



THOMAS HOMES LTD

Verification Report

13-21 Crown Street and 22 Silver Street Reading RG1 2SE

Project Ref. 28957-R03 (00)

DECEMBER 2020





RSK GENERAL NOTES

Project No.: 28957-R03 (00)

Title: Verification Report: 13-21 Crown Street and 22 Silver Street Reading

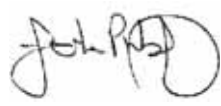
Client: Thomas Homes Ltd

Date: December 2020

RSK office: RSK Environment Limited, 18 Frogmore Road, Hemel Hempstead, Herts, HP3 9RT

Tel: 01442 437500, contact: John R Pulsford

Status: Final

Author	<u>Sylvia Mianowska</u>	Technical reviewer	<u>John R Pulsford</u> <u>Alena Landers</u>
Signature		Signature	
Date:	<u>December 2020</u>	Date:	<u>December 2020</u>
Project manager	<u>John R Pulsford</u>	Quality reviewer	<u>Ellie Sanders</u>
Signature		Signature	
Date:	<u>December 2020</u>	Date:	<u>December 2020</u>

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1 INTRODUCTION

1.1 Introduction

On the instructions of Thomas Homes Ltd (THL), RSK Environment Limited (RSK) has prepared a verification report (VR) to detail remedial works undertaken at 13-21 Crown Street and 22 Silver Street Reading (hereafter referred to as 'the site') and subsequently facilitate the discharge of Condition 13 (under planning application 170794).

1.2 Project background

The development comprises a 5-storey 'L' shaped block of flats with a part single storey semi-basement car park and plant room including communal soft landscaping.

The site has been the subject of previous investigations as detailed as follows:

- Phase 1 Geo-environmental report by Haigh Huddleston & Associates (HHA), ref. E14/6083/R001 dated April 2014; and
- Phase 2 Geo-environmental Assessment by RSK, ref. 28957-R01 (00), dated January 2017.

In addition, RSK prepared the following remediation action plan:

- Remediation Action Plan, ref. 28957-R03 (01), dated May 2017.

This VR should be read in conjunction with the previous reports referenced above.

1.3 Definitions

The following parties have a direct involvement in the works described herein:

Client	Thomas Homes Ltd
Demolition Contractor	J. Mould (Reading)
Tank decommissioning	New Wave Marine & Industrial Cleaning Services
Earthworks Contractor	VFK Groundworks
Local Authority	Reading Borough Council
Environmental Consultant	RSK Environment Limited

1.4 Scope

The scope of this report is limited to activities identified in the RAP (RSK, May 2017). The purpose of the report is to demonstrate that work has been carried out in accordance with the RAP and the site is therefore suitable for its intended end-use.

This report is subject to the RSK Environment Limited service constraints given in **Appendix A**.

This Verification Report (VR) includes details of:

- Validation relating to the decommissioning of the above ground fuel tank;
- A record of any unforeseen contamination encountered including details of remedial works and validation undertaken;
- Validation of soft landscaping area including a record of imported topsoil; and
- A record of waste removal.

1.5 Limitations

The comments given in this report and the opinions expressed are based on the ground conditions encountered during the site investigation and that reported by Thomas Homes Ltd during the construction phase and upon validation works carried out, on the results of tests made in the field and in the laboratory and on information provided. It should be noted that much of the validation works have been undertaken by the client and/or its contractors therefore reliance is placed on their data.

2 SITE DESCRIPTION AND DEVELOPMENT LAYOUT

The site is located between Newark Street to the west, Silver Street the A327 road to the east and Crown Street the A4 road to the north. as shown on **Figure 1**.

The site covers approximately 0.33 ha at an elevation of approximately 50 m above Ordnance Datum (AOD) and previously comprised the following main attributes some of which are shown on **Figure 2**:

1. Derelict buildings occupy a significant area of the site including an above ground fuel tank and a basement of unknown extent;
2. External areas comprise concrete and bituminous hardstanding of generally poor quality used in more recent times currently as a car park; and
3. Dense shrub vegetation along the northern and eastern boundaries.

The site is also known to have been used for car hand washing, 'Crown Hand Car Wash and Valet Services'.

The current development comprises a 5-storey 'L' shaped block of flats with a part single storey semi-basement car park and plant room including communal soft landscaping. The current layout is presented in **Figure 3**.

3 SUMMARY OF THE CONCEPTUAL SITE MODEL AND RISK ASSESSMENT

3.1 Summary of Site Setting

The site investigation identified made ground in all exploratory holes to approximately 1.1 m and 2.8 m below ground level (mbgl). The made ground generally comprised brown to dark brown slightly clayey gravelly sand. This was intermixed with occasional anthropogenic materials comprising fragments of brick, glass, mortar, concrete, metal, plastic, rubber and ash. Beneath the made ground, superficial River Terrace Deposits (RTD) were encountered to depths between 1.1 mbgl and 2.8 mbgl and varies between 0.6 m and 3.6 m in thickness. Beneath the RTD, Chalk was encountered at depths of between 5.2 mbgl and 5.3 mbgl and was recovered as a structureless melange as a result of the percussive drilling technique adopted.

During the intrusive investigation, groundwater was encountered within BH1 and BH2 at depths ranging from 11.1 mbgl and 11.4 mbgl. In addition, a subsequent monitoring visit encountered water at a depth of 9.38 mbgl.

A small amount of discoloured black hardstanding was noted on the ground surface next to the fuel storage tank within the main building. Exploratory location TP1 was chosen to target this potential contamination. PID readings within this trial pit were all recorded <0.1 ppm indicating an absence of significant volatile organic compounds.

3.2 Generic Quantitative risk assessment

The site investigation report (28957 R01) identified several the potentially complete pollutant linkages which were assessed. Each linkage and the assessment undertaken is summarised below.

3.2.1 Direct contact with impacted soil by future residents

The results of laboratory tests were assessed against Generic Assessment Criteria for a residential without home grown produce end. On this basis, no potentially significant risks were identified and therefore the site was assessed to be suitable for the proposed end use.

3.2.2 Inhalation exposure of future residents to asbestos fibres

The laboratory screening for asbestos identified detectable asbestos fibres within one sample of made ground (WS3 at 0.5 mbgl). This sample was then further analysed and the presence of fibres of chrysotile were confirmed (0.001% by weight). This pollutant linkage is therefore considered to be complete.

3.2.3 Uptake of contaminants by vegetation potentially inhibiting plant growth

The results indicate that a relevant pollutant is unlikely to exist associated with phytotoxic effects.

3.2.4 Impact of organic contaminants on potable water supply pipes

The results indicate that a relevant linkage is unlikely to exist associated with organic contaminants and therefore, PVC (polyvinyl chloride) pipe was considered suitable for use on the development.

3.2.5 Leaching of contaminants to groundwater in principal aquifer and subsequent migration to surface watercourse

The results indicate slight exceedances in a number of metals. Given the site is considered to be of low sensitivity i.e. no abstraction of groundwater within the vicinity and is not located within a groundwater Source Protection Zone; it is considered that these exceedances do not pose an unacceptable risk to site development including future residents.

3.2.6 Migration of ground gases

Ground gas monitoring undertaken on three occasions, indicated gas screening values (GSV) for methane of 1×10^{-4} l/hr and carbon dioxide of 3×10^{-4} l/hr. Based on these GSVs, the site has been assessed to be Characteristic Situation 1 (CS1) i.e. the site is considered to be at low risk from ground gases and therefore, gas protection measures were not considered necessary. Also, the development comprises a full well ventilated semi-basement car park which will reduce any potential risk significantly further.

3.3 Refined CSM

The results of the GQRA indicate that no potentially significant risks associated with soil contamination have been identified with respect to human health receptors or groundwater beneath the site apart from the potential for asbestos in made ground with the exception of the inhalation of asbestos within soil.

The following measures were recommended:

- Prior to demolition of existing structures, an asbestos survey following removal of identified materials will need to be undertaken by an approved contractor;
- Removal of waste materials in existing buildings and the identified basement structure will need to be undertaken by an approved contractor;
- Whilst the results of chemical analyses would suggest the site is at low risk from contamination, there is potentially contamination beneath the footprint of existing of structures which has not been assessed and therefore has not been considered;
- There is the potential for contamination to be present including asbestos in any made ground beneath proposed soft landscaping areas. To mitigate against any unacceptable risk, a suitable capping layer is recommended;
- The above ground tank will need to be removed along with any underlying impacted materials by an improved contractor. Should this area fall with proposed soft landscaping, then validation of remaining soils will need to be undertaken to demonstrate no remaining unacceptable risk; and
- During site development, should any unforeseen contamination be encountered then advice must be sought from an environmental consultant.

4 IMPLEMENTATION OF REMEDIAL MEASURES

4.1 Introduction

Implementation of remedial measures during the enabling works phase of the development given in the RAP (i.e. site clearance and foundation excavation works) are detailed in the following subsections along with measures implemented during the construction phase.

4.2 Demolition works

An asbestos survey was completed by M3 Asbestos Survey Ltd in February 2017. The objectives of this was to locate and identify the presence of asbestos containing materials (ACM's) within the building fabric of existing structure prior to demolition works. A copy of the survey report is presented in **Appendix B**, along with plans showing the locations of the identified ACM's.

4.3 Removal of Asbestos Containing Materials

Works to remove identified asbestos containing materials was undertaken by J Mould (Reading) demolition who are a registered waste carrier, licensed to remove and to transport asbestos and any other hazardous waste to an appropriate disposal facility.

Asbestos containing materials were removed off-site. Relevant waste transfer records are contained in **Appendix C**.

Reoccupation certificates, based on the asbestos in air monitoring testing completed after asbestos containing materials (ACM) removal, are also contained in **Appendix C**.

4.4 Demolition of Building Structures

Following the removal of ACM, demolition of the existing structures continued under a watching brief by suitably trained operatives. Waste materials, including waste metal, were removed offsite to an appropriate waste recycling facility whilst demolition rubble (e.g. concrete) was crushed and screened for reuse on site as a piling mat.

As the demolition works progressed, control measures including the damping down of materials were implemented in accordance with J Mould (Reading) control measures.

4.5 Removal of above ground fuel tank

The preliminary risk assessment and ground investigations identified an above ground fuel tank inside the main building as shown on **Figure 2**, as a potential source of contamination. A small amount of discoloured black hardstanding was noted on the concrete slab surface in the vicinity of the tank during the site reconnaissance visit.

Subsequent site investigation works in 2017 confirmed the absence of visual hydrocarbon contamination in the trial pit TP1 targeting the former tank area. In addition,

PID screening and chemical testing of the soils confirmed the absence of volatile hydrocarbons.

The tank was decommissioned by New Wave Marine & Industrial Cleaning Services in June 2017 and removed off site by them.

A copy of the waste transfer notes relating to this operation is presented in **Appendix C**.

The client confirmed that upon removal of concrete hardstanding and foundations of the main building, the underlying soils were reported to be free from visual and olfactory evidence of contamination.

4.6 Earthworks

The development includes a full semi undercroft carparking. Construction therefore comprised bulk excavation of made ground and natural soils requiring off-site disposal. Previous assessment of these materials for waste disposal purposes by RSK, indicate the materials to be classified as being inert.

An available waste related information is included in **Appendix C**.

It was confirmed by Thomas Homes that none of the site derived arisings were reused on site; but removed off site as waste by Mould's, waste carrier license ref CBDU173096. The material was taken to Mould's waste sites in Reading, site ref EPR/JB3132AR, however, no waste transfer notes are available as a floor has collapsed in the building where the records were kept and it is not safe to enter this building and get the information.

4.7 Soft landscaping

Due to the absence of suitable site derived soils for use within landscaped areas, topsoil was imported to site for this purpose.

The RAP states that a minimum 450 mm thick capping layer is required in communal soft landscaping areas. A greater thickness may be required to extend to a greater depth (at the discretion of the landscape architect) where tree pits are to be included. The locations of soft landscaping are indicated on **Figure 3**.

Multipurpose topsoil was imported to site from 'Hatford' by Earthline Ltd. Prior to importing to site, RSK was supplied with a certificate of chemical analysis, given in **Appendix D**. When the results are compared with the chemical compliance thresholds set out in the RAP for the more stringent human health enduse (growing of home grown produce), given in **Appendix E**, the topsoil is considered suitable for use.

An RSK engineer visited the site on the 8th September 2020 to inspect areas of soft landscaping and take samples of the topsoil to confirm suitability for use. Five hand dug inspection pits, designated HP1 to HP5, were undertaken at the approximate locations given in **Figure 3**. A photographic record of the trial pits is presented in **Appendix F**. It should be noted that the observed thickness of the capping layer on 8th September 2020 was not 450 mm thick or greater, as the landscaping works were in the progress at the

time of the visit. The thickness of the capping was increased in October 2020, upon additional topsoil delivery from the same source.

Additional photographs confirming the required thickness of the capping layer, as provided by Thomas Homes Ltd, are include in **Appendix F**.

The topsoil comprises dark grey organic silty fine to medium sand with rootlets. Conveyance notes, provided by VFK Groundworks, given, **Appendix D**, confirms the topsoil is sourced from 'Hatford' by Earthline and conforms to BS 3882:2015, 'Specification for topsoil', April 2015.

A total of five topsoil samples were submitted for analysis at a UKAS accredited laboratory, four of which obtained from the hand dug pits and one from the topsoil stockpile, located to the south-west corner of the site.

The results are presented in **Appendix D**. When the results are compared directly to the acceptance criteria given in **Appendix E**, the topsoil is suitable for use.

5 CONCLUSION

The above ground tank, located in the former building, was cleaned and removed off site by New Wave Marine & Industrial Cleaning Services in July 2017.

The demolition contractor confirmed the absence of hydrocarbon contamination beneath the slabs of the former building.

The inspection and validation of the clean capping layer was completed by RSK on 8th September 2020. The results of the inspection confirmed that the quality of the imported topsoil is compliant with the assessment criteria set in the Remediation Action Plan.

The final thickness of the capping layer, as confirmed by Thomas Homes Ltd, also complies with the set remediation criteria.

FIGURES



Site location plan

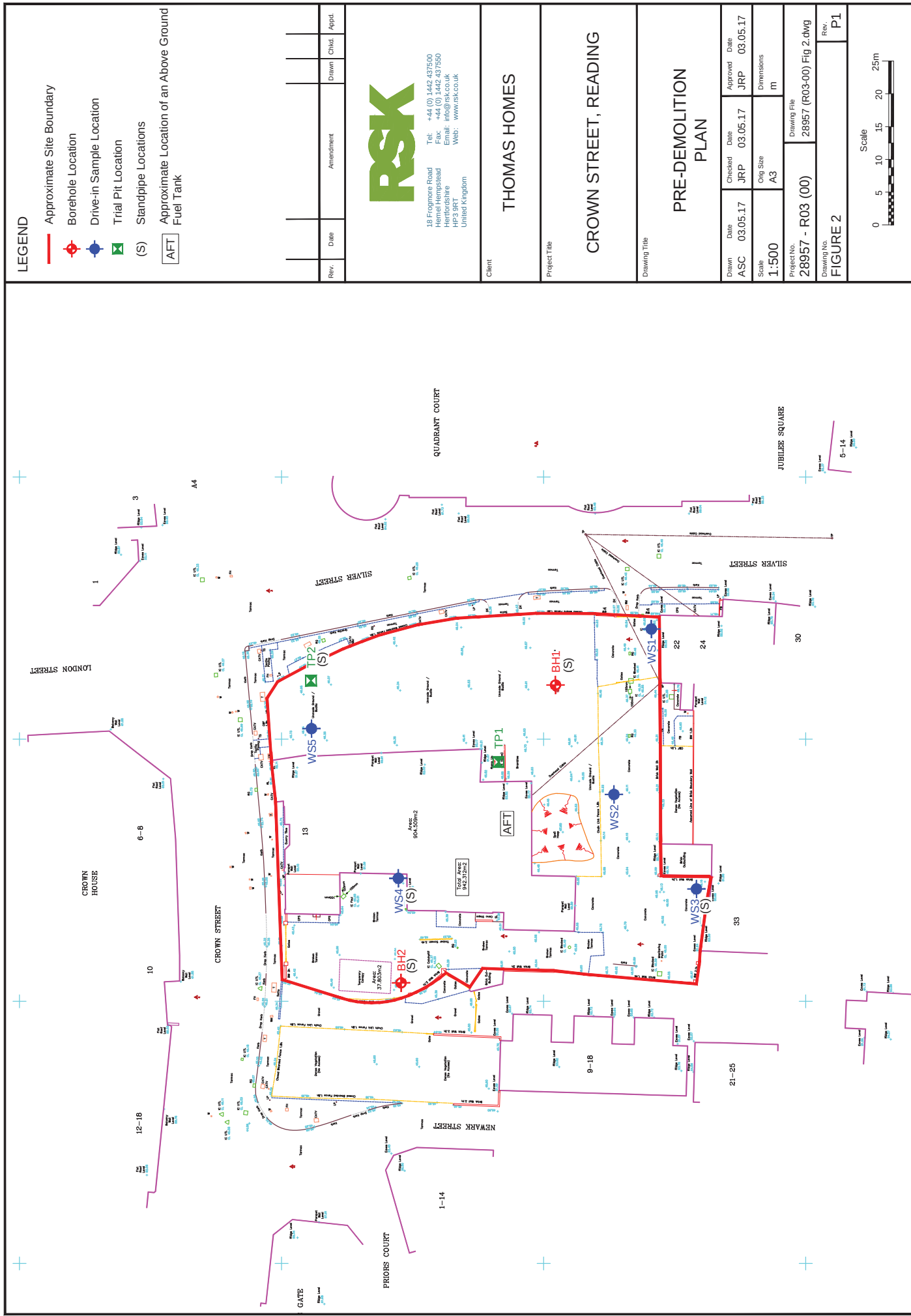
Client: Thomas Homes Ltd

Site: Crown Street, Reading

Scale: NTS

Figure No: 1

Job No: 28957 R03 (00)



LEGEND

- Approximate Site Boundary
- Borehole Location
- Drive-in Sample Location
- Trial Pit Location
- Standpipe Locations
- (S) Approximate Location of an Above Ground Fuel Tank
- AFT

Rev.	Date	Amendment	Drawn	Chkd	Appd.



