

Our Ref: BEK/24060/240606/GK

6 June 2024

GK Construction & Project Management Ltd

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Ambrose Street, Manchester – Supplementary Site Investigation Letter Report

BEK has been commissioned by GK Construction & Project Management Ltd to prepare a Site Investigation Letter Report detailing the supplementary site investigation works undertaken at the site located off Ambrose Street, Manchester, M12 5DD.

The site investigation works were undertaken by BEK in order to provide additional information regarding asbestos contamination encountered within previous site investigation works undertaken by GeoAssist Limited in January 2023, the report of which is detailed below.

- GeoAssist Limited – ‘Phase II Contaminated Land Risk Assessment – Storage World Ambrose Street, Manchester’, Site Ref: 6101/VAJ-CLRA v1.00, dated January 2023.

Site Location & Description

The site is located to the north of Ambrose Street at the junction of Ambrose Street and the A6010 some 2 km south-east of Manchester City Centre. The site is roughly rectangular in shape and is largely occupied by a large warehouse building with associated exterior hardstanding areas.

Proposed Development

It is proposed to construct a five storey self-storage facility together with associated parking, circulation space and stores and landscaping following the demolition of existing buildings at the site. The proposed development can be seen on Urban Green drawing No. UG_1754_LAN_GA_DRW_01 (Rev P04) entitled ‘General Arrangement – Ambrose Street, Manchester’, dated 17/10/22, a copy of which is presented in Annex C.

Previous Site Investigation – GeoAssist Limited

GeoAssist undertook site investigation works in January 2023 as part of the preparation of a 'Phase II Contaminated Land Risk Assessment'. The works comprised the drilling of six exploratory holes to a maximum depth of 6.0 m, as well as the hand excavation of two trial holes to a maximum depth of 0.9 m. The exploratory locations can be seen on BEK Drawing No. 24060-1, dated 30/05/24, a copy of which is presented in Annex C.

Made ground within the exploratory locations was encountered to depths between 0.4 m and 2.7 m and generally comprised an uppermost layer of hardstanding atop sandy gravels with brick fragments. Silty clay containing ash and cinders was encountered in BH2, BH3 and BH6. The exploratory logs for the GeoAssist site investigation are provided within Annex A.

GeoAssist obtained a total of nine soil samples which were subjected to chemical testing for a wide range of contaminants of concern including asbestos identification. A total of five soil samples of the nine tested for asbestos returned a positive asbestos result, the details of which can be seen in the table below. No asbestos quantification testing was undertaken.

Location	Asbestos Containing Material Types Detected (ACM)	PLM Results
BH1 (0.3 m)	Hard/Cement Type Material	Chrysotile
BH2 (0.4 m)	Hard/Cement Type Material & Loose Fibrous Debris	Chrysotile
BH3 (0.5 m)	Loose Fibrous Debris	Chrysotile
BH5 (0.5 m)	Loose Fibres	Chrysotile
TP1 (0.3 m)	Hard/Cement Type Material	Chrysotile

Table 1: Summary of Results for Positive Asbestos Samples from GeoAssist Site Investigation

No other contaminants of concern were identified by GeoAssist when the soil chemical test results were compared against assessment criteria for a commercial end use.

GeoAssist concluded that the site presents a low contamination risk to end users/receptors and recommended that the issues relating to the ACMs encountered within the shallow made ground be addressed.

As no asbestos quantification testing was undertaken by GeoAssist, BEK considered it necessary to undertake additional site investigation works to obtain samples of made ground for asbestos quantification testing. This allows for a thorough assessment of the potential risks associated with asbestos at the site and facilitates the preparation of an Asbestos Management Plan.

BEK Site Investigation

Site investigation works were undertaken by BEK in May 2024 with the aim of obtaining additional samples of made ground for asbestos quantification testing. The works comprised the drilling of 8 No. window sample boreholes to 1.0 m depth.

Made ground was encountered in all exploratory locations and generally comprised an uppermost layer of hardstanding or gravel atop gravelly sands and sandy clays containing varying proportions of brick, ash and clinker.

The exploratory locations can be seen on BEK Drawing No. 24060-1, dated 30/05/24, a copy of which is presented in Annex C. The exploratory logs are provided within Annex A.

A total of eight samples were recovered and subjected to asbestos identification testing and after an initial test, no asbestos was detected within any of the samples. Notwithstanding, as asbestos was anticipated to be present within the samples, a retest of the samples was requested and found asbestos to be present within three of the eight samples.

Quantification was undertaken on the positive asbestos samples, with detailed quantification undertaken on those samples containing two or more types of ACMs. The results of the testing can be seen in the table below.

Location	Asbestos Type/Matrix Description	Quantification Result	
WS101 (0.3 m)	Amosite – Loose Fibres	<0.001 % w/w	
WS102 (0.4 m)	Amosite & Chrysotile – Loose Fibres	<0.001 % w/w	
WS103 (0.5 m)	Chrysotile – Loose Fibres	<0.001 % w/w	0.022% w/w
	Chrysotile – Woven	0.022 % w/w	Total

Table 2: Summary of Asbestos Quantification Testing in Positive Samples

It can be seen from the above table that two of the three positive asbestos samples contained asbestos concentrations at trace (<0.001% w/w) whilst the sample taken from WS103 (0.5 m) contained loose fibres at trace and woven chrysotile at a concentration of 0.022 % w/w.

Copies of the chemical test results are provided within Annex B.



GEO-ENVIRONMENTAL CONSULTING

BEK Geo-Environmental Consulting

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I trust the above is satisfactory. Please call me should you have any questions.

