

**ASBESTOS MANAGEMENT PLAN
RODNEY STREET
ANCOATS, MANCHESTER
WATES CONSTRUCTION LIMITED
AMP-22434-22-250
JULY 2022**

IDOM



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Current Document Details

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Approved by



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TABLE OF CONTENTS

SECTION 1	INTRODUCTION	1
SECTION 2	LIMITATIONS	2
SECTION 3	BACKGROUND	3
3.1	INTRODUCTION.....	3
3.2	PREVIOUS INVESTIGATIONS	3
3.3	ASBESTOS IDENTIFICATION	4
SECTION 4	LEGISLATIVE FRAMEWORK FOR PROPOSED MANAGEMENT OF ASBESTOS	5
4.1	INTRODUCTION.....	5
4.2	APPLICABLE LEGISLATION AND GUIDANCE.....	6
4.3	SUMMARY	7
SECTION 5	RISK ASSESSMENT	7
5.1	INTRODUCTION.....	7
5.2	RISK CHARACTERISATION – CONSTRUCTION WORKERS	8
5.3	THE GENERAL PUBLIC AND ADJACENT SITE USERS	9
SECTION 6	PROCEDURES FOR MANAGING ASBESTOS.....	9
6.1	OVERVIEW	9
6.2	STAFF/RESPONSIBILITIES.....	10
6.3	REMOVAL SPORADIC BONDED ACM AND OCCASIONAL FRIABLE ACM	11
6.4	CACHE PROCEDURES	11
6.5	GENERAL CONSTRUCTION WORKS AND WORKS WITH ASBESTOS CONTAINING SOILS (0.01-0.05% W/W AVERAGE).....	12
6.6	ASBESTOS MANAGEMENT- ENVIRONMENTAL CONTROL AND MONITORING.....	13
SECTION 7	VALIDATION REPORTING	13
APPENDIX 1		16
▪	Site Location Drawing 22434-002-001	16
▪	Site Investigation Drawing 22434-304-001	16
APPENDIX 2		17
▪	JIWG Risk Assessments	17
APPENDIX 3		18
▪	Visible asbestos identification schematic	18
APPENDIX 4		19
▪	Visible asbestos identification flow chart	19

SECTION 1 INTRODUCTION

- 1.1 IDOM Merebrook Ltd (IDOM) has been commissioned by Wates Construction Limited (Wates) to produce an Asbestos Management Plan (AMP). This sets out the actions to be taken to deal with the presence of asbestos contamination within made ground during the construction of a new residential development located off Rodney Street, Ancoats, during site enabling and subsequent groundworks phases.
- 1.2 The subject site location is shown on a plan provided in Appendix 1. Previous information from ground investigations, and an assessment of the history of the site indicate that made ground will contain asbestos in the form as dispersed fibres and microscopic debris, as well as visible Asbestos Containing Materials (ACM).
- 1.3 The AMP is prepared on the basis that it is the intention of the developer to:
- i.* Where practical, retain asbestos contaminated soils on site below areas of proposed hardstanding or clean cover, including materials which may need to be processed for suitability. This is subject to engineering approval on the geotechnical suitability of soil; and,
 - ii.* Remove visible bulk asbestos containing materials to prevent their deterioration during soil remediation and construction works and where such material (where encountered) cannot be safely left undisturbed.
- 1.4 The site has been subject to previous investigations, the data of which is contained within the following documents which are referred to in the AMP. It is recommended that these be read in conjunction with this AMP:
- i.* Curtins; Rodney Street, Ancoats – Phase 1 Preliminary Risk Assessment (ref: St Ann’s Hospital, London – Due Diligence Report: Ground Conditions (ref: 079056-CUR-00-XX-DR-GE-001) dated July 2021;
 - ii.* EPS; Land off Rodney Street – Phase 2 Geo-Environmental Assessment (ref: UK21.5551), dated December 2021; and,
 - iii.* IDOM; Rodney Street, Ancoats- Contaminated Land Assessment (ref: GEA-22434-22-182), dated May 2022.
- 1.5 This document assesses the risks from asbestos (as far as is known) and sets out the high-level remedial actions and procedures to be adopted to manage asbestos impacted soil during excavation of soils, filling works and general construction activities in the ground.
- 1.6 Wates will be the Principal Contractor for the project and, under the Construction Design and Management regulations (2015) will collate the Construction Phase Plan. As part of the Plan it will be a requirement that earthworks and groundworks will be carried out by experienced and appropriately qualified sub-contractors who will produce their own risk assessment method statement compliant with the

necessary provisions of the Control of Asbestos Regulations (CAR) (2012) and its approved Code of Practice and the CL:AIRE Joint Industry Working Group CAR Soil guidance. It will be the contractor's responsibility to make any relevant notifications as required under current asbestos legislation. The Plan will ensure that subsequent works in the ground, where remnant asbestos at low or very low levels are anticipated, will also be undertaken by contractors and their personnel with a suitable level of training and understanding of the risks and in accordance with measures to prevent the spread of asbestos. IDOM will monitor the contractors' performance during the works.

1.7 The purpose of the agreed procedures presented in this document is to:

- i. Ensure safe working during general groundworks from dispersed asbestos fibres in the ground;
- ii. Facilitate timely and safe treatment of removal of bulk ACMs should these be encountered, thereby minimising disruption to the ground workers;
- iii. Minimise risk of ACMs entering the other materials waste and processing streams; and,
- iv. Set out environmental controls and monitoring to ensure that works involving asbestos and general groundworks minimise exposure to airborne asbestos.