18 Frognore Road
Hemel Hempstead
Herts SG8 1JG
HP3 9RT
United Kingdom
Tel: +44 (0) 1462 437500
Fax: +44 (0) 1462 437550
Email: info@rsk.co.uk
Web: www.rsk.co.uk

Client
THOMAS HOMES

Project Title
CROWN STREET, READING

Drawing Title
PRE-DEMOLITION
PLAN

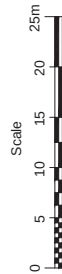
Drawn	Date	Checked	Date	Approved	Date
ASC	03.05.17	JRP	03.05.17	JRP	03.05.17
Scale	Orig Size	Dimensions			
1:500	A3	m			

Project No.
28957 - R03 (00)

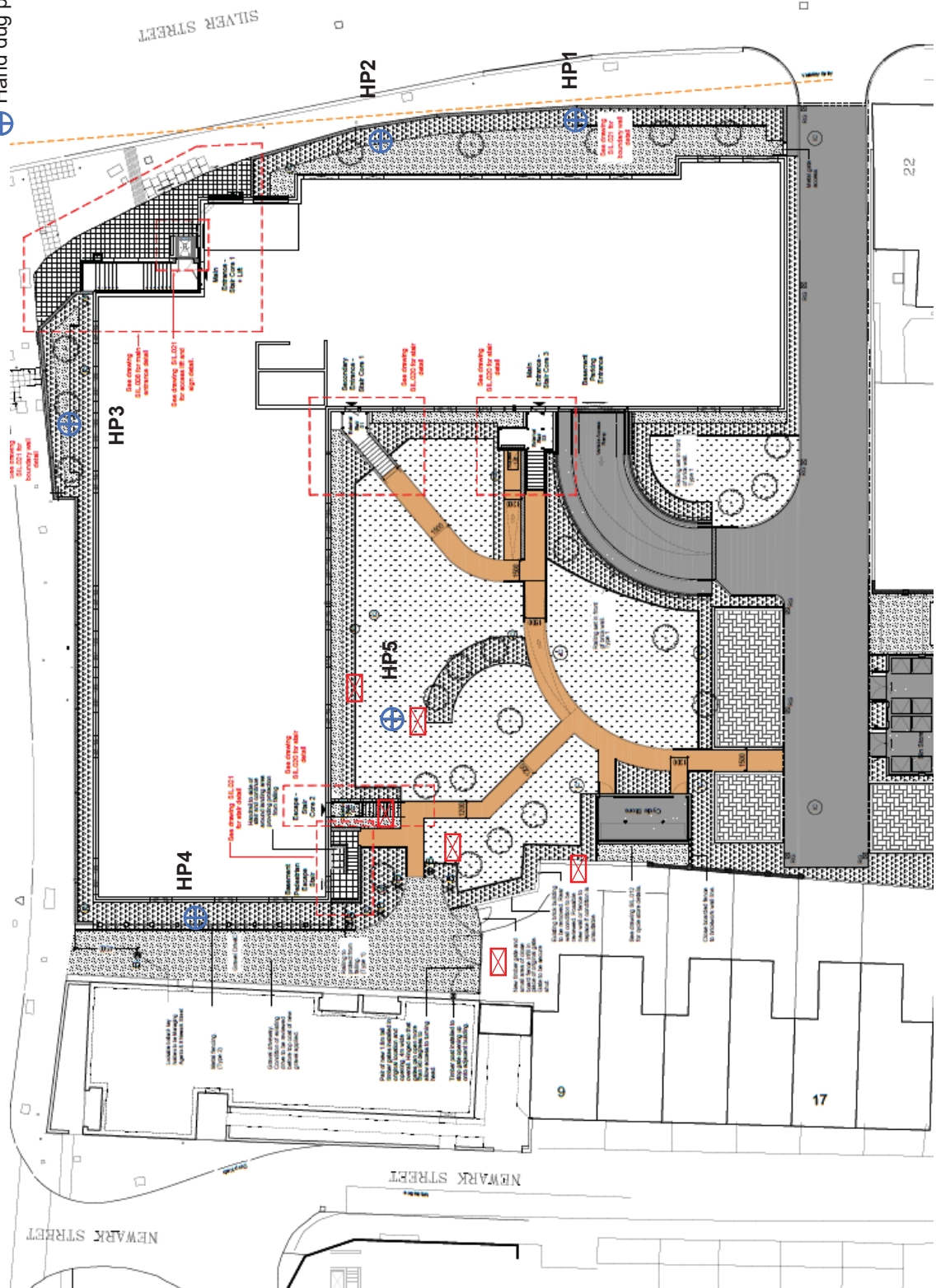
Drawing File
28957 (R03-00) Fig 2.dwg

Drawing No.
FIGURE 2

Rev.
P1



⊕ Hand dug pit locations



Development Plan

Client: Thomas Homes Ltd
Site: Crown Street, Reading
Scale: NTS

Figure No: 3
Job No: 28957 R03 (00)



APPENDIX A

SERVICE CONSTRAINTS

1. This report and the site investigation carried out in connection with the report (together the "Services") were compiled and carried out by RSK Environment Limited (RSK) for Thomas Homes Ltd (the "Client") in accordance with the terms of a contract between RSK and the Client. The Services were performed by RSK with the reasonable skill and care ordinarily exercised by an environmental consultant at the time the Services were performed. Further, and in particular, the Services were performed by RSK taking into account the limits of the scope of works required by the client, the time scale involved and the resources, including financial and manpower resources, agreed between RSK and the Client.
2. Other than that, expressly contained in paragraph 1 above, RSK provides no other representation or warranty whether express or implied, in relation to the Services.
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4. It is RSK's understanding that this report is to be used for the purpose described in the introduction to the report. That purpose was a significant factor in determining the scope and level of the Services. Should the purpose for which the report is used, or the proposed use of the site change, this report may no longer be valid and any further use of or reliance upon the report in those circumstances by the client without RSK's review and advice shall be at the client's sole and own risk. Should RSK be requested to review the report after the date of this report, RSK shall be entitled to additional payment at the then existing rates or such other terms as agreed between RSK and the client.
5. The passage of time may result in changes in site conditions, regulatory or other legal provisions, technology or economic conditions which could render the report inaccurate or unreliable. The information and conclusions contained in this report should not be relied upon in the future without the written advice of RSK. In the absence of such written advice of RSK, reliance on the report in the future shall be at the Client's own and sole risk. Should RSK be requested to review the report in the future, RSK shall be entitled to additional payment at the then existing rate or such other terms as may be agreed between RSK and the client.
6. The observations and conclusions described in this report are based solely upon the Services which were provided pursuant to the agreement between the Client and RSK. RSK has not performed any observations, investigations, studies or testing not specifically set out or required by the contract between the client and RSK. RSK is not liable for the existence of any condition, the discovery of which would require performance of services not otherwise contained in the Services. For the avoidance of doubt, unless otherwise expressly referred to in the introduction to this report, RSK did not seek to evaluate the presence on or off the site of asbestos, invasive plants, electromagnetic fields, lead paint, heavy metals, radon gas or other radioactive or hazardous materials, unless specifically identified in the Services.
7. The Services are based upon RSK's observations of existing physical conditions at the Site gained from a visual inspection of the site together with RSK's interpretation of information, including documentation, obtained from third parties and from the Client on the history and usage of the site, unless specifically identified in the Services or accreditation system (such as UKAS ISO 17020:2012 clause 7.1.6):



- a. The Services were based on information and/or analysis provided by independent testing and information services or laboratories upon which RSK was reasonably entitled to rely.
- b. The Services were limited by the accuracy of the information, including documentation, reviewed by RSK and the observations possible at the time of the visual inspection.
- c. The Services did not attempt to independently verify the accuracy or completeness of information, documentation or materials received from the client or third parties, including laboratories and information services, during the performance of the Services.

RSK is not liable for any inaccurate information or conclusions, the discovery of which inaccuracies required the doing of any act including the gathering of any information which was not reasonably available to RSK and including the doing of any independent investigation of the information provided to RSK save as otherwise provided in the terms of the contract between the Client and RSK.

8. The intrusive environmental site investigation aspects of the Services are a limited sampling of the site at pre-determined locations based on the known historic / operational configuration of the site. The conclusions given in this report are based on information gathered at the specific test locations and can only be extrapolated to an undefined limited area around those locations. The extent of the limited area depends on the properties of the materials adjacent and local conditions, together with the position of any current structures and underground utilities and facilities, and natural and other activities on site. In addition, chemical analysis was carried out for a limited number of parameters (as stipulated in the scope between the client and RSK, based on an understanding of the available operational and historical information) and it should not be inferred that other chemical species are not present.
9. Any site drawing(s) provided in this report is (are) not meant to be an accurate base plan but is (are) used to present the general relative locations of features on, and surrounding, the site. Features (intrusive and sample locations etc) annotated on site plans are not drawn to scale but are centred over the approximate location. Such features should not be used for setting out and should be considered indicative only.
10. The comments given in this report and the opinions expressed are based on the ground conditions encountered during the site work and on the results of tests made in the field and in the laboratory. However, there may be conditions pertaining to the site that have not been disclosed by the investigation and therefore could not be taken into account. In particular, it should be noted that there may be areas of made ground not detected due to the limited nature of the investigation or the thickness and quality of made ground across the site may be variable. In addition, groundwater levels and ground gas concentrations and flows, may vary from those reported due to seasonal, or other, effects and the limitations stated in the data should be recognised.
11. Asbestos is often observed to be present in soils in discrete areas. Whilst asbestos-containing materials may have been locally encountered during the fieldworks or supporting laboratory analysis, the history of brownfield and demolition sites indicates that asbestos fibres may be present more widely in soils and aggregates, which could be encountered during more extensive ground works.
12. Unless stated otherwise, only preliminary geotechnical recommendations are presented in this report and these should be verified in a Geotechnical Design Report, once proposed construction and structural design proposals are confirmed.



APPENDIX B

ASBESTOS SURVEY REPORT

1 37



M3 Asbestos Surveys Ltd

Demolition / Refurbishment Asbestos Survey Report

Comissioned By

Thomas Homes

Site Address

Silverside

8-20 London Road

Reading

Survey Conducted

3rd February 2017



Survey Conducted By

Surveyors: P Austen

Report Production

Report Prepared by: 3rd February 2017

Date: 8th February 2017

Signature:

Report Proof-Read by: I Stupples

Date: 8th February 2017

Signature:

Contact Points

M3 Asbestos Surveys Ltd
17a Murrell Green Business Park
London Road
Hook
RG27 9GR

Tel: 01256 384192
Fax: 01256 384195

Mr Adam Sibley
(Director)

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1.0 Executive Summary

1.1 – 1.3 Background

1.4 – 1.5 Scope & Purpose

1.6 – 1.9 Sources of Information

1.10 – 1.11 Presentation of Findings

1.12 Material Assessment Algorithm

1.13 CAR 2012 (expert regarding ACM removal)

2.0 References

Appendix A – Results of Laboratory Testing

Appendix B – Data Sheets

Appendix C – Summary of Findings

Appendix D – Plans

1.0 Executive Summary

Within the scope of this survey Asbestos Containing Materials (ACM's) have been identified. The incidence of asbestos and the actions recommended are summarised below.

Total number of suspect materials sampled **4**

Number of samples containing Asbestos **3**

Total Recommendations for:

- | | |
|---------------------------------------|----------|
| • Remove | 3 |
| • Encapsulate, label & manage in-situ | 0 |
| • Label & manage in-situ | 0 |
| • Manage in-situ | 0 |

Throughout the report the following colour coding is used.

Red	Laboratory analysis shows that asbestos is present in the recovered sample.
Orange	No laboratory analysis has been carried out because it was not possible to recover a sample at this location and it is considered likely that asbestos is present .
Green	Laboratory analysis shows that asbestos is not present in the recovered sample (NADIS)

Asbestos Insulation (lagging / sprayed insulation)

- N/A

Asbestos Insulation Board

- N/A

Asbestos Cement Products

- N/A

Asbestos Textile Materials

- N/A

Asbestos Composite Materials

- N/A

Materials found to be NADIS (no asbestos detected in sample)

- N/A
-

Demolition / Refurbishment Asbestos Survey – Areas Accessed		
Area	Area Accessed	Comments
Roof	Yes	New bitumen or asbestos cement
Loft Spaces	N/A	N/A
Soffits	Yes	Wooden where present
Facias	Yes	Wooden where present
Rain Water Goods	Yes	Plastic or cement
Flues / Cowl	Yes	Cement
Cavity Walls	Yes	Solid
Partition Walls	Yes	Solid or fibreboard
Ceilings	Yes	Plasterboard or fibreboard where present
Window / Door Frames	Yes	Solid
Floor Voids	Yes	No asbestos
Concealed Risers / Voids	N/A	N/A
Electrical Switchgear	Yes	Modern
Beyond Suspected / Known ACMs	N/A	N/A
Plant / Equipment	N/A	N/A
Locked Areas	No	No locked areas
Lift Shafts	N/A	N/A

Areas excluded from the scope of this survey

- Voids beyond known or suspected asbestos containing materials were not accessed.
- Soil and land testing is not covered in the remit of this survey.
- Limited surveying in areas due to condition of flooring or debris
- White floor tiles are non asbestos

Background

- 1.1 Asbestos has been used extensively in the building industry for over one hundred years and has proved to be an excellent product for a variety of uses, having many qualities such as insulation, fire and chemical resistance. Its suitability across a wide range of uses and its relatively cheap cost made it very popular, with over 3,000 different asbestos products having been recorded.
- 1.2 The use of asbestos containing materials (ACM's) was most prevalent between the 1950's and 1970's when it provided an economic, easy to use and versatile material. Unfortunately, given the constitution and make up of asbestos it can give rise to microscopic airborne fibres being released into the working environment. The fibres have carcinogenic properties, which, when inhaled can lodge in the lining of the lungs causing disease and death.
- 1.3 For this reason the use of asbestos has receded and its use in buildings was eventually banned in 1999. Despite its ban, millions of tonnes of ACM's are still present in properties and buildings throughout the UK.

Scope and Purpose

- 1.4 Thomas Homes has commissioned M3 Asbestos Surveys Ltd to undertake a Demolition / Refurbishment Asbestos Survey of Silverside. The aim of the survey was to locate and identify the presence of ACM's or suspected ACM's, as far as is reasonably practicable. This report provides a record and assessment of the extent and characteristics of ACM's. It is assumed that all ACMs identified will be removed to enable demolition / refurbishment, therefore priority assessment scores are not given.
- 1.5 This type of survey employs the use of destructive sampling techniques of an unfamiliar site. Although every effort is made to locate all asbestos containing materials, it cannot be ruled out that undiscovered ACMs may be present in inaccessible areas due to the way that ACMs were used during construction. Therefore we cannot give assurances that all asbestos containing materials have been located and as such we recommend that further sampling be undertaken, should any suspect material become accessible during the course of any demolition / refurbishment works.

Site Description & Survey Purpose

Survey of former industrial units in poor condition prior to demolition

Sources of Data

Background Information

- 1.6 No background information was available concerning the location of asbestos-containing materials within the buildings on the site.

Inspection, sampling and testing

- 1.7 M3 Asbestos Surveys Ltd carried out a visual inspection of the buildings. The purpose of the inspection was to identify locations where the presence of asbestos is suspected, and to make arrangements for the recovery and testing of representative samples, where practicable. The inspection also enabled informed judgements to be made about the likelihood of asbestos being present in situations where samples could not be recovered.
- 1.8 Based on the findings of the visual inspection, representative bulk samples of materials suspected of containing asbestos were recovered. During the sampling process, care was taken to verify that the recovered samples were representative of the situation and the medium in which asbestos contamination was suspected. The sampling protocol that was used is as specified in HSG264 (Asbestos: The Survey Guide), published by the Health & Safety Executive.
- 1.9 The recovered samples were subsequently examined by Airsafe Analytical Ltd (UKAS number: 4376) to establish their asbestos content, in accordance with their in-house procedures and HSG248 (Asbestos: The analysts' guide for sampling, analysis and clearance procedures), published by the Health & Safety Executive. The analysis certificate is presented in Appendix A.

Presentation of Findings

Data Sheets

- 1.10 A series of data sheets provide assessments and recommendations for each of the locations where samples were taken. These data sheets are presented in Appendix B. The information in the data sheets is summarised in Appendix C.

