). The plan estimates the type and quantity of waste to be generated from the proposed development during the operational phase and provides a strategy for managing the different waste streams.

At present, there are no specific guidelines in Ireland for the preparation of OWMPs. Therefore, in preparing this document, consideration has been given to the requirements of national and regional waste policy, legislation and other guidelines.

2.0 OVERVIEW OF WASTE MANAGEMENT IN IRELAND

2.1 National Level

The Government issued a policy statement in September 1998 titled as *'Changing Our Ways'* [6] which identified objectives for the prevention, minimisation, reuse, recycling, recovery and disposal of waste in Ireland. A heavy emphasis was placed on reducing reliance on landfill and finding alternative methods for managing waste. Amongst other things, Changing Our Ways stated a target of at least 35% recycling of municipal (i.e. household, commercial and non-process industrial) waste.

A further policy document *'Preventing and Recycling Waste – Delivering Change'* was published in 2002 [7]. This document proposed a number of programmes to increase recycling of waste and allow diversion from landfill. The need for waste minimisation at source was considered a priority.

This view was also supported by a review of sustainable development policy in Ireland and achievements to date, which was conducted in 2002, entitled *'Making Irelands Development Sustainable – Review, Assessment and Future Action'* [8]. This

document also stressed the need to break the link between economic growth and waste generation, again through waste minimisation and reuse of discarded material.

In order to establish the progress of the Government policy document *Changing Our Ways*, a review document was published in April 2004 entitled *'Taking Stock and Moving Forward'* [9]. Covering the period 1998 – 2003, the aim of this document was to assess progress to date with regard to waste management in Ireland, to consider developments since the policy framework and the local authority waste management plans were put in place, and to identify measures that could be undertaken to further support progress towards the objectives outlined in *Changing Our Ways*.

In particular, *Taking Stock and Moving Forward* noted a significant increase in the amount of waste being brought to local authority landfills. The report noted that one of the significant challenges in the coming years was the extension of the dry recyclable collection services.

In September 2020 the government released a new policy document outlining a new action plan for Ireland to cover the period of 2020-2025. This plan *'A Waste Action Plan for a Circular Economy'* [10] was prepared in response to the 'European Green Deal' which sets a roadmap for a transition to a new economy, where climate and environmental challenges are turned into opportunities. Replacing the previous national waste management plan "A Resource Opportunity (2012).

It aims to fulfil the commitment in the Programme for Government to publish and start implementing a new National Waste Action Plan. It is intended that this new national waste policy will inform and give direction to waste planning and management in Ireland over the coming years. It will be followed later this year by an All of Government Circular Economy Strategy. The policy document shifts focus away from waste disposal and moves it back up the production chain. To support the policy, regulation is already being used (Circular Economy Legislative Package) or in the pipeline (Single Use Plastics Directive). The policy document contains over 200 measures across various waste areas including Circular Economy, Municipal Waste, Consumer Protection & Citizen Engagement, Plastics and Packaging, Construction and Demolition, Textiles, Green Public Procurement and Waste Enforcement.

Since 1998, the Environmental Protection Agency (EPA) has produced periodic *'National Waste (Database) Reports'* [11] detailing among other things estimates for household and commercial (municipal) waste generation in Ireland and the level of recycling, recovery and disposal of these materials. The 2018 National Waste Statistics, which is the most recent study published, along with national waste statistics web resource (August 2020) reported the following key statistics for 2018:

- **Generated** – Ireland produced 2,912,353 t of municipal waste in 2018, this is almost a five percent increase since 2017. This means that each person living in Ireland generated 600kg of municipal waste in 2018;
- **Managed** – Waste collected and treated by the waste industry. In 2018, a total of 2,865,207 t of municipal waste was managed and treated;
- **Unmanaged** –Waste that is not collected or brought to a waste facility and is therefore likely to cause pollution in the environment because it is burned, buried or dumped. The EPA estimates that 47,546 t was unmanaged in 2018;
- **Recovered** – the amount of waste recycled, used as a fuel in incinerators, or used to cover landfilled waste. In 2018, around 85% of municipal waste was recovered, this is an increase from 77% in 2017;
- **Recycled** – the waste broken down and used to make new items. Recycling also includes the breakdown of food and garden waste to make compost. The recycling rate in 2018 was 38%, which is down from 41% in 2017; and
- **Disposed** – Less than a quarter (15%) of municipal waste was landfilled in 2018, this is a decrease from 23% in 2017.

2.2 Regional Level

The proposed development is located in the Local Authority area of Dublin City Council (DCC).

The *EMR Waste Management Plan 2015 – 2021* is the regional waste management plan for the DCC area which was published in May 2015.

The regional plan sets out the following strategic targets for waste management in the region that are relevant to the proposed development:

- Achieve a recycling rate of 50% of managed municipal waste by 2020; and
- Reduce to 0% the direct disposal of unprocessed residual municipal waste to landfill (from 2016 onwards) in favour of higher value pre-treatment processes and indigenous recovery practices.

Municipal landfill charges in Ireland are based on the weight of waste disposed. In the Leinster Region, charges are approximately €130-150 per tonne of waste which includes a €75 per tonne landfill levy introduced under the *Waste Management (Landfill Levy) (Amendment) Regulations 2013.*

The *Dublin City Development Plan 2016 – 2022* [13] sets out a number of policies and objectives for Dublin City in line with the objectives of the regional waste management plan. The plan identifies a need to further reduce the role of landfilling in favour of higher value recovery options.