1.8 These aims are achieved as follows:

- i. Defining the scope of the forthcoming works in relation to the Control of Asbestos Regulations (CAR) 2012, the accompanying Approved Code of Practice and guidance in CL:AIRE document CAR-SOIL 2012 – *Interpretation for Managing and Working with Asbestos in Soil and Construction and Demolition Materials*;
- ii. Assess and set out the risk posed by asbestos on the site;
- iii. Set out procedures to ensure that works comply with regulatory requirements and guidance and minimise exposure risk; and,
- iv. If required; make this AMP available to the Health and Safety Executive (HSE) to facilitate prior notification of the potential for works with asbestos for the whole site for notifiable non-licensable works.

SECTION 2 LIMITATIONS

2.1 This AMP covers the construction phase of the development off Rodney Street, Ancoats. A Remediation Method Statement (RMS) has been prepared under separate cover and addresses long-term risk from asbestos exposure (amongst other contaminants) to site users during the occupation phase.

- 2.2 It is recommended the RMS, *IDOM; Rodney Street, Ancoats- Remediation Method Statement (ref: RMS-22434-22-193), dated June 2022*, be read in conjunction with this AMP.
- 2.3 This AMP has been prepared using an assessment of the site provided by the ground investigation reports noted in section 1.4 and in accordance with the RMS (ref: RMS-22434-22-193).
- 2.4 Due to the nature of ground enabling works, this report should be considered a 'live' document and subject to revision where further information on the asbestos contamination condition dictates.
- 2.5 This report has been prepared for Wates Construction Limited for the sole purpose described above and no extended duty of care to any third party is implied or offered. Third parties making reference to the report should consult Wates Construction Limited and IDOM as to the extent to which the findings may be appropriate for their use.

SECTION 3 BACKGROUND

3.1 INTRODUCTION

- 3.1.1 This site is located off Rodney Street, Ancoats. The site is located at National Grid Reference 385304, 398959 and indicated on drawing 22434-001-001, presented in Appendix 1 of this report.
- 3.1.2 Earliest historical map records dating to the 1820s show the site to have been previously developed into a series of terraced housing with associated yards and outhouses. The site was later re-developed with the demolition of the initial dwellings and construction of an unnamed works in 1963. By 1969 a residential building had been constructed in the south side of the site and new terraced housing had been built in the north. By 2006 all buildings on the site are shown to have been demolished and at present, the site remains undeveloped.
- 3.1.3 Intrusive investigations encountered Made Ground/Topsoil up to 2.60 m bgl. Underlying the Made Ground the natural stratigraphic sequence included several metres of superficial Devensian age glacial Till deposits with bedrock of the Collyhurst Sandstone at depth.

3.2 PREVIOUS INVESTIGATIONS

- 3.2.1 Intrusive investigations have previously been completed by EPS between 27th September and 14th October, and IDOM between the 28th-29th April and the 4th May 2022.
- 3.2.2 The EPS investigation report was made available to IDOM, and comprised the following scope of works:

- i.* 4 cable percussion boreholes (BH01-BH04) eight boreholes to a maximum depth of 35m)
 - ii.* 9 window sample boreholes (WS01A, WS01B, WS01C, WS02A, ES02B, WS03B, WS04, WS05) to a maximum depth of 6m bgl;
 - iii.* 10 machine dug trial pits (TP01-TP10) to a maximum depth of 1.60 m bgl.
- 3.2.3 The subsequent IDOM investigation comprised the following additional works;
- i.* Eighteen machine-dug trial holes (MTP1 to MTP18) to a depth of 2.80 m bgl (these were primarily targeted in areas of previously identified contamination, in the vicinity of former structures).
- 3.2.4 Ground conditions were generally congruent with the geological maps and have been summarised in Table 1 below:

Table 1: Ground conditions identified in intrusive investigations

STRATA	DEPTH TO TOP RANGE (m bgl)	THICKNESS RANGE (m)
Topsoil	0.0	0.1 – 0.4
Made Ground	0.0	0.2 - 1.25
Natural Clay	0.6 – 1.4	0.1 – 2.1

3.3 ASBESTOS IDENTIFICATION

- 3.3.1 The investigation completed by EPS identified detectable concentrations of ACM, in the form of chrysotile fibre bundles in shallow soils recovered from TP01, TP02, TP08 & WS03B.
- 3.3.2 The subsequent investigation completed by IDOM identified an additional 3 no. samples containing detectable asbestos recovered in MTP06 and MTP11.
- 3.3.3 Positive asbestos testing results from both phases of investigation have been summarised in a table 2 below and a schematic outlining this distribution is included in Appendix 3.

Table 2: Summary of asbestos identification

Sample Reference	Depth	Sample Type	Asbestos Type Detected	Asbestos Concentration (%w/w)	Asbestos Form
MTP06	0.6	D	Amosite	<0.001	Loose Fibres
MTP08	0.65	B	Chrysotile	Not Quantified	Pipe insulation/Fibres

MTP11	0.6	B	Amosite	2.152	Bitumen
TP01	0.40-0.50	D	Chrysotile	<0.1%	Loose Fibres
TP02	0.50-0.60	D	Chrysotile	<0.1%	Loose Fibres
TP08	0.40-0.50	D	Amosite	0.016	Loose Fibres
WS03b	0.10-0.50	D	Chrysotile	0.001	Loose Fibres

- 3.3.4 The percentage of asbestos within the host soil materials, are defined by the CL:AIRE Joint Industry Working Group (JIWG) Decision Support Tool for the Categorisation of Work Activities Involving Asbestos in Soil or Construction and Demolition Materials in Accordance with CAR 2012 (see Table 3 below).