Yours sincerely

Michael Buckley

BSC (Hons) MSc MEnvSci CEnv

Revisions - Ambrose Street, Manchester – Supplementary Site Investigation Letter Report

Rev	Date	Comments	Author	Checked By



BEK Geo-Environmental Consulting

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ANNEX A

Borehole Records

GeoAssist Limited Consultant: Thomasons Client: Storage World Self Storage & Workspace LLP	Exploratory Hole Record Sheet Project: Storage World Ambrose Street Location: Manchester		Ref: BH1 Sheet: 1			
	Equipment: Archway Dart Rig		Ground Level: 52.75 m.AOD Co-ordinates: Easting: 387241.3(m) Northing: 397217.2(m) Dates: 16/11/2022 to 16/11/2022			
Drilling Foreman: M Walton STRATUM DESCRIPTION Engineer/Geologist: M Benson		Depth (Thick) (m)	Reduced Level (mAOD)	Strata Legend/ Standpipe Backfill	Samples/Tests Depth (m) from to Sample Type/No Blow Count N/(U)	Field Records

0	Grey/brown sandy gravel, brick and concrete fragments - MADE GROUND	(0.40) 0.40	52.35		0.30	C1		
	Stiff to very stiff brown with light grey gravelly sandy silty CLAY	(0.60) 1.00	51.75		0.80 1.00 1.20	D1 CP1 D2	9	TRLDCP Test CBR at 0.40m- 13%
1	Stiff to very stiff brown high to very high strength gravelly slightly sandy silty CLAY							Hand penetrometer at 1.20m - 164kPa
2					2.00	CP2	13	Hand penetrometer at 1.80m - >250kPa
3		(3.60)			3.00	CP3	13	Hand penetrometer at 2.50m - 220kPa
4		4.60	48.15		4.00	CP4	7	Hand penetrometer at 3.50m - 182kPa
5	Very stiff brown/grey very high strength gravelly sandy silty CLAY with occasional sand inclusions	(0.40) 5.00	47.75		4.90	CP5	9	Hand penetrometer at 4.50m - 144kPa Hand penetrometer at 4.80m - 219kPa
	Exploratory Hole complete at 5.00m							16/11/2022: On completion of exploratory hole at 5.00m. Casing at 2.00m. Standing water level Nil with casing. On withdrawal of casing groundwater/gas monitoring standpipe installed to 4.00m with response zone from 1.00m to 4.00m.
6								
7								
8								
9								
10								

Remarks: 16/11/2022: Inspection pit excavated to 1.00m depth to avoid services The groundwater conditions entered on the exploratory hole logs are those observed at the time of the drilling operations and the water level may not have reached equilibrium with the surrounding water level prior to the record being taken. Standing groundwater levels will be subject to seasonal variation or changes in local drainage conditions and could be higher at certain times of the year particularly after periods of heavy rainfall.	Logged: M Benson Date: 21/11/2022 Checked: M Richardson Date: 25/11/2022 Site Ref: 6101/VAJ Scale 1:50
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GeoAssist Limited	Exploratory Hole Record Sheet						Ref: BH3			
	Project: Storage World Ambrose Street						Sheet: 1			
	Location: Manchester									
	Consultant: Thomasons	Equipment: Archway Dart Rig					Ground Level: NR m.AOD			
Client: Storage World Self Storage & Workspace LLP	Co-ordinates: Easting: NR(m) Northing: NR(m)									
						Dates: 14/11/2022 to 14/11/2022				
Drilling Foreman: M Walton				Depth (Thick) (m)	Reduced Level (mAOD)	Strata Legend/ Standpipe Backfill	Samples/Tests			Field Records
STRATUM DESCRIPTION							Depth (m) from to	Sample Type/No	Blow Count N/(U)	
Engineer/Geologist: M Benson										

Remarks: 14/11/2022: Concrete slab precored The groundwater conditions entered on the exploratory hole logs are those observed at the time of the drilling operations and the water level may not have reached equilibrium with the surrounding water level prior to the record being taken. Standing groundwater levels will be subject to seasonal variation or changes in local drainage conditions and could be higher at certain times of the year particularly after periods of heavy rainfall.	Logged: M Benson Date: 21/11/2022 Checked: M Richardson Date: 25/11/2022 Site Ref: 6101/VAJ Scale 1:50
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GeoAssist Limited	Exploratory Hole Record Sheet							Ref: BH4		
	Project: Storage World Ambrose Street							Sheet: 1		
	Location: Manchester									
	Equipment: Archway Dart Rig							Ground Level: 52.46 m.AOD Co-ordinates: Easting: 387238.5(m) Northing: 397193(m) Dates: 16/11/2022 to 16/11/2022		
Consultant: Thomasons		Client: Storage World Self Storage & Workspace LLP								
Drilling Foreman: M Walton				Depth (Thick) (m)	Reduced Level (mAOD)	Strata Legend/ Standpipe Backfill	Samples/Tests			Field Records
STRATUM DESCRIPTION							Depth (m) from to	Sample Type/No	Blow Count N/(U)	
Engineer/Geologist: M Benson										

0 CONCRETE		0.12	52.34					
Stiff to very stiff brown with light grey high to very high strength gravelly sandy silty CLAY with occasional sand inclusions		(4.88)			0.30	C1		TRLDGP Test CBR at 0.30m- 5%
-1	D1							
	CP1				10	Hand penetrometer at 1.20m - 229kPa		
	D2							
	2.00				CP2	11	Hand penetrometer at 1.80m - 224kPa	
-2				3.00	CP3	12	Hand penetrometer at 2.50m - 167kPa	
-3				4.00	CP4	8	Hand penetrometer at 3.50m - 220kPa	
				4.90	CP5	9	Hand penetrometer at 4.50m - 172kPa	
Exploratory Hole complete at 5.00m		5.00	47.46				16/11/2022: On completion of exploratory hole at 5.00m. Casing at 2.00m. Standing water level Nil with casing. On withdrawal of casing exploratory hole backfilled and reinstated.	
-6								
-7								
-8								
-9								
-10								

