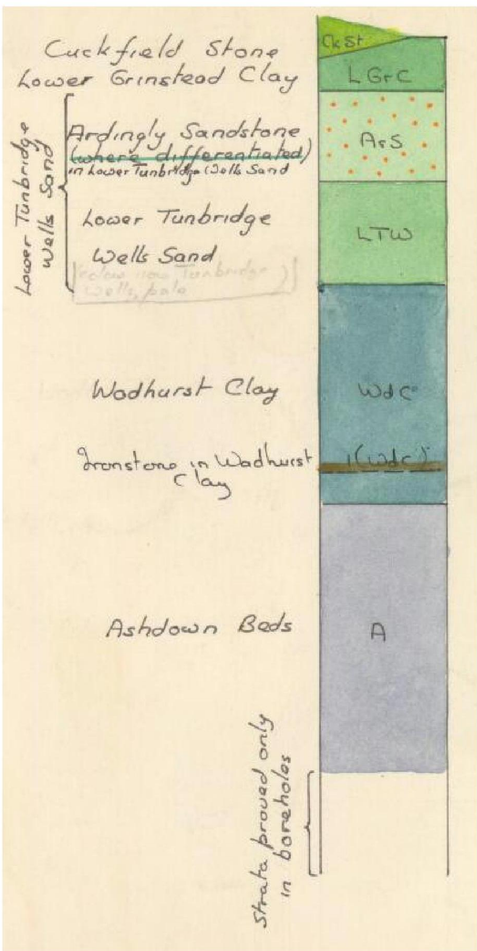


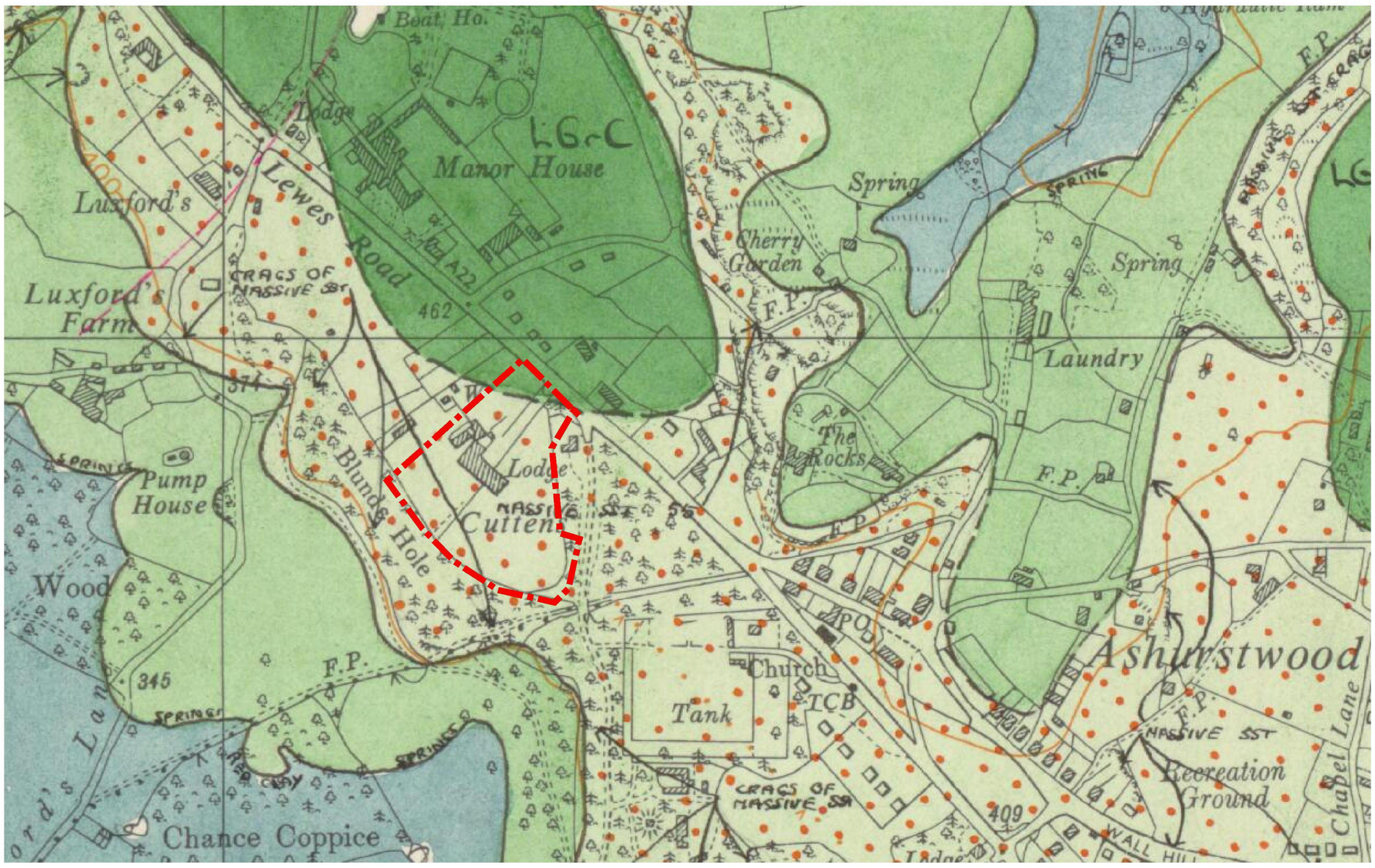


Figure G1 - BGS Geology Map Extract 1966 Solid and Drift (1:10,560 Scale)

Southern Testing
Environmental & Geotechnical

ST Consult
Environmental & Geotechnical

Project Name:	Wealden House	**Project ID:**	J15778	Revisions: Revision 1
Location:	Lewes Road, East Grinstead, West Sussex RH19 3TB	**Scale:**	NTS	
Client:	Octagon Developments Ltd.	**Date:**	06/08/2024	

TQ4167 3710

RECORD OF WELL

For Survey use only Licence No. N.12510.

303 TQ43/1 /122 C

At Ivy Dene Laundry, Ashurst Wood.

Town or Village East Grinstead.

County Sussex.

EXACT SITE OF WELL

Six-inch sheet 5 SW/5. Six-inch National Grid sheet

For M. B. Mitchell Ltd. State whether owner, tenant, builder, contractor, consultant, etc.:— Owner.

Address (if different from above)

* DELETE WHICHEVER IS INAPPLICABLE

Level of ground surface above sea level (O.D.) +c 350 ft. If well top is not at ground level, state how far .... above:* below; ft.

SHAFT ft.; diameter ft.; HEADINGS (please attach details—dimensions and directions)

BORE 100 ft.; diameter of bore: at top 15 in.;* at bottom 6 in.

Full details of permanent lining tubes (position, length, diameter, plain, slotted etc.)

20' of 15" Plain tubes; 100' of 6" MAGUSTA screen, top 51'6" of which is plain pipe.

