



SUB SURFACE CONSULTANTS

GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS



Your ref:

Our ref: DJ/NE3941F/S

Reg. Office

**SUB SURFACE
CONSULTANTS LTD.
3 PEEL STREET
PRESTON
PR2 2QS**

Telephone: 01772-561135

Fax: 01772-204907

e-mail: preston@subsurface.co.uk

www.subsurface.co.uk

18th May 2022

Creative Developments (Huddersfield) Limited
107 Bradford Road,
Huddersfield
HD1 6DZ

Dear Sirs,

**RE: RISK ASSESSMENT OF SCRUB AREA, LAUND ROAD, SALENDINE NOOK,
HUDDERSFIELD**

This report has been prepared in accordance with an email dated 13th May 2022 from the Client.

The brief includes a site visit to inspect and take soil samples from the scrub area at the south eastern end of the site, and provision of a letter report on the findings.

The following reports have previously been issued for this site and should be read in conjunction with this Remediation Statement:

- Phase I Desk Study Reference: A0697/17, November 2017 undertaken by Earth Environmental & Geotechnical Ltd (EEG)
- Phase II Ground Investigation Reference: A0697/17, October 2019 undertaken by Earth, Environmental & Geotechnical Ltd (EEG)
- Addendum Phase II Investigation Reference: A0697/20, January 2020 undertaken by Earth Environmental & Geotechnical Ltd (EEG)

It should be noted that the risk assessment for the scrub area has been revised following comments from the Local Authority Environmental Health Officer and this letter report supersedes the risk assessment presented in our previous reports NE3941F/7 and NE3941F/8.

1.1 Site Location and Description

The site is located off Laund Road to the northwest of Huddersfield town centre. The site is roughly L-shaped with maximum approximate dimensions of 70m by 30m. The National Grid Reference for the centre of the site is 410379E, 418266N.

The site is accessed off Laund Road and is bound by open land with some houses to the north and east, by residential properties and gardens to the north west and along the southern side, and by Laund Road to the south west.

The site rises up from Laund Road to the main flat part of the site in its rear northern half, with the land beyond rising up further. Some retaining features are present along parts of the southern boundary and part is a sloping garden area, bordered by mature and semi mature trees and bushes.

The specific area of this investigation comprises an area designated as scrub at the south eastern end of the site as indicated on Figure 3.

1.2 Proposed Development & Purpose of the Risk Assessment

The site is currently being developed as residential housing as depicted on Figure 3.

The purpose of this risk assessment is to determine whether significant chemical contamination is present in the near surface soil in the designated scrub area at the eastern end of the and to ascertain whether remedial measures are required to protect the end users of the site.

3. ECOLOGICALLY PROTECTED AREA OF SCRUB

3.1 Designation

We understand that following recommendations given in the Preliminary Ecological Appraisal (PEA) undertaken by Middleton Ecological Consultancy (MEC) in February 2015 the Planning Conditions for the site require that an area of scrub is to be retained at the rear of the site for the enhancement of site biodiversity and to comply with the National Planning Policy Framework.

The Local Authority Environmental Health Officer has indicated that given the proximity to Plots 7 and 8 the scrub area could potentially be brought into use as garden space. Therefore, for the purposes of this assessment the scrub area has been classified as residential with homegrown produce as defined in the EA Science Report SR3 'Updated *Technical Background to the CLEA Model*'.

3.2 Contamination Assessment

Six hand dug pits (HD30 to HD36) were taken out at the positions determined and set out by Sub Surface North East Limited, as shown on Figure 3. The hand dug trial pits were excavated to depths of between 0.35m and 0.60m. Samples were taken for logging, in accordance with BS EN ISO 14688-1: 2018 and BS EN ISO 14689-1: 2018, and the resulting Hand Dug Trial Pit Records are appended.

Three samples of the near surface soil (from HD30, HD32 and HD35) were subjected to the following suite of analyses by an MCERTS and UKAS accredited laboratory (Chemtest Limited):

Arsenic	Nickel
Asbestos	pH
Boron	Phenols
Cadmium	Polynuclear Aromatic Hydrocarbons (16 EPA PAH)
Chromium	Selenium
Copper	Sulphide
Cyanide	Sulphate
Lead	Total Petroleum Hydrocarbons (3-BAND SPECIATION)
Mercury	Zinc

The hand dug pits chosen for contamination analyses were positioned at approximately 7.5m centres, exceeding the minimum sampling density of 10m to 25m centres as recommended in BS 10175:2011+A2:2017 for a detailed investigation.

The results of the analyses were compared with generic assessment criteria (GACs) for residential with homegrown produce.

To assess the polycyclic aromatic hydrocarbon (PAH) contamination the surrogate marker approach has been used. The ratios of the seven genotoxic PAHs (benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(123-cd)pyrene, dibenzo(ah)anthracene and benzo(ghi)perylene) to benzo(a)pyrene, have been determined and compared with the published ratio profile of a coal tar test material (Culp et al in 1998).

The comparison indicates that the PAH contamination matches the Culp profile within reasonable bounds (as defined in DEFRA 2014) allowing the genotoxic PAHs to be assessed against the C4SL for benzo(a)pyrene as a surrogate marker. A copy of the ratio assessment is appended.

The analyses determined one slightly elevated concentration of lead (260mg/kg) in the sample taken from HD32 at 0.00m to 0.40m, when compared with the C4SL critical value of 200mg/kg.

