



Memo

To: Salehs LLP Solicitors and Crossfield Development
From: Geo² Limited
Cc: Anthony Stankard, Mark Graham
Date: 24/09/2024
Site: Chorlton Villas, Chorlton-cum-Hardy

Re: Clean Cover System Verification

1. Introduction

Geo² has been requested by Salehs LLP Solicitors and Crossfield Development (the 'client') to produce a Clean Cover System verification letter report relating to a residential property known as Chorlton Villas located off Hardy Lane, Chorlton-cum-Hardy, Manchester, M21 8DN (the 'site').

2. Context and Purpose

The development comprises a four bedroom detached residential dwelling with associated vehicular access and soft landscaping under Manchester City Council Planning Application Ref. 127696/FO/2020. There are a series of previous reports for the site and wider area which should be read in conjunction with this memo, as listed below;

- Phase 2 Geo-Environmental Investigation, Risk Assessment and Remediation Strategy, Chorlton Villas, Chorlton, by LK Group, Ref. LKC 20 1012, dated March 2021;
- Piling Risk Assessment, Manchester-Chorlton Villas, by Pile Designs, Ref. 26422-PRA, dated June 2023; and
- Letter Report - Contamination Analyses for 21A Chorlton Villas, Hardy Lane, Manchester, M21 8DN by Sub Surface Consultants, Ref. 7848/SS, dated November 2023.

3. Context and Purpose

Background

Historically the site formed part of Hardy Farm and was generally undeveloped until present day. The site also formed part of Hardy Farm Tip, a landfill active from 1967 until 1974 and accepted inert, industrial, commercial, household, special waste and liquid sludge.

The previous LK Group investigation identified ground conditions to comprise Made Ground to depths between 2.0 m bgl and 3.8 m bgl comprising gravelly sandy clay with brick, rubber, wood and localised organic material. The underlying natural superficial deposits were recorded as soft to firm sandy gravelly clay. Bedrock was not identified.

Elevated concentrations of PAHs were identified within the Made Ground above the applied guidance values, as such a clean cover system was considered to be required in landscaped areas. The LK Group report details that the cover system shall comprise a minimum of 600 mm clean cover in private gardens and 300 mm in shared landscaping.

Geo² has been provided with validation evidence contained within this report from the Client.

4. Clean Cover System

Geo² initially attended site on 16th July 2024 to undertake sampling of the topsoil and validate the depth of the installed material. Five test locations were dug across the garden area which recorded the presence of Made Ground in all locations and no geotextile membrane was present. As such, the exercise was aborted and remedial works undertaken to remove the existing materials and replace with clean imported materials.

Geo2 re-attended Site on 22nd August 2024 to undertake sampling of the topsoil and validate the depth of installed materials. At the time of the second visit, the topsoil and membrane were being placed by the client. The imported topsoil was stockpiled separately from the materials being removed from site and it was observed that separate excavators were being utilised to prevent cross contamination. A series of site photographs from both visits are provided in Appendix A.

It is understood from the Client that imported topsoil was sourced from Eaton Hall Quarry (greenfield source). The topsoil delivery tickets are included in Appendix B and in total there was an imported volume of 120 tonnes/c. 90m³.

It is understood from the Client that the excavated soil was removed from the site and sent to Cheshire Demolition, Moss Lane, approximately 140 tonnes/ c. 100m³ was removed. Waste transfer notes are included in Appendix C.

A minimum thickness of 600 mm of clean cover was confirmed during the site visit and a white geotextile membrane was also present below the topsoil, separating the materials from the underlying Made Ground. In total, three composite samples were collected from the imported topsoil during placement. The testing has resulted in a testing frequency of 1 sample per 30m³, this frequency is considered appropriate to characterize the materials.

All collected soil samples were placed in laboratory provided containers and stored in cool boxes prior to being transported to the laboratory under the laboratory's chain of custody documentation. The laboratory used for the ground investigation on this occasion was i2 Analytical, a UKAS and MCERTS accredited laboratory. The chemical analysis results are summarised in the table below compared against a residential with plant uptake end-use generic assessment criteria (GAC). Chemical results are included in Appendix D.

Contaminant	Maximum Concentration (mg/kg)	GAC (mg/kg)	Exceedance Location (Concentration (mg/kg) / depth (m bgl))
Asbestos	Not Detected	Not Detected	-
Metals			
Arsenic	3.6	37	-
Cadmium	<0.2	11	
Copper	13	2,400	
Chromium	6.9	910	
Chromium VI	<1.8	6	
Lead	22	200	
Mercury	<0.3	40	
Nickel	6.4	130	
Zinc	33	910	
PAHs			
Naphthalene	<0.05	2.3	-
Acenaphthylene	<0.05	170	
Acenaphthene	<0.05	210	
Fluorene	<0.05	170	
Phenanthrene	0.4	95	
Anthracene	<0.05	2400	
Fluoranthene	0.67	280	
Pyrene	0.61	620	
Benzo(a)anthracene	0.27	7.2	

Contaminant	Maximum Concentration (mg/kg)	GAC (mg/kg)	Exceedance Location (Concentration (mg/kg) / depth (m bgl))
Chrysene	0.3	15	
Benzo(b)fluoranthene	0.31	2.6	
Benzo(k)fluoranthene	0.15	77	
Benzo(a)pyrene	0.28	2.2	
Indeno(1,2,3-cd)Pyrene	0.16	27	
Dibenz(a,h)Anthracene	<0.05	0.24	
Benzo(ghi)perylene	0.22	320	
TPHs			
Aliphatic >C5-C6	<0.01	42	
Aliphatic >C6-C8	<0.01	100	
Aliphatic >C8-C10	<0.01	27	
Aliphatic >C10-C12	<1	130	
Aliphatic >C12-C16	2.1	1,100	
Aliphatic >C16-C21	<8	65,000	
Aliphatic >C21-C35	28	65,000	
Aliphatic >C35-C40	>10	65,000	
Aromatic >C5-C7	<0.01	70	
Aromatic >C7-C8	<0.01	130	
Aromatic >C8-C10	<0.02	34	
Aromatic >C10-C12	<1	74	
Aromatic >C12-C16	<2	140	
Aromatic >C16-C21	<10	260	
Aromatic >C21-C35	15	1,100	
Aromatic >C35-C40	<10	1,100	
Total TPH	43.0	5,000	

No GAC exceedances have been recorded within the imported topsoil and no asbestos fibres were identified.

Based on the information provided and chemical analysis undertaken, it is considered that the clean cover system has been installed in accordance with the remediation strategy and is suitable for its intended use.