Water struck at depths of ft. below well top.

TEST CONDITIONS

Rest level of water 25'8" ft. ~~above*~~ below well top. Suction at 85 ft. Yield on hours'* days' test pumping at nil. galls. per with depression to 85 ft. below well top.

Recovery to rest level in mins.* hours Capacity of pump 1,000 g.p.h. Date of measurements NOV 66.

NORMAL CONDITIONS

DESCRIPTION OF PERMANENT PUMPING EQUIPMENT:

Make and/or type Motive power

Capacity galls. per hour. Suction at ft. below well top.

Amount pumped galls. per day. Estimated consumption galls. per week.

Well made by L.E. GRAND ADSCO. Date of sinking

Information from*

ADDITIONAL NOTES ANALYSIS (please attach copy if available)

Borehole treated with approximately 14lbs of "CALGON".

Extract from Le Grand Adsco's letter dated 22. 2. 67.

" The Hagusta screen has been withdrawn and the borehole given a thorough shelling out afterwhich the screen was replaced and upon making a further pumping test we are able to obtain 1,020 gallons of water per hour from a pumping level of 33' 7". "

LOG OF STRATA OVERLEAF.

For Survey use only

Date Received 20.12.66.

Section 6

Pumping test

Observ. well

Recorder

E.R. log

Site marked on

1" map

6" map 02.1.67. (use symbol)

Record forwarded

to

date

GEOLOGICAL SURVEY, WATER DIVISION, SOUTH KENSINGTON, LONDON, S.W.7.