Remarks: 16/11/2022: Inspection pit excavated to 1.00m depth to avoid services The groundwater conditions entered on the exploratory hole logs are those observed at the time of the drilling operations and the water level may not have reached equilibrium with the surrounding water level prior to the record being taken. Standing groundwater levels will be subject to seasonal variation or changes in local drainage conditions and could be higher at certain times of the year particularly after periods of heavy rainfall.	Logged: M Benson Date: 21/11/2022 Checked: M Richardson Date: 25/11/2022 Site Ref: 6101/VAJ Scale 1:50
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GeoAssist Limited		Exploratory Hole Record Sheet					Ref: BH5	
Consultant: Thomasons		Project: Storage World Ambrose Street Location: Manchester					Sheet: 1	
Client: Storage World Self Storage & Workspace LLP		Equipment: Archway Dart Rig					Ground Level: NR m.AOD Co-ordinates: Easting: NR(m) Northing: NR(m) Dates: 14/11/2022 to 14/11/2022	
Drilling Foreman: M Walton STRATUM DESCRIPTION Engineer/Geologist: M Benson		Depth (Thick) (m)	Reduced Level (mAOD)	Strata Legend/ Standpipe Backfill	Samples/Tests Depth (m) from to Sample Type/No		Blow Count N/(U)	Field Records
0 CONCRETE		0.30						
Dark grey/brown sandy gravel with cinders, brick and timber fragments - MADE GROUND		(1.10)			0.50 0.50	CP1 C1	15	
1		1.40			1.00 1.00	CP2 D1	3	
Firm to stiff brown medium to high strength gravelly sandy silty CLAY		(0.60)			1.50 1.60	CP3 D2	7	Hand penetrometer at 1.60m - 160kPa
2 Very stiff brown very high strength gravelly sandy silty CLAY		2.00			2.00	CP4	10	
3		(3.00)			3.00	CP5	9	Hand penetrometer at 2.50m - 187kPa
4					4.00	CP6	8	Hand penetrometer at 3.50m - 162kPa
5		5.00			4.90	CP7	16	Hand penetrometer at 4.50m - 170kPa
Exploratory Hole complete at 5.00m								14/11/2022: On completion of exploratory hole at 5.00m. Casing at 2.00m. Standing water level Nil with casing. On withdrawal of casing exploratory hole backfilled and reinstated.
6								
7								
8								
9								
10								
Remarks: 14/11/2022: Concrete slab precored The groundwater conditions entered on the exploratory hole logs are those observed at the time of the drilling operations and the water level may not have reached equilibrium with the surrounding water level prior to the record being taken. Standing groundwater levels will be subject to seasonal variation or changes in local drainage conditions and could be higher at certain times of the year particularly after periods of heavy rainfall.							Logged: M Benson Date: 21/11/2022 Checked: M Richardson Date: 25/11/2022 Site Ref: 6101/VAJ Scale 1:50	

GeoAssist Limited	Exploratory Hole Record Sheet		Ref: BH6
	Project: Storage World Ambrose Street Location: Manchester		Sheet: 1
Consultant: Thomasons	Equipment: Archway Dart Rig		Ground Level: 51.86 m.AOD Co-ordinates: Easting: 387268.8(m) Northing: 397174(m) Dates: 15/11/2022 to 15/11/2022
Client: Storage World Self Storage & Workspace LLP	Drilling Foreman: M Walton STRATUM DESCRIPTION Engineer/Geologist: M Benson		
		Depth (Thick) (m) Reduced Level (mAOD) Strata Legend/ Standpipe Backfill	Samples/Tests Depth (m) from to Sample Type/No Blow Count N/(U)
		Field Records	

0	CONCRETE	0.10	51.76									
	Brown sand, gravel and brick fragments - MADE GROUND	0.30	51.56			0.30	C1					
	Soft to firm brown/grey gravelly sandy silty clay - MADE GROUND	(0.70)				0.80	D1					
		1.00	50.86			1.00	CP1	1			Wet at 1.00m depth	
1	Very soft brown with grey gravelly sandy silty clay - MADE GROUND	(0.90)				1.40	D2					
		1.90	49.96									
2	Stiff brown high strength gravelly sandy silty CLAY					2.00	CP2	6			Hand penetrometer at 1.90m - 122kPa Hand penetrometer at 2.20m - 109kPa	
		(1.10)										
3	Brown silty fine to medium SAND	3.00	48.86			3.00	CP3	11			Hand penetrometer at 2.80m - 164kPa	
	Stiff brown high strength gravelly sandy silty CLAY	3.20	48.66								Wet from 3.20m depth	
		(0.80)									Hand penetrometer at 3.50m - 134kPa	
4	Medium dense brown with occasional black silty fine to medium SAND	4.00	47.86			4.00	CP4	12				
		(0.80)										
		4.80	47.06									
5	Brown/grey gravelly sandy silty CLAY	5.00	46.86			4.90	CP5	21			15/11/2022: On completion of exploratory hole at 5.00m. Casing at 2.00m. Standing water level at 3.80m with casing. On withdrawal of casing groundwater/gas monitoring standpipe installed to 4.50m with response zone from 1.00m to 4.50m.	
	Exploratory Hole complete at 5.00m											
6												
7												
8												
9												
10												

Remarks: 15/11/2022: Inspection pit excavated to 1.00m depth to avoid services The groundwater conditions entered on the exploratory hole logs are those observed at the time of the drilling operations and the water level may not have reached equilibrium with the surrounding water level prior to the record being taken. Standing groundwater levels will be subject to seasonal variation or changes in local drainage conditions and could be higher at certain times of the year particularly after periods of heavy rainfall.	Logged: M Benson Date: 21/11/2022 Checked: M Richardson Date: 25/11/2022 Site Ref: 6101/VAJ Scale 1:50
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GEO-ENVIRONMENTAL CONSULTANTS

GEO-ENVIRONMENTAL CONSULTING

PROJECT NUMBER 24060	DATE 10th May 2024
PROJECT NAME Ambrose Street, Manchester	DRILLING METHOD Window Sample Borehole
CLIENT GK Construction	BOREHOLE NO WS101
	SHEET 1/8

COMPLETION	CASING uPVC	SCREEN uPVC Factory Slotted
COMMENTS Borehole dry.		

Depth (m)	Depth (m)	Samples/ Test	Field Records	Water	Graphic Log	Material Description	Elevation (m)
0.05						MADE GROUND: Grey angular GRAVEL	0.05
0.1						MADE GROUND: Black/dark brown ashy sandy clay with occasional fine to coarse gravels, occasional ash and clinker, rare broken bricks fragments	0.1
0.15							0.15
0.2							0.2
0.25							0.25
0.3	0.3	D = 0.3 m					0.3
0.35							0.35
0.4							0.4
0.45							0.45
0.5							0.5
0.55							0.55
0.6							0.6
0.65							0.65
0.7							0.7
0.75							0.75
0.8							0.8
0.85							0.85
0.9							0.9
0.95							0.95
1						Termination Depth at: 1.0 m	1
1.05							1.05



GEO-ENVIRONMENTAL CONSULTANTS

GEO-ENVIRONMENTAL CONSULTING

PROJECT NUMBER 24060

PROJECT NAME Ambrose Street, Manchester

CLIENT GK Construction

DATE 10th May 2024

DRILLING METHOD Window Sample Borehole

BOREHOLE NO WS102

SHEET 2/8

COMPLETION

CASING uPVC

SCREEN uPVC Factory Slotted

COMMENTS Borehole dry.