Waste policies and objectives with a particular relevance to this development are:

Policies:

- *SI19: To support the principles of good waste management and the implementation of best international practice in relation to waste management in order for Dublin city and the region to become self-reliant in terms of waste management.*
- *SI20: To prevent and minimise waste and to encourage and support material sorting and recycling.*
- *SI21: To minimise the amount of waste which cannot be prevented and ensure it is managed and treated without causing environmental pollution.*
- *SI22: To ensure that effect is given as far as possible to the "polluter pays" principle.*

Objectives:

- *SIO16: To require the provision of adequately-sized-recycling facilities in new commercial and large scale residential developments, where appropriate.*
- *SIO18: To implement the current Litter Management Plan through enforcement of the litter laws, street cleaning and education and awareness campaigns.*
- *SIO19: To implement the Eastern-Midlands Waste Management Plan 2015 - 2021 and achieve the plan targets and objectives.*

2.3 Legislative Requirements

The primary legislative instruments that govern waste management in Ireland and applicable to the project are:

- Waste Management Act 1996 (No. 10 of 1996) as amended 2001 (No. 36 of 2001), 2003 (No. 27 of 2003) and 2011 (No 20 of 2011). Sub-ordinate and associated legislation includes:

- European Communities (Waste Directive) Regulations 2011 (S.I. No. 126 of 2011) as amended
- Waste Management (Collection Permit) Regulations 2007 (S.I. No. 820 of 2007) as amended
- Waste Management (Facility Permit and Registration) Regulation 2007 (S.I No. 821 of 2007) as amended
- Waste Management (Licensing) Regulations 2000 (S.I No. 185 of 2000) as amended
- European Union (Packaging) Regulations 2014 (S.I. No. 282 of 2014) as amended.
- Waste Management (Planning) Regulations 1997 (S.I. No. 137 of 1997) as amended
- Waste Management (Landfill Levy) Regulations 2015 (S.I. No. 189 of 2015)
- European Communities (Waste Electrical and Electronic Equipment) Regulations 2014 (S.I. No. 149 of 2014)
- Waste Management (Batteries and Accumulators) Regulations 2014 (S.I. No. 283 of 2014) as amended
- Waste Management (Food Waste) Regulations 2009 (S.I. No. 508 of 2009) as amended
- European Union (Household Food Waste and Bio-waste) Regulations 2015 (S.I. No. 191 of 2015)
- Waste Management (Hazardous Waste) Regulations 1998 (S.I. No. 163 of 1998) as amended
- Waste Management (Shipments of Waste) Regulations 2007 (S.I. No. 419 of 2007) as amended
- *European Communities (Transfrontier Shipment of Waste) Regulations 1994 (SI 121 of 1994)*
- European Union (Properties of Waste Which Render it Hazardous) Regulations 2015 (S.I. No. 233 of 2015) as amended

- Environmental Protection Act 1992 (S.I. No. 7 of 1992) as amended;
- Litter Pollution Act 1997 (Act No. 12 of 1997) as amended and
- Planning and Development Act 2000 (S.I. No. 30 of 2000) as amended [13]

These Acts and subordinate Regulations enable the transposition of relevant European Union Policy and Directives into Irish law.

One of the guiding principles of European waste legislation, which has in turn been incorporated into the *Waste Management Act 1996 - 2011* and subsequent Irish legislation, is the principle of *"Duty of Care"*. This implies that the waste producer is responsible for waste from the time it is generated through until its legal disposal (including its method of disposal.) As it is not practical in most cases for the waste producer to physically transfer all waste from where it is produced to the final disposal area, waste contractors will be employed to physically transport waste to the final waste disposal site.

It is therefore imperative that the residents and the proposed building management company undertake on-site management of waste in accordance with all legal requirements and employ suitably permitted/licenced contractors to undertake off-site management of their waste in accordance with all legal requirements. This includes the requirement that a waste contactor handle, transport and reuse/recover/recycle/dispose of waste in a manner that ensures that no adverse environmental impacts occur as a result of any of these activities.

A collection permit to transport waste must be held by each waste contractor which is issued by the National Waste Collection Permit Office (NWCPO). Waste receiving facilities must also be appropriately permitted or licensed. Operators of such facilities cannot receive any waste, unless in possession of a Certificate of Registration (COR)

or waste permit granted by the relevant Local Authority under the *Waste Management (Facility Permit & Registration) Regulations 2007* as amended or a waste or IE (Industrial Emissions Directive) licence granted by the EPA. The COR/permit/licence held will specify the type and quantity of waste able to be received, stored, sorted, recycled, recovered and/or disposed of at the specified site.

2.3.1 Dublin City Council Waste Bye-Laws

The DCC "Dublin City Council (Storage, Presentation and Segregation of Household and Commercial Waste) Bye-Laws (2018)" were bought into force in May 2019. These bye-laws repeal the previous '*Bye-Laws for the Storage, Presentation and Collection of Household and Commercial*'. The bye-Laws set a number of enforceable requirements on waste holders with regard to storage, separation and presentation of waste within the DCC functional area. Key requirements under these bye-Laws of relevance to the proposed development include the following

- Kerbside waste presented for collection shall not be presented for collection earlier than 5.00 pm on the day immediately preceding the designated waste collection day;
- All containers used for the presentation of kerbside waste and any uncollected waste shall be removed from any roadway, footway, footpath or any other public place no later than 10:00am on the day following the designated waste collection day, unless an alternative arrangement has been approved in accordance with bye-law 2.3;
- Documentation, including receipts, is obtained and retained for a period of no less than one year to provide proof that any waste removed from the premises has been managed in a manner that conforms to these bye-laws, to the Waste Management Act and, where such legislation is applicable to that person, to the European Union (Household Food Waste and Bio-Waste) Regulations 2015; and
- Adequate access and egress onto and from the premises by waste collection vehicles is maintained.

The full text of the Waste Bye-Laws is available from the DCC website.

2.4 Regional Waste Management Service Providers and Facilities

Various contractors offer waste collection services for the residential sector in the DCC region. Details of waste collection permits (granted, pending and withdrawn) for the region are available from the NWCPO.

As outlined in the regional waste management plan, there is a decreasing number of landfills available in the region. Only three municipal solid waste landfills remain operational and are all operated by the private sector. There are a number of other licensed and permitted facilities in operation in the region including waste transfer stations, hazardous waste facilities and integrated waste management facilities. There are two existing thermal treatment facilities, one in Duleek, Co. Meath and a second facility in Poolbeg in Dublin.