23111/59 (397) Wt.54188—P.S.47 10M 1/60 M.P.Ltd. G.722

British Geological Survey

(2)

(For Survey use only) GEOLOGICAL CLASSIFICATION	NATURE OF STRATA If measurements start below ground surface, state how far	THICKNESS Feet	THICKNESS Inches	DEPTH Feet	DEPTH Inches
MADE GROUND	Made up ground.	2	6	2	6
Lower Tunbridge Wells Sand	Clay.	9	6	12	0
	Sandstones.	3	0	15	0
	Sand.	4	0	19	0
	Blue clay.	7	0	26	0
Sandstone in Wadhurst Clay	Sandstones.	1	0	27	0
	Blue clay.	23	0	50	0
Wadhurst Clay	Blue clay and sandstones.	17	0	67	0
	Sandy blue clay.	5	0	72	0
	Sandy black slatey clay.	10	0	82	0
Sands + Sandstone in Wadhurst Clay	Sand and sandstones.	8	0	90	0
	Sand.	2	0	92	0
	Fine brown blowing sand, with sandstone layers.	8	0	100	0
		100	0	100	0

Sgd CKS.
9. 2. 67.

DATA Bank

AHQ 4165 3164 Bored

RECORD OF WELL (SHAFT OR BORE)

TQ43/22A **303** / 122a

No. IVYDENE LAUNDRY Ref.

Town or Village ASHURSTWOOD (East Grinstead) County SUSSEX Six-inch quarter sheet No. 3 N.E.

Exact site 100 yds N.E. of The Rocks (A rough sketch-map or a tracing from a map is very desirable)

in parish of

Level of ground surface above sea-level (O.D. 375 approx. ft. If well starts below ground surface, state how far 0 ft.

Shaft — ft., diameter — ft. Bore 100 ft. Diameter of bore: at top 4½ ins.; at bottom 4½ ins.

Details of permanent lining tubes (internal diameters preferred) 4½ I.D. Surface to 88' 0"

Water struck at depths of (feet) from 89' 6"

Rest-level of water below ~~above~~ top of well 49 feet. Suction at 86 feet. Yield on 8 hours' ~~days'~~ test 900 gallons per hour. (with pump of capacity 900 g.p.h.); depressing water level to ? feet below top. Time of recovery hrs. Amount normally pumped daily g.p.h. for hours.

Quality (attach copy of analysis if available)

Sunk by Duke & Ockenden Ltd for Mr. M.B. Mitchell Ltd Date of well Dec 1942.

Information from **DUKE & OCKENDEN LTD., WESTMINSTER & LITTLEHAMPTON**

(For Survey use only). GEOLOGICAL CLASSIFICATION.	NATURE OF STRATA (and any additional remarks).	THICKNESS Feet.	THICKNESS Inches.	DEPTH Feet.	DEPTH Inches.
	Clay & Loose Rock	7	0	7	0
LTW & N Sand	Yellow Clay	20	0	27	0
	Sand	26	0	53	0
	Sandstone	9	0	62	0
	Sand	18	0	80	0
	Clay	1	0	81	0
	Sandstone	8	0	89	0
? Wealdhurst Clay	Clay		6	89	6
	Sandstone	12	6	102	0
	Clay	6	0	108	0

This record is unsatisfactory in its description of Strata. From evidence of samples from Aug 1946 (122' 6") the Wealdhurst Clay was encountered at about 60 ft down in this hole, say at 62 ft. The 'Sandstones' below that depth may have been fine silts.

LTW 62'
WdC 46'

Ivy Dene Laundry
Yield 1000 g.p.h 14-15 hours a day 5 days p.w. a week
R.W.L 47' below surface Aug 1946
Water been high ever since - Gave trouble with free carbon dioxide
O.D. c. 375
Visited & sited on Sussex 5 SW-E
C. 28.11.47

Disused. Visited 14.11.57. BH.

9/7/62

GEOLOGICAL SURVEY AND MUSEUM, SOUTH KENSINGTON, LONDON, S.W.7.

For Survey use only

Date received	G.S.M. Office File No.	Site marked on 1" map (use symbol)
19 JUL 1943		

(7998) Wt.86064/0349 5,000 12/58 A.&E.W.Ltd. Gp.686

British Geological Survey

1063 Wt. 22438/0384 10M 7/45 (51) F.&S. TQ 4168 3701

RECORD OF WELL (SHAFT OR BORE)

(For Survey use only) N2374
1-inch Map Registered No. TQ43/22B
303/122 B

At IVYDENE LAUNDRY N. 2374

Town or Village ASHURSTWOOD

County SUSSEX Six-inch quarter sheet V. S.W.