Plans

- 1.11 Asbestos location plans presented in Appendix D if supplied by client at the time of the survey, shows the locations of all materials found to contain Asbestos (ACM's). Additionally areas of no access, if applicable, will be highlighted on the plans.
-

Material Assessment Algorithm

- 1.12 A material assessment algorithm for potential of fibre release has been carried out for all asbestos materials found, based on their product type, condition (extent of damage/deterioration), surface treatment and asbestos type. The method adopted is as described below;

Sample Variable	Score	Examples of scores
Product Type (or debris from product)	1	Asbestos-reinforced composites (plastics, resins, mastics, vinyl floor tiles, semi-rigid paints or decorative finishes, asbestos cement etc.).
	2	AIB, millboards, other low-density insulation boards, asbestos textiles, gaskets, ropes & woven textiles, asbestos paper & felt.
	3	Thermal insulation (e.g. pipe & boiler lagging), sprayed asbestos, loose asbestos, asbestos mattresses & packing.
Extent of Damage / Deterioration	0	Good Condition
	1	Low Damage
	2	Medium Damage
	3	High Damage
Surface Treatment	0	Composite materials (reinforced plastics, resins, vinyl tiles)
	1	Enclosed sprays & lagging, AIB (with exposed face painted or encapsulated), asbestos cement
	2	Unsealed AIB, or encapsulated lagging & sprays
	3	Unsealed lagging & sprays
Asbestos Type	1	Chrysotile
	2	Amphibole asbestos excluding crocidolite
	3	Crocidolite
Score		Potential to release fibres
10 or more		High
7 – 9		Medium
5 – 6		Low
4 or less		Very Low

Control of Asbestos Regulations

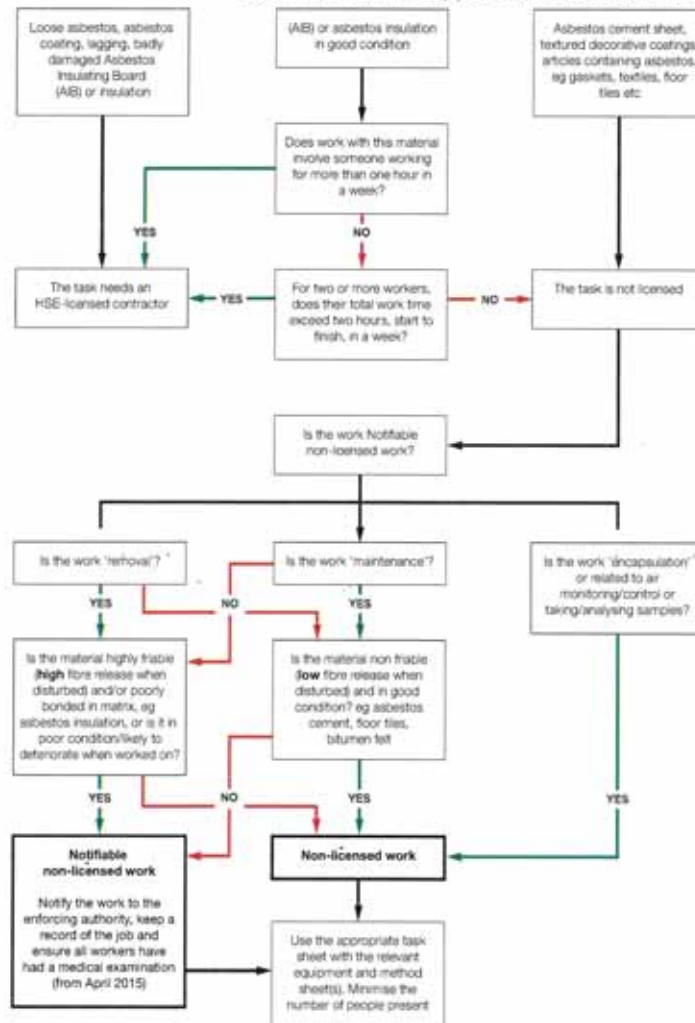
1.13 The Control of Asbestos Regulations 2012 (CAR) applies to most work situations involving risk of exposure to asbestos. CAR requires that employers:

- Take all reasonable steps to identify the locations of materials likely to contain asbestos.
 - Assume that the identified materials contain asbestos, unless there is evidence to the contrary.
 - Keep an up to date written record (an **Asbestos Register**) of the location of asbestos-containing materials.
 - Monitor the condition of asbestos-containing materials.
 - If any remedial / removal works are required it should be determined whether the work is licensed, notifiable non-licensed or non-licensed. This has to be determined in each case and will depend on the type of work being carried out, the type of material and its condition (as shown in the decision flow chart below).
 - Some non-licensed work needs to be notified to the relevant enforcing authority.
 - Brief written records should be kept of non-licensed work, which has to be notified e.g. copy of the notification with a list of workers on the job, plus the level of likely exposure of those workers to asbestos. This does not require air monitoring on every job, if an estimate of degree of exposure can be made based on experience of similar past tasks or published guidance.
 - By April 2015, all workers / self-employed carrying out notifiable non-licensed work with asbestos must be under health surveillance by a Doctor. Workers who are already under health surveillance for licensed work need not have another medical examination for non-licensed work. BUT medicals for notifiable non-licensed work are not acceptable for those carrying out licensed work
 - Make a written assessment of the risk of exposure from asbestos.
 - The Regulations require mandatory training for anyone liable to be exposed to asbestos fibres at work. This includes maintenance workers and others who may come into contact with or who may disturb asbestos as well as those involved in asbestos removal work.
 - Prepare and implement a **management plan** to control asbestos-related health risks, including measures to ensure that:
 - Materials known or presumed to create a risk of exposure to asbestos is repaired or, if necessary removed.
-

- Materials known or presumed to contain asbestos, but which does not pose a risk of exposure, are maintained in a good state of repair.
- Information about the location and condition of materials known or presumed to contain asbestos are given to anyone likely to disturb them.

Decision flow chart

Use this simple flow chart to help you decide who needs to do the work:



2.0 REFERENCES

- (1) HSG264 Asbestos: The Survey Guide**
HSE Books
 - (2) HSG248 Asbestos: The analysts ' guide for sampling, analysis and clearance procedures.**
Methods for the Determination of Hazardous Materials, HSE Books
 - (3) HSG227 A Comprehensive Guide to Managing Asbestos in Premises**
HSE Books
 - (4) The Control of Asbestos Regulations 2012**
 - (5) Working with materials containing Asbestos**
Approved Code of Practice (CAR 2012)
-

Appendix A

Results of Laboratory Testing
(Bulk Sample Identification Certificates)



AIRSAFE ANALYTICAL LTD
14 NORMANDY STREET, ALTON, HANTS, GU34 1BX

TEL: 01420 88883 / 89990 email: info@airsafe.org.uk



Certificate of Analysis

Job Number :	AA9246	Date :	15/02/17	Analyst :	RW
Name & Address of Client :		Site Address :			
M3 Asbestos Ltd		Silverside			
17a Murrell Green Business Park		8 – 20 London Road			
London Road		Reading			
Hook					
Hants					
Postcode :	RG27 9GR	Tel :	01256 384192	Postcode :	
Date Samples Taken :	Unknown		Certificate Number :	1 of 1	
Date Samples Received :	14/02/17		Total Number of Samples :	4	
Date of Analysis :	15/02/17		Clients Representative :	Adam Sibley	
Samples collected by the client are evaluated using information provided by the client at the time of delivery. Airsafe Analytical Limited are not responsible for the accuracy and / or competence of the sampling by third parties. Under these circumstances Airsafe Analytical Limited cannot be held responsible for the interpretation of the results shown. All samples of material, detailed below, have been examined to determine the presence of Asbestos fibres using Polarised Light Microscopy and the McCrone Dispersion Staining Technique in accordance with Airsafe Analytical Limited's documented "in-house" procedures which are based on the HSE's guidance note HSG248 - Asbestos: The Analysts' guide for sampling analysis and clearance procedures.					
AA Sample Reference	Client Sample Number	Sample Description / Material Type		Fibre Type Detected	
B01		Cement wall sheets + flue		CHRYSTILE CROCIDOLITE	
B02		Cement roof sheets		CHRYSTILE	
B03		Boiler room panels		AMOSITE	
B04		Board		NADIS	
NADIS = No Asbestos Detected In Sample					
All samples will be retained by the laboratory for a minimum of 6 months from the date the samples were received.					
Authorised by :	R. Wren		Date :	15/02/17	Time : 1505
Signature :					
ISSUE NUMBER	7		DATE	FEB 2017	

This Certificate may only be reproduced in FULL and with the written authority of the issuing laboratory.

Appendix B

Data Sheets

Sample Ref: B01

Location: Wall sheets and flue pipe



Material Sampled: Cement wall sheets and flues

Analysis Result: **Crocidolite (blue) Asbestos**

Approximate Quantity: 100m2 and 12lm flue

Product Type: **Asbestos Re-inforced Composites**

Condition: **Low Damage**

Surface Treatment: **Cement / Sealed AIB / Enclosed Lagging**

Material Assessment Score: **6**

Remarks / Recommendations: **Remove prior to demolition**

Sample Ref: B02

Location: Roof sheets



Material Sampled: Roof sheets to both units

Analysis Result: **Chrysotile (white) Asbestos**

Approximate Quantity: 400m2

Product Type: **Asbestos Re-inforced Composites**

Condition: **Low Damage**

Surface Treatment: **Cement / Sealed AIB / Enclosed Lagging**

Material Assessment Score: **4**

Remarks / Recommendations: **Remove**

Sample Ref: B03

Location: Boiler room left hand building



Material Sampled: Insulation board lining

Analysis Result: **Amosite (brown) Asbestos**

Approximate Quantity: 15m2

Product Type: **AIB / Millboards / Textiles**

Condition: **Low Damage**

Surface Treatment: **Unsealed AIB / Encapsulated Lagging**

Material Assessment Score: **7**

Remarks / Recommendations: **Remove**

This form of asbestos requires a licensed removal company and 14 day notification to HSE

Sample Ref: B04

Location: Throughout warehouses



Material Sampled: Fibreboard

Analysis Result:

No Asbestos Detected

Approximate Quantity:

Product Type:

Condition:

Surface Treatment:

Material Assessment Score: **0**

Remarks / Recommendations:

Appendix C

Summary of Findings

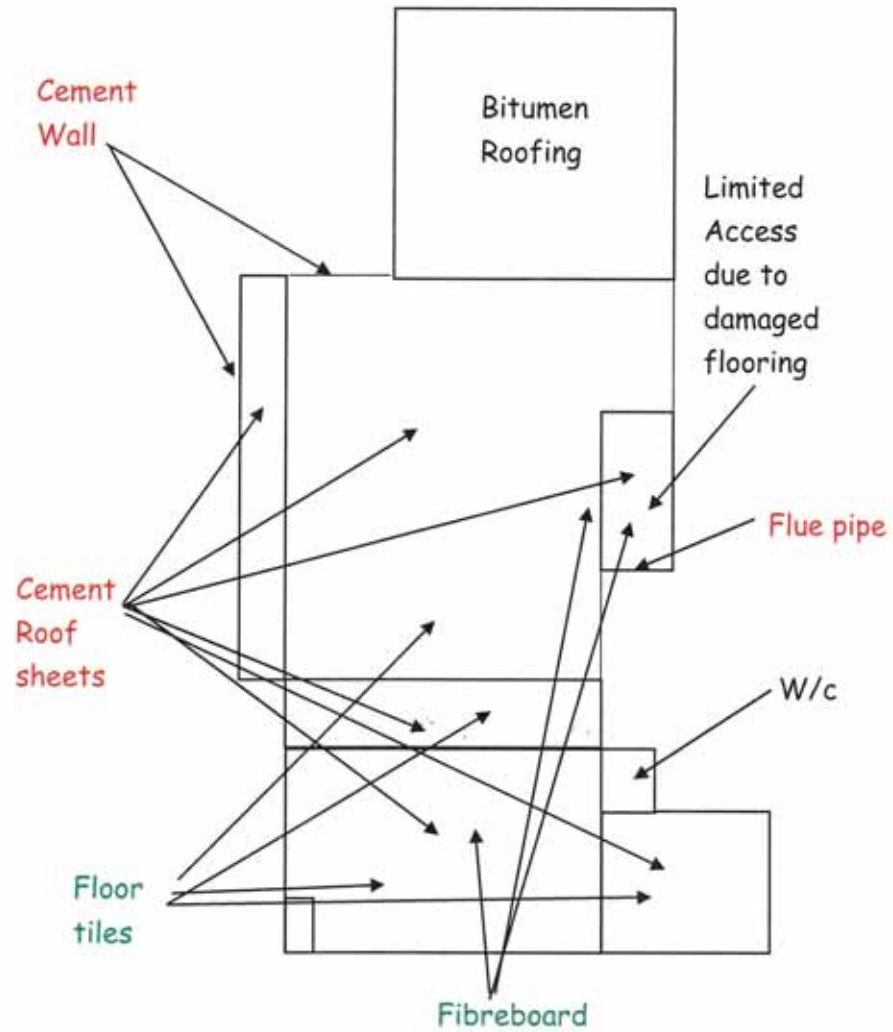
No	Location	Material Sampled	Asbestos Content	Quantity
B01	Wall sheets and flue pipe	Cement wall sheets and flues	Crocidolite (blue) Asbestos	100m2
B02	Roof sheets	Roof sheets to both units	Chrysotile (white) Asbestos	400m2
B03	Boiler room left hand building	Insulation board lining	Amosite (brown) Asbestos	15m2
B04	Throughout warehouses	Fibreboard	No Asbestos Detected	N/A

Appendix D

Asbestos Location Plan

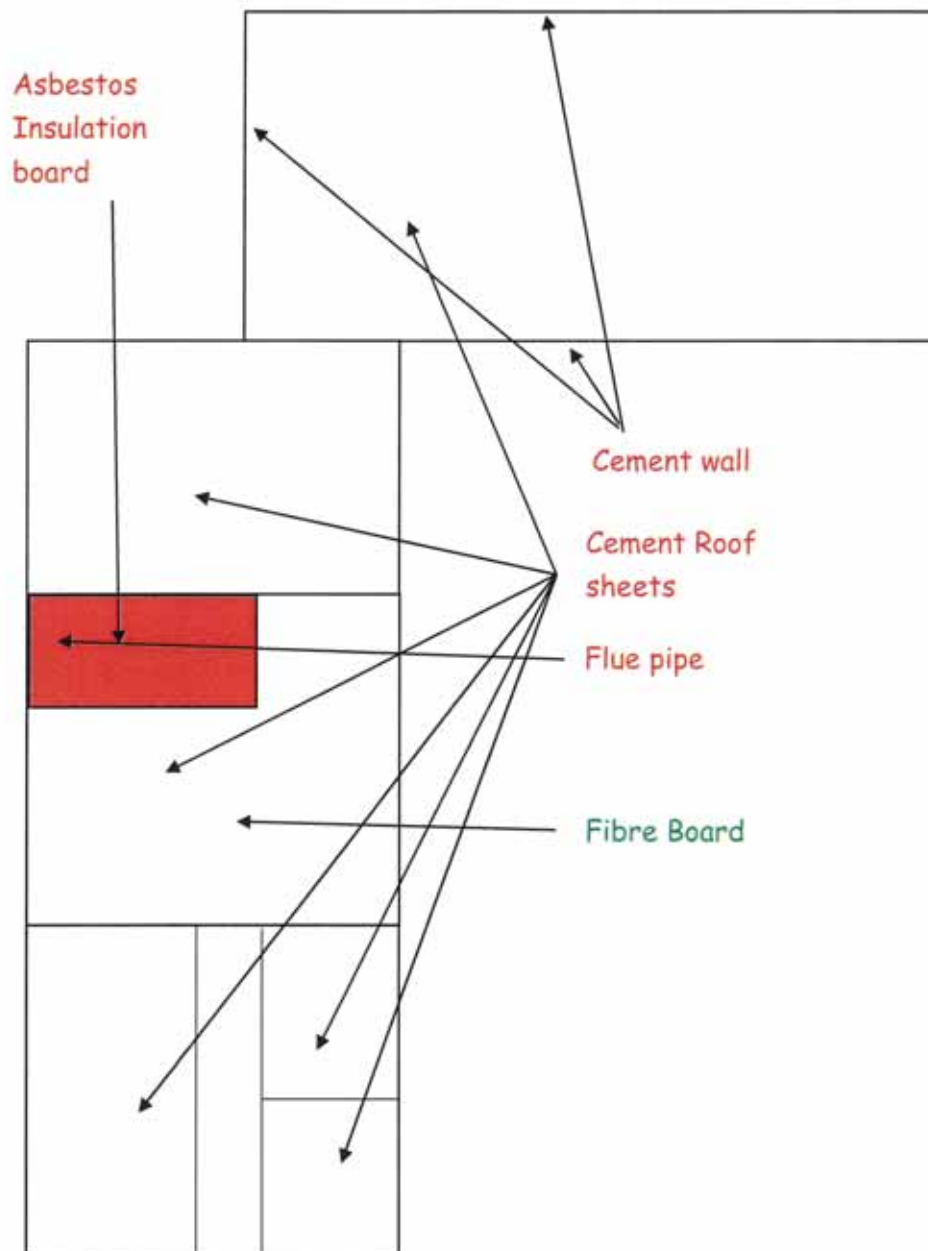
Silver Side

Warehouse one



Silver Side

Warehouse Two





APPENDIX C

WASTE TRANSFER RECORDS/ FUEL TANK DECOMMISSIONING RECORD

Tony Herbert

From: Richard Harris <Richard.Harris@jmouldreading.co.uk>
Sent: 17 October 2017 16:00
To: Tony Herbert
Subject: Asbestos Silver Street

Afternoon Tony

Please see below as requested

Date	Vehicle	Driver	Ticket No	Customer	Site	Order No	Loaded
20.06.17	JM15 JAY	Dypka	148853	J Mould	740 Silver St Rdg	RoRo Asbestos Away	I
23.06.17	T10 OJM JM14	Dypka	148863	J Mould	470 Silver St Rdg	RoRo Asbestos Away	I
14.07.17	JAY JM04	Dypka	157454	J Mould	740 Silver St Rdg	RoRo Asbestos Away	I
19.06.17	JMO	Dypka	148852	J Mould	740 Silver St Rdg	Skip Asbestos Away	Hi

Richard Harris
Demolition Manager

J. Mould (Reading)

Hydecrete Pit, Pingewood Road North, Burghfield Bridge, Reading, RG30 3XN

T: 0118 9575555 (Option 2)

M: 07557509541

E: Richard.Harris@jmouldreading.co.uk

W: www.jmouldreading.co.uk



National Federation of Demolition Contractors
Voice of the Global Demolition Industry

23.06.17	T10 OJM JM14	Dypka	148863	J Mould	470 Silver St Rdg	RoRo Asbestos Away	Biffa
14.07.17	JAY JM04	Dypka	157454	J Mould	740 Silver St Rdg	RoRo Asbestos Away	Biffa
19.06.17	JMO	Dypka	148852	J Mould	740 Silver St Rdg	Skip Asbestos Away	Hills 4

Richard Harris
Demolition Manager

J. Mould (Reading)

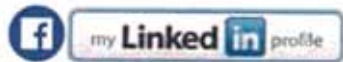
Hydecrete Pit, Pingewood Road North, Burghfield Bridge, Reading, RG30 3XN

T: 0118 9575555 (Option 2)

M: 07557509541

E: Richard.Harris@jmouldreading.co.uk

W: www.jmouldreading.co.uk



National Federation of Demolition Contractors
Voice of the Global Demolition Industry



INDUSTRIAL / MARINE CLEANING WORK RECORD / WASTE TRANSFER NOTE DUTY OF CARE

Unit 15, Scott Business Park, Beacon Park Road, Plymouth, Devon, PL2 2PB
Waste Carriers Registration Number: CBD38113 Company Reg No. 08903417

No. 00187

CLIENT	T MOUNT DEMO	TASK DESCRIPTION	TRUNK CLEAN	WEEK COMMENCING / DATE	16-6-2017	SIC CODE		EWC	
SITE ADDRESS	PCADINS	INVOICE NUMBER		VEHICLE REG	W15 UON				
		REF/ORDER No.					Driver's Signature		
CLIENT	LOCATION	START TIME	FINISH TIME	OPERATOR	WORK DESCRIPTION				
	SILVER STREET			1 G. PARSONS					
	PCADINS			2 G. COOPER	TRUCK TO CLEAN				
				3	FROM TOP OF CAR				
				4					
				5					
				6					

ADDITIONAL EQUIPMENT (TICK IF USED)	✓	HIRED PLANT		MATERIALS USED		DOCUMENTATION	
RESCUE TEAM						CONFINED SPACE PERMIT No.	
TANKER						SAFE SYSTEM OF WORK No.	
MULTI PURPOSE DEEP SUCTION UNIT						GAS FREE / GAS FREE ENTRY No.	
CONFINED SPACE EQUIPMENT						TASK No.	