No specific potentially contaminative activities are highlighted in the Phase I report in the vicinity of the scrub area and it is likely that the contamination is derived from past construction and demolition on the site.

Given that the exceedance is marginal with the other two samples tested from the scrub area returning values well below the C4SL (giving a mean concentration across the three samples of 132mg/kg) and given the conservative nature of the generic assessment criteria, in our opinion the single exceedance does not represent a very significant risk and in our opinion no remedial action is warranted.

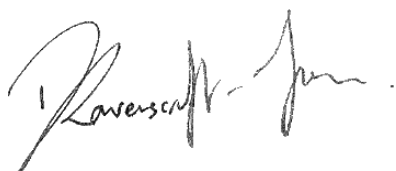
The GACs used for the assessment are appended.

4. GENERAL

We recommend that this Verification Report should be submitted to the Local Authority Environmental Health Officer for their consideration and written approval obtained prior to finalising the development.

We trust that this report fulfils your present requirements but if you have any queries or we can be of further assistance please contact the undersigned or Mr David Simpson at our Ossett office.

SUB SURFACE CONSULTANTS LIMITED
REPORT No. NE3941F/S
MAY 2022

A handwritten signature in black ink, appearing to read 'D. Ravenscroft-Jones', is written over a light blue horizontal line.

D. Ravenscroft-Jones Cert Nat Sci (Open), BSc.(Hons.), MSc., CEnv, MIEEnvSc, AMRSC
Principal Geoenvironmental Engineer
For and on behalf of
Sub Surface Consultants Limited

GENERIC ASSESSMENT CRITERIA



SUB SURFACE

SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Contamination Assessment

Site: SCRUB AREA, SALENDINE NOOK, HUDDERSFIELD
Client: CREATIVE DEVELOPMENTS (HUDDERSFIELD) LIMITED
Engineer:

Job Number:

NE3941F/S

Sheet:

1/1

GENERIC ASSESSMENT CRITERIA - RESIDENTIAL WITH HOMEGROWN PRODUCE 1% SOM

	LQM & CIEH (S4ULs)*
	DEFRA (C4SLs)
	CLAIRE

Determinant	GAC	Units
Boron (water soluble)	290	mg/kg
Arsenic	37	mg/kg
Cadmium	11	mg/kg
Chromium III	910	mg/kg
Copper	2,400	mg/kg
Mercury	40	mg/kg
Nickel	130	mg/kg
Lead	200	mg/kg
Selenium	250	mg/kg
Zinc	3,700	mg/kg
Chromium VI	6.0	mg/kg
Phenols (total)	1,100	mg/kg
PAHs		
Naphthalene	2.3	mg/kg
Acenaphthylene	170	mg/kg
Acenaphthene	210	mg/kg
Fluorene	170	mg/kg
Phenanthrene	95	mg/kg
Anthracene	2,400	mg/kg
Fluoranthene	280	mg/kg
Pyrene	620	mg/kg
Benzo(a)anthracene	7.2	mg/kg
Chrysene	15	mg/kg
Benzo(b)fluoranthene	2.6	mg/kg
Benzo(k)fluoranthene	77	mg/kg
Benzo(a)pyrene	2.2	mg/kg
Indeno(1,2,3-cd)pyrene	27	mg/kg
Dibenzo(a,h)anthracene	0.24	mg/kg
Benzo(g,h,i)perylene	320	mg/kg
Coal Tar (BAP Marker)	0.79	mg/kg
BTEX		
Benzene	0.09	mg/kg
Toluene	130	mg/kg
Ethylbenzene	47	mg/kg
m-Xylene	59	mg/kg
p-Xylene	56	mg/kg
o-Xylenes	60	mg/kg
MTBE	160	mg/kg

Determinant	GAC	Units
CWG SUITE		
Aliphatic C5-C6	42	mg/kg
Aliphatic >C6-C8	100	mg/kg
Aliphatic >C8-C10	27	mg/kg
Aliphatic >C10-C12	130	mg/kg
Aliphatic >C12-C16	1,100	mg/kg
Aliphatic >C16-C35	65,000	mg/kg
Aliphatic >C35-C44	65,000	mg/kg
Aromatic C5-C7 (benzene)	70	mg/kg
Aromatic >C7-C8 (toluene)	130	mg/kg
Aromatic >C8-C10	34	mg/kg
Aromatic >C10-C12	74	mg/kg
Aromatic >C12-C16	140	mg/kg
Aromatic >C16-C21	260	mg/kg
Aromatic >C21-C35	1,100	mg/kg
Aromatic >C35-C44	1,100	mg/kg
Aliphatic & Aromatic C44-C70	1,600	mg/kg

*Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3114. All Rights Reserved.

CONTAMINATION ANALYSIS RESULTS

Site: ROUGH GRASS AREA TO REAR OF PLOTS 7/8, LAUND ROAD, HUDDERSFIELD

Client: CREATIVE DEVELOPMENTS LIMITED

Engineer:

Job Number:

NE3941F/S

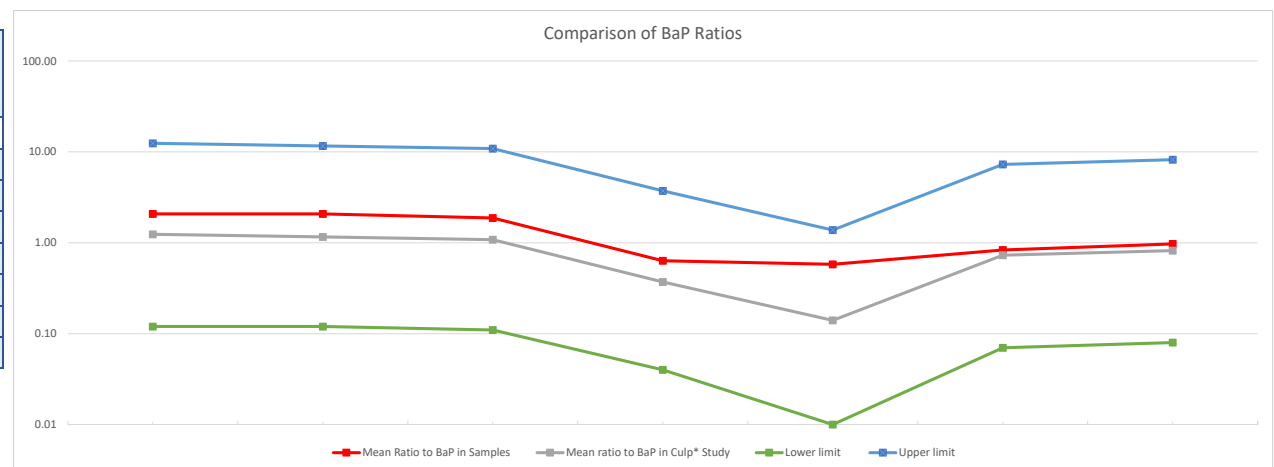
Sheet:

1 / 1

Benzo(a)pyrene Surrogate Marker Test

[illegible]

PAH	Units	Mean Concentrations in samples	Mean Ratio to BaP in Samples	Mean ratio to BaP in Culp* Study	Lower limit	Upper limit
Benzo(a)pyrene	mg/kg	1.30	1.00	–	–	–
Benz[a]anthracene	mg/kg	2.70	2.08	1.24	0.12	12.43
Chrysene	mg/kg	2.70	2.08	1.16	0.12	11.61
Benzo[b]fluoranthene	mg/kg	2.43	1.87	1.08	0.11	10.85
Benzo[k]fluoranthene	mg/kg	0.82	0.63	0.37	0.04	3.72
Dibenz[ah]anthracene	mg/kg	0.75	0.58	0.14	0.01	1.38
Indeno[123-cd]pyrene	mg/kg	1.08	0.83	0.73	0.07	7.27
Benzo[ghi]perylene	mg/kg	1.26	0.97	0.82	0.08	8.22



Comments:

*CULP, S.J., GAYLOR, D.W., SHELDON, W.G. GOLDSTEIN, L.W., BELAND, F.A., 1998. A comparison of the tumors induced by coal tar and benzo(a)pyrene in a 2-year bioassay.

Assessed in accordance with Development of Category 4 Screening Levels for assessment of land affected by contamination - SP1010 Appendix E



2183

Final Report

Report No.: 22-08577-1
Initial Date of Issue: 16-Mar-2022
Client Sub Surface
Client Address: 3 Peel Street□
Preston□
Lancashire□
PR2 2QS
Contact(s): Simon Gabbatt
Project NE3941F7 Plots 7 & 8, Laund Road,
Huddersfield

Quotation No.: **Date Received:** 08-Mar-2022

Order No.: **Date Instructed:** 08-Mar-2022

No. of Samples: 5

Turnaround (Wkdays): 7 **Results Due:** 16-Mar-2022

Date Approved: 16-Mar-2022

Approved By:



Details: Stuart Henderson, Technical
Manager□

Results - Soil

Project: NE3941F7 Plots 7 & 8, Laund Road, Huddersfield

Client: Sub Surface	Chemtest Job No.:				22-08577	22-08577	22-08577	22-08577	22-08577
Quotation No.:	Chemtest Sample ID.:				1386476	1386477	1386478	1386479	1386480
	Client Sample ID.:				890	892	895	896	898
	Sample Location:				HD30	HD32	HD35	HD36	HD38
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				0.20	0.00	0.10	0.20	0.10
	Bottom Depth (m):				0.50	0.40	0.40	0.60	0.50
	Date Sampled:				25-Feb-2022	25-Feb-2022	25-Feb-2022	25-Feb-2022	25-Feb-2022
	Asbestos Lab:				DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD					
ACM Type	U	2192		N/A	-	-	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020	40	26	26	23	16
pH	U	2010		4.0	7.1	6.3	5.8	8.5	8.4
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	0.56	0.87	1.5	1.0	1.0
Cyanide (Total)	U	2300	mg/kg	0.50	0.60	0.50	0.60	< 0.50	0.60
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	1.6	1.8	1.9	0.51	1.3
Sulphate (Total)	U	2430	%	0.010	0.11	0.16	0.013	0.049	0.031
Arsenic	U	2450	mg/kg	1.0	12	23	1.7	2.3	3.0
Cadmium	U	2450	mg/kg	0.10	0.46	0.33	< 0.10	0.18	0.17
Chromium	U	2450	mg/kg	1.0	56	27	5.4	5.3	5.5
Molybdenum	U	2450	mg/kg	2.0	< 2.0	7.0	< 2.0	< 2.0	< 2.0
Copper	U	2450	mg/kg	0.50	50	48	5.5	15	9.9
Mercury	U	2450	mg/kg	0.10	0.70	0.47	< 0.10	< 0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	32	23	6.3	5.4	5.7
Lead	U	2450	mg/kg	0.50	130	260	8.0	13	13
Selenium	U	2450	mg/kg	0.20	0.37	0.76	< 0.20	< 0.20	< 0.20
Zinc	U	2450	mg/kg	0.50	310	98	13	24	25
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TPH >C6-C10	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C21	N	2670	mg/kg	1.0	17	48	22	< 1.0	< 1.0
TPH >C21-C40	N	2670	mg/kg	1.0	5.4	81	14	< 1.0	< 1.0
Total TPH >C6-C40	U	2670	mg/kg	10	23	130	36	< 10	< 10
Naphthalene	U	2700	mg/kg	0.10	< 0.10	1.3	< 0.10	< 0.10	< 0.10
Acenaphthylene	U	2700	mg/kg	0.10	< 0.10	0.12	< 0.10	< 0.10	< 0.10
Acenaphthene	U	2700	mg/kg	0.10	< 0.10	0.90	< 0.10	< 0.10	< 0.10
Fluorene	U	2700	mg/kg	0.10	< 0.10	0.51	< 0.10	< 0.10	< 0.10
Phenanthrene	U	2700	mg/kg	0.10	1.8	3.5	1.2	< 0.10	< 0.10
Anthracene	U	2700	mg/kg	0.10	< 0.10	0.79	0.25	< 0.10	< 0.10
Fluoranthene	U	2700	mg/kg	0.10	2.3	4.3	2.6	< 0.10	< 0.10
Pyrene	U	2700	mg/kg	0.10	2.2	4.2	2.6	< 0.10	< 0.10
Benzo[a]anthracene	U	2700	mg/kg	0.10	3.1	2.9	2.1	< 0.10	< 0.10
Chrysene	U	2700	mg/kg	0.10	2.3	3.5	2.3	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2700	mg/kg	0.10	2.0	3.0	2.3	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2700	mg/kg	0.10	0.35	1.2	0.92	< 0.10	< 0.10

Results - Soil

Project: NE3941F7 Plots 7 & 8, Laund Road, Huddersfield

Client: Sub Surface	Chemtest Job No.:				22-08577	22-08577	22-08577	22-08577	22-08577
Quotation No.:	Chemtest Sample ID.:				1386476	1386477	1386478	1386479	1386480
	Client Sample ID.:				890	892	895	896	898
	Sample Location:				HD30	HD32	HD35	HD36	HD38
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				0.20	0.00	0.10	0.20	0.10
	Bottom Depth (m):				0.50	0.40	0.40	0.60	0.50
	Date Sampled:				25-Feb-2022	25-Feb-2022	25-Feb-2022	25-Feb-2022	25-Feb-2022
	Asbestos Lab:				DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD					
Benzo[a]pyrene	U	2700	mg/kg	0.10	1.0	1.8	1.1	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2700	mg/kg	0.10	0.75	1.3	1.2	< 0.10	< 0.10
Dibenz(a,h)Anthracene	U	2700	mg/kg	0.10	1.4	0.46	0.40	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2700	mg/kg	0.10	0.78	1.2	1.8	< 0.10	< 0.10
Total Of 16 PAH's	U	2700	mg/kg	2.0	18	31	19	< 2.0	< 2.0
Benzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Phenols	U	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.com

HAND DUG TRIAL PIT RECORD SHEETS

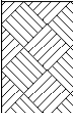
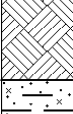


SUB SURFACE
 SITE INVESTIGATION SPECIALISTS, GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS
 3 Peel Street, Preston, Lancashire, PR2 2QS. Tel: (01772) 561135 Fax: (01772) 204907

Site
 LAUND ROAD, HUDDERSFIELD

Trial Pit Number
HD30

Excavation Method HAND DUG TRIAL PIT (IN ROUGH GRASS AREA)		Dimensions 0.5 x 0.5m		Ground Level (mOD)		Client CREATIVE DEVELOPMENTS LIMITED		Job Number NE3941F/7	
		Location As Shown on Fig.3		Dates 25/02/2022		Engineer NORTHERN DESIGN PARTNERSHIP		Sheet 1/1	

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.20-0.50	B		25/02/2022:DRY			Fibrous TOPSOIL (leaf mould).		
					0.15	TOPSOIL.		
					0.25			
					0.40	Dark brown silty CLAY.		
					0.50	...at 0.50m sandstone obstruction.		
						Complete at 0.50m		

Plan

.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.

Remarks
 On completion backfilled with arisings.

Scale (approx)
 1:10

Logged By
 DS/DJ

Figure No.
 NE3941F/7.HD30

Produced by the GEOTECHNICAL DATABASE SYSTEM (GEODASY) © all rights reserved

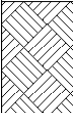
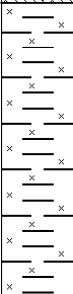


SUB SURFACE
 SITE INVESTIGATION SPECIALISTS, GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS
 3 Peel Street, Preston, Lancashire, PR2 2QS. Tel: (01772) 561135 Fax: (01772) 204907

Site
 LAUND ROAD, HUDDERSFIELD

Trial Pit Number
HD31

Excavation Method HAND DUG TRIAL PIT (IN ROUGH GRASS AREA)		Dimensions 0.5 x 0.5m		Ground Level (mOD)		Client CREATIVE DEVELOPMENTS LIMITED		Job Number NE3941F/7	
		Location As Shown on Fig.3		Dates 25/02/2022		Engineer NORTHERN DESIGN PARTNERSHIP		Sheet 1/1	

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.15-0.40	B					TOPSOIL		
					0.15	Brown silty CLAY.		
					0.40			
			25/02/2022:DRY		0.55	...at 0.55m tree root obstruction. Complete at 0.55m		

Plan

.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.