Table 3: JIWG (March 2017)

AMOUNT OF ASBESTOS FIBRES AS PERCENTAGE WEIGHT OF HOST MATERIAL	CATEGORY
<0.0001 to 0.001	TRACE
>0.001 to 0.01	VERY LOW
>0.01 to 0.05	LOW
>0.05 to 0.1	MODERATE
>0.1	LARGE

- 3.3.5 Based on the average percentage of asbestos identified within the soil samples obtained from both the EPS and IDOM investigation (where a sample result of no asbestos detected is considered to be 0.001% w/w asbestos) this site would be considered to have an average value of 0.002% w/w. Based on the JIWG Decision Support Tool, the site would be classified as having very low levels of asbestos within the soils and as such the control of asbestos regulations (CAR) apply to all works undertaken within the soil.

SECTION 4 LEGISLATIVE FRAMEWORK FOR PROPOSED MANAGEMENT OF ASBESTOS

4.1 INTRODUCTION

- 4.1.1 The regulatory and guidance framework under which works that may disturb asbestos are controlled are set out in Section 5.2. The following activities likely to be undertaken during the construction and enabling works phases are considered under these controls:

- i. Site clearance and removal of belowground obstructions and associated excavation of soils;
- ii. Processing of excavated materials to recover them for use as fill under a materials management plan. This may include (subject to the remediation/earthworks contractor's method statement), screening, stockpiling, crushing site-won hard materials and remediation of chemical contamination, if identified in soil.

- 4.2.5 The above scenarios involve *removal* of bulk, clearly identifiable ACMs in an atypical or unusual quantity (compared to known ground conditions). These will instigate specific cache procedures are set out in Section 7.4 and are likely to require the use of licensed asbestos removal contractors (LARCs).
- 4.2.6 Tasks involving removal of small or individual clearly identifiable ACM items of lagging, board or degraded cement/firmly bonded forms which would be a sporadic and low intensity (SALI) operation, triggers Regulation 3 (2) and requires implementation of Regulation 9 only (notification) as non-licensable work but requiring staff with non-licensed work training. This will apply to such works described in Section 7.3 of this report.
- 4.2.7 From the investigations carried out and the works completed to date, it is estimated that the *average* asbestos content in soil is at a very low level (defined by the JIWG as in the range >0.001-<0.01% by weight). Using the approach in CAR-SOIL for identifying the nature of general groundworks involving soil, including *inter alia*: bulk soil excavations (excluding for the purpose of remediation of asbestos contamination specifically), soil backfilling and placement, are considered as non-licensable works and non-notifiable. These would still come under the provisions of: Regulation 4 (duty to manage asbestos), Regulation 5 (adequate assessment to identify asbestos present, Regulation 6 (risk assessment) Regulation 7 (written plan of works detailing how works with asbestos will be carried out), and Regulation 10 (provision of adequate information and training for employees other than LARCs).
- 4.3 **SUMMARY**
- 4.3.1 Provided any post-demolition ACM debris is removed before to the main phase of works, working with low level asbestos in soil is considered to be non-licensable. Notification of non-licensable works would be required where there is an expectation of disturbance of bulk/visible ACMs. Licensable works being undertaken under a specific notification and method statement would be required where unusual quantities or substantial higher risk forms of ACMs are found. Current data indicates licenced removal works will be a strong possibility as works progress.
- 4.3.2 Removal of some visible ACM's which have previously been identified on site may also be considered non-licensable depending on their composition and quantities. These include but are not limited to asbestos containing cement, asbestos pipe and asbestos floor tiles, when not found in unusually high quantities.

SECTION 5 RISK ASSESSMENT

5.1 INTRODUCTION

- 5.1.1 Based on the known site conditions and proposed activities, the risk management measures proposed relate to risks to the following main receptors: construction workers and adjacent site users, resulting from the presence of asbestos in the soil (the source) and via the exposure pathway of inhalation of airborne fibres.

- 5.1.2 The risk assessment has used both the JIWG Decision Support Tool (v.2.1 2017) for categorising work activities involving asbestos and a quantitative estimation of risk using the risk assessment procedure proposed in CIRIA C733. The quantitative estimation of risk is also viewed in the context of IDOM's experience of asbestos management on similarly contaminated sites, where extended periods of earthworks and follow-on construction activities have taken place during which re-assurance and personnel air monitoring was employed.

5.2 RISK CHARACTERISATION – CONSTRUCTION WORKERS

- 5.2.1 For the enabling works, groundworks and construction phases, the potential for airborne fibres to occur from general construction works and groundworks is considered to be from the following activities:

- i.* Plant movement disturbing surface soils during dry, dusty conditions. This could result in localised relatively high concentrations of dust;
- ii.* Formation of foundations and trenches by piling and excavations, which may involve close contact with soils;
- iii.* Wind action over exposed soil surfaces during dry periods is considered to contribute to dust levels, potentially producing lower concentrations over a wider area; and,
- iv.* Any required material processing including material screening or crushing.

- 5.2.2 Based on these scenarios and taking into account the type of asbestos identified on site to date, an exposure risk assessment has been completed using the JIWG decision support tool for each scenario. Completed risk assessment for working with both fibres within the soils and loose fragments within the Made Ground can be found in appendix 2. As per this AMP when visible asbestos is identified it will be removed from site by suitably trained personnel, and as such only a risk assessment for fibres within the soil is appropriate for construction workers.