PRODUCERS DECLARATION I classify the above waste stream as Non-Hazardous under the Hazardous Waste regulations 2005 unless accompanied by a Hazardous Waste Consignment Note and that the work has been carried out to my satisfaction and I confirm I have fulfilled my duty to apply the waste hierarchy in line with regulations 12 of the waste (England and Wales) Regulations 2011 SI 988 Signed on behalf of customer. <i>[Signature]</i> Print Name <i>[Name]</i> Date <i>[Date]</i> Time <i>[Time]</i>	DISPOSAL SITE ACCEPTANCE I classify that the waste described has been accepted in accordance with our site licence. Signed on behalf of customer. <i>[Signature]</i> Print Name <i>[Name]</i> Date <i>[Date]</i> Time <i>[Time]</i>	DISPOSAL / TREATMENT DETAILS WASTE DESCRIPTION <i>[Description]</i> VOLUME / WEIGHT <i>[Volume/Weight]</i> UNIT / QUANTITY <i>[Unit/Quantity]</i> LIC / REF No. <i>[Lic/Ref No.]</i>
--	---	--

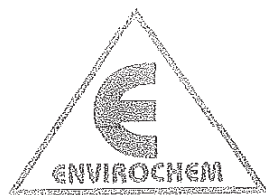
Unit 15, Scott Business Park, Beacon Park Road, Plymouth, Devon, PL2 2PB
Waste Carriers Registration Number: CBD38113 Company Reg No. 08903417

CLIENT	SITE ADDRESS	TASK DESCRIPTION	INVOICE NUMBER	REF/ORDER No.	LOCATION	START TIME	FINISH TIME	OPERATOR	WEEK COMMENCING / DATE	VEHICLE REG	SIC CODE	EWG.
		J Hould. READING.							Take clean.		26-6-17	
											PARSON.	
CLIENT					LOCATION	START TIME	FINISH TIME	OPERATOR	WORK DESCRIPTION			
					SILVER RD			1 G. PARSONS				
					Reading			2 D. RIDGES				
								3				
								4				
								5				
								6				

ADDITIONAL EQUIPMENT (TICK IF USED)	✓	HIRED PLANT	MATERIALS USED	DOCUMENTATION
RESCUE TEAM				CONFINED SPACE PERMIT No.
TANKER		Pump	Detegant	SAFE SYSTEM OF WORK No.
MULTI PURPOSE DEEP SUCTION UNIT		Jetted		GAS FREE / GAS FREE ENTRY No.
CONFINED SPACE EQUIPMENT				TASK No.

Date..... Time.....

LIC / REF No.



ENVIROCHEM

Analytical Laboratories Ltd

12 The Gardens
Broadcut, Fareham
Hampshire. PO16 8SS



Ref No: J122141 FC2

Tel: (01329) 287777
Fax: (01329) 287755

Certificate of Reoccupation

Client name & address: J Mould Reading, Hydecrete Pit, Pingewood Road North, Burghfield Bridge, Reading RG30 3XN	
Site address: Silver Side, 8-20 London Road, Reading RG1 2ST	
Areas to be assessed and brief description of works, including dates carried out: Removal of AIB panels from boiler room. Works completed 15.6.2017	
Asbestos removal contractor name & address (if different from client):	
Name of asbestos removal contractor representative/site supervisor: Paul Satchell	
Plan of work number: 740	ASB5 notification form: DA88BAD9B2
Note: Where 'no' has been indicated in the following sections, further details are recorded on the comments page(s)	
STAGE 1 - Preliminary check of site condition and job completeness	
1.1 Plan of work checked to confirm areas to be assessed (any problems, differences, ACMs to remain are noted on comment page)	Yes ☒ No
1.2 Work areas are suitably identified/marked with warning signs	Yes ☒ No
1.3 Enclosures/air extraction intact/operating	Yes ☒ No
1.4 Hygiene facilities intact/operating	Yes ☒ No
1.5 Skip area/waste route free of obvious asbestos debris and asbestos waste sacks	Yes ☒ No
1.6 Transit route free of obvious asbestos debris and asbestos waste sacks	Yes ☒ No
1.7 Hygiene facilities free of obvious asbestos debris and asbestos waste sacks	Yes ☒ No
1.8 Enclosure area free of obvious asbestos debris and asbestos waste sacks (from external examination)	Yes ☒ No
1.9 Sufficient and suitable vision panels present	Yes ☒ No
Stage 1 start time: 11.50 Analyst: Anna Wynn Stage 1 finish time: 12.07	
Stage 1: ☒ PASS / FAIL	Date: 15.6.2017 Signature:
STAGE 2 - Thorough visual inspection	
2.1 Airlock/baglock/enclosure are free of waste bags, materials and unnecessary equipment	Yes ☒ No
2.2 All ACMs have been completely removed from the underlying surfaces	Yes ☒ No
2.3 Interior surfaces inside the enclosure are free from debris and fine settled dust	Yes ☒ No
Visual inspection start time: 12.07 Analyst (if different): - Visual inspection finish time: 12.24	
Stage 2: ☒ PASS / FAIL	Date (if different): - Signature:
The airlock, baglock and enclosure were ☒ FREE / NOT FREE of visible asbestos waste, debris and surface dust	

Stage 3 - Clearance air monitoring inside the enclosure			
3.1 All areas are dry	Yes ☒	No	
3.2 Air movers off and sealed	Yes ☒	No	
3.3 No evidence of lock down spray/sealant	Yes ☒	No	
3.4 Original floor surface uncovered	Yes ☒	No	
3.5 Disturbance using brushes	Yes ☒	No	
3.6 Time of disturbance	Start time: 12.24	Finish time: 12.27	
3.7 Area or volume of enclosure	45	m ² / m ³	
3.8 Number of air samples collected (see Fibre Counting Report)	2	Samples	
3.9 Air test results satisfactory	Yes ☒	No	
3.10 All areas within the enclosure inspected (note any inaccessible areas)	Yes ☒	No	
Time: 13.16 Analyst (if different): - Stage 3: ☒ PASS / FAIL Date (if different): - Signature:  The area is ☒ CLEARED / NOT CLEARED for the enclosure to be removed			
Stage 4 - Assessment of site for reoccupation (after the enclosure is removed)			
4.1 Former enclosure/work area and the immediate surrounding area are free from any visible debris, asbestos sacks and waste	Yes ☒	No	
4.2 Transit route and waste routes are free from any asbestos debris, asbestos sacks and waste	Yes ☒	No	
4.3 All ACMs in the scope of work have been removed and any known ACMs remaining are intact	Yes ☒	No	
Time: 14.00 Analyst (if different): - Stage 4: ☒ PASS / FAIL Date (if different): 15.6.2017 Signature:  The area ☒ CAN BE / CANNOT BE reoccupied			
Contractor's representative acknowledgement:			
I have been advised by <u>Anna Wynn</u> :			
- That the certificate of reoccupation has not been issued because the area has failed stage # ____. - That the certificate of reoccupation can be issued as the area has passed all four stages. ☒			
Name: Paul Satchell	Signature:	Date: 15.6.2017	Time: 14.00
Issue of certificate of reoccupation by the assessor:			
A copy of this certificate comprising a total of <u>6</u> pages, was issued to the above person.			
Name of Analyst: Anna Wynn	Signature: 	Date: 15.6.2017	Time: 14.00
Notes: Inspection and assessment carried out in accordance with in-house procedure 3.03 based on HSE Guidance Note HSG248			



ENVIROCHEM

Analytical Laboratories Ltd

12 The Gardens, Broadcut, Fareham

Hampshire. PO16 8SS

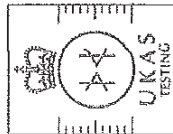
J Mould Reading, Hydecote Pit, Pingewood Road North, Burghfield Bridge, Reading RG30 3XN

CLIENT:

SITE ADDRESS: Silver Side, 8-20 London Road, Reading RG1 2ST

Our Ref: J122141 FC2

Your Ref: -



Tel: (01329) 287777
Fax: (01329) 287755

SAMPLING PROTOCOL: Clearance air monitoring

SAMPLED BY: Anna Wynn

ANALYSED BY (if different): -

DATE OF SAMPLING: 15.6.2017

DATE OF ANALYSIS (if different): -

Filter No.	Pump	Head	Location	Time on	Time off	Flow (start)	Flow (finish)	Flow (used)	Volume (V) litres	Grats (n)	Fibres (N)	Calculation fibres/ml	Reported result fibres/ml
FC1	ENV41	P10	Inside enclosure	12.24	12.54	16.0	16.0	16.0	480	200	6.0	0.003	<0.01
FC2	ILL1	AW3	Inside enclosure	12.24	12.54	16.0	16.0	16.0	480	200	4.5	0.003	<0.01

1. Unless otherwise stated, the detection limit is 0.01 fibres/ml.

2. Comments, observations and opinions are outside the scope of UKAS accreditation.

3. For clearance sampling, this report must be read in conjunction with the certificate of participation.

Equipment Numbers:

Micrometer: 14

Stage Micrometer: 11

Tally Counter: 8/LUS

Barometer: 38

Thermometer: 38

Flow Meter: 11

Environment:

Temperature (°C): 21

Pressure (mb): 1016

Correction Factor (F): -

Diam. of dust deposit (D) (mm): 22.5

Test Slide (5 bands): Yes/No

W/B Grit diameter (µm): 100

Blank Filter

Head: AW1

Graticules: -

Fibres: -

Place of Analysis:

Lab

On Site

Mob Lab

HY14 DFD

Comments Clearance monitoring following removal of AIB panels from boiler room. Results satisfactory.

SIGNATURE:

for Envirochem by an authorised signatory

ENVIR/C1/F FORMS/WORKSHEETS/02/ISSUE07/NOV06

PRINT NAME: Anna Wynn



ENVIROCHEM

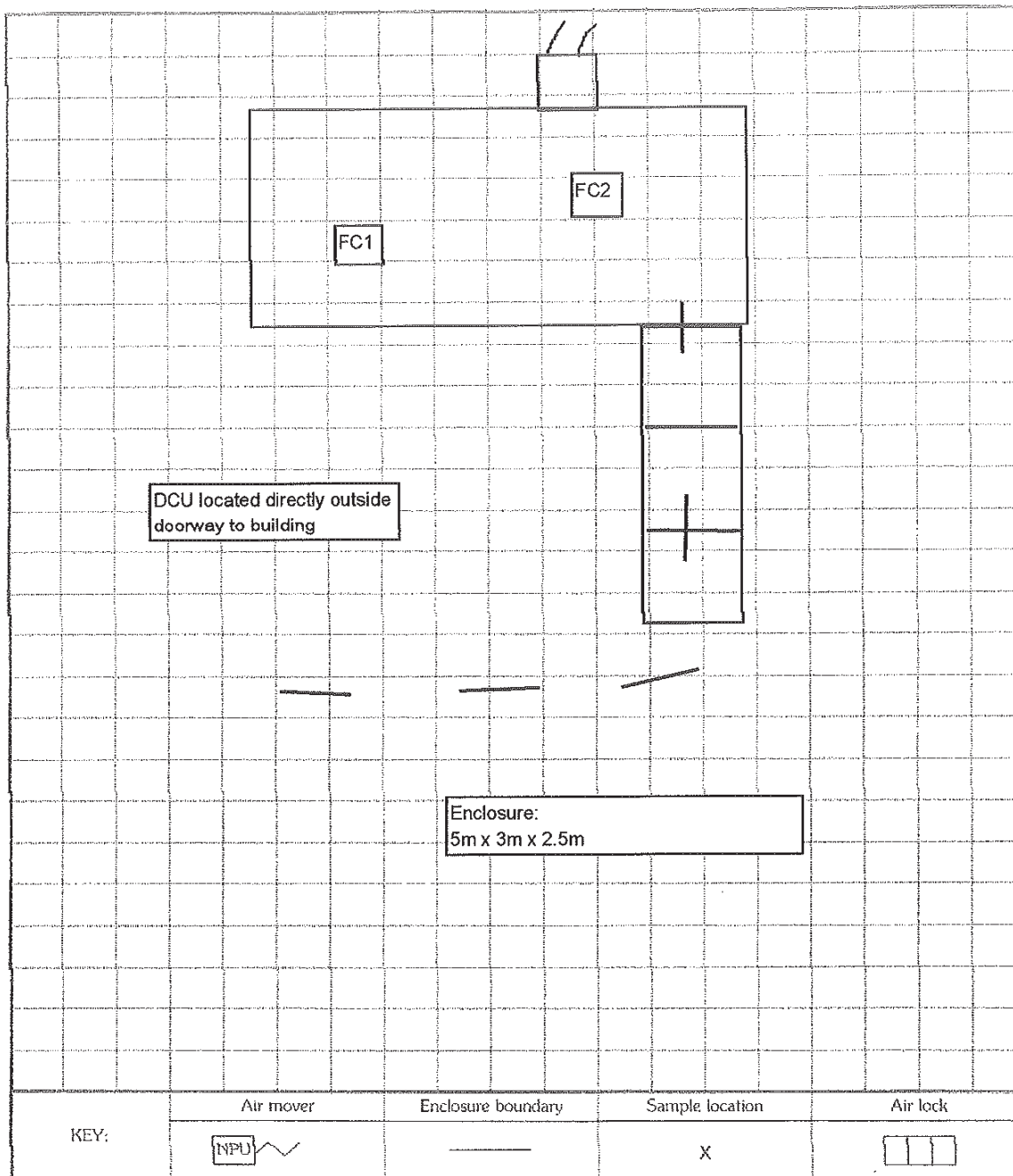
Analytical Laboratories Ltd

12 The Gardens
Broadcut, Fareham
Hampshire. PO16 8SS

Ref No: J122141 FC2

Tel: (01329) 287777
Fax: (01329) 287755

Enclosure details (Schematic Representation)



Full Name and Signature:

Date:

Time:

Analyst: Anna Wynn	15.6.2017	14.00
Contractor's Representative: Paul Satchell	15.6.2017	14.00



ENVIROCHEM

Analytical Laboratories Ltd

12 The Gardens
Broadcut, Fareham
Hampshire. PO16 8SS

Tel: (01329) 287777
Fax: (01329) 287755

Ref No: J122141 FC2

Comments and Observations

All AIB panels have been removed, and all holes in timber joists drilled. Nails in the brickwork have been removed also. Timbers and brickwork surfaces have been cleaned as far as reasonably practicable, however due to the rundown nature of the building, they are in very poor condition. All redundant metal/ pipework is very rusted.