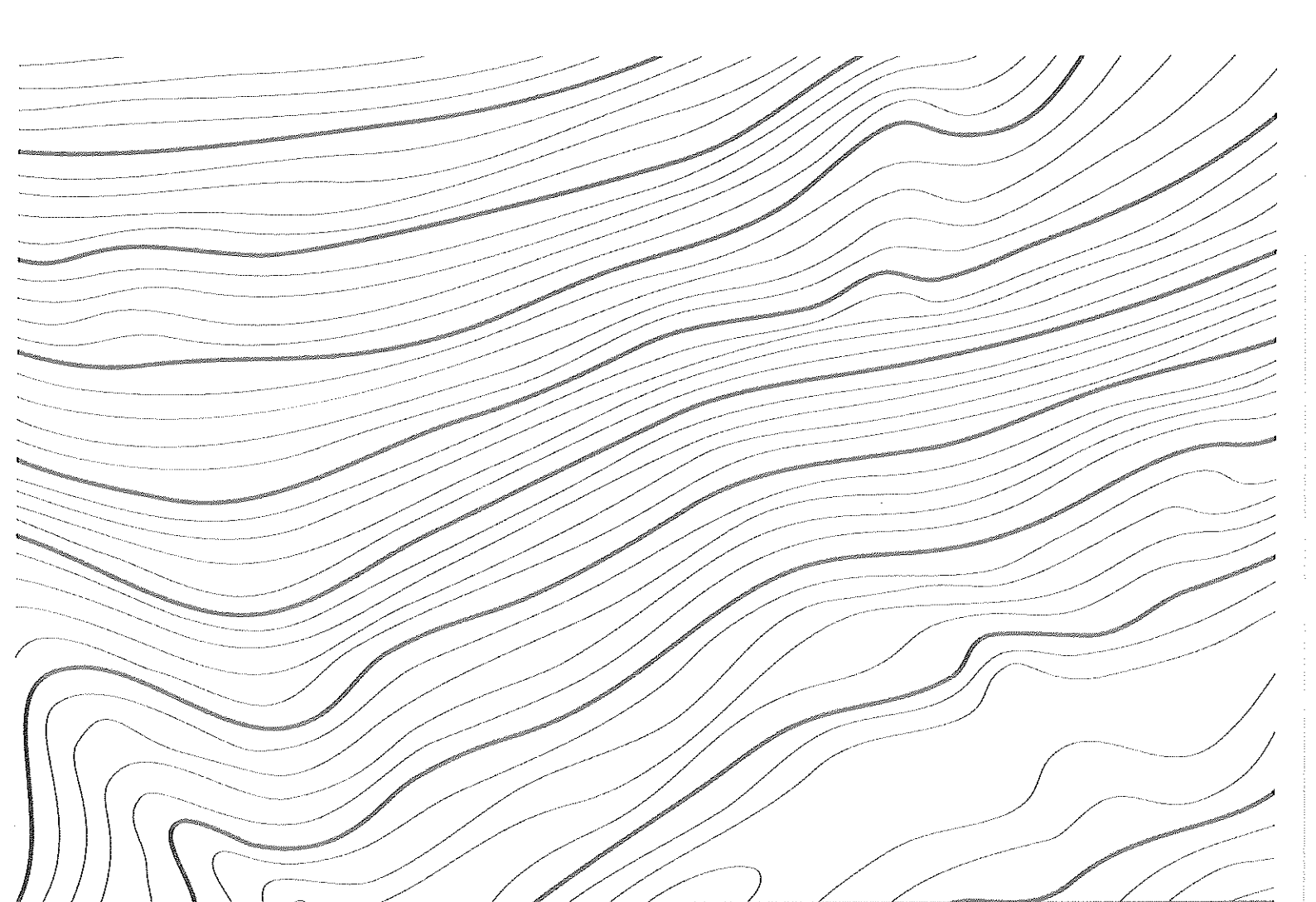
Attachments:

Appendix A – Site Photographs

Appendix B – Topsoil Delivery Notes

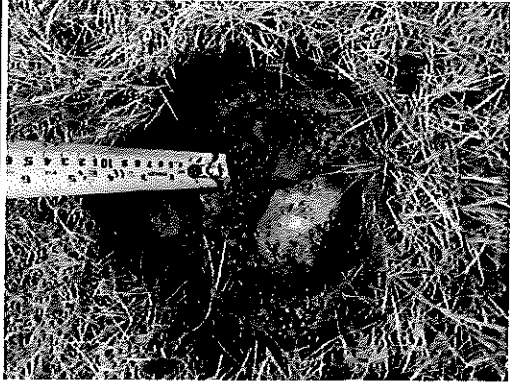
Appendix C – Waste Transfer Notes

Appendix D – Laboratory Chemical Analysis Results

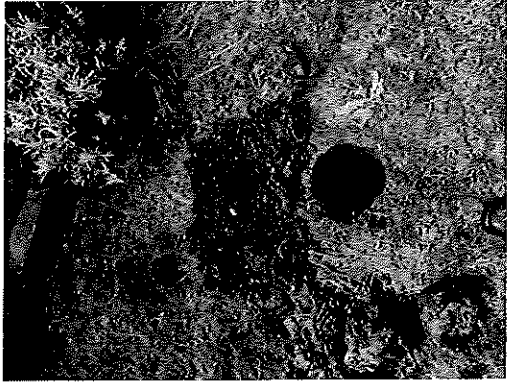
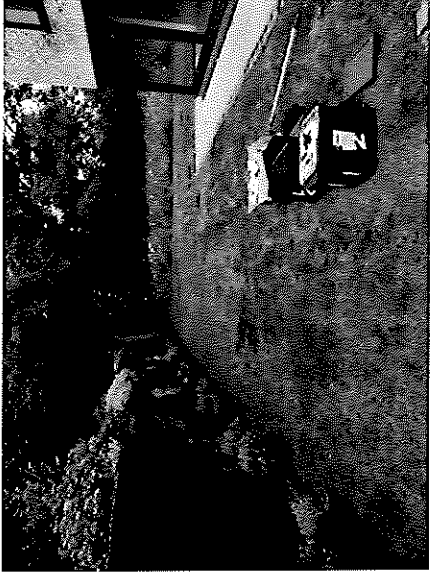