- 5.2.3 The JIWG decision support tool indicates that the maximum combined exposure and hazard ranking for the amount and form of asbestos presents a MODERATE hazard for the works to be completed. This assessment is based upon a worst-case scenario in which clearly identifiable insulation or lagging is required to be hand-picked within hotspot areas.

- 5.2.4 The JIWG decision support tool indicates that the majority of the works will be classified as Non-licensed activities, with hand-picking in hotspots classified as Notifiable Non-Licensed Work (NNLW). Included in Appendix 4 is a flow diagram provided to help determine the required course of action for NNLW.

- 5.2.5 Guidance in CIRIA C733 states that the potential for fibre release from soils reduces significantly where moisture content exceeds 5% and the addition of 10% moisture content can reduce estimated airborne fibre concentrations by an order of magnitude

and it is unusual for soil moisture content to fall below 5%. From previous construction sites, where damp soils have been present at the surface, it has been found that asbestos fibre counts from static and personnel mounted air samplers are below reporting limits. Furthermore, where dry conditions do develop, fibre counts in outdoor air have also been routinely found below reporting limits. Nevertheless, mitigation measures are proposed to reduce the risk of fibre release from surface soils in subsequent sections.

- 5.2.6 For the duration of the earthworks, it is considered that a negligible risk of exposure to fibres in excess of the clearance limit of <0.01 fibres/ml would exist in outside air from diffuse fibres in soil. There is a low risk that fibre levels could exceed the clearance limit in internal spaces such as site welfare units, if soils are tracked back from the work areas.
- 5.2.7 IDOM would consider that, with appropriate controls in place, no enhanced PPE or RPE will be required while working with the soils. This will not apply when working with visible asbestos. measures would be adopted.
- 5.2.8 If, during the earthworks, bulk ACMS occur as a cache (see section 6.4), the risk of exposure to fibres for the wider site during controlled removal under notification, would appear to be low as exclusion zones, damping down and additional protective measures would be adopted.

5.3 THE GENERAL PUBLIC AND ADJACENT SITE USERS

- 5.3.1 The site is set within a residential area with a multi-storey tower block immediately north and several double story properties within the wider surroundings. For public exposure to asbestos, where the receptor is at a greater distance from the source, the potential fugitive loads in air would reduce, when compared to those which could occur on the site itself and risk of the fibre clearance limit being reached in outdoor air at the nearest developments would very low. The main risk is considered to be remobilisation of fugitive dusts and transfer into indoor spaces. Currently, low-moderate risk to adjacent site users is considered to exist in the absence of dust control.

SECTION 6 PROCEDURES FOR MANAGING ASBESTOS

6.1 OVERVIEW

- 6.1.1 The emphasis for control is avoiding exposure in the first place.
- 6.1.2 For works with soil containing dispersed asbestos as fibres and not clearly identifiable debris, the primary means of managing asbestos and risk reduction will be the minimisation of dust and prevention of transfer of soils from the work area.
- 6.1.3 For exposed formation levels, general construction excavations trained staff will maintain a watching brief and ensure ongoing identification of ACMs which are

previously undiscovered. It is anticipated that the watching brief will be initially conducted by a suitability trained Geo-Environmental engineer, however, as the scheme progresses the responsibility can be transferred to suitably trained personnel within Wates and their sub-contractors.

- 6.1.4 Where bulk/visible ACMs are encountered undertaking their early management and removal mainly during enabling and groundworks. Removal of identifiable/visible ACMs by a suitable trained person (training required should be determined by risk assessment) will prevent their deterioration and liberation of fibres during and after placement of the host soil. Included in Appendix 4 is a flow diagram provided to help determine the required course of action for visibly asbestos containing soils (Hse.gov.uk. 2018. *a0 – Introduction to Asbestos essentials*. [online] Available at: <<https://www.hse.gov.uk/pubns/guidance/a0.pdf>> [Accessed 1 July 2022].)

6.2 STAFF/RESPONSIBILITIES

- 6.2.1 IDOM's main role is to coordinate and oversee implementation of this asbestos management plan. If ACMs are identified, IDOM will aid with identifying the correct remediation requirements. IDOM's Amy Jones will have overall responsibility for IDOM, contractor liaison and ensuring provision of staff. IDOM'S site responsibilities may include a watching brief of excavations and soil arisings. If initial watching briefs demonstrate with confidence that the risk of ACMs being encountered remains very low, then the contractors' own asbestos awareness trained staff may undertake the watching brief role. If IDOM requires a site presence it will be undertaken by Amy Jones or a named deputy.
- 6.2.2 The Principal Contractor will arrange for an asbestos testing and air monitoring contractor (TBC) to carry out monitoring as described in the following sections.
- 6.2.3 The Contractor (Wates) and their main groundworks sub-contractor will maintain a named supervisor/manager who, following training and advice from IDOM, will:
- i. Ensure all personnel engaged in groundworks on site are suitably inducted and trained with regards ACMs and asbestos related risks and procedures.
 - ii. Receive reports from those carrying out the asbestos watching brief at excavations (a banksman directly employed by the Contractor or their groundworker and, possibly, subsequently IDOM), on friable ACMs being encountered.
 - iii. Ensure exclusion of staff from areas where such ACMs are suspected (including organisation of fencing, signage and monitoring) and cessation of excavation in such areas where disturbance of ACMs could occur.
 - iv. Enforce use of boot washes and any other hygiene rules.
 - v. Ensure site records on ACMs being found, removed and disposed of are kept and maintained on site and for subsequent verification reporting.