For Mr. MITCHELL

Exact site of well 100 yds N.E of "The Rocks" — Attach a tracing from a map, or a sketch map, if possible.

Level of ground surface above sea level (O.D.) 375 ft. If well-top is not at ground level, state how far ... above; below; ft.

SHAFT 30 ft.; diameter 4 ft. Details of headings

BORE to 100 ft.; diameter of bore: at top 10 ins.; at bottom 4½ ins. Lengths, diameters, perforations, etc., of lining tubes 10" I.D. to 100' 0" Slottings from 70' to 100

Internal liner 4½" I.D. from 60' to 100' with sand screen from 72' to 90.

Water struck at depths, below well top, of (feet)

Rest-level of water 32 ft. above/below well-top. Suction at 86¾ ft. Yield on hours'/days' pumping, 976 gal. per hour with depression to ? ft. below well-top, Capacity of pump 976 g.p.h. Recovery to rest level in ? mins./hours Date of measurements Nov. 1952 Date of well Nov 1952

Quality of water (*attach copy of analysis if available*)

Well made by DUKE & OCKENDEN LTD

Information from DUKE & OCKENDEN, LTD LONDON AND LITTLEHAMPTON

Additional notes in space overleaf.

(For Survey use only) Geological Classification	Nature of Strata (If measurements start below ground surface, e.g., from bottom of an existing shaft, state how far from bottom of an existing shaft)	Thickness Feet	Thickness Ins.	Depth Feet	Depth Ins.
	DUG WELL	30	0	30	0
LTW ? WOLC 100'	Sand	23	0	53	0
	Sandstone	7	0	60	0
	Sand	20	0	80	0
	Sandstone	20	0	100	0
	then Clay				
	Yield 1000 g.p.h., 12 L.p.d., 5 d.p.w.				
	Quality satisfactory.				
	Sited on Sussex 5 SW/E. by O.				
	O.D. +375. Visited 14-11-57.				
	Sited by Δ on 6" sheet Sussex 5 SW.				
	9-7-54.				
	EHBC.				
	Continued overleaf				

Geological Survey and Museum, South Kensington, London, S.W.7.	Date received	Correspondence File No.	1" N.S. Map No.	1" O.S. Map No.	Site marked (use symbol) on 1" Map	on 6" Map
	17.6.54.					Δ.

Southern Testing
Environmental & Geotechnical

ST Consult
Environmental & Geotechnical

APPENDIX E

Contamination Laboratory Test Methods and Results

E

These screening values are valid at the time of writing but may be subject to change and any such changes will have implications for the assessments based on them. Their validity should be confirmed at the time of site development.

Table 1 – Tier 1 Screening Values							
Contaminant	Units	Proposed Land Use					
		Residential with home grown produce consumption	Residential without home grown produce consumption	Open Space * (Residential)	Open Space * (Park)	Allotments	Commercial / Industrial
Arsenic (As) [2]	mg/kg	37	40	79	170	43	640
Cadmium (Cd) [2]	mg/kg	11	85	120	555	1.9	190
Trivalent Chromium (CrIII) [2]	mg/kg	910	910	1,500	33,000	18,000	8600
Hexavalent Chromium (CrVI) [2]	mg/kg	6	6	7.7	220	1.8	33
Lead (Pb) [3]	mg/kg	200	310	630	1300	80	2330
Mercury (Hg) [1,2,7]	mg/kg	7.6-11	9.2-15	40	68-71	6.0	29-320
Selenium (Se) [2]	mg/kg	250	430	1,100	1,800	88	12,000
Nickel (Ni) [2,4]	mg/kg	130	180	230	800	53	980
Copper (Cu) [2,4]	mg/kg	2,400	7,100	12,000	44,000	520	68,000
Zinc (Zn) [2,4]	mg/kg	3,700	40,000	81,000	170,000	620	730,000
Phenol [1,2]	mg/kg	120-380	440-1200	440-1300	440-1300	23-83	440-1300
Benzo[a]pyrene [1,5]	mg/kg	1.7-2.4	2.6	4.9	10	0.67-2.7	36
Naphthalene [1,2]	mg/kg	2.3-13	2.3-13	77-430+	77-430+	4.1-24	77-430+
Total Cyanide (CN) [6]	mg/kg	/	/	/	/	/	/
Free Cyanide [6]	mg/kg	/	/	/	/	/	/
Complex Cyanides [6]	mg/kg	/	/	/	/	/	/
Thiocyanate [6]	mg/kg	/	/	/	/	/	/

Notes:

* Open Space levels calculated on the basis of the exposure modelling developed in the C4SL research.