Analyst: Anna Wynn

Signature:

Visual inspection start time: Analyst (if different):
 Visual inspection finish time:
 Stage 2: PASS / FAIL Date (if different): Signature:
 The airlock, baglock and enclosure were FREE / NOT FREE of visible asbestos waste, debris and surface dust

ENVIROCHEM/FORMS/WORKSHEETS/07/ISSUE03/APR06

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Visual inspection start time: Analyst (if different):
 Visual inspection finish time:
 Stage 2: PASS / FAIL Date (if different): Signature:
ENVIROCHEM ANALYTICAL LABORATORIES LTD
RISK ASSESSMENT FOR ASBESTOS WORK
 The airlock, baglock and enclosure were FREE / NOT FREE of visible asbestos waste, debris and surface dust

ENVIROCHEM/FORMS/WORKSHEETS/07/ISSUE03/APR06 Reference Number J122141 FC2

Analysts / surveyors Anna Wynn

PAGE of

Client J Mould Reading, Hyde Gate Pit, Pingewood Road North, Burghfield Bridge, Reading RG30 3XN
 Visual inspection start time: Analyst (if different):
 Visual inspection finish time:
 Stage 2: PASS / FAIL Date (if different): Signature:
 Site Address Silver Side, 8-20 London Road, Reading RG1 2ST
 The airlock, baglock and enclosure were FREE / NOT FREE of visible asbestos waste, debris and surface dust

ENVIROCHEM/FORMS/WORKSHEETS/07/ISSUE03/APR06

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Cleanance Reassurance Visual inspection start time: Leak Analyst (if different):
 Visual inspection finish time:
 Stage 2: PASS / FAIL Date (if different): Signature:
 Demolition Survey:
 The airlock, baglock and enclosure were FREE / NOT FREE of visible asbestos waste, debris and surface dust

ENVIROCHEM/FORMS/WORKSHEETS/07/ISSUE03/APR06

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Hazard	Risk without additional precautions L M H	Visual inspection start time: Visual inspection finish time: Date (if different):	Analyst (if different): Signature:	Risk after additional precautions L M H
Asbestos fibres	none / detail	Visual inspection start time: Visual inspection finish time: Date (if different):	Analyst (if different): Signature:	none / detail
PPE	none / detail	Visual inspection start time: Visual inspection finish time: Date (if different):	Analyst (if different): Signature:	none / detail
Working at height	none / detail	Visual inspection start time: Visual inspection finish time: Date (if different):	Analyst (if different): Signature:	none / detail
Working in roof void / on fragile roof	none / detail	Visual inspection start time: Visual inspection finish time: Date (if different):	Analyst (if different): Signature:	none / detail
Lone / remote working	none / detail	Visual inspection start time: Visual inspection finish time: Date (if different):	Analyst (if different): Signature:	none / detail
Electrical hazards	none / detail	Visual inspection start time: Visual inspection finish time: Date (if different):	Analyst (if different): Signature:	none / detail
Working on or near operable machinery or plant	none / detail	Visual inspection start time: Visual inspection finish time: Date (if different):	Analyst (if different): Signature:	none / detail
Chemical hazards & Biological hazards	none / detail	Visual inspection start time: Visual inspection finish time: Date (if different):	Analyst (if different): Signature:	none / detail
High noise levels	none / detail	Visual inspection start time: Visual inspection finish time: Date (if different):	Analyst (if different): Signature:	none / detail
Inadequate lighting	none / detail	Visual inspection start time: Visual inspection finish time: Date (if different):	Analyst (if different): Signature:	none / detail
Other specific hazards (specify)	none / detail	Visual inspection start time: Visual inspection finish time: Date (if different):	Analyst (if different): Signature:	none / detail
Ladders	none / detail	Visual inspection start time: Visual inspection finish time: Date (if different):	Analyst (if different): Signature:	none / detail

ENVIROCHEM/FORMS/WORKSHEETS/07/ISSUE03/APR06

Date: 15.6.2017

PAGE of

Risk Assessment understood and accepted by: Anna Wynn
 Visual inspection start time: Analyst (if different):
 Visual inspection finish time:
 Stage 2: PASS / FAIL Date (if different): Signature:
 ENVIROCHEM/FORMS/MISC/19/ISSUE05/JULY11/PAGE
 The airlock, baglock and enclosure were FREE / NOT FREE of visible asbestos waste, debris and surface dust

ENVIROCHEM/FORMS/WORKSHEETS/07/ISSUE03/APR06

PAGE of

Visual inspection start time: Analyst (if different):
 Visual inspection finish time:
 Stage 2: PASS / FAIL Date (if different): Signature:
 The airlock, baglock and enclosure were FREE / NOT FREE of visible asbestos waste, debris and surface dust



Notice of variation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

John Mould, Jay Thomas Mould and Jodie Samantha Mould

Reading Quarry
Berrys Lane
Burghfield Bridge
Pingewood
Reading
Berkshire
RG30 3XA

Variation application number

EPR/JB3132AR/V005

Permit number

EPR/JB3132AR

Reading Quarry

Permit number EPR/JB3132AR

Introductory note

This introductory note does not form a part of the notice

The following notice gives notice of the variation of an environmental permit.

This variation will impact upon activities referenced A1 and A2 in Schedule 1 Table S1.1. The permit is varied to allow for additional waste codes to be received under activity A1 and allow shredding of metal, acceptance and treatment of skip waste, chipping of wood, drying of plasterboard and soils and additional waste codes under activity A2. An approved Fire Prevention Plan, Dust Management Plan and a water quality testing regime for the leachate tank containing any liquids from the metal treatment area have been incorporated into Table S1.2 Operating techniques and the permitted area has also changed as part of this variation.

The schedules specify the changes made to the original permit.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit		
Description	Date	Comments
Application received EPR/HP3097LJ/A001	Duly made 02/06/2010	Application for inert landfill.
Permit determined	10/01/2011	Original permit issued to John Mould
Consolidation and variation application EPR/HP3097LJ/V002	Duly made 23/11/2011	Administrative variation application to consolidate permits EPR/HP3097LJ and EPR/LP3295ER
Variation determined	26/01/2012	Varied and consolidated permit issued in modern condition format
Variation application EPR/HP3097LJ/V003	Duly made 18/04/12	Variation to add a waste code
Variation determined	10/05/12	
Application EPR/JB3132AR/T001 (Full transfer of permit EPR/HP3097LJ)	16/08/2012	Application to transfer the permit in full to John Mould, Jay Thomas Mould and Jodie Samantha Mould
Transfer determined EPR/JB3132AR	13/11/2012	Full transfer of permit complete
Application EPR/JB3231AR/V002 (variation)	Duly made 06/01/14	Application to vary permit
Variation determined	24/02/14	Varied permit issued
Application EPR/JB3132AR/V003 (variation)	Duly made 10/04/14	Application to vary permit
Variation determined	17/06/14	Varied permit issued
Application EPR/JB3132AR/V004 (variation)	Duly made 03/09/14	Application to vary and consolidate permit

Status log of the permit		
Description	Date	Comments
Variation determined	28/11/14	Varied and consolidated permit issued
Application EPR/JB3132AR/V005 (variation)	Duly made 24/05/17	Application to vary permit
Additional information received	18/08/17	Response to Schedule 5 Notice
Additional information received	06/02/18	Response to Schedule 5 Notice
Variation determined	23/02/18	Varied permit issued

End of introductory note

Notice of variation

The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

Permit number

EPR/JB3132AR

Issued to

John Mould, Jay Thomas Mould and Jodie Samantha Mould ("the operator")

whose principal office is

**Hydecrete Pit
Pingewood Road North
Burghfield Bridge
Reading
Berkshire
RG30 3XN**

to operate a regulated facility at

**Reading Quarry
Berrys Lane
Burghfield Bridge
Pingewood
Reading
Berkshire
RG30 3XA**

to the extent set out in the schedules.

The notice shall take effect from 23/02/18

Name	Date
Rachel Sauce	23/02/2018

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

The following conditions are deleted as a result of the application made by the operator

Schedule 1 – Operations**Schedule 2 – Waste types, raw materials and fuels****Schedule 7 – Site Plan**

Schedule 2 – conditions to be amended

None

Schedule 3 – conditions to be added

The following conditions are added as a result of the application made by the operator

Conditions

2.8 Fire prevention

- 2.8.1 The operator shall take all appropriate measures to prevent fires on site and minimise the risk of pollution from them including, but not limited to, those specified in any approved fire prevention plan.
- 2.8.2 The operator shall:
 - (a) if notified by the Environment Agency that the activities are giving rise to a risk of fire, submit to the Environment Agency for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;
 - (b) implement the fire prevention plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

Schedule 1 – Operations

Table S1.1 activities		
Activity reference	Description of activities for waste operations	Limits of activities
A1: Waste Recycling Facility	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced) R3: Recycling/reclamation of organic substances which are not used as solvents R5: Recycling/reclamation of other inorganic compounds	Treatment consisting of washing and manual sorting, separation, screening or crushing of waste into different components for disposal (no more than 50 tonnes per day), or recovery. Waste types specified in Table S2.1
A2: Hazardous Waste transfer Station with treatment	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) R3: Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes) R4: Recycling/reclamation of metals and metal compounds R5: Recycling/reclamation of other inorganic materials D14: Repackaging prior to submission to any of the operations numbered D1 to D13 D9: Physico-chemical treatment resulting in final compounds or mixtures which are discarded by any of the operations numbered D1 to D12	Treatment consisting only of manual sorting, separation, chipping and drying of waste into different components for disposal (no more than 50 tonnes per day) or recovery. Treatment in shredders of metal waste for recovery or a mix of recovery and disposal shall not exceed 75 tonnes per day. The maximum quantity of hazardous waste received at the site shall not exceed 10 tonnes per day. The maximum quantity of hazardous waste stored at the site shall not exceed 10 tonnes. Asbestos waste shall be double bagged and stored within clearly identified, segregated, secure, lockable containers. There shall be no treatment of asbestos waste. Waste types as specified in table S2.2

A3: Waste recovery activity (construction of Acoustic Bund)	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) R3: Recycling/reclamation of organic substances which are not used as solvents R5: Recycling/reclamation of other inorganic compounds	Secure storage and use of wastes listed in table S2.3 for the construction work as detailed in the approved waste recovery plan. The activities shall not be carried out other than in accordance with the approved waste recovery plan.
A4: Inert Landfill	D1: Deposit into or on to land <i>Landfill for inert waste (landfill classification under the Landfill regulations 2002)</i>	The deposit of inert waste into or onto land. Receipt, handling, storage and disposal of wastes, consisting of the types and quantities specified in conditions 2.6, as an integral part of landfilling. Or for temporary deposits, the storage of inert waste on land prior to disposal for a period greater than 1 year, or, the storage of inert waste on land prior to recovery or treatment for a period greater than 3 years. Waste types as specified in tables S2.4a and S2.4b.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	The response to questions 2.1, 2.2, 2.3, 2.4 and 2.5 in Part B of the application form and Procedures Manual and Hydrological Risk Assessment	02/06/10
Additional Information	All additional information received via email	21/11/10 and 06/12/10
Response to pre-operational condition	Information received by email: - Drawing showing pre-settlement level - Report relating to elevated gas concentrations	21/04/11
Application	Table 3a – technical Standards, Part C4 of the application form: - How to Comply - EPR5.06 Guidance for the Recovery and Disposal of Hazardous and Non Hazardous Waste - EPR13 Defining Waste Recovery: Permanent Deposit of Waste on Land	08/09/11
Application	Original Waste Recovery Plan march 2011 Reading Quarry Acoustic Bund – Waste Recovery Plan & associated appendices dated March 2011 - 111114 412.01209.00002 L EA Reading Quarry response to EA queries received via email on 17 November 2011	08/09/11

Table S1.2 Operating techniques		
Description	Parts	Date Received
	- 111110 412.01209.00002 Appendix A received via email on 17 November 2011	
Additional information	111114 412.01209.00002 L EA Reading Quarry response to EA queries received via email	17/11/11
Application	Approved Waste recovery Plan GPP/M011/KM/WRP version 2 final received with variation application to include extension of the acoustic bund and variation of environmental permit to increase total tonnage - Response – drawing RQL2 Landscape proposal, received 04 March 2014 - Response – Surface water management plan, received 04 March 2014.	21/03/14
Response to Schedule 5 Notice dated 06/07/17	Dust Management Plan: Document Reference CRM 1144 003 PE R 011 A. Dated Jul 2017.	24/07/17
Response to Schedule 5 Notice dated 17/10/17	Approved Fire Prevention Plan: Document Reference CRM 1144 003 PE R 001. Dated November 2017.	10/11/17
Response to Schedule 5 Notice dated 17/10/17	Environmental Permit Variation Application Report. Document reference CRM 1144 003. Dated February 2018. Drainage, water containment and water testing arrangements are detailed in Section 4.3, Appendix I - Leachate Tank Containment Values and Appendix J – Drainage Plans.	05/02/18

Table S1.3 Annual waste input limits (Activity A4 Inert landfill)	
Category	Limit tonnes/year
Inert waste	4,000

Table S1.4 Improvement programme requirements		
Reference	Requirement	Date
IP 1	The operator shall not store or treat any combustible waste within a building until such time as a UKAS approved fire suppression system has been installed and approved by the Environment Agency.	N/A

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Permitted waste types and quantities for waste recycling facility (A1)	
Maximum quantity	The total waste accepted at the site under activity A1 shall be less than 300,000 tonnes per year
Exclusions Wastes having any of the following characteristics shall not be accepted: - Consisting solely or mainly of dusts, powders or loose fibres - Wastes that are in the form which is either sludge or liquid - Hazardous wastes	
Waste code	Description
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 04	WASTES FROM PHYSICAL AND CHEMICAL PROCESSING OF NON-METALLIFEROUS MINERALS
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
10	WASTES FROM THERMAL PROCESSES
10 12	WASTES FROM MANUFACTURE OF CERAMIC GOODS, BRICKS, TILES AND CONSTRUCTION PRODUCTS
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	wood, glass and plastic
17 02 01	wood
17 02 02	glass
17 03	bituminous mixtures, coal tar and tarred products
17 03 02	bituminous mixtures other than those mentioned in 17 03 01
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 08	track ballast other than those mentioned in 17 05 07
17 09	other construction and demolition wastes
17 09 04	wastes from the treatment of construction, demolition and excavation waste only, excluding fines from treatment of unsorted (mixed) non-hazardous waste.

19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 09	minerals (for example sand, stones)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
19 13	wastes from soil and groundwater remediation
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 02	garden and park wastes (including cemetery waste)
20 02 02	soil and stones
20 02 03	other non-biodegradable wastes

Table S2.2 Permitted waste types and quantities for Hazardous Waste transfer Station with treatment (A2)	
Maximum quantity	The total waste accepted at the site under activity A2 shall be less than 60,000 tonnes per year
Exclusions Wastes having any of the following characteristics shall not be accepted: - Consisting solely or mainly of dusts, powders or loose fibres - Wastes that are in the form which is either sludge or liquid	
Waste code	Description
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 03	plant-tissue waste
02 01 04	waste plastics (except packaging)
02 01 07	wastes from forestry
02 01 10	waste metal
03	WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD
03 01	wastes from wood processing and the production of panels and furniture
03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
10	WASTES FROM THERMAL PROCESSES
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
12	WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS
12 01	wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01 01	ferrous metal filings and turnings
12 01 03	non-ferrous metal filings and turnings
15	Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	packaging (including separately collected municipal packaging waste)
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 04	metallic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging

15 01 09	textile packaging
15 01 10*	packaging containing residues of or contaminated by hazardous substances
15 01 11*	metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers
16	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 02	wastes from electrical and electronic equipment
16 02 09*	transformers and capacitors containing PCBs
16 02 10*	discarded equipment containing or contaminated by PCBs other than those mentioned in 16 02 09
16 02 11*	discarded equipment containing chlorofluorocarbons, HCFC, HFC
16 02 12*	discarded equipment containing free asbestos
16 02 13*	discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13
16 05	gases in pressure containers and discarded chemicals
16 05 04*	gases in pressure containers (including halons) containing hazardous substances
16 05 05	gases in pressure containers other than those mentioned in 16 05 04
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	wood, glass and plastic
17 02 01	wood
17 02 02	glass
17 02 03	plastic
17 03	bituminous mixtures, coal tar and tarred products
17 03 02	bituminous mixtures other than those mentioned in 17 03 01
17 04	metals (including their alloys)
17 04 01	copper, bronze, brass
17 04 02	aluminium
17 04 03	lead
17 04 04	zinc
17 04 05	iron and steel
17 04 06	tin
17 04 07	mixed metals
17 04 09*	metal waste contaminated with hazardous substances
17 04 10*	cables containing oil, coal tar and other hazardous substances
17 04 11	cables other than those mentioned in 17 04 10

17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 08	track ballast other than those mentioned in 17 05 07
17 06	insulation materials and asbestos-containing construction materials
17 06 01*	insulation materials containing asbestos
17 06 03*	other insulation materials consisting of or containing dangerous substances
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
17 06 05*	Construction materials containing asbestos
17 08	gypsum-based construction material
17 08 02	gypsum-based construction materials other than those mentioned in 17 08 01
17 09	other construction and demolition wastes
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 01	wastes from incineration or pyrolysis of waste
19 01 02	ferrous materials removed from bottom ash
19 01 12	bottom ash and slag other than those mentioned in 19 01 11
19 10	wastes from shredding of metal-containing wastes
19 10 01	iron and steel waste
19 10 02	non-ferrous waste
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 01	paper and cardboard
19 12 02	ferrous metal
19 12 03	non-ferrous metal
19 12 04	plastic and rubber
19 12 05	glass
19 12 07	wood other than that mentioned in 19 12 06
19 12 08	textiles
19 12 09	minerals (for example sand, stones)
19 12 10	combustible waste (refuse derived fuel)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)
20 01 01	paper and cardboard
20 01 02	glass
20 01 10	clothes