There is a DCC North Strand Recycling Centre at Shamrock Terrace, North Strand located c.1.2km to the north east of the development, which can be utilised by the residents of the development for other household waste streams while a bottle and textile bank can be found c. 800m m to the south west at St Mary's church carpark.

A copy of all CORs and waste permits issued by the Local Authorities are available from the NWCPO website and all waste/IE licenses issued are available from the EPA.

3.0 DESCRIPTION OF THE PROJECT

3.1 Location, Size and Scale of the Development

Master Plan

The Dublin Central project is an expansive (c.2.2 Ha) and complex regeneration project. It needs to be delivered in stages to overcome site and project constraints.

A site wide cumulative masterplan has been prepared by 'the Applicant' to set out the overall development vision for the Dublin Central project.

'The Masterplan' area encompasses almost entirely three urban blocks. The area is bounded generally by O'Connell Street Upper and Henry Place to the east, Henry Street to the south, Moore Street to the west, and O'Rahilly Parade and Parnell Street to the north. Moore Lane extends south from Parnell Street through the centre of the masterplan area, as far as its junction with Henry Place.

Site 3

Located in the south west corner of 'the Masterplan' area, Site 3 is bounded by Henry Street to the south, Moore Street to the west and Henry Place to the north and east. Site 3 includes Nos. 36 – 41 Henry Street, Nos. 1 – 9 Moore Street and Nos. 3 – 13 Henry Place.

Site 3 lies within the O'Connell Street ACA.

The proposed development generally comprises a mixed-use scheme accommodating a hotel, residential units and associated amenities, cultural, retail and café / restaurant uses in 2no. blocks ranging in height from 1 – 9 storeys over existing and new single storey basements. Provision of a new Passageway linking Henry Street with Henry Place / Moore Lane.

Site 4

Located in the west of 'the Masterplan' area, Site 4 is bounded by Moore Street to the west, Moore Lane to the east, Henry Place to the south and Site 5 to the north. Site 4 includes Nos. 10 – 13 and Nos. 18 – 21 Moore Street, Nos. 5 – 8 and Nos. 10 – 12 Moore Lane.

Site 4 excludes the site of the National Monument and its protection zone at Nos. 14-17 Moore Street (protected structures) and the open area to the rear at Nos. 8 & 9 Moore Lane.

The proposed development generally comprises a mixed-use scheme accommodating residential units and associated amenities, retail and café / restaurant uses, in two parts located north and south of the Nos. 14 – 17 Moore Street (National Monument / Protected Structures). Building height ranges from 1 – 3 storeys, including retained independent single storey basements. Provision of part of the proposed new public plaza and an archway onto the proposed new public plaza.

Site 5

Located in the west of 'the Masterplan' area, Site 5 is bounded by Moore Street to the west, Moore Lane to the east, O'Rahilly Parade to the north and Site 4 to the south. Site 5 includes Nos. 22 – 25 Moore Street, Nos. 1 – 8 O'Rahilly Parade and Nos. 13 – 15 Moore Lane.

The proposed development generally comprises a mixed-use scheme accommodating office and café / restaurant uses in a single building ranging in height from 2 – 6 storeys (top floor set back) over new single storey localised basement. Provision of a part of the new public plaza.

3.2 Typical Waste Categories

The typical non-hazardous and hazardous wastes that will be generated at the proposed development will include the following:

- Dry Mixed Recyclables (DMR) - includes waste paper (including newspapers, magazines, brochures, catalogues, leaflets), cardboard and plastic packaging, metal cans, plastic bottles, aluminium cans, tins and Tetra Pak cartons;
- Organic waste – food waste and green waste generated from internal plants/flowers;
- Glass; and
- Mixed Non-Recyclable (MNR)/General Waste.

In addition to the typical waste materials that will be generated at the development on a daily basis, there will be some additional waste types generated in small quantities which will need to be managed separately including:

- Green/garden waste may be generated from external landscaping;
- Batteries (both hazardous and non-hazardous);
- Waste electrical and electronic equipment (WEEE) (both hazardous and non-hazardous);
- Printer cartridges/toners;
- Chemicals (paints, adhesives, resins, detergents, etc.) ;
- Lightbulbs;
- Textiles (rags);
- Waste cooking oil (if any generated by the residents);
- Furniture (and from time to time other bulky wastes); and
- Abandoned bicycles.

Wastes should be segregated into the above waste types to ensure compliance with waste legislation and guidance while maximising the re-use, recycling and recovery of waste with diversion from landfill wherever possible.

3.3 European Waste Codes

In 1994, the *European Waste Catalogue* [14] and *Hazardous Waste List* [15] were published by the European Commission. In 2002, the EPA published a document titled the *European Waste Catalogue and Hazardous Waste List* [16], which was a condensed version of the original two documents and their subsequent amendments. This document has recently been replaced by the EPA '*Waste Classification – List of Waste & Determining if Waste is Hazardous or Non-Hazardous'* [17] which became valid from the 1st June 2015. This waste classification system applies across the EU and is the basis for all national and international waste reporting, such as those associated with waste collection permits, COR's, permits and licences and EPA National Waste Database.

Under the classification system, different types of wastes are fully defined by a code. The List of Waste (LoW) code (also referred to as European Waste Code or EWC) for typical waste materials expected to be generated during the operation of the proposed development are provided in Table 3.1 below

Waste Material	LoW/EWC Code
Paper and Cardboard	20 01 01
Plastics	20 01 39
Metals	20 01 40
Mixed Non-Recyclable Waste	20 03 01
Glass	20 01 02
Biodegradable Kitchen Waste	20 01 08
Oils and Fats	20 01 25
Textiles	20 01 11
Batteries and Accumulators*	20 01 33* - 34
Printer Toner/Cartridges*	20 01 27* - 28
Green Waste	20 02 01
WEEE*	20 01 35*-36
Chemicals (solvents, pesticides, paints & adhesives, detergents, etc.) *	20 01 13*/19*/27*/28/29*30
Fluorescent tubes and other mercury containing waste*	20 01 21*
Bulky Wastes	20 03 07

** Individual waste type may contain hazardous materials*

Table 3.1 Typical Waste Types Generated and LoW Codes

4.0 ESTIMATED WASTE ARISINGS

A waste generation model (WGM) developed by AWN, has been used to predict waste types, weights and volumes arising from operations within the proposed development. The WGM incorporates building area and use and combines these with other data including Irish and US EPA waste generation rates.