Depth (m)	Depth (m)	Samples/ Test	Field Records	Water	Graphic Log	Material Description	Elevation (m)
0.05						MADE GROUND: Concrete	0.05
0.1							0.1
0.15							0.15
0.2						MADE GROUND: Brown/orangish slightly clayey very gravely SAND with frequent broken brick fragments	0.2
0.25							0.25
0.3							0.3
0.35							0.35
0.4	0.4	D = 0.4 m					0.4
0.45							0.45
0.5							0.5
0.55							0.55
0.6						Golden brown slightly sandy CLAY with rare fine to medium gravels	0.6
0.65							0.65
0.7							0.7
0.75							0.75
0.8							0.8
0.85							0.85
0.9							0.9
0.95							0.95
1						Termination Depth at: 1.0 m	1
1.05							1.05



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PROJECT NUMBER 24060

PROJECT NAME Ambrose Street, Manchester

CLIENT GK Construction

DATE 10th May 2024

DRILLING METHOD Window Sample Borehole

BOREHOLE NO WS103

SHEET 3/8

COMPLETION

CASING uPVC

SCREEN uPVC Factory Slotted

COMMENTS Borehole dry.

Depth (m)	Depth (m)	Samples/ Test	Field Records	Water	Graphic Log	Material Description	Elevation (m)
0.05						MADE GROUND: Reinforced concrete	0.05
0.1							0.1
0.15							0.15
0.2							0.2
0.25							0.25
0.3						MADE GROUND: Black/dark brown ashy very gravely sand with occasional ash and clinker, occasional broken bricks fragments	0.3
0.35							0.35
0.4							0.4
0.45							0.45
0.5	0.5	D = 0.5 m					0.5
0.55							0.55
0.6							0.6
0.65							0.65
0.7							0.7
0.75							0.75
0.8							0.8
0.85							0.85
0.9							0.9
0.95							0.95
1						Termination Depth at: 1.0 m	1
1.05							1.05



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PROJECT NUMBER 24060
PROJECT NAME Ambrose Street, Manchester
CLIENT GK Construction

DATE 10th May 2024
DRILLING METHOD Window Sample Borehole
BOREHOLE NO WS104
SHEET 4/8

COMPLETION **CASING** uPVC **SCREEN** uPVC Factory Slotted

COMMENTS Borehole dry.

Depth (m)	Depth (m)	Samples/ Test	Field Records	Water	Graphic Log	Material Description	Elevation (m)
0.05						MADE GROUND: Concrete	0.05
0.1							0.1
0.15						MADE GROUND: Black/dark brown ashy very gravelly sand with occasional ash and clinker, occasional broken bricks fragments	0.15
0.2							0.2
0.25							0.25
0.3						Golden brown slightly sandy CLAY with rare fine to medium gravels	0.3
0.35							0.35
0.4	0.4	D = 0.4 m					0.4
0.45							0.45
0.5							0.5
0.55							0.55
0.6							0.6
0.65							0.65
0.7							0.7
0.75							0.75
0.8							0.8
0.85							0.85
0.9							0.9
0.95							0.95
1						Termination Depth at: 1.0 m	1
1.05							1.05



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PROJECT NUMBER 24060

PROJECT NAME Ambrose Street, Manchester

CLIENT GK Construction

DATE 10th May 2024

DRILLING METHOD Window Sample Borehole

BOREHOLE NO WS105

SHEET 5/8

COMPLETION

CASING uPVC

SCREEN uPVC Factory Slotted

COMMENTS Borehole dry.

Depth (m)	Depth (m)	Samples/ Test	Field Records	Water	Graphic Log	Material Description	Elevation (m)
0.05						MADE GROUND: Concrete	0.05
0.1						MADE GROUND: Bricks	0.1
0.15							0.15
0.2							0.2
0.25							0.25
0.3						MADE GROUND: Black/dark brown ashy very gravely sand with occasional ash and clinker, occasional broken bricks fragments	0.3
0.35							0.35
0.4							0.4
0.45							0.45
0.5	0.5	D = 0.5 m					0.5
0.55							0.55
0.6							0.6
0.65							0.65
0.7							0.7
0.75							0.75
0.8							0.8
0.85							0.85
0.9							0.9
0.95							0.95
1						Termination Depth at: 1.0 m	1
1.05							1.05



GEO-ENVIRONMENTAL CONSULTANTS

GEO-ENVIRONMENTAL CONSULTING

PROJECT NUMBER 24060

PROJECT NAME Ambrose Street, Manchester

CLIENT GK Construction

DATE 10th May 2024

DRILLING METHOD Window Sample Borehole

BOREHOLE NO WS106

SHEET 6/8

COMPLETION

CASING uPVC

SCREEN uPVC Factory Slotted

COMMENTS Borehole dry.

Depth (m)	Depth (m)	Samples/ Test	Field Records	Water	Graphic Log	Material Description	Elevation (m)
0.05						MADE GROUND: Concrete	0.05
0.1							0.1
0.15						MADE GROUND: Black/dark brown ashy very gravely sand with occasional ash and clinker, occasional broken bricks fragments	0.15
0.2						Golden brown slightly sandy CLAY with rare fine to medium gravels	0.2
0.25							0.25
0.3							0.3
0.35							0.35
0.4	0.4	D = 0.4 m					0.4
0.45							0.45
0.5							0.5
0.55							0.55
0.6							0.6
0.65							0.65
0.7							0.7
0.75							0.75
0.8							0.8
0.85							0.85
0.9							0.9
0.95							0.95
1						Termination Depth at: 1.0 m	1
1.05							1.05



GEO-ENVIRONMENTAL CONSULTANTS

GEO-ENVIRONMENTAL CONSULTING

PROJECT NUMBER 24060

PROJECT NAME Ambrose Street, Manchester

CLIENT GK Construction

DATE 10th May 2024

DRILLING METHOD Window Sample Borehole

BOREHOLE NO WS107

SHEET 7/8

COMPLETION

CASING uPVC

SCREEN uPVC Factory Slotted

COMMENTS Borehole dry.