Remarks
 On completion backfilled with arisings.

Scale (approx)
 1:10

Logged By
 DS/DJ

Figure No.
 NE3941F/7.HD30

Produced by the GEOTECHNICAL Database SYSTEM (GEODASY) © all rights reserved



LAUND ROAD, HUDDERSFIELD

**Trial Pit
Number
HD32**

**Job
Number**
NE3941F/7

Sheet
1/1

Scale (approx)	Logged By	Figure No.
1:10	DS/DJ	NE3941F/7.HD30



SUB SURFACE
 SITE INVESTIGATION SPECIALISTS, GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS
 3 Peel Street, Preston, Lancashire, PR2 2QS. Tel: (01772) 561135 Fax: (01772) 204907

Site
 LAUND ROAD, HUDDERSFIELD

Trial Pit Number
HD33

Excavation Method HAND DUG TRIAL PIT (IN ROUGH GRASS AREA)		Dimensions 0.5 x 0.5m		Ground Level (mOD)		Client CREATIVE DEVELOPMENTS LIMITED		Job Number NE3941F/7	
		Location As Shown on Fig.3		Dates 25/02/2022		Engineer NORTHERN DESIGN PARTNERSHIP		Sheet 1/1	

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.10-0.40	B				(0.10)	Fibrous TOPSOIL (leaf mould).		
					0.10	Dark brown silty CLAY.		
					(0.30)			
					0.40	Brown silty CLAY.		
					(0.10)			
			25/02/2022:DRY		0.50	...at 0.50m brown siltstone obstruction.		
						Complete at 0.50m		

Plan

.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.

Remarks
 On completion backfilled with arisings.

Scale (approx)
 1:10

Logged By
 DS/DJ

Figure No.
 NE3941F/7.HD30

Produced by the GEOTECHNICAL DATABASE SYSTEM (GEODASY) © all rights reserved



LAUND ROAD, HUDDERSFIELD

**Trial Pit
Number
HD34**

(IN ROUGH GRASS AREA)

0.5 x 0.5m

Dates

25/02/2022

CREATIVE DEVELOPMENTS LIMITED

**Job
Number**
NE3941F/

NORTHERN DESIGN PARTNERSHIP

Sheet
1/1

Depth
(m)

Sample / Tests

Water
Depth
(m)

Field Records

Level
(mOD)Depth
(m)
(Thickness)

Description

Legend

Water	
-------	--

0.00-0.30

B

25/02/2022:DRY

(0.30)

0.30
(0.05)
0.35

TOPSOIL.

Very weak grey and brown very thinly bedded highly weathered MUDSTONE.
...at 0.50m sandstone obstruction.

Complete at 0.35m

Plan

Remarks

On completion backfilled with arisings.

Scale (approx)

1:10

Logged By

DS/DJ

Figure No.

NE3941F/7.HD30

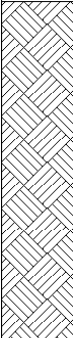


SUB SURFACE
 SITE INVESTIGATION SPECIALISTS, GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS
 3 Peel Street, Preston, Lancashire, PR2 2QS. Tel: (01772) 561135 Fax: (01772) 204907

Site
 LAUND ROAD, HUDDERSFIELD

Trial Pit Number
HD35

Excavation Method HAND DUG TRIAL PIT (IN ROUGH GRASS AREA)		Dimensions 0.5 x 0.5m		Ground Level (mOD)		Client CREATIVE DEVELOPMENTS LIMITED		Job Number NE3941F/7	
		Location As Shown on Fig.3		Dates 25/02/2022		Engineer NORTHERN DESIGN PARTNERSHIP		Sheet 1/1	

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.10-0.40	B					TOPSOIL.		
					0.45 (0.05) 0.50	Brown silty CLAY. ...at 0.50m tree root obstruction. Complete at 0.50m		
			25/02/2022:DRY					

Plan

.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.	.