Appendix A – Site Photographs

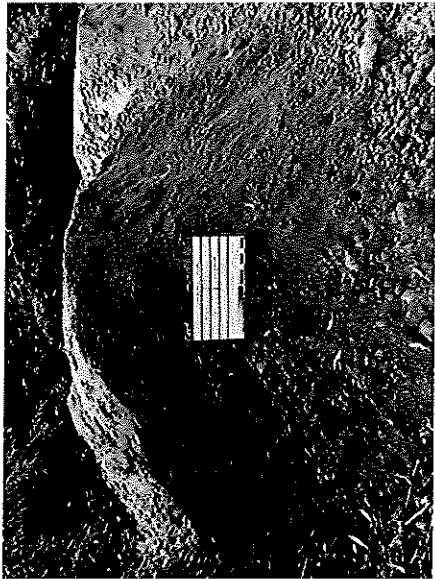
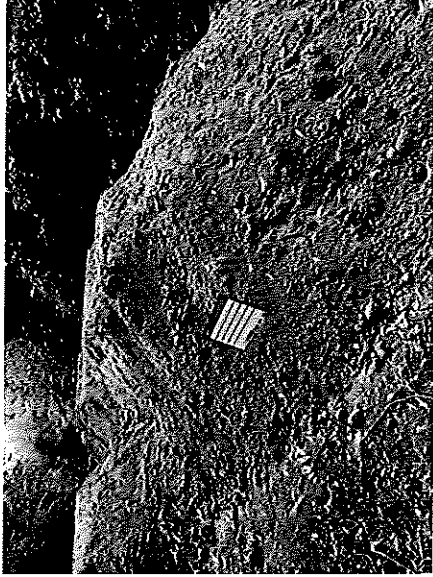
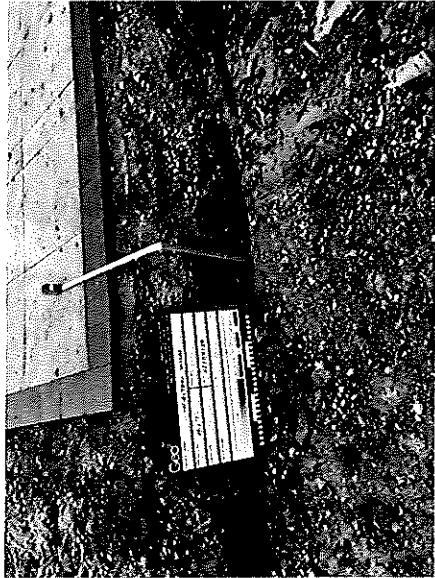
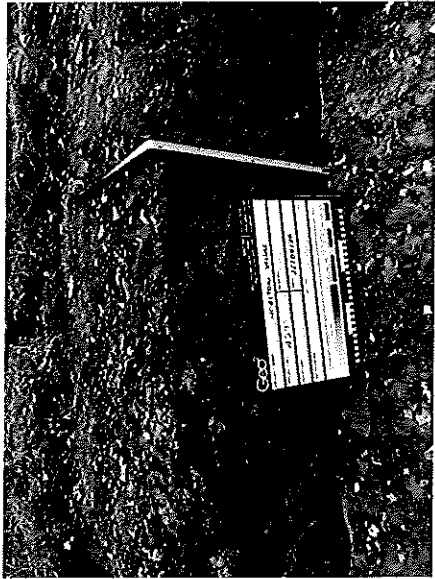
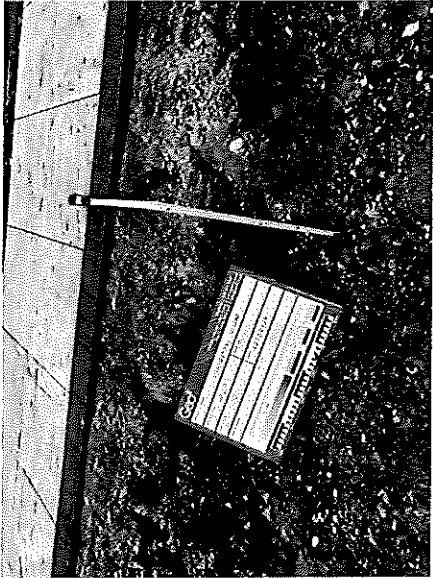
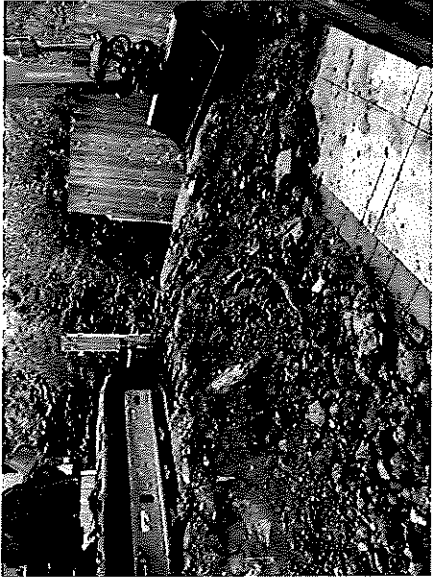
4293 – Chorlton Villas – Photographic Survey 1 – Initial Visit

Image 1: HP101 – Brick and concrete inclusions 	Image 2: HP101 – Arisings 	Image 3: HP102 
Image 4: HP102 – Arisings 	Image 5: HP103 	Image 6: HP103 – Arisings 

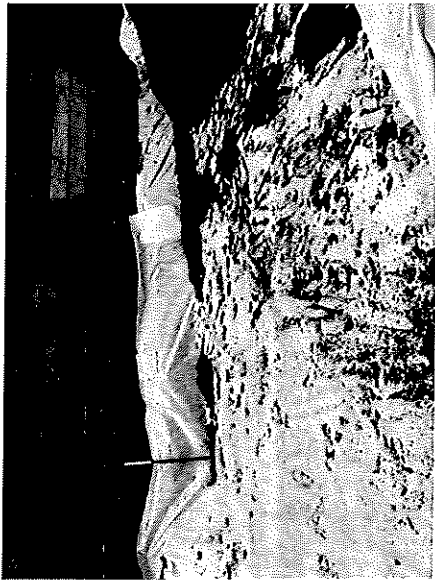
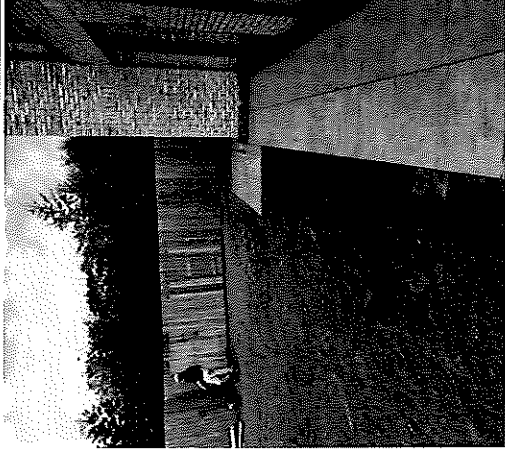
4293 – Chorlton Villas – Photographic Survey 2 – Initial Site Visit

Image 7: HP104	Image 8: HP104 Arisings	Image 9: HP105
		
Image 10: HP105 – Arisings	Image 11: View across garden area	Image 12: View across garden area
		