The estimated quantum/volume of waste that will be generated from the residential units and hotel rooms has been determined based on the predicted occupancy of the units. While the floor area usage (m^2) has been used to estimate the waste arising from the office, retail and F&B units.

The estimated waste generation for the development for the main waste types is presented in Table 4.1, 4.2, 4.3 & 4.4.

Masterplan

Waste Type	Waste Volume (m^3/week)			
	Residential Units (combined)	Retail and F&B Units (combined)	Hotel Units (Combined)	Office Units (Combined)
Organic Waste	1.14	5.28	2.49	2.81
Dry Mixed Recyclables	8.06	27.23	5.08	22.06
Glass	0.22	2.88	3.52	0.51
Mixed Non-Recyclables	4.24	42.09	5.95	26.77
Confidential Paper	-	-	-	4.19
Cardboard (For Baling)	-	55.65	-	21.34
Plastic (For Baling)	-	18.97	-	18.22
Total	**13.66**	**152.10**	**14.55**	**95.90**

Table 4.1 *Estimated waste generation for the Masterplan Site Units*

Site 3

Waste Type	Waste Volume (m^3/week)		
	Residential Units (combined)	Retail and F&B Units (combined)	Hotel Unit
Organic Waste	0.98	0.58	1.04
Dry Mixed Recyclables	6.93	3.06	2.00
Glass	0.19	0.32	2.39
Mixed Non-Recyclables	3.64	4.48	2.02
Confidential Paper	-	-	-
Cardboard (For Baling)	-	6.43	-
Plastic (For Baling)	-	2.11	-
Total	**11.74**	**16.97**	**6.41**

Table 4.2 *Estimated waste generation for the Site 3 Units*

Site 4

Waste Type	Waste Volume (m^3/week)		
	Residential Units (combined)	Retail and F&B Units (combined)	Office Unit
Organic Waste	0.11	0.47	0.02
Dry Mixed Recyclables	0.80	1.83	0.16
Glass	0.02	0.24	0.01
Mixed Non-Recyclables	0.42	4.82	0.20
Confidential Paper	-	-	0.03
Cardboard (For Baling)	-	3.28	0.16
Plastic (For Baling)	-	1.72	0.14
Total	**1.35**	**12.36**	**0.73**

Table 4.3 *Estimated waste generation for the Site 4 Units*

Site 5

Waste Type	Waste Volume (m^3/week)	
	F&B Units (combined)	Office Units
Organic Waste	0.20	0.87
Dry Mixed Recyclables	1.29	4.06
Glass	0.11	0.09
Mixed Non-Recyclables	2.73	4.69
Confidential Paper	-	3.27
Cardboard (For Baling)	2.16	3.79
Plastic (For Baling)	0.69	3.70
Total	**4.33**	**20.46**

Table 4.4 *Estimated waste generation for the Site 5 Units*

5.0 WASTE STORAGE AND COLLECTION

This section provides information on how waste generated within the development will be stored and how the waste will be collected from the development. This has been prepared with due consideration of the proposed site layout as well as best

practice standards, local and national waste management requirements including those of DCC. In particular, consideration has been given to the following documents:

- BS 5906:2005 Waste Management in Buildings – Code of Practice,
- EMR Waste Management Plan 2015 – 2021;
- Dublin City Council Development Plan 2016 – 2022 (Appendix 10);
- DCC Dublin City Council (Storage, Presentation and Segregation of Household and Commercial Waste) Bye-Laws (2018); *and*
- DoEHLG, Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities (Section 4.8-4.9) (2020) [19].

Dedicated communal Waste Storage Areas (WSA) have been allocated within the development design at basement and ground floor levels for the residential units and can be viewed in the drawings submitted with the application.

Masterplan

Dedicated shared Waste Storage Areas (WSA) have been allocated within the development design at ground floor level for the residential and commercial tenants and can be viewed in the drawings submitted with the application.

Commercial Waste

Using the estimated figures in Tables 4.1 it is anticipated that glass waste will be collected on a weekly basis. Organic, cardboard and plastic waste will be collected on a twice weekly basis, while MNR and DMR will be collected between two and three times per week.

Residential Waste

It is anticipated that DMR, MNR, glass and organic waste will be collected on a weekly basis.

Site 3

Commercial Waste

Using the estimated figures in Tables 4.2 it is anticipated that glass waste will be collected on a weekly basis, while DMR, MNR, organic, cardboard and plastic waste will be collected on a twice weekly basis.

Residential Waste

It is anticipated that DMR, MNR, glass and organic waste will be collected on a weekly basis.

Site 4

Commercial Waste

Using the estimated figures in Tables 4.3 it is anticipated that glass waste will be collected on a weekly basis, while DMR, MNR, organic, cardboard and plastic waste will be collected on a twice weekly basis.

Residential Waste

It is anticipated that DMR, MNR, glass and organic waste will be collected on a weekly basis.

Site 5

Commercial Waste

Using the estimated figures in Tables 4.4 it is anticipated that glass waste will be collected on a weekly basis, while DMR, MNR, organic, cardboard and plastic waste will be collected on a thrice weekly basis.

Using the estimated waste generation volumes in Tables 4.2, 4.3 & 4.4 the waste receptacle requirements for MNR, DMR, organic waste, glass, cardboard and plastic have been established for the WSA. These are presented in Table 5.1.