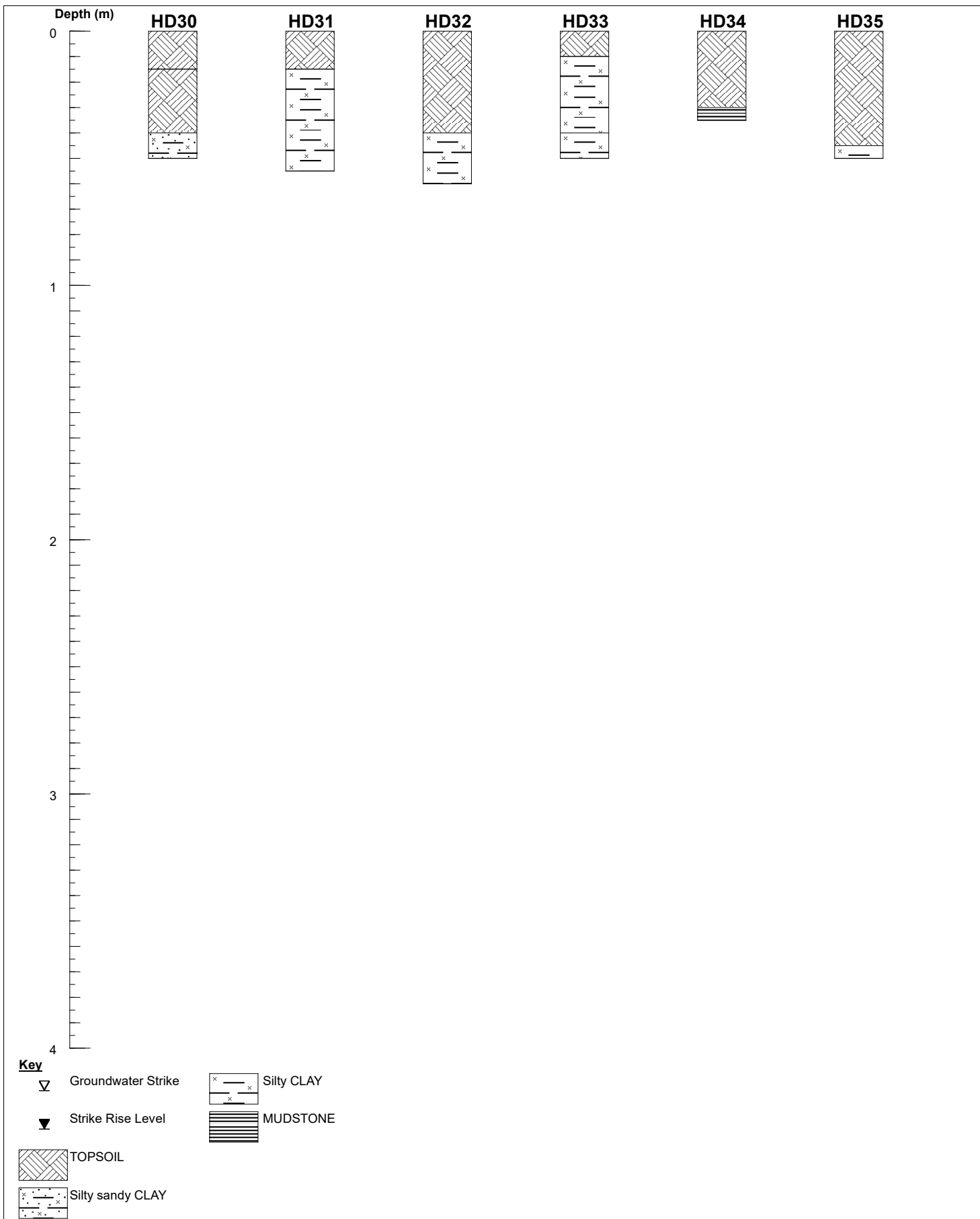
Remarks
 On completion backfilled with arisings.