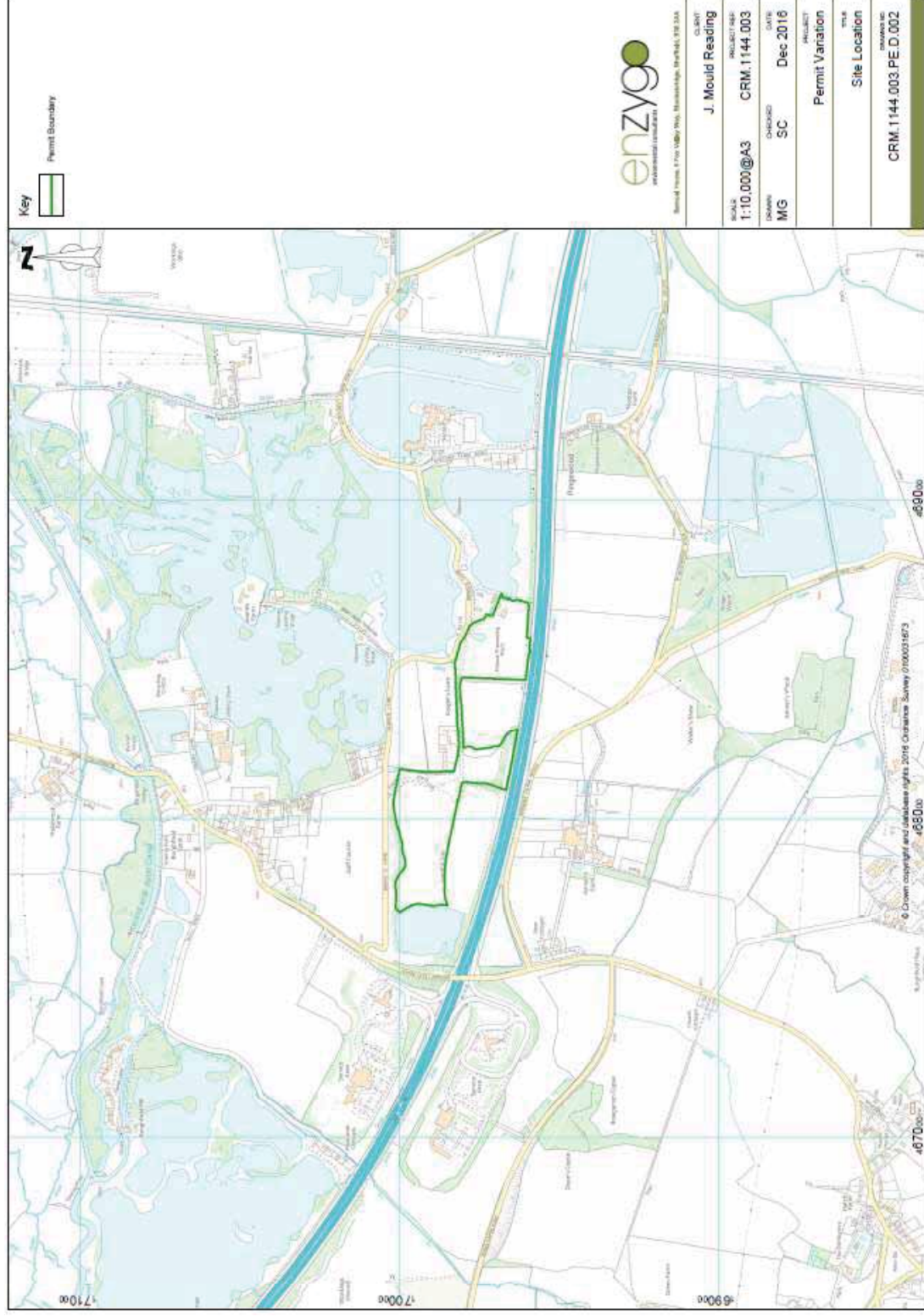
20 01 11	textiles
20 01 21*	fluorescent tubes and other mercury-containing waste
20 01 23*	discarded equipment containing chlorofluorocarbons
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 34	batteries and accumulators other than those mentioned in 20 01 33
20 01 35*	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 40	metals
20 02	garden and park wastes (including cemetery waste)
20 02 01	biodegradable waste
20 02 02	soil and stones
20 02 03	other non-biodegradable wastes
20 03	other municipal wastes
20 03 01	mixed municipal waste
20 03 03	street-cleaning residues

Table S2.3 Permitted waste types and quantities for waste recovery operation (A3)	
Maximum quantity	The total waste accepted at the site under activity A3 shall be less than 84,000 tonnes per year
Exclusions Wastes having any of the following characteristics shall not be accepted: - Consisting solely or mainly of dusts, powders or loose fibres - Wastes that are in the form which is either sludge or liquid - Hazardous wastes	
Waste code	Description
1	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 01	wastes from mineral excavation
01 01 02	wastes from mineral non-metalliferous excavation
01 04	wastes from physical and chemical processing of non-metalliferous minerals
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
10	WASTES FROM THERMAL PROCESSES
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 04	wastes from calcination and hydration of lime
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 09	minerals (for example sand, stones)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 02	garden and park wastes (including cemetery waste)
20 02 02	soil and stones

Table S2.4a Permitted waste types and quantities for inert landfill that may be accepted without testing (A4)	
Maximum quantity	The total waste accepted at the site under activity A4 shall be less than 4,000 tonnes per year
Waste code	Description
10	WASTES FROM THERMAL PROCESSES
10 11	wastes from manufacture of glass and glass products
10 11 03	waste glass-based fibrous materials
15	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01	packaging (including separately collected municipal packaging waste)
15 01 07	glass packaging
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	wood, glass and plastic
17 02 02	glass
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 05	glass
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	separately collected fractions (except 15 01)
20 01 02	glass
20 02	garden and park wastes (including cemetery waste)
20 02 02	soil and stones

Table S2.4b Permitted waste types and quantities for inert landfill that may be accepted after testing (A4)	
Maximum quantity	The total waste accepted at the site under activity A4 shall be less than 4,000 tonnes per year
Waste code	Description
1	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 01	wastes from mineral excavation
01 01 02	wastes from mineral non-metalliferous excavation
01 03	wastes from physical and chemical processing of metalliferous minerals
01 03 06	tailings other than those mentioned in 01 03 04 and 01 03 05
01 04	wastes from physical and chemical processing of non-metalliferous minerals
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
01 04 12	tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11
10	WASTES FROM THERMAL PROCESSES
10 01	wastes from power stations and other combustion plants (except 19)
10 01 01	bottom ash, slag and boiler dust (excluding boiler dust mentioned in 10 01 04)
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 09	other construction and demolition wastes
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 09	minerals (for example sand, stones)

Schedule 7 – Site Plan



Variation application number
EPRJB3132ARV005

Certificate of Registration under the Waste (England and Wales) Regulations 2011

Regulation authority

Name



Address

National Customer Service Centre
99 Parkway Avenue
Sheffield
S9 4WF

Telephone number

03708 506506

The Environment Agency certify that the following information is entered in the register which they maintain under regulation 28 of the Waste (England and Wales) Regulations 2011.

Carriers details

Name of registered carrier

John Mould

Business name (if applicable)

J Mould (Reading)

Registered as

An upper tier waste carrier, broker and dealer

Registration number

CBDU173096

Address of place of business

J MOULD (READING)
BURGHFIELD BRIDGE
READING
RG30 3XN

Telephone number

01189512222

Date of registration

9 April 2020

Expiry date of

registration (unless revoked)

29 April 2023

Making changes to your registration

Your registration will last 3 years and will need to be renewed after this period. If any of your details change, you must notify us within 28 days of the change.



APPENDIX D

TOPSOIL CHEMICAL ANALYSIS AND CONVEYANCE RECORDS

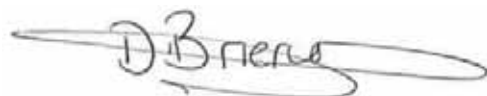
FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 20/07548
Issue Number: 1
Date: 15 September, 2020

Client: RSK Environment Ltd Hemel
18 Frogmore Road
Hemel Hempstead
Hertfordshire
UK
HP3 9RT

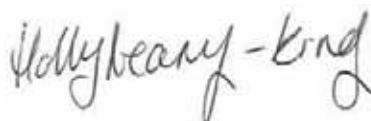
Project Manager: John Pulsford/Sylwia Mianowska
Project Name: Crown Street Reading
Project Ref: 28957
Order No: N/A
Date Samples Received: 09/09/20
Date Instructions Received: 09/09/20
Date Analysis Completed: 15/09/20

Prepared by:

A handwritten signature in black ink, appearing to read "D Brierley".

Danielle Brierley
Client Manager

Approved by:

A handwritten signature in black ink, appearing to read "Holly Neary-King".

Holly Neary-King
Client Services Supervisor

Envirolab Job Number: 20/07548

Client Project Name: Crown Street Reading

Client Project Ref: 28957

Lab Sample ID	20/07548/1	20/07548/2	20/07548/3	20/07548/4	20/07548/5			Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TS1	TS2	TS3	TS4	TS5					
Depth to Top										
Depth To Bottom										
Date Sampled	08-Sep-20	08-Sep-20	08-Sep-20	08-Sep-20	08-Sep-20					
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES					
Sample Matrix Code	6AE	6AE	6AE	6AE	6AE					
% Stones >10mm _A	<0.1	<0.1	2.1	<0.1	2.3			% w/w	0.1	A-T-044
pH _D ^{M#}	7.91	8.08	8.08	8.14	8.10			pH	0.01	A-T-031s
Sulphate (water sol 2:1) _D ^{M#}	<0.01	0.02	<0.01	0.02	<0.01			g/l	0.01	A-T-026s
Sulphate (acid soluble) _D ^{M#}	330	280	350	280	290			mg/kg	200	A-T-028s
Arsenic _D ^{M#}	3	4	3	4	6			mg/kg	1	A-T-024s
Cadmium _D ^{M#}	<0.5	<0.5	<0.5	<0.5	<0.5			mg/kg	0.5	A-T-024s
Copper _D ^{M#}	6	6	6	6	6			mg/kg	1	A-T-024s
Chromium _D ^{M#}	6	7	7	6	7			mg/kg	1	A-T-024s
Lead _D ^{M#}	9	10	10	10	9			mg/kg	1	A-T-024s
Mercury _D	<0.17	<0.17	<0.17	<0.17	<0.17			mg/kg	0.17	A-T-024s
Nickel _D ^{M#}	6	6	6	6	7			mg/kg	1	A-T-024s
Selenium _D ^{M#}	<1	<1	<1	<1	<1			mg/kg	1	A-T-024s
Zinc _D ^{M#}	32	39	34	34	32			mg/kg	5	A-T-024s

Envirolab Job Number: 20/07548

Client Project Name: Crown Street Reading

Client Project Ref: 28957

Lab Sample ID	20/07548/1	20/07548/2	20/07548/3	20/07548/4	20/07548/5			Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TS1	TS2	TS3	TS4	TS5					
Depth to Top										
Depth To Bottom										
Date Sampled	08-Sep-20	08-Sep-20	08-Sep-20	08-Sep-20	08-Sep-20					
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES					
Sample Matrix Code	6AE	6AE	6AE	6AE	6AE					
Asbestos in Soil (inc. matrix) ^										
Asbestos in soil ^o	NAD	NAD	NAD	NAD	NAD					A-T-045
Asbestos ACM - Suitable for Water Absorption Test? ^o	N/A	N/A	N/A	N/A	N/A					A-T-045

Envirolab Job Number: 20/07548

Client Project Name: Crown Street Reading

Client Project Ref: 28957

Lab Sample ID	20/07548/1	20/07548/2	20/07548/3	20/07548/4	20/07548/5			Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TS1	TS2	TS3	TS4	TS5					
Depth to Top										
Depth To Bottom										
Date Sampled	08-Sep-20	08-Sep-20	08-Sep-20	08-Sep-20	08-Sep-20					
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES					
Sample Matrix Code	6AE	6AE	6AE	6AE	6AE					
PAH-16MS										
Acenaphthene _A ^{M#}	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{M#}	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-019s
Anthracene _A ^{M#}	<0.02	<0.02	<0.02	<0.02	<0.02			mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{M#}	<0.04	<0.04	<0.04	<0.04	<0.04			mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{M#}	<0.04	<0.04	<0.04	<0.04	<0.04			mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	<0.05	<0.05	<0.05	<0.05	<0.05			mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<0.05	<0.05	<0.05	<0.05	<0.05			mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07	<0.07	<0.07	<0.07	<0.07			mg/kg	0.07	A-T-019s
Chrysene _A ^{M#}	<0.06	<0.06	<0.06	<0.06	<0.06			mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04	<0.04	<0.04	<0.04	<0.04			mg/kg	0.04	A-T-019s
Fluoranthene _A ^{M#}	<0.08	<0.08	<0.08	<0.08	<0.08			mg/kg	0.08	A-T-019s
Fluorene _A ^{M#}	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	<0.03	<0.03	<0.03	<0.03	<0.03			mg/kg	0.03	A-T-019s
Naphthalene _A ^{M#}	<0.03	<0.03	<0.03	<0.03	<0.03			mg/kg	0.03	A-T-019s
Phenanthrene _A ^{M#}	<0.03	<0.03	<0.03	<0.03	<0.03			mg/kg	0.03	A-T-019s
Pyrene _A ^{M#}	<0.07	<0.07	<0.07	<0.07	<0.07			mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{M#}	<0.08	<0.08	<0.08	<0.08	<0.08			mg/kg	0.01	A-T-019s

Envirolab Job Number: 20/07548

Client Project Name: Crown Street Reading

Client Project Ref: 28957

Lab Sample ID	20/07548/1	20/07548/2	20/07548/3	20/07548/4	20/07548/5			Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TS1	TS2	TS3	TS4	TS5					
Depth to Top										
Depth To Bottom										
Date Sampled	08-Sep-20	08-Sep-20	08-Sep-20	08-Sep-20	08-Sep-20					
Sample Type	Soil - ES	Soil - ES	Soil - ES	Soil - ES	Soil - ES					
Sample Matrix Code	6AE	6AE	6AE	6AE	6AE					
TPH CWG										
Ali >C5-C6 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s
Ali >C6-C8 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s
Ali >C8-C10 _A	<1	<1	<1	<1	<1			mg/kg	1	A-T-055s
Ali >C10-C12 _A ^{M#}	<1	<1	<1	<1	<1			mg/kg	1	A-T-055s
Ali >C12-C16 _A ^{M#}	<1	<1	<1	<1	<1			mg/kg	1	A-T-055s
Ali >C16-C21 _A ^{M#}	<1	<1	1	1	1			mg/kg	1	A-T-055s
Ali >C21-C35 _A ^{M#}	24	11	11	11	11			mg/kg	1	A-T-055s
Total Aliphatics _A	24	11	12	12	12			mg/kg	1	A-T-055s
Aro >C5-C7 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s
Aro >C8-C10 _A	<1	<1	<1	<1	<1			mg/kg	1	A-T-055s
Aro >C10-C12 _A	<1	<1	<1	<1	<1			mg/kg	1	A-T-055s
Aro >C12-C16 _A	3	2	1	1	1			mg/kg	1	A-T-055s
Aro >C16-C21 _A ^{M#}	7	6	4	3	4			mg/kg	1	A-T-055s
Aro >C21-C35 _A ^{M#}	65	56	58	48	49			mg/kg	1	A-T-055s
Total Aromatics _A	75	64	64	53	55			mg/kg	1	A-T-055s
TPH (Ali & Aro >C5-C35) _A	99	75	76	65	67			mg/kg	1	A-T-055s
BTEX - Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s
BTEX - o Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s
MTBE _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01			mg/kg	0.01	A-T-022s

REPORT NOTES

General

This report shall not be reproduced, except in full, without written approval from Envirolab.

The results reported herein relate only to the material supplied to the laboratory.

The residue of any samples contained within this report, and any received with the same delivery, will be disposed of six weeks after initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of six months after the initial Asbestos testing is completed.

Analytical results reflect the quality of the sample at the time of analysis only.

Opinions and interpretations expressed are outside the scope of our accreditation.

If results are in italic font they are associated with an AQC failure, these are not accredited and are unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.

The Client Sample No, Client Sample ID, Depth to Top, Depth to Bottom and Date Sampled were all provided by the client.

Soil chemical analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH analysis of water by method A-T-007:

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

Electrical Conductivity of water by Method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Asbestos:

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed.

Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

Predominant Matrix Codes:

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

Secondary Matrix Codes:

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,

E = contains roots/twigs.

Key:

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

Please contact us if you need any further information.



Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR
Tel. 0161 368 4921
email. ask@envirolab.co.uk

Client:	RSK Environment Ltd Hemel, 18 Frogmore Road, Hemel Hempstead, Hertfordshire, UK, HP3 9RT	Project No:	20/07548
Project:	Crown Street Reading	Date Received:	09/09/2020 (am)
Clients Project No:	28957	Cool Box Temperatures (°C):	15.1

NO DEVIATIONS IDENTIFIED

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.



TIM O'HARE ASSOCIATES
SOIL & LANDSCAPE CONSULTANCY

Mr Darren Spencer
London Rock Supplies Limited
Unit 5, Delta Court
Manor Way
Borehamwood
Hertfordshire WD6 1FJ

24th June 2020
Our Ref: TOHA/20/9520/SS
Your Ref: see below

Dear Sirs

Topsoil Analysis Report: Hatford Topsoil

We have completed the analysis of the soil sample recently submitted, referenced *Hatford Topsoil* and have pleasure reporting our findings.

The purpose of the analysis was to determine the suitability of the sample for general landscape purposes. In addition, this sample has been assessed to determine its compliance with the requirements of the British Standard for Topsoil (*BS3882:2015 – Specification for Topsoil – Table 1, Multipurpose Topsoil*).

This report presents the results of analysis for the sample submitted to our office, and it should be considered 'indicative' of the topsoil source. The report and results should therefore not be used by third parties as a means of verification or validation testing or waste designation purposes.

SAMPLE EXAMINATION

The sample was described as a dark brown (Munsell Colour 10YR 3/3), slightly moist, friable, slightly calcareous, fine to medium LOAMY SAND with a weakly developed, very fine to fine granular structure*. The sample was slightly stony and contained a low proportion of organic fines and occasional woody fragments. No unusual odours, deleterious materials, roots or rhizomes of pernicious weeds were observed.

* This appraisal of soil structure was made from examination of a disturbed sample(s). Structure is a key soil characteristic that may only be accurately assessed by examination in an in-situ state.

Tim O'Hare Associates LLP
Howbery Park Wallingford Oxfordshire OX10 8BA
T:01491 822653 E:info@toha.co.uk
www.toha.co.uk

ANALYTICAL SCHEDULE

The sample was submitted to a UKAS and MCERTS accredited laboratory for a range of physical and chemical tests to confirm the composition and fertility of the soil, and the concentration of selected potential contaminants. The following parameters were determined:

- detailed particle size analysis (5 sands, silt, clay);
- pH and electrical conductivity values;
- exchangeable sodium percentage;
- major plant nutrients (N, P, K, Mg);
- organic matter content;
- C:N ratio;
- heavy metals (As, B, Cd, Cr, Cu, Pb, Hg, Ni, Se, Zn);
- total cyanide and total (mono) phenols;
- speciated PAHs (US EPA16 suite);
- aromatic and aliphatic TPH (C5-C35 banding);
- benzene, toluene, ethylbenzene, xylene (BTEX);
- asbestos screen.

The results are presented on the attached Certificate of Analysis and an interpretation of the results is given below.

RESULTS OF ANALYSIS

Particle Size Analysis and Stone Content

The sample fell into the *loamy sand* texture class, which is usually considered suitable for general landscape applications provided the soil's physical condition is satisfactory.

Detailed particle size analysis found the sample to have a narrow particle size distribution and a predominance of *fine sand* (0.15-0.25mm) and *medium sand* (0.25-0.50mm).