Area/Use	Bins Required					Equipment Required
	MNR[1]	DMR[2]	Glass	Organic	Carboard/ Plastic (Bales)	
Site 3 Hotel WSA (Block 3A)	1 no. 1100L & 1 no. 240L	1 no. 1100L	9 no. 240L	3 no. 240L	-	-
Site 3 Commercial WSA (Block 3B)	2 no. 1100L	2 no. 1100L	2 no. 240L	2 no. 240L	5	Baler
Site 3 Residential WSA (Block 3B)	4 no. 1100L	7 no. 1100L	2 no. 240L	5 no. 240L	-	-
Site 4 Residential WSA 1	1 no. 240L	2 no. 240L	1 no. 120L	1 no. 240L	-	-
Site 4 Residential WSA 2	2 no. 240L	1 no. 1100L	1 no. 120L	1 no. 240L	-	-
Site 4 Commercial WSA 1	1 no. 1100L	1 no. 1100L	1 no. 120L	1 no. 240L	-	-
Site 4 Commercial WSA 2	2 no. 1100L	4 no. 1100L	1 no. 240L	3 no. 240L	3	Baler
Site 5 Commercial WSA	2 no. 1100L 1 no. 240L	2 no. 1100L	1 no. 240L	2 no. 240L	4	Baler

Table 5.1 *Waste storage requirements for the proposed development*

Note: 1 = Mixed Non-Recyclables
2 = Dry Mixed Recyclables

The waste receptacle requirements have been established from distribution of the total weekly waste generation estimate into the holding capacity of each receptacle type.

Waste storage receptacles as per Table 5.1 above (or similar appropriate approved containers) will be provided by the building management company in the residential WSA.

As outlined in the current *Dublin City Development Plan*, it is preferable to use 1,100 litre wheelie bins for waste storage, where practical. However, in the case of organic and glass waste, it is considered more suitable to use smaller waste receptacles due to the weight of bins when filled with organic and glass waste. The use of 240 & 120 litre bins as recommended in Table 5.1 will reduce the manual handling impacts on the building management personnel and waste contractor employees.

The types of bins used will vary in size, design and colour dependent on the appointed waste contractor. However, examples of typical receptacles to be provided in the WSAs are shown in Figure 5.1. All waste receptacles used will comply with the IS EN 840 2012 standard for performance requirements of mobile waste containers, where appropriate.



Figure 5.1 *Typical waste receptacles of varying size (240L and 1100L)*

5.1 Waste Storage – Residential Units

Residents will be required to segregate waste into the following main waste streams:

- DMR;
- MNR;
- Glass and
- Organic Waste.

Residents will be required to take their segregated waste materials to their designated WSA of their segregated waste into the appropriate bins. The location of the WSAs are illustrated in the drawings submitted with the planning application.

Space will be provided in the residential units to accommodate 3 no. bin types to facilitate waste segregation at source.

Each bin/container in the WSAs will be clearly labelled and colour coded to avoid cross contamination of the different waste streams. Signage will be posted above or on the bins to show exactly which waste types can be placed in each bin.

Access to the residential WSAs will be restricted to authorised residents, facilities management and waste contractors by means of a key or electronic fob access.

Other waste materials such as textiles, batteries, lightbulbs, printer toner/cartridges, cooking oil and WEEE may be generated infrequently by the residents. Residents will be required to identify suitable temporary storage areas for these waste items within

their own units and dispose of them appropriately. Further details on additional waste types can be found in Section 5.6.

5.2 Waste Storage – Retail and F&B Units

The retail and F&B tenants will be required to segregate waste within their own unit into the following main waste types:

- DMR;
- MNR;
- Organic waste;
- Glass;
- Plastic; and
- Carboard.

Tenants will be required to take their segregated waste materials to their designated commercial WSA and dispose of their segregated waste into the appropriate bins. Locations of all WSAs can found on the plans submitted with the application.

Suppliers for the tenants should be requested by the tenants to make deliveries in reusable containers, minimize packaging or to remove any packaging after delivery where possible, to reduce waste generated by the development.

If any kitchens are allocated in unit areas, this will contribute a significant portion of the volume of waste generated on a daily basis, and as such it is important that adequate provision is made for the storage and transfer of waste from these areas to the WSA.

If kitchens are required it is anticipated that waste will be generated in kitchens throughout the day, primarily at the following locations:

- Food Storage Areas (i.e. cold stores, dry store, freezer stores and stores for decanting of deliveries);
- Meat Preparation Area;
- Vegetable Preparation Area;
- Cooking Area;
- Dish-wash and Glass-wash Area; and
- Bar Area.

Small bins will be placed adjacent to each of these areas for temporary storage of waste generated during the day. Waste will then be transferred from each of these areas to the appropriate waste store within their unit.

A trolley/tug or suitable vehicle may be required to convey the bins to/from the WSAs.

All bins/containers in the tenants areas as well as in the WSAs will be clearly labelled and colour coded to avoid cross contamination of the different waste streams. Signage will be posted above or on the bins to show exactly which wastes can be put in each.

Other waste materials such as textiles, batteries, lightbulbs, printer toner/cartridges, cooking oil and WEEE may be generated infrequently by the tenants. Tenants will be required to identify suitable temporary storage areas for these waste items within their own units and dispose of them appropriately. Further details on additional waste types can be found in Section 5.6

5.3 Waste Storage – Hotel

The operator(s) will be required to segregate their waste within the development into the following main waste types:

- DMR;
- MNR;
- Organic waste; and
- Glass.

Tenants will be required to take their segregated waste materials to their designated WSAs and dispose of their segregated waste into the appropriate bins. Locations of all WSAs can found on the plans submitted with the application.

Suppliers for the development should be requested by the hotel operator to make deliveries in reusable containers, minimize packaging or to remove any packaging after delivery where possible, to reduce waste generated by the development.

Signage should be erected above internal bins and in the WSA to identify what waste types should be placed into each bin as appropriate. Bins/containers should be labelled, and colour coded to avoid cross contamination of the different waste streams.