6.3 REMOVAL SPORADIC BONDED ACM AND OCCASIONAL FRIABLE ACM

- 6.3.1 The site has been subject to multiple phases of redevelopment and there is a possibility that fragments of cement or other bonded forms will be encountered as the oversite is cleared. Removal of individual/sporadic fragments is considered to be sporadic and low intensity (SALI) and may be undertaken by non-licensed work operatives.
- 6.3.2 Small individual/isolated occurrences of friable and weak forms (lagging, highly degraded board) typically up to 100 mm across may also be removed as a low intensity short duration operation (non-licensed work). Staff undertaking such operations must have, as a minimum, non-licensed work training.
- 6.3.3 Coveralls (Type 5 to BS EN ISO 13982-1) and RPE (Disposable P3 mask to EN149) will be required for sporadic, short-duration non-licensable works (such as hand picking of surface cement and bitumen). Materials shall be placed in approved sealed containers (double-bagging) for transfer to a lockable holding skip.
- 6.3.4 If numerous or large fragments of such ACMs are present where removal for sampling and identification is not applicable and/or practical, then its removal will come under the provisions of Section 7.4.

6.4 CACHE PROCEDURES

- 6.4.1 For the purpose of this management plan, a cache is defined as an occurrence of weak or friable ACM or large volumes of degraded bonded forms, for which removal measures are unlikely to be SALI. That is, they are not of short duration (i.e. not sporadic), even though the *intensity* of exposure to airborne fibres is likely to be low from low fibre levels in moist soils and visible ACMs within the soil (<0.01 f/ml). A relatively higher risk of exposure to airborne fibres is considered to exist in comparison with quick operations presented in the preceding sections but this can be minimised by adopting suitable procedures.
- 6.4.2 Where the trained banksman observes a cache, he will alert the excavator driver to cease digging and empty any arisings in the bucket back to the excavation. If the excavator driver is the first to observe a cache he will cease excavation and alert the banksman to ensure that materials are kept undisturbed or not moved from the area and can be kept separate.
- 6.4.3 Generally for all caches, temporary barriers will be placed 10 m from the suspected cache with warning signs. Confirmation of ACMs will be undertaken by alerting the nominated asbestos manager for the site and by testing. Visual means of identification can only be used to make a presumption of asbestos being present. If immediate removal of ACMs cannot occur, the ground surface will be covered with adequately weighted down polythene sheeting.

- 6.4.4 The PPE and RPE equipped LARC will remove the cache under their own notification and method statement which will be appropriate to the form of ACM, soil type, extent and complexity of the task. The Contractor may decide to dig to demonstrably 'clean' soil to allow for screening and segregation of soils in a designated asbestos work area (N.B. these procedures will subject continual review with the LARC).
- 6.4.5 During dry conditions, all arisings and exposed soil faces will be wetted using misting or low-pressure jetting to maintain moisture contents.
- 6.4.6 Personnel air monitors will be attached to staff undertaking ACM removal. Static air monitors will be located upwind and downwind at the edge of the exclusion zone (minimum two).
- 6.4.7 The LARC will carry out personnel decontamination in accordance with their own method statement which will likely be informed by the findings of personnel air fibre monitoring.
- 6.5 **GENERAL CONSTRUCTION WORKS AND WORKS WITH ASBESTOS CONTAINING SOILS (0.01-0.05% W/W AVERAGE)**
- 6.5.1 Groundworks will likely generate an area of exposed made ground where soils with residual very low/low asbestos content remains. Conservative risk modelling identifies a potential risk from chrysotile and crocidolite asbestos in such soils. Procedures are therefore to be implemented which employ the principle of minimising the generation (source potential) of airborne fibres.
- i.* Generally, minimise areas where made ground is exposed at the surface. Haul roads, plant running surfaces and contractors' parking areas to be established early on with clean surfacing, ideally macadam. Such areas to be kept free of mud/soil by sweepers/bowsers. Surface soils to be kept damp at all times (minimum 10% moisture content);
 - ii.* Enforcement of site speed limits;
 - iii.* Stockpiles must be managed to prevent dust generation/potential fibre release. Management measures should include minimising duration of stockpiling before use and cover, sheeting or dampening down pending re-use;
 - iv.* Nominating a site manager to carry out daily visual assessment of dust generating potential;
 - v.* Plant involved in bulk excavation and movement to have closed cabs with air filters;
 - vi.* Vehicle wash facilities to be established on site to prevent transfer of mud to highways. Additional street sweeping to be implemented;

- vii. Establish clean areas including workers' vehicle parking areas, site offices and welfare units and pedestrian walkways. Bootwashes to be provided at exit points of works areas to avoid transfer of soil into clean zones. Their use to be rigorously enforced. Site boots are to be provided to workers by their employers under their statutory duties and must left in a suitable changing area and not taken home. Boots should be of a type suitable for washing down; and,
- 6.5.2 Subject to the rigorous application of the above and robust monitoring data it is anticipated that for normal working conditions re-evaluation of the JiWG-Working Categories decision tool within Appendix 2 will permit the requirement for respiratory protective equipment (RPE) to be avoided.
- 6.5.3 Personal Protective Equipment (PPE) requirements for normal working conditions on site which may involve working with soils which containing trace asbestos fibres will comprise as a minimum glove, safety boots, hard hat and hi-visibility clothing.
- 6.6 **ASBESTOS MANAGEMENT- ENVIRONMENTAL CONTROL AND MONITORING**
- 6.6.1 The potential for airborne fibres during excavation works and movement of materials, will be monitored through air monitoring around the perimeter of the working area for free fibres to ensure that the airborne fibre count is not above the clearance level of 0.01 fibres per millilitre. Reassurance air fibre monitoring should be undertaken within the area of soil handling, placement areas and at the boundaries of work areas. Personnel mounted air samplers will also be deployed to certain operatives including: dumper drivers, excavator drivers, asbestos removers.
- 6.6.2 Subject to ongoing review it is proposed that the full-time monitoring is undertaken for the first 2 weeks of intrusive works and thereafter reduced to one day a week until groundworks has reduced significantly (subject to the results). This should be reviewed by the contractor and IDOM on a continual basis. If any work is categorised as Non-Licensed Work or Licensed Work, then air monitoring will be deployed for task-specific remediation (Hand picking, non-hazardous waste removal etc).
- 6.6.3 If the clearance level is exceeded, works must stop immediately, with an investigation undertake to identify the source of asbestos fibres. Work cannot recommence until the problem has identified and mitigation measures put in place. Prior to recommencement of works an additional set of monitoring data must be collected to demonstrate that the mitigation measures have been effective.