4293 – Chorlton Villas – Photographic Survey 3 – Return Visit

Image 13: Imported stockpiled topsoil		Image 14: Imported stockpiled topsoil		Image 15: Reduced level dig (>600mm)	
Image 16: Reduced level dig (>600 mm)		Image 17: Reduced level dig (>600 mm)		Image 18: Excavated materials awaiting off-site disposal	

4293 – Chorlton Villas – Photographic Survey 4 – Return Visit

Image 19: Placement of geotextile and topsoil	Image 20: Placement of geotextile and topsoil	Image 21: Placement of geotextile and topsoil
		
Image 22: Completed clean cover system	Image 23: Completed clean cover system	Image 24: Completed clean cover system
		

Appendix B – Topsoil Delivery Notes

PIVOTAL PLANT

Nº 6518

Customer:

CROSSELAND

Collected From:

PIVOTAL

Delivered To:

CHORLTON VILLAS MCR

Driver's Name:

PAUL

Vehicle Reg:

A417 MKK

1 x 8 Wheeler Load

Description

20ft Top Soil

Print Name:

J. BARN

Signature:

J. BARN

Job Title:

www.pivotalplanthire.co.uk

01625 300017 • office@pivotalplant.co.uk

Customers requesting this vehicle to leave the public highway on your instruction, will accept all responsibility for any damage which may arise to this vehicle, property or any personnel.

Pivotal Plant Hire LTD do not accept responsibility for this request.

PIVOTAL PLANT

Nº 6516

Customer:

CROSSELAND

Collected From:

PIVOTAL

Delivered To:

CHORLTON VILLAS MANCHESTER

Driver's Name:

PAUL

Vehicle Reg:

A417 MKK

1 x 8 Wheeler Load

Description

20ft Top Soil

Print Name:

J. BARN

Signature:

J. BARN

Job Title:

www.pivotalplanthire.co.uk

01625 300017 • office@pivotalplant.co.uk

Customers requesting this vehicle to leave the public highway on your instruction, will accept all responsibility for any damage which may arise to this vehicle, property or any personnel.

Pivotal Plant Hire LTD do not accept responsibility for this request.

PIVOTAL PLANT

No:	5681
Date:	27.8.24
Waster carriers number	CBDU490673

Customer:

Crossfield Developments

Collected From:

Foston Hall

Delivered to:

Chalton Villas Manchester

Driver Name:

Tosh

Vehicle Reg:

AXAMEN

1 x 8 Wheeler Load	
Description	TOP SOIL 20T

Print Name:

Signature:

Job Title:

www.pivotalplanthire.co.uk

01625 300017 office@pivotalplant.co.uk

Customers requesting this vehicle to leave the public highway on your instruction, will accept all responsibility for any damage which may arise to this vehicle, property or any personnel.

Pivotal Plant Hire LTD do not accept any responsibility for this request

40999

PIVOTAL PLANT

No	6520
Date:	21.8.24
Waste Carriers No.	CBDU490673

Customer:

Crossfield

Collected From:

Pivotal

Delivered To:

Chalton Villas MCR

Driver's Name:

Tosh

Vehicle Reg:

AY17 MKR

1 x 8 Wheeler Load	
Description	20T TOP SOIL

Print Name:

Signature:

Job Title:

www.pivotalplanthire.co.uk

01625 300017 - office@pivotalplant.co.uk

Customers requesting this vehicle to leave the public highway on your instruction, will accept all responsibility for any damage which may arise to this vehicle, property or any personnel.

Pivotal Plant Hire LTD do not accept responsibility for this request

PIVOTAL PLANT

Nº 6524

Customer:

Crossfield

Date:

27/8/24

Waste Carriers No.

CBDU490673

Collected From:

Quarry

Delivered To:

Chertem Villas

Driver's Name:

Rob EJosh

Vehicle Reg:

A117 Mdk

1 x 8 Wheeler Load

Description

1 x top soil

Spot 2 loads

A117 Mdk

Print Name:

Baron

Signature:

Baron

Job Title:

www.pivotalplanthire.co.uk

01625 300017 • office@pivotalplant.co.uk

Customers requesting this vehicle to leave the public highway on your instruction, will accept all responsibility for any damage which may arise to this vehicle, property or any personnel.

Pivotal Plant Hire LTD do not accept responsibility for this request.



Tom Lees Ltd
Turner Crescent
Newcastle-Under-Lyme
Staffordshire

ST5 7JZ

Telephone:
Email:

01782950775
accounts@tomlees.co.uk

Delivery Note

Collect from

Tarmac
Eaton Hall Quarry
off A34
Congleton
Cheshire
CW12 2LU

Deliver to

29 Chorlton Villas
Chorlton
Manchester
M21 8ND

Collect on

21/08/2024 00:00

Deliver on

21/08/2024 23:59

Account TLC118 Pivotal Plant Hire Limited
Order number Whatsapp: Rob Shem
Reference 2
Reference 3
Contact Mr Rob Shem

Vehicle PN23HHP
Trailer
Driver David Bagshaw
Job number 69880

Goods	Quantity	Weight	Volume
BS3882 certified topsoil REF: 993352	1.000	0.000	0.000

Notes

Instructions

Site contact Damo: 07742316863

The above goods have been received in good order and condition

Signature.....

Print name..... James Baron

Signature generated digitally

Date..... 21/08/2024

Time..... 08:28



Tom Lees Ltd
Turner Crescent
Newcastle-Under-Lyme
Staffordshire

ST5 7JZ

Collection Note

Telephone: 01782950775
Email: accounts@tomlees.co.uk

Collect from

Tarmac
Eaton Hall Quarry
off A34
Congleton
Cheshire
CW12 2LU

Deliver to

29 Chorlton Villas
Chorlton
Manchester
M21 8ND

Collect on

21/08/2024 00:00

Deliver on

21/08/2024 23:59

Account TLC118 Pivotal Plant Hire Limited
Order number Whatsapp: Rob Shem
Reference 2
Reference 3
Contact Mr Rob Shem

Vehicle PN23HHP
Trailer
Driver David Bagshaw
Job number 69882

Goods	Quantity	Weight	Volume
BS3882 certified topsoil REF: 993352	1.000	0.000	0.000

Notes

Instructions

Site contact Damo: 07742316863

Signature.....