The majority of waste materials collected in bins in the hotel rooms, common areas etc. will not be segregated and will be managed as MNR waste. Housekeeping and hotel cleaning staff will segregate waste, where possible, during cleaning by using segregated containers on their cleaning trolleys. Waste will be transferred from the cleaning carts to the appropriate bins in the WSA via the lifts and corridors.

The kitchen in the restaurant area will contribute a significant portion of the volume of waste generated on a daily basis, and as such it is important that adequate provision is made for the storage and transfer of waste from these areas to the WSA.

It is anticipated that waste will be generated in the kitchen throughout the day, primarily at the following locations:

- Food Storage Areas (i.e. cold stores, dry store, freezer stores and stores for decanting of deliveries);
- Meat Preparation Area;
- Vegetable Preparation Area;
- Cooking Area; and
- Dish-wash and Glass-wash Area;

Small bins will be placed adjacent to each of these areas as required for temporary storage of waste generated during the day. Waste will then be transferred from each of these areas to the WSA and placed into the segregated bins as detailed in Table 5.1.

All bins/containers in the kitchen, restaurant, bar and dining areas as well as in the WSAs will be clearly labelled and colour coded to avoid cross contamination of the different waste streams. Signage will be posted above or on the bins to show exactly which wastes can be put in each.

Other waste materials such as textiles, batteries, lightbulbs, printer toner/cartridges, cooking oil and WEEE may be generated infrequently by the tenants. Tenants will be required to identify suitable temporary storage areas for these waste items within their own units and dispose of them appropriately. Further details on additional waste types can be found in Section 5.6

5.4 Waste Storage – Office

The office tenant(s) will segregate waste into the following main waste streams:

- DMR;
- MNR;
- Organic waste;
- Glass;
- Plastic; and
- Carboard.

Personnel nominated by the office tenants will empty the bins in the AWSs, as required, and bring the segregated waste using trolleys/carts/bins to their allocated WSA. Locations of all WSAs can found on the plans submitted with the application.

The office unit(s) may be occupied by a single tenant or multiple tenants. It is recommended that the office tenants implement the 'binless office' concept where employees do not have bins located under desks and instead bring their waste to Area Waste Stations (AWSs) located strategically on the office floors, at print stations/rooms and at any canteens, micro kitchens or tea stations which may be provided within the tenant's office space. Experience has shown that the maximum travel distance should be no more than 15m from the employee's desk to the AWS. This 'best in class' concept achieves maximum segregation of waste in an office setting.

Typically, an AWS would include a bin for DMR and a bin for MNR. It is recommended that a confidential paper bin with a locked lid/door should also be provided for at each AWS and/or adjacent to photocopy/printing stations, as required. In addition, it is recommended that organic and glass bins should be provided at any canteens or micro kitchens or tea stations, where appropriate.

A printer cartridge/toner bin should be provided at the print/copy stations, where appropriate.

It is recommended that all bins/containers should be clearly labelled and colour coded to avoid cross contamination of the different waste streams. Signage should be posted on or above the bins to show which wastes can be put in each bin.

The binless office concept, in addition to assisting in maximising recycling rates and minimising associated landfill disposal costs, also has the advantage of substantially reducing cleaning costs, as cleaners visit only the AWSs on each floor, as opposed to each desk.

Suppliers for the tenants should be requested by the tenants to make deliveries in reusable containers, minimize packaging and/or to remove any packaging after delivery where possible, to reduce waste generated by the development.

It is proposed that confidential paper waste will be managed separately to non-confidential paper waste. Tenants will be required to engage with an appropriately permitted/licenced confidential waste management contractor for collection and shredding of confidential paper. It is anticipated that tenants will place locked confidential waste paper bins as required throughout their office areas. The confidential waste company will typically collect bins directly from the office areas, under agreement with the tenant, and bring the locked bin or bags of confidential waste via the lifts to their collection truck.

Other waste materials such as textiles, batteries, lightbulbs, printer toner/cartridges, cooking oil and WEEE may be generated infrequently by the tenants. Tenants will be required to identify suitable temporary storage areas for these waste items within their own units and dispose of them appropriately. Further details on additional waste types can be found in Section 5.6

5.5 Waste Collection

There are numerous private contractors that provide waste collection services in the Dublin City area. All waste contractors servicing the proposed development must hold a valid waste collection permit for the specific waste types collected. All waste collected must be transported to registered/permitted/licensed facilities only.

A servicing management strategy prepared in conjunction with the design team by SWECO and has been provided for this development to cover 'the Masterplan' and the individual Sites. This plan can be viewed as part of the planning application and provides the location of all temporary waste collection areas.

A trolley/tug or suitable vehicle may be required to convey the bins to/from the collection area.

The facilities management team or the waste contractor will ensure that empty bins are promptly returned to the WSAs after collection/emptying.

Bin collection times/days will be staggered to reduce the number of bins required to be emptied at once and the time the waste vehicle is onsite. This will be determined during the process of appointment of a waste contractor.

It is currently envisaged that the below collection locations will be used so that each site can act independently of each other site prior to the completion of the Dublin Central Masterplan. The Dublin Central Masterplan includes the introduction of the Metrolink Station, which prevents vehicles from accessing basement waste stores. In addition, all WSAs which are at basement level have insufficient height clearance for a standard waste truck to access. Therefore, all waste will be collected at grade. Upon completion of the Dublin Central Masterplan, additional loading bays will be provided off the carriageway to improve access for service and waste collection vehicles. In addition, the Estate Management Company will manage all site-wide waste operations to ensure smooth transition during collections and ensure waste bins are not left idle on the street. Suitably sized vehicles will be procured to serve the site, typically smaller refuse vehicles, less than 8m in length. The private waste contractors will have fob access to the bin stores. This prevents bins from being left on street for collection.

The Dublin Central Masterplan proposes all bins will be collected and returned directly to the waste storage areas by the waste contractor or by the Estate Management Company. At no stage will bins be stored within the public realm.