Depth (m)	Depth (m)	Samples/ Test	Field Records	Water	Graphic Log	Material Description	Elevation (m)
0.05						MADE GROUND: Concrete	0.05
0.1							0.1
0.15							0.15
0.2							0.2
0.25							0.25
0.3	0.3	D = 0.3 m					0.3
0.35						MADE GROUND: Black/dark brown ashy sandy clay with occasional fine to coarse gravels, occasional ash and clinker, rare broken bricks fragments	0.35
0.4							0.4
0.45							0.45
0.5							0.5
0.55							0.55
0.6							0.6
0.65							0.65
0.7							0.7
0.75							0.75
0.8							0.8
0.85							0.85
0.9							0.9
0.95							0.95
1						Termination Depth at: 1.0 m	1
1.05							1.05



GEO-ENVIRONMENTAL CONSULTANTS

GEO-ENVIRONMENTAL CONSULTING

PROJECT NUMBER 24060

PROJECT NAME Ambrose Street, Manchester

CLIENT GK Construction

DATE 10th May 2024

DRILLING METHOD Window Sample Borehole

BOREHOLE NO WS108

SHEET 8/8

COMPLETION

CASING uPVC

SCREEN uPVC Factory Slotted

COMMENTS Borehole dry.

Depth (m)	Depth (m)	Samples/ Test	Field Records	Water	Graphic Log	Material Description	Elevation (m)
0.05						MADE GROUND: Grey angular GRAVEL	0.05
0.1						MADE GROUND: Black/dark brown ashy sandy clay with occasional fine to coarse gravels, occasional ash and clinker, rare broken bricks fragments	0.1
0.15							0.15
0.2							0.2
0.25							0.25
0.3	0.3	D = 0.3 m					0.3
0.35							0.35
0.4							0.4
0.45							0.45
0.5							0.5
0.55							0.55
0.6							0.6
0.65							0.65
0.7							0.7
0.75							0.75
0.8							0.8
0.85							0.85
0.9							0.9
0.95							0.95
1						Termination Depth at: 1.0 m	1
1.05							1.05

ANNEX B

Chemical Test Results

FINAL ANALYTICAL TEST REPORT SUPPLEMENT TO TEST REPORT 24/04768/3

Amendments: Request for Additional Analysis

Envirolab Job Number: 24/04768
Issue Number: 4 **Date:** 30 May, 2024

Client: BEK Enviro Ltd
2 Landwick Court
Metcalf Drive
Altham Business Park
Altham
Lancashire
BB5 5GY

Project Manager: ** USE THIS Mick Buckley/James Mashiter
Project Name: Ambrose Street, Manchester
Project Ref: Not specified
Order No: 8210-24060-MLM
Date Samples Received: 14/05/24
Date Instructions Received: 15/05/24
Date Analysis Completed: 30/05/24

Approved by:

A handwritten signature in black ink, appearing to be "Amy Riding".

Amy Riding
Administration Assistant

Envirolab Job Number: 24/04768

Client Project Name: Ambrose Street, Manchester

Client Project Ref: Not specified

Lab Sample ID	24/04768/1	24/04768/2	24/04768/3	24/04768/4	24/04768/5	24/04768/6	24/04768/7	Units	Limit of Detection	Method ref
Client Sample No	WS101	WS102	WS103	WS104	WS105	WS106	WS107			
Client Sample ID										
Depth to Top	0.30	0.40	0.50	0.50	0.50	0.40	0.30			
Depth To Bottom										
Date Sampled	10-May-24	10-May-24	10-May-24	10-May-24	10-May-24	10-May-24	10-May-24			
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL			
Sample Matrix Code	4AC	4AB	4ABE	6A	4AB	6A	6A			
Asbestos in soil [#]	NAD	NAD	NAD	NAD	NAD	NAD	NAD			A-T-045
Asbestos Matrix (visual) ₀	-	-	-	-	-	-	-			A-T-045
Asbestos Matrix (microscope) ₀	-	-	-	-	-	-	-			A-T-045
Asbestos ACM - Suitable for Water Absorption Test? ₀	N/A	N/A	N/A	N/A	N/A	N/A	N/A			A-T-045

Envirolab Job Number: 24/04768

Client Project Name: Ambrose Street, Manchester

Client Project Ref: Not specified

Lab Sample ID	24/04768/8	24/04768/9	24/04768/10	24/04768/11	24/04768/12	24/04768/13	24/04768/14	Units	Limit of Detection	Method ref
Client Sample No	WS108	Re-test	Re-test	Re-test	Re-test	Re-test	Re-test			
Client Sample ID		WS101	WS102	WS103	WS104	WS105	WS106			
Depth to Top	0.30	0.30	0.40	0.50	0.50	0.50	0.40			
Depth To Bottom										
Date Sampled	10-May-24	10-May-24	10-May-24	10-May-24	10-May-24	10-May-24	10-May-24			
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL			
Sample Matrix Code	6A	4AC	4AB	4ABE	6A	4AB	6A			
Asbestos in soil [#]	NAD	Amosite	Amosite & Chrysotile	Chrysotile	NAD	NAD	NAD			A-T-045
Asbestos Matrix (visual) ₀	-	-	-	-	-	-	-			A-T-045
Asbestos Matrix (microscope) ₀	-	Loose Fibres	Loose Fibres	Loose Fibres & Woven	-	-	-			A-T-045
Asbestos ACM - Suitable for Water Absorption Test? ₀	N/A	N/A	N/A	N/A	N/A	N/A	N/A			A-T-045
Asbestos in soil % composition (hand picking and weighing) ₀	-	<0.001	-	0.022	-	-	-	% w/w	0.001	A-T-054
Asbestos in soil % composition (1st visually identified Matrix) ₀	-	-	-	-	-	-	-	% w/w	0.001	A-T-054
Asbestos in soil % composition (2nd visually identified Matrix) ₀	-	-	-	-	-	-	-	% w/w	0.001	A-T-054
Asbestos in soil % composition (3rd visually identified Matrix) ₀	-	-	-	-	-	-	-	% w/w	0.001	A-T-054
Asbestos in soil % composition (1st microscope identified Matrix) ₀	-	-	<0.001	<0.001	-	-	-	% w/w	0.001	A-T-054
Asbestos in soil % composition (4th visually identified Matrix) ₀	-	-	-	-	-	-	-	% w/w	0.001	A-T-054
Asbestos in soil % composition (4th visually identified Matrix) ₀	-	-	-	-	-	-	-	% w/w	0.001	A-T-054
Asbestos in soil % composition (2nd microscope identified Matrix) ₀	-	-	<0.001	0.022	-	-	-	% w/w	0.001	A-T-054
Asbestos in soil % composition (3rd microscope identified Matrix) ₀	-	-	-	-	-	-	-	% w/w	0.001	A-T-054
Asbestos in soil % composition - TOTAL ₀	-	-	<0.001	0.022	-	-	-	% w/w	0.001	A-T-054
Asbestos in soil % composition (4th microscope identified Matrix) ₀	-	-	-	-	-	-	-	% w/w	0.001	A-T-054
Asbestos in soil % composition (5th microscope identified Matrix) ₀	-	-	-	-	-	-	-	% w/w	0.001	A-T-054