+ Screening values constrained to saturation limit. Higher values may be acceptable on a site specific basis.

[1] Where ranges of values are given for organic contaminants the screening value is dependent on the Soil +Organic Matter.

[2] LQM/CIEH S4UL (2014). Copyright Land Quality Management Ltd. reproduced with permission; Publication Number S4UL 3116. All rights reserved.

[3] C4SL (DEFRA 2014).

[4] Copper, Zinc and Nickel may have phototoxic effects at the given concentrations. Alternative criteria should be adopted for importation of Topsoil or other soils for cultivation. BS3882:2015 and BS8601:2013 suggest values of 200 to 300mg/kg for Zn, 100 to 200mg/kg for Cu, and 60 to 110mg/kg for Ni, for topsoil and subsoil, depending on pH.

[5] Based on the Surrogate Marker approach and modelled using the modified exposure parameters of C4SL but retaining 'minimal risk' HCV.

[6] Screening criteria derived on a site specific basis if test results indicate.

[7] S4UL for Methyl Mercury, higher concentrations may be tolerable if inorganic mercury is the only species present. Lower concentrations apply for elemental Mercury.

Southern Testing Laboratories Ltd
Keeble House
Stuart Way
East Grinstead
West Sussex
RH19 4QA

t: 01342 333100

e: stoms@southerntesting.co.uk
contamresults@southerntesting.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 : 24-032137

Project / Site name:	Wealden House, East Grinstead	**Samples received on:**	23/07/2024
Your job number:	J15778	**Samples instructed on/ Analysis started on:**	23/07/2024
Your order number:	J15778 1	**Analysis completed by:**	30/07/2024
Report Issue Number:	1	**Report issued on:**	30/07/2024
Samples Analysed:	15 soil samples		

[redacted]

Dominika Liana
Junior Reporting Specialist
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

Excel copies of reports are only valid when accompanied by this PDF certificate.

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.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 24-032137
Project / Site name: Wealden House, East Grinstead
Your Order No: J15778 1

Lab Sample Number				264960	264961	264962	264963	264964
Sample Reference				WLS101	WLS101	WLS102	WLS103	WLS103
Sample Number				ES	ES	ES	ES	ES
Depth (m)				0.20	0.55	0.55	0.20	0.50
Date Sampled				18/07/2024	18/07/2024	18/07/2024	18/07/2024	18/07/2024
Time Taken				0900	0900	1000	1100	1100
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	-	15	8.6	-	11
Total mass of sample received	kg	0.1	NONE	-	0.5	0.5	-	0.4

Asbestos

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

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	-	7.6	7.7	-	8.1
Total Cyanide	mg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	64	190	-	32
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	0.032	0.0956	-	0.0159
Water Soluble SO_4 16hr extraction (2:1 Leachate					32	95.6		15.9

Analytical Report Number: 24-032137
Project / Site name: Wealden House, East Grinstead
Your Order No: J15778 1

Lab Sample Number				264960	264961	264962	264963	264964
Sample Reference				WLS101	WLS101	WLS102	WLS103	WLS103
Sample Number				ES	ES	ES	ES	ES
Depth (m)				0.20	0.55	0.55	0.20	0.50
Date Sampled				18/07/2024	18/07/2024	18/07/2024	18/07/2024	18/07/2024
Time Taken				0900	0900	1000	1100	1100
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	7.5	25	-	18
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 (aqua regia extractable)	mg/kg	1	MCERTS	-	27	22	-	20
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	7.8	23	-	35
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	23	210	-	810
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	0.6
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	15	12	-	12
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	1.7	-	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	64	84	-	120
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	-	-	-	-	-

Analytical Report Number: 24-032137
Project / Site name: Wealden House, East Grinstead
Your Order No: J15778 1