Print name..... Dave Bagshaw

Signature generated digitally

Date..... 21/08/2024

Time..... 14:01



Tom Lees Ltd
Turner Crescent
Newcastle-Under-Lyme
Staffordshire

ST5 7JZ

Delivery Note

Telephone: 01782950775
Email: accounts@tomlees.co.uk

Collect from

Tarmac
Eaton Hall Quarry
off A34
Congleton
Cheshire
CW12 2LU

Deliver to

29 Chorlton Villas
Chorlton
Manchester
M21 8ND

Collect on

21/08/2024 00:00

Deliver on

21/08/2024 23:59

Account	TLC118	Pivotal Plant Hire Limited	Vehicle	PN23HHP
Order number	Whatsapp: Rob Shem		Trailer	
Reference 2			Driver	David Bagshaw
Reference 3			Job number	69881
Contact	Mr Rob Shem			

Goods	Quantity	Weight	Volume
BS3882 certified topsoil REF: 993352	1.000	0.000	0.000

Notes

Instructions

Site contact Damo: 07742316863

The above goods have been received in good order and condition

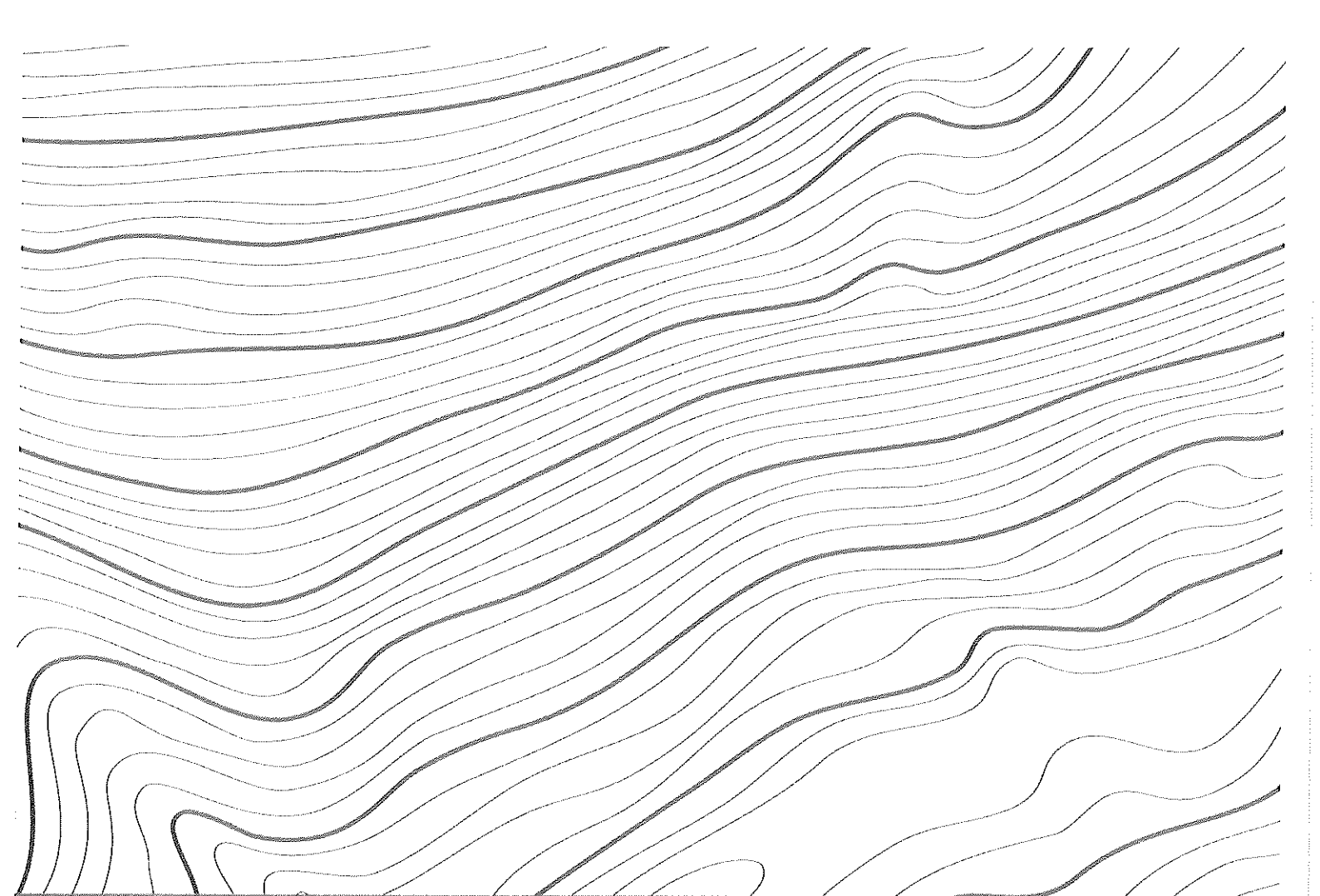
Signature.....

Date..... 21/08/2024

Print name..... James Baron

Time..... 12:11

Signature generated digitally



Appendix C – Waste Transfer Notes

Cheshire Demolition / Excavation Contractors Ltd

Moss House, 72 Moss Lane, Macclesfield, Cheshire SK11 7TT
Tel: 01625 424433 Fax: 01625 611094 E-Mail: sales@cheshiredemolition.co.uk
Waste Management Number EA WML 101129

126038

DUTY OF CARE - CONTROLLED WASTE TRANSFER/CONVEYANCE

SECTION A - Waste Description/Material

Type of vehicle (please tick)
4 wheeler ☐ 6 wheeler ☒ 8 wheeler ☐ Grab ☐
Roll on/off skips
20 yard ☐ 30 yard ☐ 40 yard ☐ 50 yard ☐
Preparing for re-use ☐ Recycling ☐ Disposal ☐
SKIP No.

SIC (2007) CODE
Collection of non-hazardous waste
☐ 38 - 11
Collection of hazardous waste
☐ 38 - 12
Site preparation
☐ 43 - 12

SECTION B - Producer of Waste (Customer)

Name CROSSFIELD DEVELOPMENTS

Address CITATION SITE

Date Gross weight 20t Tare weight Nett weight

This vehicle may leave the hard public road on your instruction and at the driver's discretion provided that you accept full responsibility for any damage, which may occur to this vehicle, property or personnel.

I, the customer do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction and subject to the Terms & Conditions.
I confirm that I have fulfilled my duty to apply the waste hierarchy as required by regulation 12 of the Waste (England & Wales) Regulations 2011

Customer Signature CROSSFIELD DEVELOPMENTS

Print Name

SECTION C - Person Carrying Waste

Carrier: Cheshire Demolition Ltd.