SECTION 7 VALIDATION REPORTING

- 7.1 Following the completion of the works, a validation report will be prepared detailing the scope of works completed in line this plan. The report will provide a commentary on the relevant actions including air monitoring for free fibres, environmental watching briefs described in Section 6.2. In addition, waste transfer notes will be included for material leaving site.

- 7.2 The Validation Report including will be included in the Health and Safety File for the scheme.
- 7.3 The report will provide details of remedial works undertaken including *inter alia*:
- i.* Data relating to the testing of soils or stockpiles;
 - ii.* Details of where the material has been processed (hand-picked);
 - iii.* A photographic record of key stages of works;
 - iv.* Details of waste disposal, including examples of tip tickets, and
 - v.* Data from air quality monitoring.

APPENDIX 1

- Site Location Drawing 22434-002-001
- Site Investigation Drawing 22434-304-001



Legend

--- Site boundary

MTPref Merebrook trial pit with location reference

First Issue	13-05-2022		-
	FDO	LNW	LNW
	DWN	CHD	APP'D

ISSUE PURPOSE

PRELIMINARY

CLIENT

Wates Construction

PROJECT

Rodney Street Ancoats

DWG TITLE

Undertaken Trial Pit Investigation Locations

DWG NO.		REVISION
22434-304-001		-

SCALE	DATE	FRAM DIMENSIONS (mm)
1:500	May 2022	(A3) 400 x 280

DRAWN	CHECKED	APPROVED
FDO	LNW	LNW

London

Kent

Derbyshire

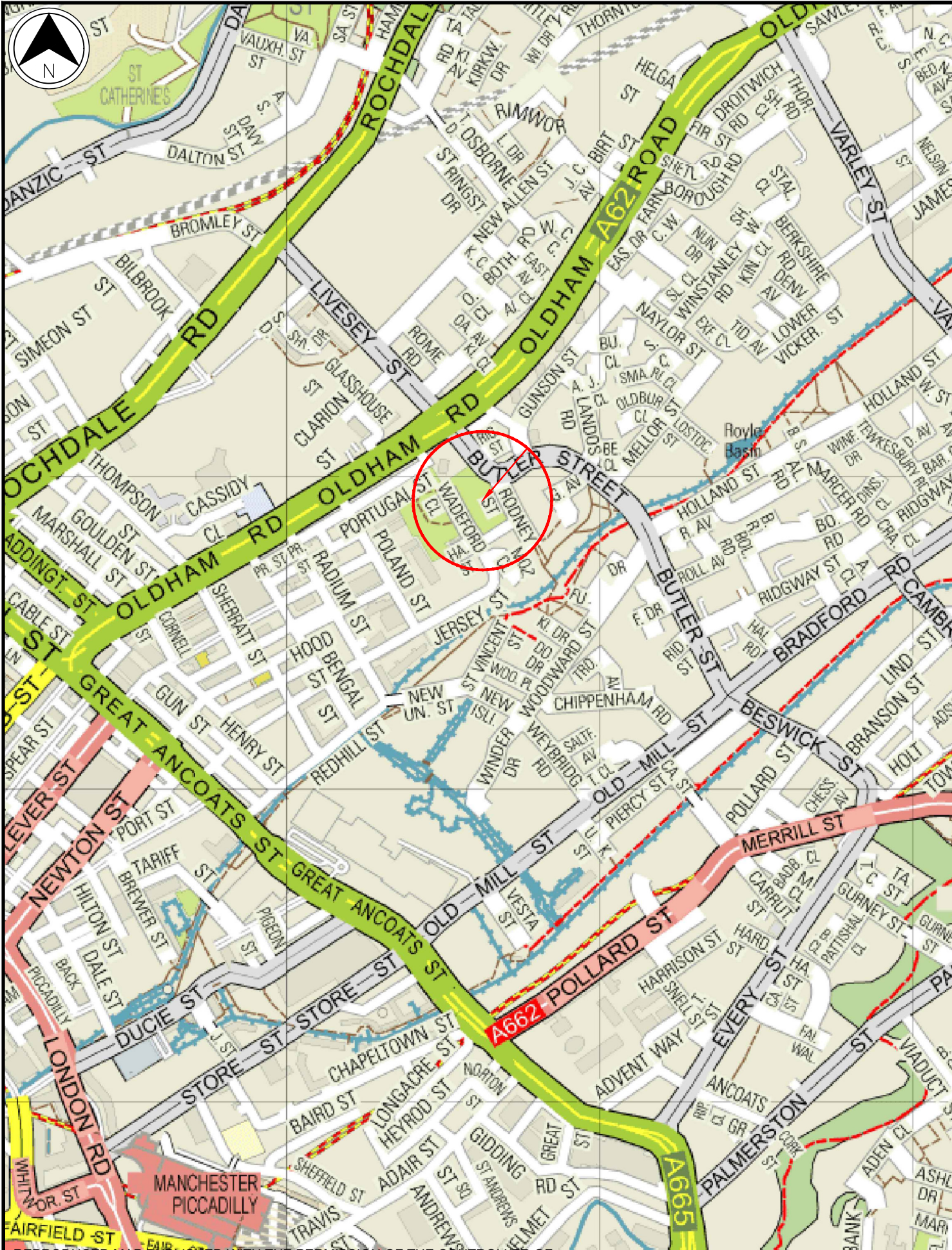
Manchester

Stirling

IDOM

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Wates Construction
Rodney Street, Ancoats
Site Location Plan

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First Issue		13-05-2022	-
		FDO	LNW LNW
ISSUE DETAILS		DWN	CHD APP'D
DWG NO.	22434-001-001		REVISION
		-	
SCALE	N.T.S	DATE	May 2022
		FRAME DIMS (mm) (A4) 250x181	
DRAWN	FDO	CHECKED	LNW
		APPROVED LNW	

APPENDIX 2 ▪ JIWG Risk Assessments



Joint Industry Working Group

Asbestos in Soil and Construction & Demolition Materials

Project Reference	AMP-22434-22250
Site Name	Rodney Street
Client	Wates Construction Ltd
Run by	L.Waddington
Date	01-Jul-22
Scenario details	Hotspot Contaminant Risk

Decision Support Tool for CAR2012 Work Categories

Stage 1

Hazard Factors

Select ACM type (run model for each type to generate 'Worst Case' output)
Extent of degradation of ACMs at outset of work
Friability and degree of bonding by matrix (ACM matrix, not ground materials)
Distribution of Visible Asbestos Across Affected Area
Amount of asbestos fibre in selected ACM/fibre type as % of host material

Clearly identifiable insulation or lagging	3
Disaggregated (dominated by loose fibrous material; extreme degradation in ACM and/or free asbestos fibres/fibre bundles)	4
Friable ACM or ACM with fibres not linked in any matrix (free dispersed fibres/fibre bundles)	4
Sporadic/random occurrences of visible contamination by ACMs	2
Large quantities - >0.1 %wt/wt	4