Lab Sample Number				264965	264966	264967	264968	264969
Sample Reference				WLS105	WLS107	WLS108	WLS108	WLS109
Sample Number				ES	ES	ES	ES	ES
Depth (m)				0.50	0.40	0.45	0.60	0.50
Date Sampled				18/07/2024	19/07/2024	19/07/2024	19/07/2024	19/07/2024
Time Taken				1400	0900	0930	0930	1030
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	-	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	-	12	12	15
Total mass of sample received	kg	0.1	NONE	0.5	-	0.4	0.5	0.4

Asbestos

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

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	7.4	-	-	8.1	7.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	-	-	< 1.0	< 1.0
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	100	-	-	12	46
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0511	-	-	0.00611	0.0231
Water Soluble SO_4 16hr extraction (2:1 Leachate				51.1			6.11	23.1

Analytical Report Number: 24-032137
Project / Site name: Wealden House, East Grinstead
Your Order No: J15778 1

Lab Sample Number				264965	264966	264967	264968	264969
Sample Reference				WLS105	WLS107	WLS108	WLS108	WLS109
Sample Number				ES	ES	ES	ES	ES
Depth (m)				0.50	0.40	0.45	0.60	0.50
Date Sampled				18/07/2024	19/07/2024	19/07/2024	19/07/2024	19/07/2024
Time Taken				1400	0900	0930	0930	1030
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	-	-	7	11
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 (aqua regia extractable)	mg/kg	1	MCERTS	23	-	-	13	19
Copper (aqua regia extractable)	mg/kg	1	MCERTS	13	-	-	7.8	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	51	-	-	19	58
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	12	-	-	6.4	12
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1.3	-	-	1.8	1.9
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	48	-	-	30	71
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	-	< 0.020	-	< 0.020
TPHCWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	-	< 0.020	-	< 0.020
TPHCWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	< 0.010	-	< 0.050	-	< 0.050

Analytical Report Number: 24-032137
Project / Site name: Wealden House, East Grinstead
Your Order No: J15778 1

Lab Sample Number				264970	264971	264972	264973	264974
Sample Reference				WLS110	WLS110	WLS111	WLS111	WLS112
Sample Number				ES	ES	ES	ES	ES
Depth (m)				0.20	0.40	0.10	0.40	0.10
Date Sampled				19/07/2024	19/07/2024	19/07/2024	19/07/2024	19/07/2024
Time Taken				1230	1230	1130	1130	1100
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	17	17	16	21
Total mass of sample received	kg	0.1	NONE	0.5	0.5	0.5	0.5	0.5

Asbestos

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

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	7.4	7.6	5.6	6.8	6.5
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	9.3	34	11	19	15
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.00466	0.0168	0.00533	0.00925	0.00746
Water Soluble SO_4 16hr extraction (2:1 Leachate				4.66	16.8	5.33	9.25	7.46

Analytical Report Number: 24-032137
Project / Site name: Wealden House, East Grinstead
Your Order No: J15778 1

Lab Sample Number				264970	264971	264972	264973	264974
Sample Reference				WLS110	WLS110	WLS111	WLS111	WLS112
Sample Number				ES	ES	ES	ES	ES
Depth (m)				0.20	0.40	0.10	0.40	0.10
Date Sampled				19/07/2024	19/07/2024	19/07/2024	19/07/2024	19/07/2024
Time Taken				1230	1230	1130	1130	1100
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	16	16	14	21
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	24	35	19	28	27
Copper (aqua regia extractable)	mg/kg	1	MCERTS	32	22	25	11	22
Lead (aqua regia extractable)	mg/kg	1	MCERTS	64	21	140	19	66
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	14	13	12	9.9	35
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	1.4	< 1.0	< 1.0	< 1.0	2.3
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	78	46	57	45	67
Petroleum Hydrocarbons								
TPHCWG - Aliphatic >EC5 - EC6 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC6 - EC8 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	-	-	-	-	-
TPHCWG - Aliphatic >EC8 - EC10 $_{HS_1D_AL}$	mg/kg	0.01	MCERTS	-	-	-	-	-

Analytical Report Number : 24-032137
Project / Site name: Wealden House, East Grinstead