Licence No. CB/DU96028

Drivers Name PAUL

Vehicle Reg AY17 MKK

SECTION D - Next Holder/Disposer of Waste

TIP AREA

Full Name CHESHIRE DEMOLITION

Name & Address of Company MOSS HOUSE, MOSS LANE

Address of Place of Transfer

Date of Transfer 21.8.24

White copy: Office Pink copy: Tip Green copy: Customer Yellow: Leave in book

Cheshire Demolition / Excavation Contractors Ltd

Moss House, 72 Moss Lane, Macclesfield, Cheshire SK11 7TT
Tel: 01625 424433 Fax: 01625 611094 E-Mail: sales@cheshiredemolition.co.uk
Waste Management Number EA WML 101129

126040

DUTY OF CARE - CONTROLLED WASTE TRANSFER/CONVEYANCE

SECTION A - Waste Description/Material

Type of vehicle (please tick)
4 wheeler ☐ 6 wheeler ☐ 8 wheeler ☒ Grab ☐
Roll on/off skips
20 yard ☐ 30 yard ☐ 40 yard ☐ 50 yard ☐
Preparing for re-use ☐ Recycling ☐ Disposal ☐
SKIP No.

SIC (2007) CODE
Collection of non-hazardous waste
☐ 38 - 11
Collection of hazardous waste
☐ 38 - 12
Site preparation
☐ 43 - 12

SECTION B - Producer of Waste (Customer)

Name CROSSFIELD DEVELOPMENTS

Address CITATION SITE

Date Gross weight 20t Tare weight Nett weight

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I confirm that I have fulfilled my duty to apply the waste hierarchy as required by regulation 12 of the Waste (England & Wales) Regulations 2011

Customer Signature CROSSFIELD DEVELOPMENTS

Print Name

SECTION C - Person Carrying Waste

Carrier: Cheshire Demolition Ltd.

Licence No. CB/DU96028

Drivers Name PAUL

Vehicle Reg AY17 MKK

SECTION D - Next Holder/Disposer of Waste

TIP AREA

Full Name CHESHIRE DEMOLITION

Name & Address of Company MOSS HOUSE, MOSS LANE

Address of Place of Transfer

Date of Transfer 21.8.24

White copy: Office Pink copy: Tip Green copy: Customer Yellow: Leave in book

Cheshire Demolition / Excavation Contractors Ltd

Moss House, 72 Moss Lane, Macclesfield, Cheshire SK11 7TT
Tel: 01625 424433 Fax: 01625 611094 E-Mail: sales@cheshiredemolition.co.uk
Waste Management Number EA WML 101129

126028

DUTY OF CARE - CONTROLLED WASTE TRANSFER/CONVEYANCE

SECTION A - Waste Description/Material

Type of vehicle (please tick)

4 wheeler ☐ 6 wheeler ☐ 8 wheeler ☒ Grab ☐

Roll on/off skips

20 yard ☐ 30 yard ☐ 40 yard ☐ 50 yard ☐

Preparing for re-use ☐ Recycling ☐ Disposal ☐

SIC (2007) CODE
Collection of non-hazardous waste
☐ 38 - 11
Collection of hazardous waste
☐ 38 - 12
Site preparation
☐ 43 - 12

SKIP No.

SECTION B - Producer of Waste (Customer)

EWC Codes

Name CROSSFIELD DEVELOPMENTS

Address CROSSFIELD SITE

Date Gross weight 20t Tare weight Nett weight

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I confirm that I have fulfilled my duty to apply the waste hierarchy as required by regulation 12 of the Waste (England & Wales) Regulations 2011

Customer Signature CROSSFIELD DEV

Print Name

SECTION C - Person Carrying Waste

Carrier: Cheshire Demolition Ltd.

Licence No. CB/DU96028

Drivers Name PAUL

Vehicle Reg AYN MKK

SECTION D - Next Holder/Disposer of Waste

TIP AREA

Full Name CHESTRE DEMOLITION

Name & Address of Company MOSS HOUSE, MOSS LANE, MACCLESFIELD

Address of Place of Transfer

Date of Transfer 21-8-24

White copy: Office Pink copy: Tip Green copy: Customer Yellow: Leave in book

Cheshire Demolition / Excavation Contractors Ltd

Moss House, 72 Moss Lane, Macclesfield, Cheshire SK11 7TT
Tel: 01625 424433 Fax: 01625 611094 E-Mail: sales@cheshiredemolition.co.uk
Waste Management Number EA WML 101129

126029

DUTY OF CARE - CONTROLLED WASTE TRANSFER/CONVEYANCE

SECTION A - Waste Description/Material

Type of vehicle (please tick)

4 wheeler ☐ 6 wheeler ☐ 8 wheeler ☐ Grab ☐

Roll on/off skips

20 yard ☐ 30 yard ☐ 40 yard ☐ 50 yard ☐

Preparing for re-use ☐ Recycling ☐ Disposal ☐

SIC (2007) CODE
Collection of non-hazardous waste
☐ 38 - 11
Collection of hazardous waste
☐ 38 - 12
Site preparation
☐ 43 - 12

SKIP No.

SECTION B - Producer of Waste (Customer)

EWC Codes

Name CROSSFIELD DEVELOPMENTS

Address CROSSFIELD SITE

Date Gross weight 20t Tare weight Nett weight

This vehicle may leave the hard public road on your instruction and at the driver's discretion provided that you accept full responsibility for any damage, which may occur to this vehicle, property or personnel.

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I confirm that I have fulfilled my duty to apply the waste hierarchy as required by regulation 12 of the Waste (England & Wales) Regulations 2011

Customer Signature CROSSFIELD DEV

Print Name

SECTION C - Person Carrying Waste

Carrier: Cheshire Demolition Ltd.

Licence No. CB/DU96028

Drivers Name PAUL

Vehicle Reg AYN MKK

SECTION D - Next Holder/Disposer of Waste

TIP AREA

Full Name CHESTRE DEMOLITION

Name & Address of Company MOSS HOUSE, MOSS LANE, MACCLESFIELD

Address of Place of Transfer

Date of Transfer 21-8-24

White copy: Office Pink copy: Tip Green copy: Customer Yellow: Leave in book

Cheshire Demolition / Excavation Contractors Ltd

Moss House, 72 Moss Lane, Macclesfield, Cheshire SK11 7TT
Tel: 01625 424433 Fax: 01625 611094 E-Mail: sales@cheshiredemolition.co.uk
Waste Management Number EA WML 101129

126033

DUTY OF CARE - CONTROLLED WASTE TRANSFER/CONVEYANCE

SECTION A - Waste Description/Material

Type of vehicle (please tick)
4 wheeler ☐ 6 wheeler ☒ 8 wheeler ☐ Grab ☐ SKIP No.
Roll on/off skips
20 yard ☐ 30 yard ☐ 40 yard ☐ 50 yard ☐
Preparing for re-use ☐ Recycling ☐ Disposal ☐

SIC (2007) CODE
Collection of non-hazardous waste
☐ 38 - 11
Collection of hazardous waste
☐ 38 - 12
Site preparation
☐ 43 - 12

SECTION B - Producer of Waste (Customer) EWC Codes

Name CROSSFIELD DEVELOPMENTS

Address CHILTON DRIVE

Date _____ Gross weight 20T Tare weight _____ Net weight _____

This vehicle may leave the hard public road on your instruction and at the driver's discretion provided that you accept full responsibility for any damage, which may occur to this vehicle, property or personnel.