Masterplan

Site 1
Waste collections at Site 1 are proposed to occur via the proposed loading area on Moore Lane (north of O'Rahilly Parade).

Site 2AB
Waste collections at Site 2AB are proposed to occur via the proposed loading areas to the rear of 59 and 60 O'Connell St and via the proposed link between O'Connell Street Upper / Moore Lane.

Site 2C
Waste collections at Site 2C are proposed to occur via the proposed loading area on Moore Lane (north of O'Rahilly Parade).

This Application

Site 3

Bins from the residential WSA will be collected from the existing loading area on Moore Street, while The waste truck will enter the passageway between block 3A & 3B to collect the commercial and hotel waste directly from the shared commercial and the hotel WSAs.

Site 4

All commercial and residential bins from this development will be brought to a temporary collection point on Moore Street, from the WSAs by the waste contractor or facilities management company, immediately prior to collection. There are two bin stores in Site 4 – one in the north, the other in the south.

South: The waste vehicle will utilise the existing loading provision on Moore Street to access the southern bin store within Site 4, as existing. This bin store is approximately 20m from Moore Street. The commercial operator will collect the bins before emptying them and returning the empty bins to the bin store.

North: The waste vehicle will utilise the existing loading provision on Moore Street to access the northern bin store within Site 4, as existing. This bin store is approximately 22m from Moore Street. The commercial operator will collect the bins before emptying them and returning the empty bins to the bin store.

Site 5

Waste vehicles will utilise the proposed loading area on O'Rahilly Parade to access the proposed Site 5 bin store directly. The waste contractor will return the bins to the bin store immediately after collection.

5.6 Additional Waste Materials

In addition to the typical waste materials that are generated on a daily basis, there will be some additional waste types generated from time to time that will need to be managed separately. A non-exhaustive list is presented below.

Green waste
Green waste may be generated from external landscaping and internal plants/flowers. Green waste generated from landscaping of external areas will be removed by external landscape contractors. Green waste generated from gardens internal plants/flowers can be placed in the organic waste bins.

Batteries
A take-back service for waste batteries and accumulators (e.g. rechargeable batteries) is in place in order to comply with the Waste Management Batteries and Accumulators Regulations 2014 as amended. In accordance with these regulations consumers are able to bring their waste batteries to their local civic amenity centre or can return them free of charge to retailers which supply the equivalent type of battery, regardless of whether or not the batteries were purchased at the retail outlet

and regardless of whether or not the person depositing the waste battery purchases any product or products from the retail outlet.

The commercial tenants cannot use the civic amenity centre. They must segregate their waste batteries and either avail of the take-back service provided by retailers or arrange for recycling/recovery of their waste batteries by a suitably permited/licenced contractor. Facilties management may arrange collection depending on the agreement.

Waste Electrical and Electronic Equipment (WEEE)

The *WEEE Directive 2002/96/EC* and associated Waste Management (WEEE) Regulations have been enacted to ensure a high level of recycling of electronic and electrical equipment. In accordance with the regulations, consumers can bring their waste electrical and electronic equipment to their local recycling centre. In addition consumers can bring back WEEE within 15 days to retailers when they purchase new equipment on a like for like basis. Retailers are also obliged to collect WEEE within 15 days of delivery of a new item, provided the item is disconnected from all mains, does not pose a health and safety risk and is readily available for collection.

As noted above, the commercial tenants cannot use the civic amenity centre. They must segregate their WEEE and either avail of the take-back/collection service provided by retailers or arrange for recycling/recovery of their WEEE by a suitably permited/licenced contractor. Facilties management may arrange collection depending on the agreement.

Printer Cartridge/Toners

It is recommended that a printer cartridge/toner bin is provided in the commercial units, where appropriate. The commercial tenants will be required to store this waste within their unit and arrange for return to retailers or collection by an authorised waste contractor, as required.

Waste printer cartridge/toners generated by residents can usually be returned to the supplier free of charge or can be brought to a civic amenity centre.

Chemicals (solvents, paints, adhesives, resins, detergents etc)

Chemicals (such as solvents, paints etc) are largely generated from building maintenance works. Such works are usually completed by external contractors who are responsible for the off-site removal and appropriate recovery/recycling/disposal of any waste materials generated.

Any waste cleaning products or waste packaging from cleaning products generated in the commercial units that are classed as hazardous (if they arise) will be appropriately stored within the tenants own space. Facilties management may arrange collection depending on the agreement.

Any waste cleaning products or waste packaging from cleaning products that are classed as hazardous (if they arise) generated by the residents should be brought to a civic amenity centre.

Light Bulbs (Fluorescent Tubes, Long Life, LED and Lilament bulbs)

Waste light bulbs may be generated by lighting at the commercial tenants. It is anticipated that commercial tenants will be responsible for the off-site removal and appropriate recovery/disposal of these wastes. Facilties management may arrange collection depending on the agreement.

Light bulbs generated by residents should be taken to the nearest civic amenity centre for appropriate storage and recovery/disposal.

Textiles
Where possible, waste textiles should be recycled or donated to a charity organisation for reuse.

Waste Cooking Oil
If the commercial tenants use cooking oil, waste cooking oil will need to be stored within the individual units on a bunded area or spill pallet and regular collections by a dedicated waste contractor will need to be organised as required. Under sink grease traps will be installed in any cooking space.

If the residents generate waste cooking oil, this can be brought to a civic amenity centre.

Furniture (and other bulky wastes)
Furniture and other bulky waste items (such as carpet etc.) may occasionally be generated by the commercial tenants. The collection of bulky waste will be arranged as required by the tenants. If residents wish to dispose of furniture, this can be brought a civic amenity centre.

Abandoned Bicycles
Bicycle parking areas are planned for the development. As happens in other developments, residents sometimes abandon faulty or unused bicycles and it can be difficult to determine their ownership. Abandoned bicycles should be donated to charity if they arise.