Scale (approx)
 1:10

Logged By
 DS/DJ

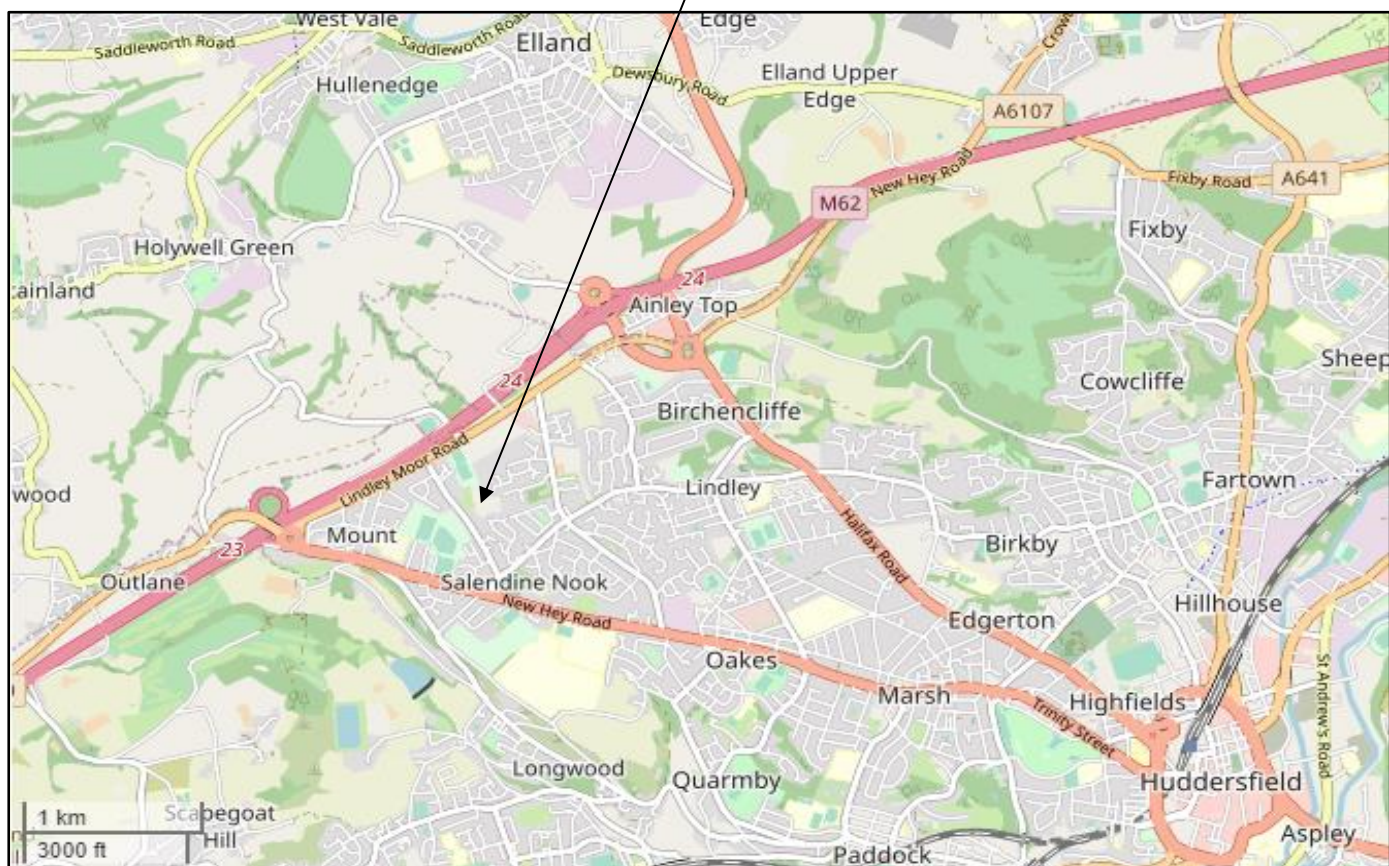
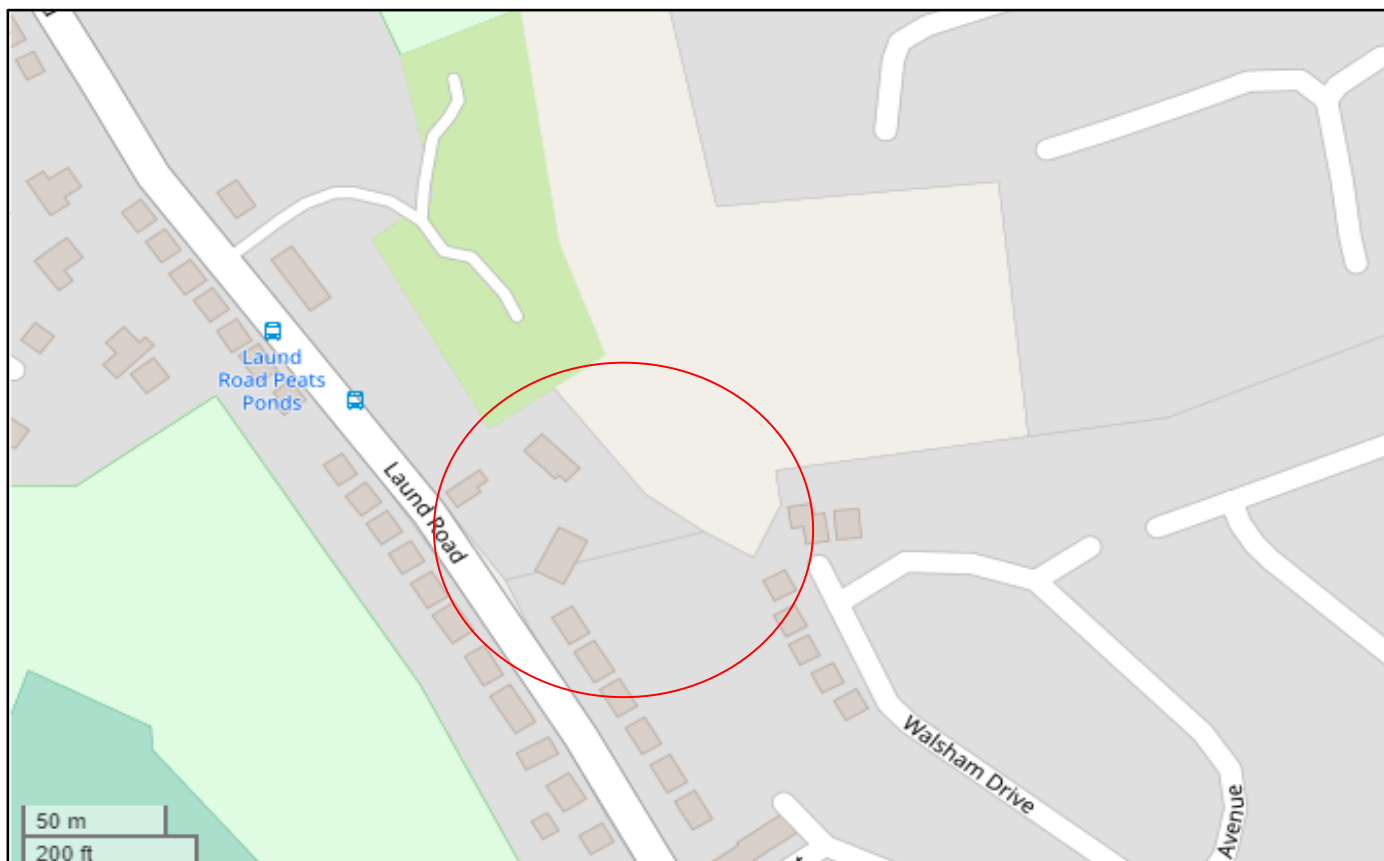
Figure No.
 NE3941F/7.HD30

Produced by the GEotechnical Database SYSTEM (GEODASY) © all rights reserved



SS SUB SURFACE SITE INVESTIGATION SPECIALISTS, GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS 3 Peel Street, Preston, Lancashire, PR2 2QS. Tel: (01772) 561135 Fax: (01772) 204907		Nominal Section		
Site LAUND ROAD, HUDDERSFIELD		Date Drawn 18/05/2022	Date Checked	Sheet 1/1
Client CREATIVE DEVELOPMENTS LIMITED		Drawn By	Checked By	Figure No. NE3941F/7.1