I, the customer do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction and subject to the Terms & Conditions.
I confirm that I have fulfilled my duty to apply the waste hierarchy as required by regulation 12 of the Waste (England & Wales) Regulations 2011

Customer Signature CROSSFIELD DEVELOPMENTS

Print Name _____

SECTION C - Person Carrying Waste

Carrier: Cheshire Demolition Ltd. Licence No. CB/DU96028

Drivers Name PAUL Vehicle Reg AYD MKL

SECTION D - Next Holder/Disposer of Waste

Full Name CHESHIRE DEMOLITION TIP AREA

Name & Address of Company MOSS HOUSE, MOSS LANE, MACC

Address of Place of Transfer _____

Date of Transfer 21.8.24

White copy: Office Pink copy: Tip Green copy: Customer Yellow: Leave in book

Cheshire Demolition / Excavation Contractors Ltd

Moss House, 72 Moss Lane, Macclesfield, Cheshire SK11 7TT
Tel: 01625 424433 Fax: 01625 611094 E-Mail: sales@cheshiredemolition.co.uk
Waste Management Number EA WML 101129

126026

DUTY OF CARE - CONTROLLED WASTE TRANSFER/CONVEYANCE

SECTION A - Waste Description/Material

Type of vehicle (please tick)
4 wheeler ☐ 6 wheeler ☐ 8 wheeler ☒ Grab ☐ SKIP No.
Roll on/off skips
20 yard ☐ 30 yard ☐ 40 yard ☐ 50 yard ☐
Preparing for re-use ☐ Recycling ☐ Disposal ☐

SIC (2007) CODE
Collection of non-hazardous waste
☐ 38 - 11
Collection of hazardous waste
☐ 38 - 12
Site preparation
☐ 43 - 12

SECTION B - Producer of Waste (Customer) EWC Codes

Name CROSSFIELD DEVELOPMENTS

Address CHILTON DRIVE

Date _____ Gross weight 20T Tare weight _____ Net weight _____

This vehicle may leave the hard public road on your instruction and at the driver's discretion provided that you accept full responsibility for any damage, which may occur to this vehicle, property or personnel.

I, the customer do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction and subject to the Terms & Conditions.
I confirm that I have fulfilled my duty to apply the waste hierarchy as required by regulation 12 of the Waste (England & Wales) Regulations 2011

Customer Signature CROSSFIELD DEV.

Print Name _____

SECTION C - Person Carrying Waste

Carrier: Cheshire Demolition Ltd. Licence No. CB/DU96028

Drivers Name PAUL Vehicle Reg AYD MKL

SECTION D - Next Holder/Disposer of Waste

Full Name CHESHIRE DEMOLITION TIP AREA

Name & Address of Company MOSS HOUSE, MOSS LANE, MACC

Address of Place of Transfer _____

Date of Transfer 21.8.24

White copy: Office Pink copy: Tip Green copy: Customer Yellow: Leave in book

Cheshire Demolition / Excavation Contractors Ltd

Moss House, 72 Moss Lane, Macclesfield, Cheshire SK11 7TT

Tel: 01625 424433 Fax: 01625 611094 E-Mail: sales@cheshiredemolition.co.uk

Waste Management Number EA WML 101129

126044

DUTY OF CARE - CONTROLLED WASTE TRANSFER/CONVEYANCE

SECTION A - Waste Description/Material Soil

Type of vehicle (please tick)

4 wheeler ☐ 6 wheeler ☒ 8 wheeler ☐ Grab ☐

Roll on/off skips

20 yard ☐ 30 yard ☐ 40 yard ☐ 50 yard ☐

Preparing for re-use ☐ Recycling ☐ Disposal ☐

SKIP No.

SIC (2007) CODE

Collection of non-hazardous waste

☐ 38 - 11

Collection of hazardous waste

☐ 38 - 12

Site preparation

☐ 43 - 12

SECTION B - Producer of Waste (Customer) EWC Codes

Name CROSSFIELD DEV

Address

Date 20.1.11 Gross weight Tare weight Nett weight

This vehicle may leave the hard public road on your instruction and at the driver's discretion provided that you accept full responsibility for any damage, which may occur to this vehicle, property or personnel.

I, the customer do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction and subject to the Terms & Conditions.

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by regulation 12 of the Waste (England & Wales) Regulations 2011

Customer Signature CROSSFIELD DEV

Print Name

SECTION C - Person Carrying Waste

Carrier: Cheshire Demolition Ltd.