Covid-19 Waste

Any waste generated by residential and commercial tenants that have tested positive for Covid-19 should be manged in accordance with the current Covid-19 HSE Guidelines at the time that that waste arises. At the time this report was prepared, the HSE Guidelines require the following procedure for any waste from a person that tests positive for Covid-19:

- Put all waste (gloves, tissues, wipes, masks) from that person in a bin bag and tie when almost full;
- Put this bin bag into a second bin bag and tie a knot;
- Store this bag safely for 3 days, then put the bag into the non-recyclable waste/general waste wheelie bin for collection/emptying.

Please note that this guidance is likely to be updated by the time the development is open and occupied and the relevant guidance at the time will need to be reviewed.

5.7 Waste Storage Area Design

The WSAs should be designed and fitted-out to meet the requirements of relevant design Standards, including:

- Be fitted with a non-slip floor surface;
- Provide ventilation to reduce the potential for generation of odours with a recommended 6-10 air changes per hour for a mechanical system for internal WSAs;
- Provide suitable lighting – a minimum Lux rating of 220 is recommended;
- Be easily accessible for people with limited mobility;
- Be restricted to access by nominated personnel only;
- Be supplied with hot or cold water for disinfection and washing of bins;
- Be fitted with suitable power supply for power washers;
- Have a sloped floor to a central foul drain for bins washing run-off;

- Have appropriate signage placed above and on bins indicating correct use;
- Have access for potential control of vermin, if required; and
- Be fitted with CCTV for monitoring.

The facilties management company, residents and tenants will be required to maintain the WSAs in good condition as required by the DCC *Waste Bye-Laws*.

6.0 CONCLUSIONS

In summary, this OWMP presents a waste strategy that addresses all legal requirements, waste policies and best practice guidelines and demonstrates that the required storage areas have been incorporated into the design of the development.

Implementation of this OWMP will ensure a high level of recycling, reuse and recovery at the development. All recyclable materials will be segregated at source to reduce waste contractor costs and ensure maximum diversion of materials from landfill, thus achieving the targets set out in the *EMR Waste Management Plan 2015 – 2021*.

Adherence to this plan will also ensure that waste management at the development is carried out in accordance with the requirements of the *DCC Waste Bye-Laws*.

The waste strategy presented in this document will provide sufficient storage capacity for the estimated quantity of segregated waste. The designated areas for waste storage will provide sufficient room for the required receptacles in accordance with the details of this strategy.

7.0 REFERENCES

1. Waste Management Act 1996 (S.I. No. 10 of 1996) as amended 2001 (S.I. No. 36 of 2001), 2003 (S.I. No. 27 of 2003) and 2011 (S.I. No. 20 of 2011). Sub-ordinate and associated legislation includes:
   - European Communities (Waste Directive) Regulations 2011 (S.I. No. 126 of 2011) as amended
   - Waste Management (Collection Permit) Regulations 2007 (S.I. No. 820 of 2007) as amended
   - Waste Management (Facility Permit and Registration) Regulations 2007 (S.I No. 821 of 2007) as amended
   - Waste Management (Licensing) Regulations 2000 (S.I No. 185 of 2000) as amended
   - European Union (Packaging) Regulations 2014 (S.I. No. 282 of 2014)
   - Waste Management (Planning) Regulations 1997 (S.I. No. 137 of 1997)
   - Waste Management (Landfill Levy) Regulations 2015 (S.I. No. 189 of 2015)
   - European Communities (Waste Electrical and Electronic Equipment) Regulations 2014 (S.I. No. 149 of 2014)
   - Waste Management (Batteries and Accumulators) Regulations 2014 (S.I. No. 283 of 2014) as amended
   - Waste Management (Food Waste) Regulations 2009 (S.I. No. 508 of 2009) as amended 2015 (S.I. No. 190 of 2015)
   - European Union (Household Food Waste and Bio-waste) Regulations 2015 (S.I. No. 191 of 2015)
   - Waste Management (Hazardous Waste) Regulations 1998 (S.I. No. 163 of 1998) as amended 2000 (S.I. No. 73 of 2000)
   - Waste Management (Shipments of Waste) Regulations 2007 (S.I. No. 419 of 2007) as amended
   - *European Communities (Transfrontier Shipment of Waste) Regulations 1994 (SI 121 of 1994)*
   - European Union (Properties of Waste which Render it Hazardous) Regulations 2015 (S.I. No. 233 of 2015) as amended
2. Environmental Protection Act 1992 (Act No. 7 of 1992) as amended;
3. Litter Pollution Act 1997 (Act No. 12 of 1997) as amended;
4. Eastern-Midlands Waste Region, *Eastern-Midlands Region (EMR) Waste Management Plan 2015 – 2021* (2015)
5. DCC *Dublin City Council (Storage, Presentation and Segregation of Household and Commercial Waste) Bye-Laws (2018)*
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8. DoELG, *Making Ireland's Development Sustainable – Review, Assessment and Future Action (World Summit on Sustainable Development)* (2002)
9. DoEHLG, *Taking Stock and Moving Forward* (2004)
10. Department of Communications, Climate Action and Environment (DCCAE), *Waste Action Plan for the Circular Economy - Ireland's National Waste Policy 2020-2025* (2020).
11. Environmental Protection Agency (EPA), *National Waste Database Reports 1998 – 2012.*
12. DCC, *Dublin City Development Plan 2016 – 2022* (2016)
13. Planning and Development Act 2000 (S.I. No. 30 of 2000) as amended 2010 (S.I. No. 30 of 2010) and 2015 (S.I. No. 310 of 2015).
14. European Waste Catalogue - Council Decision 94/3/EC (as per Council Directive 75/442/EC).
15. Hazardous Waste List - Council Decision 94/904/EC (as per Council Directive 91/689/EEC).

16. EPA, *European Waste Catalogue and Hazardous Waste List* (2002)
17. EPA, *Waste Classification – List of Waste & Determining if Waste is Hazardous or Non-Hazardous* (2015)
18. BS 5906:2005 Waste Management in Buildings – Code of Practice.
19. DoEHLG, Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities (2020).