Envirolab Job Number: 24/04768

Client Project Name: Ambrose Street, Manchester

Client Project Ref: Not specified

Lab Sample ID	24/04768/15	24/04768/16						Units	Limit of Detection	Method ref
Client Sample No	Re-test	Re-test								
Client Sample ID	WS107	WS108								
Depth to Top	0.30	0.30								
Depth To Bottom										
Date Sampled	10-May-24	10-May-24								
Sample Type	SOIL	SOIL								
Sample Matrix Code	6A	6A								
Asbestos in soil [#]	NAD	NAD								A-T-045
Asbestos Matrix (visual) _D	-	-								A-T-045
Asbestos Matrix (microscope) _D	-	-								A-T-045
Asbestos ACM - Suitable for Water Absorption Test? _D	N/A	N/A								A-T-045

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 within the same delivery, will be disposed of **four weeks** after the 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 our scope of accreditation.
 The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client.
 A deviating sample 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.

Key

Superscript "#"	Accredited to ISO 17025
Superscript "M"	Accredited to MCertS
Superscript "U"	Individual result not accredited
None of the above symbols	Analysis unaccredited
Subscript "A"	Analysis performed on as-received Sample
Subscript "D"	Analysis performed on the dried sample, crushed to pass 2mm sieve.
Subscript "A"	Analysis has dependant options against results. Details appear in the comments of your Sample receipt
IS	Insufficient Sample for analysis
US	Unsuitable Sample for analysis
NDP	No Determination Possible
NAD	No Asbestos Detected
N/A	Not applicable

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.

Assigned Matrix Codes

1	SAND	6	CLAY/LOAM	A	Contains Stones
2	LOAM	7	OTHER	B	Contains Construction Rubble
3	CLAY	8	Asbestos Bulk (Only Asbestos ID accredited)	C	Contains visible hydrocarbons
4	LOAM/SAND	9	Incinerator Ash (some Metals accredited)	D	Contains glass / metal
5	SAND/CLAY			E	Contains roots / twigs

Note: 7,8,9 matrices are not covered by our ISO 17025 or MCertS accreditation, unless stated above.

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 by method A-T-007:

For waters, free and visible oils are excluded from the sample used for analysis, so the reported result represents the dissolved phase only.
 Results "with Clean up" indicates samples cleaned up with Silica during extraction.

EPH CWG (method A-T-055) from TPH CWG:

EPH CWG results have humics mathematically subtracted through instrument calculation.
 Where these humic substances have been identified in any IDs from "TPH CWG with clean up" please note that the concentration is **NOT** included in the quantified results but present in the ID for information.

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

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

Please contact your client manager if you require any further information.

Envirolab Deviating Samples Report

Hattersley Science & Technology Park, Stockport Road, Hattersley, SK14 3QU
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: BEK Enviro Ltd, 2 Landwick Court, Metcalfe Drive, Altham Business Park,
Altham, Lancashire , BB5 5GY

Project: Ambrose Street, Manchester

Clients Project No:

Project No: 24/04768

Date Received: 15/05/2024 (am)

Cool Box Temperatures (°C): 16.9

NO DEVIATIONS IDENTIFIED with respect to sampling dates or containers received.

Note: 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 (for water samples $5 \pm 3^{\circ}\text{C}$), ISO 18400-105:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID	24/04768/1	24/04768/2	24/04768/3	24/04768/4	24/04768/5	24/04768/6	24/04768/7	24/04768/8	24/04768/9	24/04768/10	24/04768/11	24/04768/12
Client Sample No	WS101	WS102	WS103	WS104	WS105	WS106	WS107	WS108	Re-test	Re-test	Re-test	Re-test
Client Sample ID/Depth	0.30m	0.40m	0.50m	0.50m	0.50m	0.40m	0.30m	0.30m	WS101 0.30m	WS102 0.40m	WS103 0.50m	WS104 0.50m
Date Sampled	10/05/24	10/05/24	10/05/24	10/05/24	10/05/24	10/05/24	10/05/24	10/05/24	10/05/24	10/05/24	10/05/24	10/05/24
A-T-045	17/05/2024	17/05/2024	17/05/2024	17/05/2024	17/05/2024	17/05/2024	17/05/2024	17/05/2024	24/05/2024	24/05/2024	24/05/2024	24/05/2024
A-T-054									29/05/2024	29/05/2024	30/05/2024	

Lab Sample ID	24/04768/13	24/04768/14	24/04768/15	24/04768/16
Client Sample No	Re-test	Re-test	Re-test	Re-test
Client Sample ID/Depth	WS105 0.50m	WS106 0.40m	WS107 0.30m	WS108 0.30m
Date Sampled	10/05/24	10/05/24	10/05/24	10/05/24
A-T-045	24/05/2024	24/05/2024	24/05/2024	24/05/2024
A-T-054				