FIGURES



SUB SURFACE

SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Site
SCRUB AREA, LAUND ROAD, SALENDINE NOOK,
HUDDERSFIELD

Client
CREATIVE DEVELOPMENTS (HUDDERSFIELD) LIMITED

Site Location

Date Drawn
15/09/2021

Date Checked



Job No.
NE3941F/S

Drawn By
DJ

Checked By

Scale
As Shown

Figure No.
1



Extract from Northern Design Partnership Drawing 1801/02/A



SUB SURFACE

SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Proposed Site Layout & Scrub Area Location

Site SCRUB AREA, LAUND ROAD, SALENDINE NOOK, HUDDERSFIELD	Date Drawn 18-May-22	Date Checked	Orientation 	Job No. NE3941F/S
Client CREATIVE DEVELOPMENTS (HUDDERSFIELD) LIMITED	Drawn By DJ	Checked By	Scale —	Figure No. 2

Key



Soft landscaping



Inspection Pit



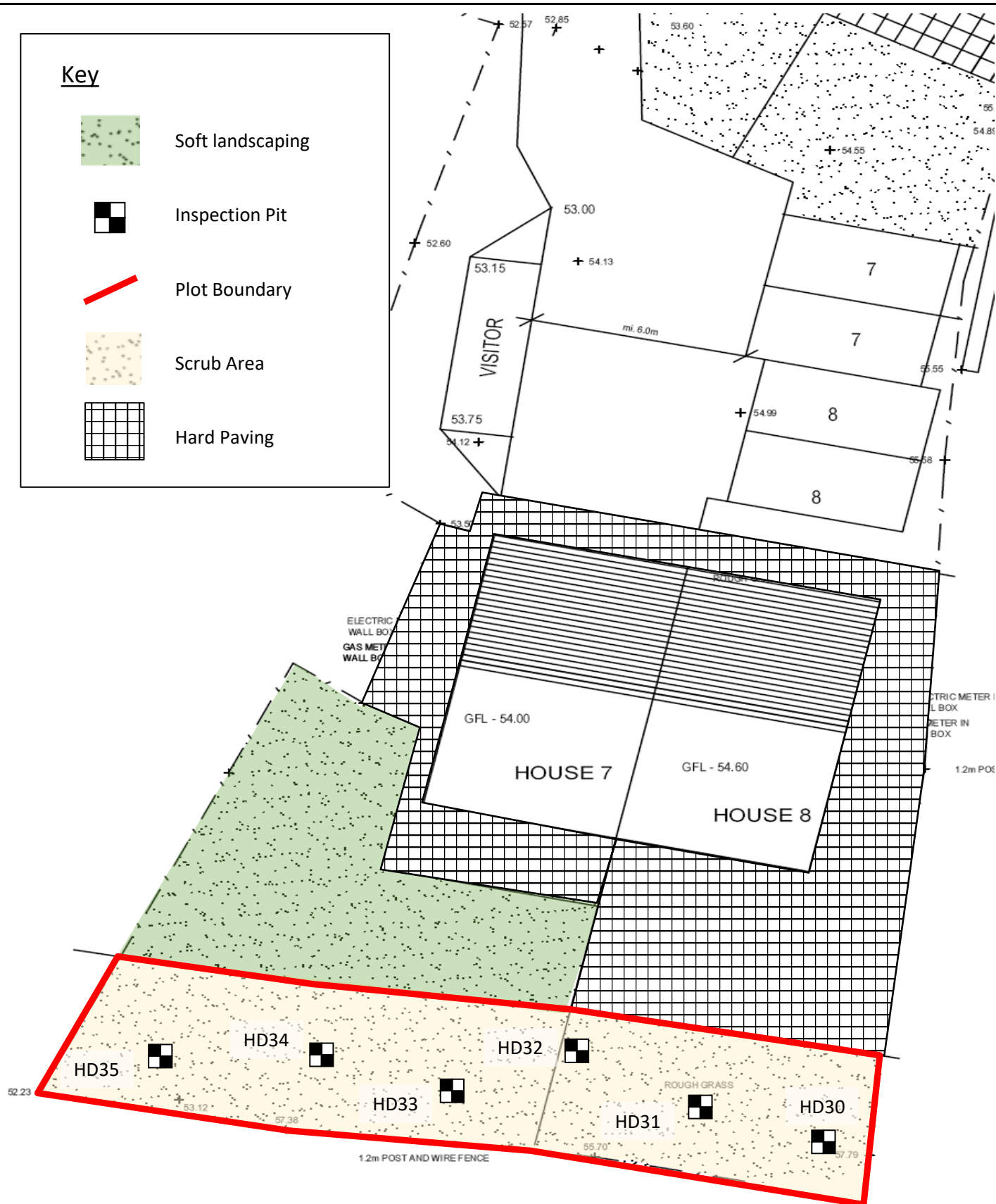
Plot Boundary



Scrub Area



Hard Paving



SUB SURFACE

SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Scrub Area Layout & Locations of Hand Dug Pits

Site	Date Drawn	Date Checked	Orientation	Job No.
SCRUB AREA, LAUND ROAD, SALENDINE NOOK, HUDDERSFIELD	18-May-22			NE3941F/S
Client	Drawn By	Checked By	Scale	Figure No.
CREATIVE DEVELOPMENTS (HUDDERSFIELD) LIMITED	DJ		—	3