Licence No. CB/DU96028

Drivers Name PAUL

Vehicle Reg AY17MKL

SECTION D - Next Holder/Disposer of Waste

TTP AREA

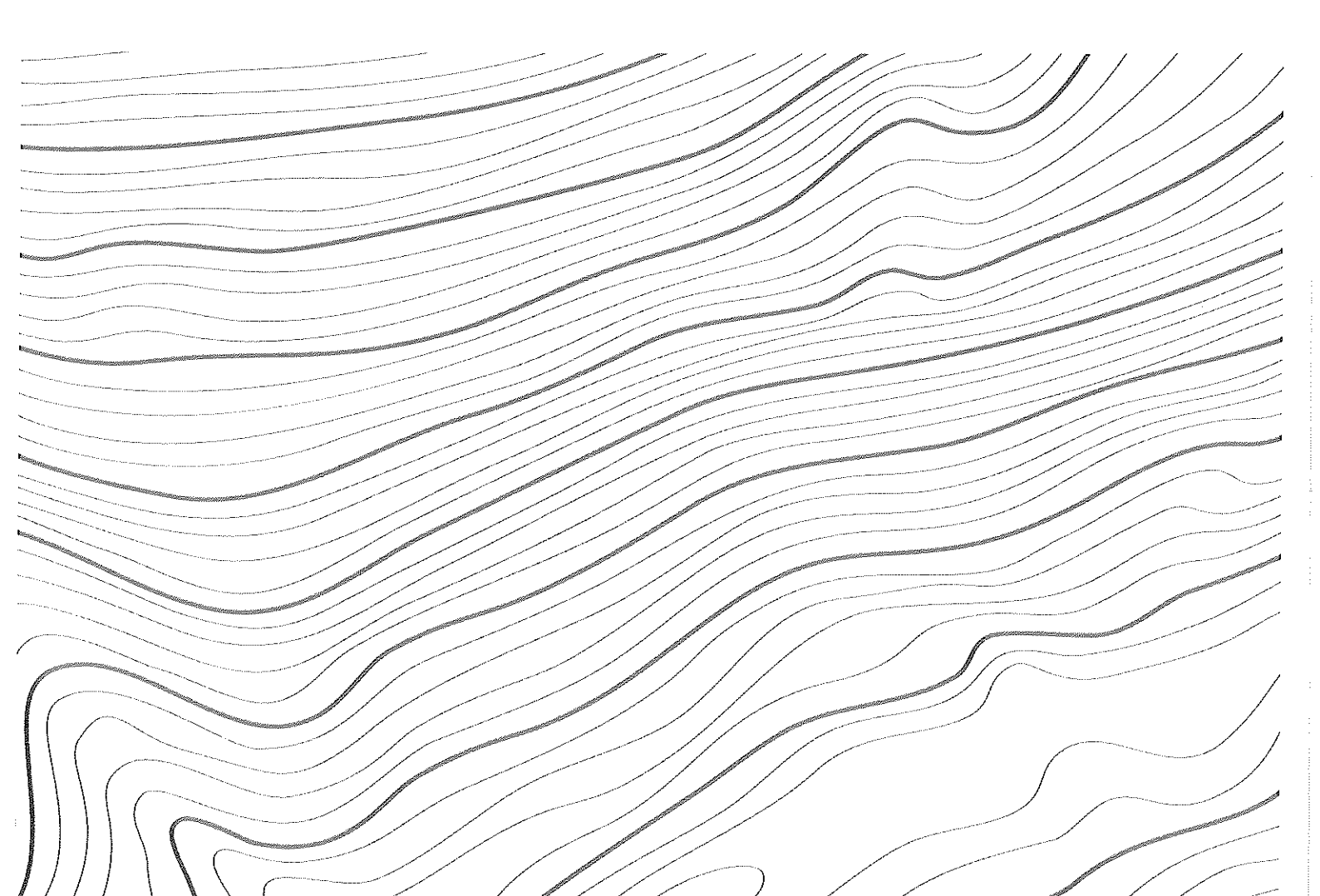
Full Name CHESHIRE DEMO

Name & Address of Company MOSS HOUSE, MOSS LANE

Address of Place of Transfer

Date of Transfer 22.8.24

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Appendix D - Laboratory Chemical Analysis Results



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Environmental Science

GEO2 Remediation Ltd
Coniston House
Louisa Street
Idle
BD10 8NE

e: jessica.rowe@geo2.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 24-038488

Project / Site name:	Chorlton Villas	Samples received on:	23/08/2024
Your job number:	4293	Samples instructed on/ Analysis started on:	23/08/2024
Your order number:	3035	Analysis completed by:	30/08/2024
Report Issue Number:	1	Report issued on:	02/09/2024
Samples Analysed:	3 soil samples		

Signed:

Adam Fenwick
Key Account Executive
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



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Analytical Report Number: 24-038488

Project / Site name: Chorlton Villas

Your Order No: 3035

Lab Sample Number	297931	297932	297933
Sample Reference	SP1	SP1	SP1
Sample Number	Composite 1	Composite 2	Composite 3
Depth (m)	None Supplied	None Supplied	None Supplied
Date Sampled	22/08/2024	22/08/2024	22/08/2024
Time Taken	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	14	12
Total mass of sample received	kg	0.1	NONE	0.8	0.9	0.8

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KWB	KWB	KWB

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	9.1	8.7	8.7
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	70	170	130
Water Soluble SO ₄ 16hr extraction (2:1)	mg/l	1.25	MCERTS	35	86.1	65.3

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.4	0.31
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.14	0.67	0.47
Pyrene	mg/kg	0.05	MCERTS	0.14	0.61	0.43
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.07	0.27	0.17
Chrysene	mg/kg	0.05	MCERTS	0.08	0.3	0.23
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.1	0.31	0.24
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.15	0.12
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.06	0.28	0.21
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.16	0.14
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.22	0.16

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	3.37	2.47
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	2.5	3	3.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	5.2	6.9	6.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	5.2	6.9	6.2
Copper (aqua regia extractable)	mg/kg	1	MCERTS	9.8	13	13
Lead (aqua regia extractable)	mg/kg	1	MCERTS	10	16	22
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	4.9	5.4	6.4
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	24	33	32

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 HS 10 AL	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 HS 10 AL	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 HS 10 AL	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010



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Environmental Science

Analytical Report Number: 24-038488

Project / Site name: Chorlton Villas

Your Order No: 3035

Lab Sample Number				297931	297932	297933
Sample Reference				SP1	SP1	SP1
Sample Number				Composite 1	Composite 2	Composite 3
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				22/08/2024	22/08/2024	22/08/2024
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status			
TPHCWG - Aliphatic >EC10 - EC12 EH_CU_ID_AL	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 EH_CU_ID_AL	mg/kg	2	MCERTS	2.1	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 EH_CU_ID_AL	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 EH_CU_ID_AL	mg/kg	8	MCERTS	< 8.0	28	< 8.0
TPHCWG - Aliphatic >EC35 - EC40 EH_CU_ID_AL	mg/kg	10	NONE	< 10	< 10	< 10
TPHCWG - Aliphatic >EC5 - EC40 EH_CU+HS_ID_AL	mg/kg	10	NONE	< 10	28	< 10

TPHCWG - Aromatic >EC5 - EC7 HS_ID_AR	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 HS_ID_AR	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 HS_ID_AR	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 EH_CU_ID_AR	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 EH_CU_ID_AR	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPHCWG - Aromatic >EC16 - EC21 EH_CU_ID_AR	mg/kg	10	MCERTS	< 10	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 EH_CU_ID_AR	mg/kg	10	MCERTS	< 10	15	< 10
TPHCWG - Aromatic >EC35 - EC40 EH_CU_ID_AR	mg/kg	10	NONE	< 10	< 10	< 10
TPHCWG - Aromatic >EC5 - EC40 EH_CU+HS_ID_AR	mg/kg	10	NONE	< 10	15	< 10

TPH Total >EC5 - EC40 EH_CU+HS_ID_TOTAL	mg/kg	10	NONE	< 10	44	< 10
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VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



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MCERTS



Environmental Science

Analytical Report Number : 24-038488

Project / Site name: Chorlton Villas

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
297931	SP1	Composite 1	None Supplied	Brown sand
297932	SP1	Composite 2	None Supplied	Brown sand
297933	SP1	Composite 3	None Supplied	Brown sand



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Environmental Science

Analytical Report Number : 24-038488

Project / Site name: Chorlton Villas

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos Identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
TPH Chromatogram in soil	TPH Chromatogram in soil	In-house method	L064B	D	NONE
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088	D/W	MCERTS
Chromium III in soil	In-house method by calculation from total Cr and Cr VI	In-house method by calculation	L080	W	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099	D	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30°C.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.

The result for sum should be interpreted with caution