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report



BEK Geo-Environmental Consulting

No.2 Landwick Court, Metcalf Drive, Altham Business Park,
Lancashire BB5 5GY

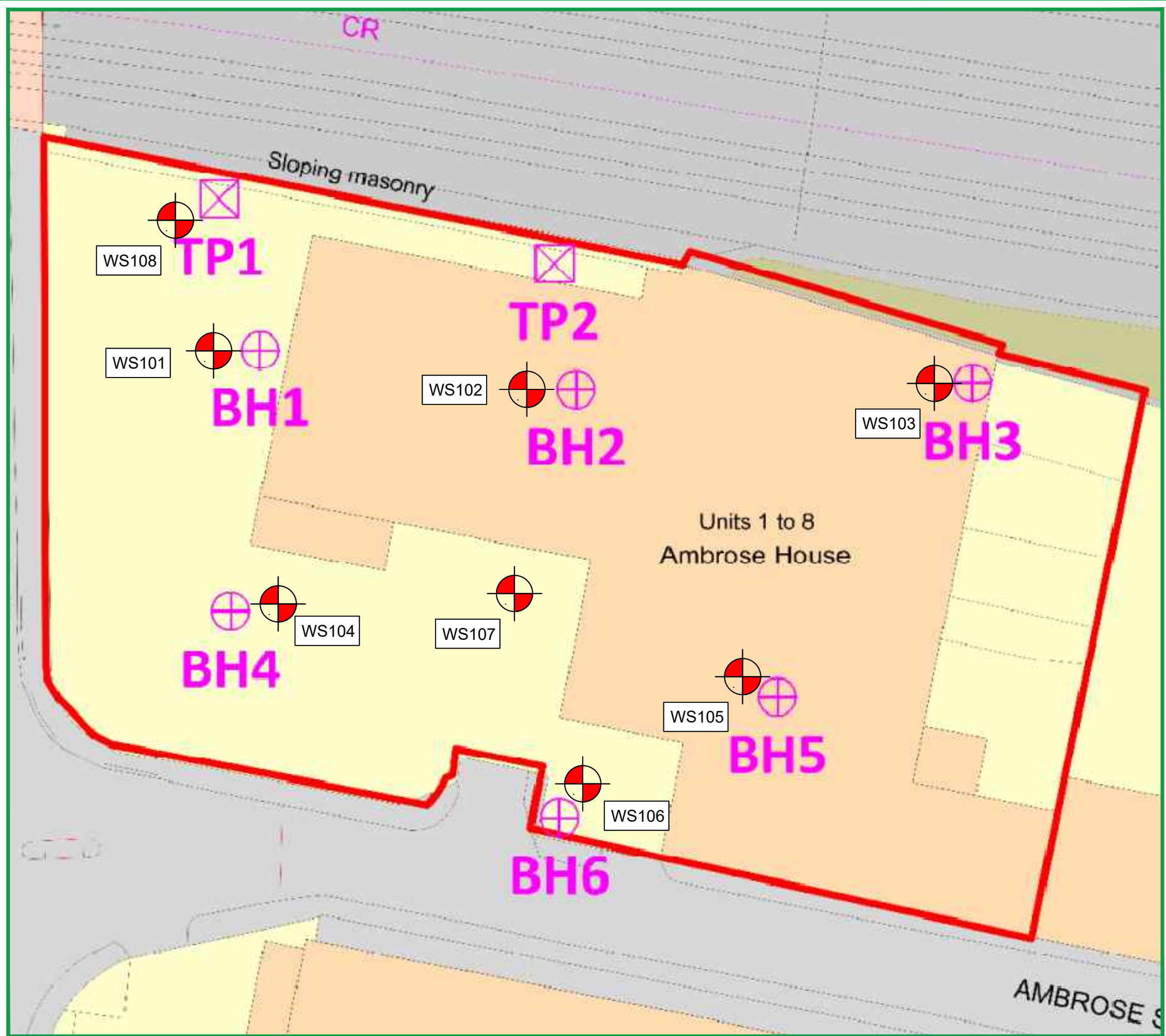
mbuckley@bekenviro.co.uk

bekenviro.co.uk

01254 377622

ANNEX C

Drawings



LEGEND

-  GEOASSIST WINDOW SAMPLE BOREHOLE (JANUARY 2023)
-  GEOASSIST TRIAL PIT (JANUARY 2023)
-  BEK WINDOW SAMPLE BOREHOLE (MAY 2024)

REV	DESCRIPTION	DATE	BY



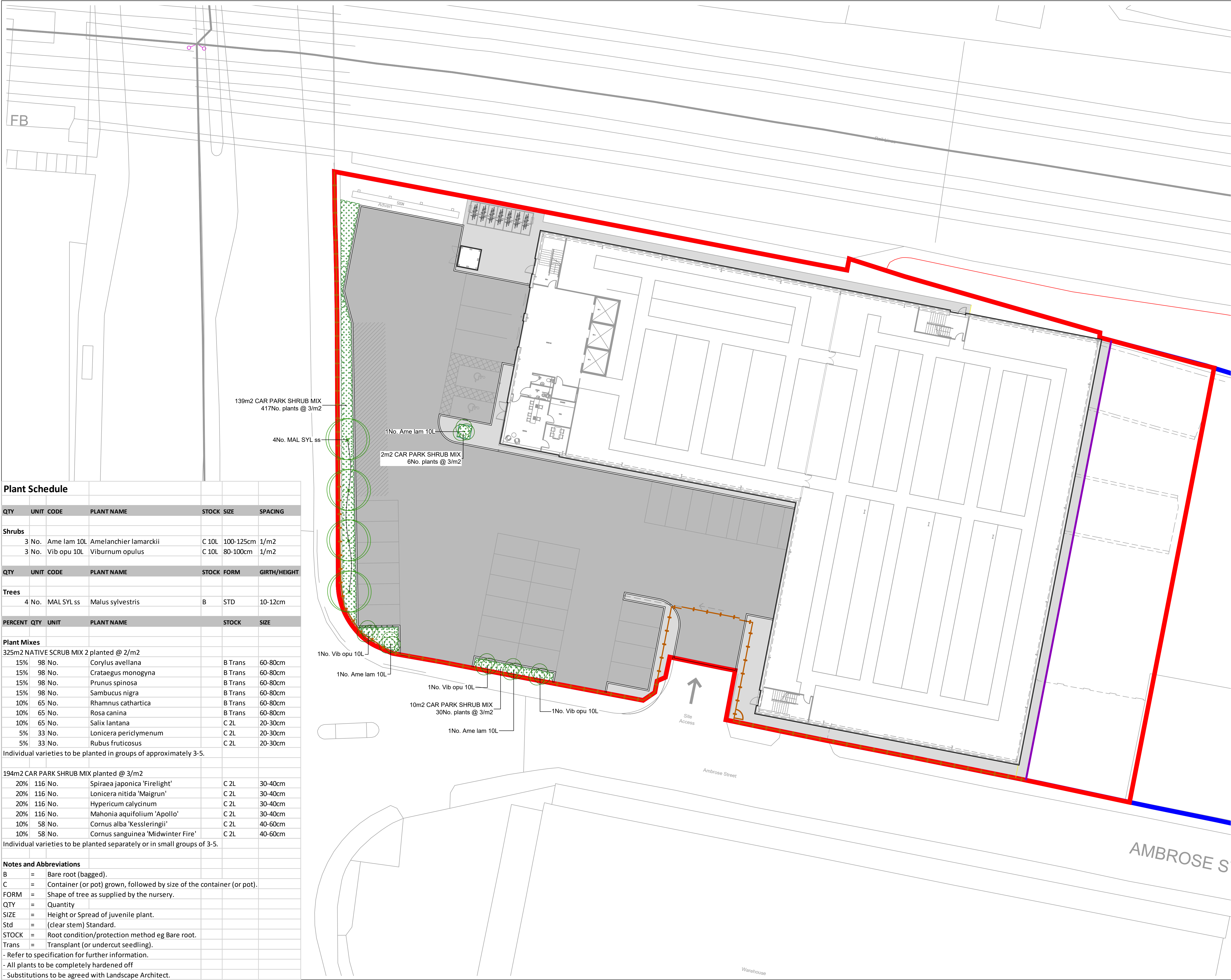
GEO-ENVIRONMENTAL CONSULTING
No 2 Landwick Court, Metcalf Drive, Altham Business Park, Lancashire, BB5 5GY
Tel: 01254 377622 Mob: 07906753583
Email: mbuckley@bekenviro.co.uk
Web: www.bekenviro.co.uk