Sub-total

17

Note: the asbestos licensing regime is unaffected by the type of asbestos fibre present in ACMs

Hazard ranking

High

No warranty, expressed or implied, or reliance, is provided in relation to the use of this tool.

It is contingent on users to satisfy themselves that the output from the tool is relevant and appropriate to the assessment being made.

Stage 2

Exposure Factors

Score

Anticipated airborne fibre concentration - Control Limit or SALI?

<0.1 fibres/ml (4 Hr TWA) or <0.6 fibres/ml (10 minute STEL)

2

Anticipated duration of exposure to asbestos

< 2 hours in a 7 day period for all persons involved (e.g. Short Duration Work)

1

Activity type and effect on deterioration of ACMs during work

Low intensity, no or minimal deterioration expected

0

Best description of primary host material matrix (soil/made ground)

Made Ground - Recycled Aggregate, Track Ballast

4

Respirable fibre index for ACM - RIVM report 711701034 (2003)

Medium

3

Sub-total

10

Exposure ranking

Low

Combined hazard and exposure ranking

27

Medium

Stage 3

Risk Assessment Outputs

Probable Licensing Status	Notifiable Non-Licensed Work
RPE*	EN140 with P3 filter half mask
Dust Suppression**	Localised mechanical dust suppression
Hygiene/Decontamination***	Localised and enhanced personal decontamination facilities

*Where RPE has to be worn continuously for long periods (e.g. more than 1-hour), then powered RPE may be necessary.

**Reduction in control measures possible if natural mitigation factors are present (e.g. raining, wet ground)

***Guide only; suitability of selected personal hygiene measures may be reviewed on a site/contamination-specific basis

Project Reference	AMP-22434-22250
Site Name	Rodney Street
Client	Wates Construction Ltd
Run by	L.Waddington
Date	01-Jul-22
Scenario details	Average Site Risk

Decision Support Tool for CAR2012 Work Categories

Stage 1

Hazard Factors

Select ACM type (run model for each type to generate 'Worst Case' output)
 Extent of degradation of ACMs at outset of work
 Friability and degree of bonding by matrix (ACM matrix, not ground materials)
 Distribution of Visible Asbestos Across Affected Area
 Amount of asbestos fibre in selected ACM/fibre type as % of host material

Free dispersed fibres/fibre bundles	2
Disaggregated (dominated by loose fibrous material; extreme degradation in ACM and/or free asbestos fibres/fibre bundles)	4
Friable ACM or ACM with fibres not linked in any matrix (free dispersed fibres/fibre bundles)	4
Sporadic/random occurrences of visible contamination by ACMs	2
Low quantities - >0.01 to <0.05 %wt/wt	2

Sub-total

Score

14

Note: the asbestos licensing regime is unaffected by the type of asbestos fibre present in ACMs

Hazard ranking

Medium

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Stage 2

Exposure Factors

Score

Anticipated airborne fibre concentration - Control Limit or SALI?