The stone content of the sample was low and, as such, stones should not restrict the use of the soil for general landscape purposes.

pH and Electrical Conductivity Values

The sample was alkaline in reaction (pH 7.9). This pH value would be considered suitable for general landscape purposes providing species with a wide pH tolerance or those known to prefer alkaline soils are selected for planting, turfing and seeding.

The electrical conductivity (salinity) value (water extract) was low, which indicates that soluble salts were not present at levels that would be harmful to plants.

The electrical conductivity value by CaSO₄ extract (BS3882 requirement) fell below the maximum specified value (3300 µS/cm) given in BS3882:2015 – Table 1.

Organic Matter and Fertility Status

The sample was adequately supplied with organic matter and all major plant nutrients.

The C:N ratio of the sample was acceptable for general landscape purposes.

Potential Contaminants

With reference to BS3882:2015 - Table 1: Notes 3 and 4, there is a recommendation to confirm levels of potential contaminants in relation to the topsoil's proposed end use. This includes human health, environmental protection and metals considered toxic to plants. In the absence of site-specific assessment criteria, the concentrations that affect human health have been compared with the *residential with homegrown produce* land use in the Suitable For Use Levels (S4ULs) presented in *The LQM/CIEH S4ULs for Human Health Risk Assessment* (2015) and the DEFRA SP1010: *Development of Category 4 Screening Levels (C4SLs) for Assessment of Land Affected by Contamination – Policy Companion Document* (2014).

Of the potential contaminants determined, none was found at levels that exceed their guideline values.

Phytotoxic Contaminants

Of the phytotoxic (toxic to plants) contaminants determined (copper, nickel, zinc), none was found at levels that exceeded the maximum permissible levels specified in *BS3882:2015 – Table 1*.

CONCLUSION

The purpose of the analysis was to determine the suitability of the topsoil sample for general landscape purposes. The analysis has also been undertaken to determine the sample's compliance with the requirements of the British Standard for Topsoil (*BS3882:2015 – Specification for Topsoil – Table 1, Multipurpose Topsoil*).

From the soil examination and subsequent laboratory analysis, the sample was described as an alkaline, non-saline, slightly calcareous loamy sand with an adequate structure and low stone content. The sample contained sufficient reserves of organic matter and all major plant nutrients. Of the potential contaminants determined, none exceeded their guideline values.

To conclude, based on our findings, the topsoil represented by this sample would be considered suitable for general landscape purposes provided species with a wide pH tolerance or those known to prefer alkaline soils are selected and the soil's physical condition is satisfactory.

The topsoil was also fully compliant with the requirements of the British Standard for Topsoil (*BS3882:2015 – Specification for Topsoil – Table 1, Multipurpose Topsoil*).

RECOMMENDATIONS

Soil Handling Recommendations

It is important to maintain the physical condition of the soil and avoid structural damage during all phases of soil handling (e.g. stockpiling, resspreading, cultivating, planting, seeding or turfing). As a consequence, soil handling operations should be carried out when soil is reasonably dry and non-plastic (friable) in consistency.

It is important to ensure that the soil is not unnecessarily compacted by trampling or trafficking by site machinery, and soil handling should be stopped during and after heavy rainfall and not continued until the soil is friable in consistency. If the soil is structurally damaged and compacted at any stage during the course of soiling or landscaping works, it should be cultivated appropriately to relieve the compaction and to restore the soil's structure prior to any planting, turfing or seeding.

Further details on soil handling are provided in Annex A of *BS3882:2015*.

We hope this report meets with your approval and provides the necessary information. Please do not hesitate to contact the undersigned if we can be of further assistance.

Yours faithfully


Aaron Cross
BSc MSc
Soil Scientist


Ceri Spears
BSc MSc MScSoilSci
Senior Associate

For and on behalf of Tim O'Hare Associates LLP



TIM O'HARE ASSOCIATES
SOIL & LANDSCAPE CONSULTANCY

Client:	London Rock Supplies Limited
Project:	Hatford Topsoil
Job:	Topsoil Analysis (BS3882:2015)
Date:	24/06/2020
Job Ref No:	TOHA/20/9520/SS

Sample Reference		
		Accreditation
Clay (<0.002mm)	%	UKAS
Silt (0.002-0.05mm)	%	UKAS
Very Fine Sand (0.05-0.15mm)	%	UKAS
Fine Sand (0.15-0.25mm)	%	UKAS
Medium Sand (0.25-0.50mm)	%	UKAS
Coarse Sand (0.50-1.0mm)	%	UKAS
Very Coarse Sand (1.0-2.0mm)	%	UKAS
Total Sand (0.05-2.00mm)	%	UKAS
Texture Class (UK Classification)	--	UKAS
Stones (2-20mm)	% DW	GLP
Stones (20-50mm)	% DW	GLP
Stones (>50mm)	% DW	GLP

pH Value (1:2.5 water extract)	units	UKAS
Electrical Conductivity (1:2.5 water extract)	uS/cm	UKAS
Electrical Conductivity (1:2 CaSO ₄ extract)	uS/cm	UKAS
Exchangeable Sodium Percentage	%	UKAS
Organic Matter (LOI)	%	UKAS
Total Nitrogen (Dumas)	%	UKAS
C : N Ratio	ratio	UKAS
Extractable Phosphorus	mg/l	UKAS
Extractable Potassium	mg/l	UKAS
Extractable Magnesium	mg/l	UKAS

Total Arsenic (As)	mg/kg	MCERTS
Total Cadmium (Cd)	mg/kg	MCERTS
Total Chromium (Cr)	mg/kg	MCERTS
Hexavalent Chromium (Cr VI)	mg/kg	MCERTS
Total Copper (Cu)	mg/kg	MCERTS
Total Lead (Pb)	mg/kg	MCERTS
Total Mercury (Hg)	mg/kg	MCERTS
Total Nickel (Ni)	mg/kg	MCERTS
Total Selenium (Se)	mg/kg	MCERTS
Total Zinc (Zn)	mg/kg	MCERTS
Water Soluble Boron (B)	mg/kg	MCERTS
Total Cyanide (CN)	mg/kg	MCERTS
Total (mono) Phenols	mg/kg	MCERTS

Naphthalene	mg/kg	MCERTS
Acenaphthylene	mg/kg	MCERTS
Acenaphthene	mg/kg	MCERTS
Fluorene	mg/kg	MCERTS
Phenanthrene	mg/kg	MCERTS
Anthracene	mg/kg	MCERTS
Fluoranthene	mg/kg	MCERTS
Pyrene	mg/kg	MCERTS
Benzo(a)anthracene	mg/kg	MCERTS
Chrysene	mg/kg	MCERTS
Benzo(b)fluoranthene	mg/kg	MCERTS
Benzo(k)fluoranthene	mg/kg	MCERTS
Benzo(a)pyrene	mg/kg	MCERTS
Indeno(1,2,3-cd)pyrene	mg/kg	MCERTS
Dibenzo(a,h)anthracene	mg/kg	MCERTS
Benzo(g,h,i)perylene	mg/kg	MCERTS
Total PAHs (sum USEPA16)	mg/kg	MCERTS

Aliphatic TPH >C5 - C6	mg/kg	MCERTS
Aliphatic TPH >C6 - C8	mg/kg	MCERTS
Aliphatic TPH >C8 - C10	mg/kg	MCERTS
Aliphatic TPH >C10 - C12	mg/kg	MCERTS
Aliphatic TPH >C12 - C16	mg/kg	MCERTS
Aliphatic TPH >C16 - C21	mg/kg	MCERTS
Aliphatic TPH >C21 - C35	mg/kg	MCERTS
Aliphatic TPH (C5 - C35)	mg/kg	MCERTS
Aromatic TPH >C5 - C7	mg/kg	MCERTS
Aromatic TPH >C7 - C8	mg/kg	MCERTS
Aromatic TPH >C8 - C10	mg/kg	MCERTS
Aromatic TPH >C10 - C12	mg/kg	MCERTS
Aromatic TPH >C12 - C16	mg/kg	MCERTS
Aromatic TPH >C16 - C21	mg/kg	MCERTS
Aromatic TPH >C21 - C35	mg/kg	MCERTS
Aromatic TPH (C5 - C35)	mg/kg	MCERTS

Benzene	mg/kg	MCERTS
Toluene	mg/kg	MCERTS
Ethylbenzene	mg/kg	MCERTS
p & m-xylene	mg/kg	MCERTS
o-xylene	mg/kg	MCERTS
MTBE (Methyl Tertiary Butyl Ether)	mg/kg	MCERTS

Asbestos Screen	ND/D	ISO 17025
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LS = LOAMY SAND

Visual Examination

The sample was described as a dark brown (Munsell Colour 10YR 3/3), slightly moist, friable, slightly calcareous, medium LOAMY SAND with a weakly developed, very fine to fine granular structure. The sample was slightly stony and contained a low proportion of organic fines and occasional woody fragments. No unusual odours, deleterious materials, roots or rhizomes of pernicious weeds were observed.

Results of analysis should be read in conjunction with the report they were issued with.

The contents of this certificate shall not be reproduced without the express written permission of Tim O'Hare Associates LLP.

Hatford Topsoil

10
4
13
35
35
2
1
86
LS
9
0
0

7.9
598
2601
2.4
4.5
0.19
14
35
633
97

8
< 0.2
9
< 4.0
11
16
< 0.3
9
< 1.0
42
1.1
< 1
< 1.0

< 0.05
< 0.05
< 0.05
< 0.05
< 0.05
< 0.05
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Not-detected


Aaron Cross
BSc MSc
Soil Scientist

EARTHLINE LTD

Hangars L6-L7
Wroughton Airfield
Wroughton, Nr Swindon
Wiltshire SN4 9LZ

Tel: 01672 841389
E-mail: tipplers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 535084

Date 17-9-2020

Arrival Time 14.15

Departure Time

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer Vfk Groundworks	Reg No. V24 EAP
Address SILVER STREET Reading	Drivers Name King
	Collected From Bladder
	Delivered To Reading
Order No	
AGGREGATES SUPPLIED	
Description BS 3882 TOPSOIL	Day Work
	Travelling
Gross	Waiting Time
Tare BY THE LOAD	Total Hours
Net	
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer. Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol. WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works. All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	SIGNED ON BEHALF OF EARTHLINE SIGNED ON BEHALF OF CUSTOMER Vincent Kelly Please print name
	Comments
WRAP RA BSEN 13242 / 13285	

EARTHLINE LTD

Hangars L6-L7
Wroughton Airfield
Wroughton, Nr Swindon
Wiltshire SN4 9LZ

Tel: 01672 841389
E-mail: tippers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 535083

Date 17-9-2020

Arrival Time

Departure Time

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer V F K Groundworks	Reg No. V24 EAE
Address SILVER STREET Reading	Drivers Name Kinky
Vince 07790 796118	Collected From Watford
Order No	Delivered To Reading
AGGREGATES SUPPLIED	
Description BS 3882 TOPSOIL	Day Work
Gross	Travelling
Tare By THE LOAD	Waiting Time
Net	Total Hours
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer. Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol. WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works. All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	SIGNED ON BEHALF OF EARTHLINE
	SIGNED ON BEHALF OF CUSTOMER Vincent Kelly
	Please print name
Comments	
WRAP RA BSEN 13242 / 13285	

EARTHLINE LTD

The Upper Lime Kiln Works
Ogbourne St. George
Nr. Marlborough, SN8 1TD

Tel: 01672 841389
Fax: 01672 841353
Accounts Fax: 01672 841177
E-mail: tipplers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 527794

Date 21/9/20

Arrival Time 08.47

Departure Time 09.00

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer <u>U FK Groundwork</u>	Reg No. <u>U123EAR</u>
Address <u>Silver street</u>	Drivers Name <u>Andrew A</u>
<u>Reading</u>	Collected From <u>Hatford</u>
Order No	Delivered To <u>Reading</u>
AGGREGATES SUPPLIED	
Description <u>B5 3882 Topsoil</u>	Day Work
Gross	Travelling
Tare <u>1 x LOAD</u>	Waiting Time
Net	Total Hours
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer.	SIGNED ON BEHALF OF
Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol.	EARTHLINE <u>A. [Signature]</u>
WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works.	SIGNED ON BEHALF OF
All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	CUSTOMER <u>[Signature]</u>
WRAP RA BSEN 13242 / 13285	Please print name <u>A Hill</u>
	Comments

EARTHLINE LTD

Hangars L6-L7
Wroughton Airfield
Wroughton, Nr Swindon
Wiltshire SN4 0QZ

Tel: 01672 841389
E-mail: tippers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 538632

Date 21-9-20

Arrival Time 0845

Departure Time 0855

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer VFK Grandlocks Address Silver Street READING	Reg No. WU20 DHV Drivers Name Adam
Order No	Collected From HATFIELD Delivered To READING
AGGREGATES SUPPLIED	
Description SS 1882 Top Soil	Day Work
Gross	Travelling
Tare	Waiting Time
Net 1 x 8+4 Load	Total Hours
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer. Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol. WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works. All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	SIGNED ON BEHALF OF EARTHLINE [Signature] SIGNED ON BEHALF OF CUSTOMER [Signature] Please print name A. Hill
WRAP RA BSEN 13242 / 13285	Comments

EARTHLINE LTD

The Upper Lime Kiln Works
Ogbourne St. George
Nr. Marlborough, SN8 1TD

Tel: 01672 841389
Fax: 01672 841353
Accounts Fax: 01672 841177
E-mail: tipplers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 531505

Date 4.9.20

Arrival Time 8.45

Departure Time 8.55

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer V F K Groundworks	Reg No. Y21HAN
Address THOMAS HOMER SILVER ST READING	Drivers Name TUSTIN
Order No	Collected From HATFIELD Delivered To READING
AGGREGATES SUPPLIED	
Description BS 3882 Topsoil	Day Work
Gross	Travelling
Tare By TIR LOAD	Waiting Time
Net	Total Hours
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer. Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol. WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works. All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	SIGNED ON BEHALF OF EARTHLINE SIGNED ON BEHALF OF CUSTOMER DAZ Please print name
WRAP RA BSEN 13242 / 13285	Comments

EARTHLINE LTD

The Upper Lime Kiln Works
Ogbourne St. George
Nr. Marlborough, SN8 1TD

Tel: 01672 841389
Fax: 01672 841353
Accounts Fax: 01672 841177
E-mail: tippers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 531984

Date 4/9/20

Arrival Time 0842

Departure Time 0850

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer Vfk Groundworks	Reg No. V666 EAR
Address Thomas Homes	Drivers Name Doreen Lea
Silver street Reading	
Order No	Collected From Hatford
	Delivered To Reading
AGGREGATES SUPPLIED	
Description BS3882 Topsoil	Day Work
	Travelling
Gross	Waiting Time
Tare by the load	Total Hours
Net	
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer.	SIGNED ON BEHALF OF
Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol.	EARTHLINE
WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works.	SIGNED ON BEHALF OF
All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	CUSTOMER
	Please print name Doreen
WRAP RA BSEN 13242 / 13285	Comments

EARTHLINE LTD

The Upper Lime Kiln Works
Ogbourne St. George
Nr. Marlborough, SN8 1TD

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Fax: 01672 841353
Accounts Fax: 01672 841177
E-mail: tipplers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 531507

Date 4.9.20

Arrival Time 2.35

Departure Time 2.45

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer V.F.K. GROUNDWORKS	Reg No. Y21 HAA
Address THOMAS HARRIS	Drivers Name JUSTIN
SILVER ST	
READING	Collected From HATHRO
Order No	Delivered To READING
AGGREGATES SUPPLIED	
Description BS3882 TOPSOIL	Day Work
	Travelling
Gross	Waiting Time
Tare By T.H.L. LOAD	Total Hours
Net	
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer. Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol. WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works. All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	SIGNED ON BEHALF OF EARTHLINE 
	SIGNED ON BEHALF OF CUSTOMER DAZ
	Please print name
	Comments
WRAP RA BSEN 13242 / 13285	

EARTHLINE LTD

The Upper Lime Kiln Works
Ogbourne St. George
Nr. Marlborough, SN8 1TD

Tel: 01672 841389
Fax: 01672 841353
Accounts Fax: 01672 841177
E-mail: tippers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 531985

Date 4/9/20

Arrival Time 1127

Departure Time 1130

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer Ufk Groundworks	Reg No. UG66 EAR
Address Thomas Homes	Drivers Name Darren Lee
Silver street Reading	
	Collected From Heddford
	Delivered To Reading
Order No	
AGGREGATES SUPPLIED	
Description BS3882 Topsoil	Day Work
	Travelling
Gross	Waiting Time
Tare by the load	
Net	Total Hours
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer.	SIGNED ON BEHALF OF
Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol.	EARTHLINE
WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works.	SIGNED ON BEHALF OF
All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	CUSTOMER
	Please print name A. Hill
	Comments
WRAP RA BSEN 13242 / 13285	

EARTHLINE LTD

The Upper Lime Kiln Works
Ogbourne St. George
Nr. Marlborough, SN8 1TD

Tel: 01672 841389
Fax: 01672 841353
Accounts Fax: 01672 841177
E-mail: tipplers@earthlineltd.co.uk
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No. AG 531986

Date 4/9/20

Arrival Time 1439

Departure Time 1444

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer Vfk Groundworks	Reg No. U666 EAM
Address Thomas Homes Silver street Reading	Drivers Name Dumen Lee
Order No	Collected From Holford
	Delivered To Reading
AGGREGATES SUPPLIED	
Description B53882 TOPSOIL	Day Work
	Travelling
Gross	Waiting Time
Tare by the load	Total Hours
Net	
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer. Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol. WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works. All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	SIGNED ON BEHALF OF EARTHLINE SIGNED ON BEHALF OF CUSTOMER Please print name Comments
WRAP RA BSEN 13242 / 13285	

VAT No: 569 9183 76

EARTHLINE LTD

The Upper Lime Kiln Works
Ogbourne St. George
Nr. Marlborough, SN8 1TD

Tel: 01672 841389
Fax: 01672 841353
Accounts Fax: 01672 841177
E-mail: tippers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 531506

Date 4.9.20

Arrival Time 11.25

Departure Time 11.35

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer VFK GROUNDWORKS	Reg No. Y21BAN
Address THOMAS HOMES	Drivers Name JST
SILVER ST	
READING	Collected From HATFORD
Order No	Delivered To READING
AGGREGATES SUPPLIED	
Description B33882 TOPSOIL	Day Work
	Travelling
Gross	Waiting Time
Tare BY TRK LOAD	Total Hours
Net	
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer.	SIGNED ON BEHALF OF
Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol.	EARTHLINE
WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works.	SIGNED ON BEHALF OF
All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	CUSTOMER DAZ
	Please print name
	Comments
WRAP RA BSEN 13242 / 13285	

EARTHLINE LTD

Hangars L6-L7
Wroughton Airfield
Wroughton, Nr Swindon
Wiltshire SN4 9LZ

Tel: 01672 841389
E-mail: tippers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 532994

Date 30-9-20

Arrival Time 9:00

Departure Time 9:05

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer VFK Groundworks
Address Silver Street
Reading

Order No

Reg No. V300EAR

Drivers Name Mike S

Collected From Hatford

Delivered To Reading

AGGREGATES SUPPLIED

Description BS3822
Top Soil

Gross

Tare

Net

Day Work

Travelling

Waiting Time

Total Hours

Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer.

Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol.

WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works.

All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.

SIGNED ON BEHALF OF

EARTHLINE

SIGNED ON BEHALF OF

CUSTOMER

Please print name

Comments

WRAP RA BSEN 13242 / 13285

EARTHLINE LTD

The Upper Lime Kiln Works
Ogbourne St. George
Nr. Marlborough, SN8 1TD

Tel: 01672 841389

Fax: 01672 841353

Accounts Fax: 01672 841177

E-mail: tippers@earthlineltd.co.uk

Web: www.earthlineltd.co.uk



No. AG 527841

Date 30.9.20

Arrival Time 9.00

Departure Time 9.16

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer VFK Groundworks	Reg No. V27 EAR
Address Silver Street	Drivers Name Mike
Reading	
Order No	Collected From Hatford
	Delivered To Reading
AGGREGATES SUPPLIED	
Description BS3882 Top Soil	Day Work
	Travelling
Gross	Waiting Time
Tare 1.3000	Total Hours
Net	
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer.	SIGNED ON BEHALF OF
Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol.	EARTHLINE
WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works.	SIGNED ON BEHALF OF
If Aggregates supplied are as the description on P.O.D and grading supplied and will not meet other specification.	CUSTOMER
	Please print name
	Comments

WRAP RA BSEN 13242 / 13285

VAT No: 569 9183 76

EARTHLINE LTD

Hangars L6-L7
Wroughton Airfield
Wroughton, Nr Swindon
Wiltshire SN4 0QZ

Tel: 01672 841389
E-mail: tippers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 538998

Date 30/9/20

Arrival Time 10-42

Departure Time

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer <u>VFK Groundworks</u>	Reg No. <u>Y44 EAK</u>
Address <u>Silver Street,</u>	Drivers Name <u>Danny P</u>
<u>Reading</u>	
	Collected From <u>HATFORD</u>
Order No	Delivered To
AGGREGATES SUPPLIED	
Description <u>BS TOP Soil</u>	Day Work
	Travelling
Gross <u>31,460</u>	Waiting Time
Tare <u>13,200</u>	Total Hours
Net <u>18,260</u>	
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer.	SIGNED ON BEHALF OF
Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol.	EARTHLINE
WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works.	SIGNED ON BEHALF OF
All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	CUSTOMER
WRAP RA BSEN 13242 / 13285	Please print name
	Comments

EARTHLINE LTD

Hangars L6-L7
Wroughton Airfield
Wroughton, Nr Swindon
Wiltshire SN4 0QZ

Tel: 01672 841389
E-mail: tipplers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 541058

Date 30-9-20

Arrival Time 10-40

Departure Time 10-52

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer VFK Groundworks	Reg No. Y30 EAR
Address Silver Street Reading	Drivers Name A-Loickson
Order No	Collected From Hatfield Delivered To Silver Street
AGGREGATES SUPPLIED	
Description B53882 Topsoil	Day Work
Gross	Travelling
Tare 1 Load	Waiting Time
Net	Total Hours
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer. Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol. WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works. All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	SIGNED ON BEHALF OF EARTHLINE SIGNED ON BEHALF OF CUSTOMER Please print name
WRAP RA BSEN 13242 / 13285	Comments

EARTHLINE LTD

Hangars L6-L7
Wroughton Airfield
Wroughton, Nr Swindon
Wiltshire SN4 0QZ

Tel: 01672 841389
E-mail: tippers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 541162

Date 5/10/20

Arrival Time

Departure Time

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer VFR GROUNDWORKS	Reg No. V22EAR
Address SILVER STREET. READING	Drivers Name CARL
Order No	Collected From HATFIELD
	Delivered To READING
AGGREGATES SUPPLIED	
Description 153882 TOPSOIL	Day Work
Gross	Travelling
Tare By THE LOAD	Waiting Time
Net	Total Hours
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer. Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol. WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works. All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	SIGNED ON BEHALF OF EARTHLINE SIGNED ON BEHALF OF CUSTOMER Please print name D Oliver
WRAP RA BSEN 13242 / 13285	Comments

EARTHLINE LTD

Hangars L6-L7
Wroughton Airfield
Wroughton, Nr Swindon
Wiltshire SN4 0QZ

Tel: 01672 841389
E-mail: tippers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 544660

Date 5/10/20

Arrival Time 12:35

Departure Time 12:40

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer VFK Groundworks	Reg No. Y24 EAR
Address Silver Street Reading	Drivers Name Kamil
Order No	Collected From Hatford
	Delivered To Reading
AGGREGATES SUPPLIED	
Description BS3882 Topsoil	Day Work
Gross	Travelling
Tare 1 x 8 x 4 load	Waiting Time
Net	Total Hours
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer. Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol. WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works. All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	SIGNED ON BEHALF OF EARTHLINE KD
	SIGNED ON BEHALF OF CUSTOMER x [Signature]
	Please print name x A. Hill
	Comments
WRAP RA BSEN 13242 / 13285	

EARTHLINE LTD

Hangars L6-L7
Wroughton Airfield
Wroughton, Nr Swindon
Wiltshire SN4 0QZ

Tel: 01672 841389
E-mail: tipplers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 544661

Date 5/10/20

Arrival Time 15:30

Departure Time 18:35

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer VFK Groundworks	Reg No. Y24 EAR
Address Silver Street Reading	Drivers Name Kamal
Order No	Collected From Hatford
	Delivered To Reading
AGGREGATES SUPPLIED	
Description BS3882 Topsoil	Day Work
Gross	Travelling
Tare 1 x 8 x 4 load	Waiting Time
Net	Total Hours
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer. Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol. WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works. All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	SIGNED ON BEHALF OF EARTHLINE KD
	SIGNED ON BEHALF OF CUSTOMER [Signature]
	Please print name x A. Hill
	Comments
WRAP RA BSEN 13242 / 13285	

VAT No: 569 9183 76

EARTHLINE LTD

Hangars L6-L7
Wroughton Airfield
Wroughton, Nr Swindon
Wiltshire SN4 0QZ

Tel: 01672 841389
E-mail: tippers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 541163

Date 5/10/20

Arrival Time

Departure Time

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer VFK GROUNDWORKS	Reg No. VZZEAR
Address SILVER STREET. READING	Drivers Name CARL
Order No	Collected From HATFIELD
	Delivered To READING
AGGREGATES SUPPLIED	
Description JS3882 TOPSOIL	Day Work
Gross	Travelling
Tare By THE LOAD	Waiting Time
Net	Total Hours
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer. Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol. WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works. All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	SIGNED ON BEHALF OF EARTHLINE SIGNED ON BEHALF OF CUSTOMER Please print name A. Hill
WRAP RA BSEN 13242 / 13285	Comments

EARTHLINE LTD

Hangars LG-L7
Wroughton Airfield
Wroughton, Nr Swindon
Wiltshire SN4 0QZ

Tel: 01672 841389
E-mail: tippers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 541164

Date 6/10/20

Arrival Time

Departure Time

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer VFK GROUNDWORKS	Reg No. VZZEAR
Address SILVER STREET READING -	Drivers Name CARL
Order No	Collected From HATFORD
	Delivered To READING
AGGREGATES SUPPLIED	
Description BS 3882 TOPSOIL	Day Work
Gross	Travelling
Tare By THE LOAD	Waiting Time
Net	Total Hours
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer. Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol. WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works. All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	SIGNED ON BEHALF OF EARTHLINE SIGNED ON BEHALF OF CUSTOMER Please print name A Hill
WRAP RA BSEN 13242 / 13285	Comments

EARTHLINE LTD

Hangars L6-L7
Wroughton Airfield
Wroughton, Nr Swindon
Wiltshire SN4 0QZ

Tel: 01672 841389
E-mail: tipplers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 541165

Date 6/10/20

Arrival Time

Departure Time

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer VFK Groundworkers	Reg No. V22EAR
Address SILVER STREET	Drivers Name CARL
READING.	Collected From HATFIELD
Order No	Delivered To READING
AGGREGATES SUPPLIED	Day Work
Description BS 3882 TOPSOIL	Travelling
Gross	Waiting Time
Tare BY THE LOAD	Total Hours
Net	SIGNED ON BEHALF OF
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer.	EARTHLINE
Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol.	SIGNED ON BEHALF OF
WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works.	CUSTOMER
All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	Please print name
WRAP RA BSEN 13242 / 13285	Comments

EARTHLINE LTD

Hangars L6-1:7
Wroughton Airfield
Wroughton, Nr Swindon
Wiltshire SN4 0QZ

Tel: 01672 841389
E-mail: tippers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG **540475**

Date 9/10/20

Arrival Time

Departure Time

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer <u>Vfk Groundworks</u>	Reg No. <u>V100GAL</u>
Address <u>Silver street</u> <u>Reading.</u>	Drivers Name <u>MARK W</u>
Order No	Collected From <u>Hatford</u> Delivered To <u>Reading</u>
AGGREGATES SUPPLIED	
Description <u>BS 3882 TOPSOIL</u>	Day Work
Gross	Travelling
Tare <u>1X LOAD</u>	Waiting Time
Net	Total Hours
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer.	SIGNED ON BEHALF OF EARTHLINE <u>[Signature]</u>
Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol.	SIGNED ON BEHALF OF CUSTOMER <u>[Signature]</u>
WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works.	Please print name <u>[Signature]</u>
All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	Comments
WRAP RA BSEN 13242 / 13285	

EARTHLINE LTD

Hangars L6-L7
Wroughton Airfield
Wroughton, Nr Swindon
Wiltshire SN4 0QZ

Tel: 01672 841389
E-mail: tipplers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 540476

Date 8/10/20

Arrival Time

Departure Time

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer VFK Groundworks	Reg No. V100GA
Address Silver street Reading	Drivers Name MARK W
Order No	Collected From Hatford
	Delivered To Reading
AGGREGATES SUPPLIED	
Description BS 3882 TOPSOIL	Day Work
Gross	Travelling
Tare 1X10AD	Waiting Time
Net	Total Hours
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer.	SIGNED ON BEHALF OF
Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol.	EARTHLINE [Signature]
WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works.	SIGNED ON BEHALF OF
All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	CUSTOMER [Signature]
	Please print name
	Comments

WRAP RA BSEN 13242 / 13285

VAT No: 569 9183 76

EARTHLINE LTD

Hangars L6-L7
Wroughton Airfield
Wroughton, Nr Swindon
Wiltshire SN4 0QZ

Tel: 01672 841389
E-mail: tipplers@earthlineltd.co.uk
Web: www.earthlineltd.co.uk



No. AG 541250

(5)

Date 6/11/20

Arrival Time 15:10 PM

Departure Time 15:25 PM

Landfill and material services available at:
Wilts, Bucks, Hants, Berks, Gloucs, Oxon, Surrey

Customer VFK Groundworks	Reg No. V444 GMR
Address Silver Street Reading	Drivers Name WILL G
Order No	Collected From Hatford
	Delivered To Reading
AGGREGATES SUPPLIED	
Description Sharp Sand	Day Work
Gross 26,700	Travelling
Tare 13,900	Waiting Time
Net 13,800	Total Hours
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer. Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol. WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works. All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification.	SIGNED ON BEHALF OF EARTHLINE SIGNED ON BEHALF OF CUSTOMER Please print name R. NUG
WRAP RA BSEN 13242 / 13285	Comments

EARTHLINE LTD

The Upper Lime Kiln Works
Ogbourne St. George
Nr. Marlborough, SN8 1TD

Tel: 01672 841389

Fax: 01672 841353

Accounts Fax: 01672 841177

E-mail: tipplers@earthline.co.uk

Web: www.earthline.co.uk



No. AG 531507

Date 4.9.20

Arrival Time 2.35

Departure Time 2.45

Landfill and material services available at:
Wilts. Bucks. Hants. Berks. Gloucs. Oxon. Surrey

Customer V.F.K. GROUNDWORKS	Reg No. YZ1 KAA
Address THOMAS HEMAS SILVER ST READING	Drivers Name J. STEWART
Order No	Collected From HATFORD
	Delivered To READING
AGGREGATES SUPPLIED	
Description BS3882 TOPSOIL	Day Work
Gross	Travelling
Tare By TRL LOAD	Waiting Time
Net	Total Hours
Earthline cannot accept responsibility for any damage caused by the vehicle when directed off the highway by the customer. Recycled Aggregates produced under a Quality Management Scheme conforming to the Aggregates Quality Protocol. WARNING: All Aggregates, Primary or Recycled, will deteriorate if not used in accordance with best code of practice for Highway works. All Aggregates supplied are as the description on the P.O.D and grading supplied and will not meet any other specification. WRAP RA BSEN 13242 / 13285	SIGNED ON BEHALF OF EARTHLINE
	SIGNED ON BEHALF OF CUSTOMER DAZ
	Please print name
	Comments

VAT No: 569 9183 76

APPENDIX E

SOIL SCREENING CONCENTRATIONS

Table A: Soil contamination objectives for imported material

General Suite of Determinands	Mean Concentration not Exceeding (mg/kg)	Rational
Arsenic	37	RSK GAC adopted for the protection of human health (with home grown produce)
Cadmium	30	RSK GAC adopted for the protection of human health (with home grown produce)
Chromium (VI)	21	RSK GAC adopted for the protection of human health (with home grown produce)
Lead	200	RSK GAC adopted for the protection of human health (with home grown produce)
Total Mercury	1	Soil Code (1998) adopted for potential phytotoxic effects
Selenium	258	RSK GAC adopted for the protection of human health (with home grown produce)
Copper	200	Soil Code (1998) adopted for potential phytotoxic effects
Nickel	110	Soil Code (1998) adopted for potential phytotoxic effects
Zinc	300	Soil Code (1998) adopted for potential phytotoxic effects
pH value	>pH5	Conservative value
Asbestos	None	Conservative value
TPH with column clean up ^{*1}	100	Conservative trigger value adopted for the protection of human health
Semi Volatile Organic Compounds (1% SOM)		
Phenols (total)	180	RSK GAC adopted for the protection of human health (with home grown produce)
Acenaphthene	230	RSK GAC adopted for the protection of human health (with home grown produce)

General Suite of Determinands	Mean Concentration not Exceeding (mg/kg)	Rational
Acenaphthylene	180	RSK GAC adopted for the protection of human health (with home grown produce)
Benzo(a)anthracene	7	RSK GAC adopted for the protection of human health (with home grown produce)
Chrysene	15	RSK GAC adopted for the protection of human health (with home grown produce)
Fluoranthene	280	RSK GAC adopted for the protection of human health (with home grown produce)
Fluorene	170	RSK GAC adopted for the protection of human health (with home grown produce)
Phenanthrene	100	RSK GAC adopted for the protection of human health (with home grown produce)
Naphthalene	13	RSK GAC adopted for the protection of human health (with home grown produce)
Benzo-a-pyrene	5	RSK GAC adopted for the protection of human health (with home grown produce)
Dibenzo(a,h)anthracene	0.25	RSK GAC adopted for the protection of human health (with home grown produce)
Indeno(1,2,3-cd)pyrene	27	RSK GAC adopted for the protection of human health (with home grown produce)



APPENDIX F

SOFT LANDSCAPING PHOTOGRAPHIC RECORD



Report No: 28957 – VR01

PHOTOGRAPHIC LOG

Client name:
Thomas Homes Ltd

Site Location: Crown Street, Reading

Photo No.
1

Date:
08/09/20

Direction Photo Taken:
South

Description:
Topsoil Planting Bed
(eastern boundary planter)



Photo No.
2

Date:
08/09/20

Direction Photo Taken:
N/A

Description:
Inspection pit TS1



Photo No. 3	Date: 08/09/20	
Direction Photo Taken: N/A		
Description: Topsoil sample TS2 location		

Photo No. 4	Date: 08/09/20	
Direction Photo Taken: West		
Description: Topsoil Planting Bed (northern boundary planter)		

Photo No. 5	Date: 08/09/20	
Direction Photo Taken: N/A		
Description: Inspection pit TS3		

Photo No. 6	Date: 08/09/20	
Direction Photo Taken: North		
Description: Topsoil Planting Bed (The Western Wall)		

Photo No. 7	Date: 08/09/20	
Direction Photo Taken:		
Description: Inspection pit TS4		

Photo No. 8	Date: 08/09/20	
Direction Photo Taken: North		
Description: Topsoil sample TS5 location, obtained from Topsoil stockpile located to the south-west of the building		

LEGEND

Soil Depths

Overall Soil Depths between 400-550mm

Overall Soil Depths between 600-800mm

Overall Soil Depths between 800-1000mm

Overall Soil Depths between 1000mm+

When located under tree locations, soil depth to be minimum 900mm. Refer to landscape architect's drawing for soil outline.



NO.	MEASUREMENTS	DATE
1	First Year	04.02.20
2	Soil Depth (photos added)	09.11.20
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