CLIENT.
GK CONSTRUCTION & PROJECT MANAGEMENT

JOB TITLE.
AMBROSE STREET, MANCHESTER

DRAWING TITLE.
SITE INVESTIGATION PLAN

SCALE © A3. NTS	DRAWN BY. D.E.	APPROVED BY. M.B.	DATE. 30/05/24
DRAWING No. 24060-1	REV. -		



Plant Schedule						
QTY	UNIT	CODE	PLANT NAME	STOCK	SIZE	SPACING
Shrubs						
3 No.	Ame lam	10L	Amelanchier lamarckii	C 10L	100-125cm	1/m2
3 No.	Vib opu	10L	Viburnum opulus	C 10L	80-100cm	1/m2
QTY	UNIT	CODE	PLANT NAME	STOCK	FORM	GIRTH/HEIGHT
Trees						
4 No.	MAL SYL	ss	Malus sylvestris	B	STD	10-12cm
PERCENT	QTY	UNIT	PLANT NAME	STOCK	SIZE	
Plant Mixes						
325m2 NATIVE SCRUB MIX 2 planted @ 2/m2						
15%	98 No.		Corylus avellana	B Trans	60-80cm	
15%	98 No.		Crataegus monogyna	B Trans	60-80cm	
15%	98 No.		Prunus spinosa	B Trans	60-80cm	
15%	98 No.		Sambucus nigra	B Trans	60-80cm	
10%	65 No.		Rhamnus cathartica	B Trans	60-80cm	
10%	65 No.		Rosa canina	B Trans	60-80cm	
10%	65 No.		Salix lantana	C 2L	20-30cm	
5%	33 No.		Lonicera periclymenum	C 2L	20-30cm	
5%	33 No.		Rubus fruticosus	C 2L	20-30cm	
Individual varieties to be planted in groups of approximately 3-5.						
194m2 CAR PARK SHRUB MIX planted @ 3/m2						
20%	116 No.		Spiraea japonica 'Firelight'	C 2L	30-40cm	
20%	116 No.		Lonicera nitida 'Maigrun'	C 2L	30-40cm	
20%	116 No.		Hypericum calycinum	C 2L	30-40cm	
20%	116 No.		Mahonia aquifolium 'Apollo'	C 2L	30-40cm	
10%	58 No.		Cornus alba 'Kessleringii'	C 2L	40-60cm	
10%	58 No.		Cornus sanguinea 'Midwinter Fire'	C 2L	40-60cm	
Individual varieties to be planted separately or in small groups of 3-5.						
Notes and Abbreviations						
B	=	Bare root (bagged).				
C	=	Container (or pot) grown, followed by size of the container (or pot).				
FORM	=	Shape of tree as supplied by the nursery.				
QTY	=	Quantity				
SIZE	=	Height or Spread of juvenile plant.				
Std	=	(clear stem) Standard.				
STOCK	=	Root condition/protection method eg Bare root.				
Trans	=	Transplant (or undercut seedling).				
- Refer to specification for further information.						
- All plants to be completely hardened off						
- Substitutions to be agreed with Landscape Architect.						

Do not scale this drawing (printed or electronic version).

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All works to be carried out in accordance with the latest British Standards / Codes of Practice unless specifically directed otherwise in the specification.

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Graphical representations of equipment on this drawing have been co-ordinated, but are approximations only. Please refer to the specifications and / or details for actual sizes and / or specific contractor construction information.

Notes:-

KEY

Hard Works

Vehicular Asphalt Surface

Black colour.

Pedestrian Asphalt Surface

Black colour.

Black Paladin Fence

With matching gates.

Retaining Wall

Detail to engineer's specification

Raised 500mm high Planter Edging

Steel planter, Logic STAPEL

Size- 500mm high, 1500mm x 1500mm. Supplied by Logic

Street Furniture or equal approved.

Soft Works

Proposed Trees

Proposed specimen shrub

C 10L specimen shrub.

Proposed Low Level Shrub Mix Planting

P04	30/06/23	AMENDED ISSUE	SH	SA
P03	13/01/23	AMENDED ISSUE	TH	SA
P02	31/10/22	AMENDED ISSUE	TH	SA
P01	18/10/22	FIRST ISSUE	TH	SA
REV.	DATE	DESCRIPTION	DRAWN	CHK'D

URBAN GREEN

A: Ground Floor, The Tower, Deva City Office Park, Trinity Way, Manchester M3 7BF

T: +44 (0) 161 312 3131

weareurbangreen.co.uk

Client: STORAGE WORLD

Project: AMBROSE STREET, MANCHESTER

Title: General Arrangement

Issue: PLANNING

Drawn: TH	Checked: SA	Approved: ME
Project: UG1754	Scale @ A1: 1:200	Date: 17/10/22
Dwg No: UG_1754_LAN_GA_DRW_01	Revision: P04	