<0.1 fibres/ml (4 Hr TWA) or <0.6 fibres/ml (10 minute STEL)

2

Anticipated duration of exposure to asbestos

< 2 hours in a 7 day period for all persons involved (e.g. Short Duration Work)

1

Activity type and effect on deterioration of ACMs during work

Low intensity, no or minimal deterioration expected

0

Best description of primary host material matrix (soil/made ground)

Made Ground - Recycled Aggregate, Track Ballast

4

Respirable fibre index for ACM - RIVM report 711701034 (2003)

Low

2

Sub-total

9

Exposure ranking

Low

Combined hazard and exposure ranking

23

Medium



Joint Industry Working Group

Asbestos in Soil and Construction & Demolition Materials

Stage 3

Risk Assessment Outputs

Probable Licensing Status	Non-Licensed Work
RPE*	EN140 with P3 filter half mask
Dust Suppression**	Manual/localised dust suppression
Hygiene/Decontamination***	Localised and basic personal decontamination facilities

*Where RPE has to be worn continuously for long periods (e.g. more than 1-hour), then powered RPE may be necessary.

**Reduction in control measures possible if natural mitigation factors are present (e.g. raining, wet ground)

***Guide only; suitability of selected personal hygiene measures may be reviewed on a site/contamination-specific basis

APPENDIX 3 ▪ Visible asbestos identification schematic



Legend

- Site boundary
- Merebrook trial pit with location reference
- Asbestos ID (IDOM & EPS)

First Issue	13-06-2022	-
	FDO	LNW
	DWN	CHD
		APP'D
ISSUE PURPOSE	PRELIMINARY	
CLIENT	Wates Construction	
PROJECT	Rodney Street Ancoats	
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London

Kent

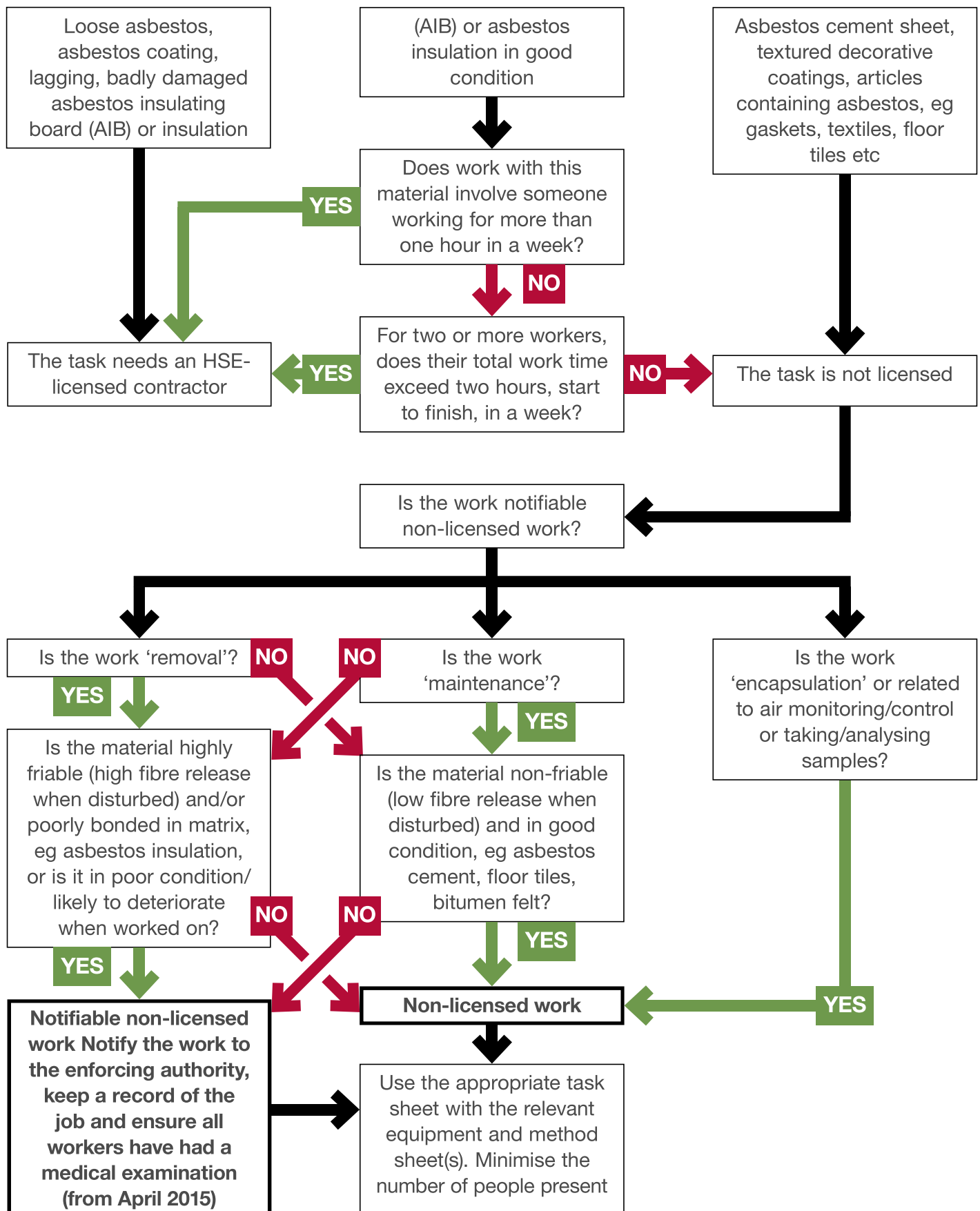
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APPENDIX 4 ▪ Visible asbestos identification flow chart

Decision flow chart

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