* 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 *
264961	WLS101	ES	0.55	Brown clay
264962	WLS102	ES	0.55	Brown loam and sand with gravel
264964	WLS103	ES	0.5	Brown loam and sand with gravel and vegetation
264965	WLS105	ES	0.5	Brown clay with gravel and vegetation
264967	WLS108	ES	0.45	Brown clay with gravel and vegetation
264968	WLS108	ES	0.6	Brown clay and loam with gravel
264969	WLS109	ES	0.5	Brown clay and loam with gravel
264970	WLS110	ES	0.2	Brown clay with gravel and vegetation
264971	WLS110	ES	0.4	Brown clay and sand
264972	WLS111	ES	0.1	Brown loam and sand with gravel and vegetation
264973	WLS111	ES	0.4	Brown clay
264974	WLS112	ES	0.1	Brown clay and loam with gravel and vegetation

Analytical Report Number : 24-032137
Project / Site name: Wealden House, East Grinstead

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
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	In-house method	L010	D	MCERTS
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
PCB's By GC-MS in soil	Determination of PCB by extraction with hexane followed by GC-MS	In-house method based on USEPA 8082	L027B	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion	In-house method based on MEWAM 2006	L038B	D	MCERTS

Analytical Report Number : 24-032137
Project / Site name: Wealden House, East Grinstead

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
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 30oC.
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.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography

Southern Testing
Environmental & Geotechnical

ST Consult
Environmental & Geotechnical

APPENDIX F

Photographs

F

Plate 1: Looking south from the site entrance, off Lewes Road.

Plate 2: Car parking area on the northwest of the site.

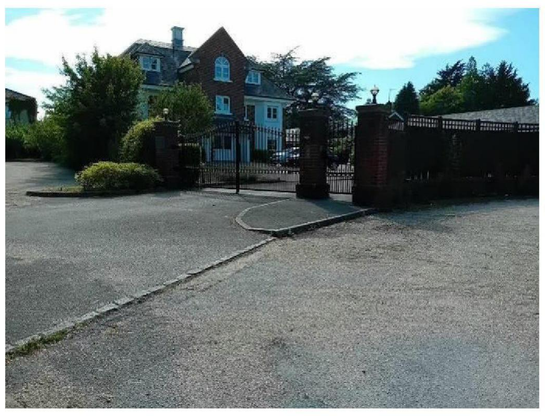


Plate 3: Location of WLS101 on the northwest of the site.

Plate 4: Soils from WLS101.

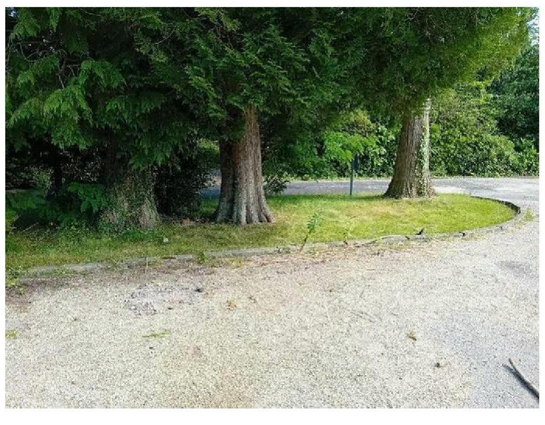


Plate 5: Location of WLS102 on the north of the site.

Plate 6: Soils from WLS102.

Plate 7: Location of WLS103 to the north of the front of Wealden House.

Plate 8: Soils from WLS103.

Plate 9: Location of WLS104 to the north of Wealden House.

Plate 10: Soils from WLS104.

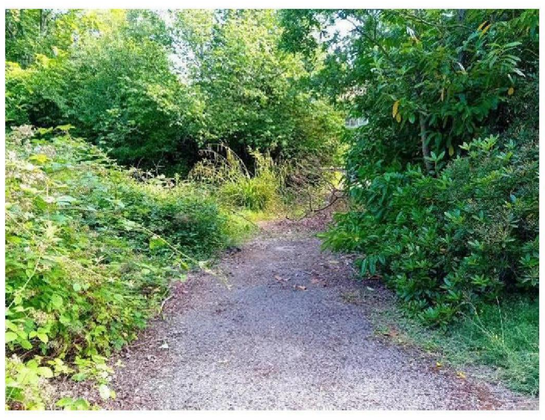


Plate 11: Access to the substation on the north of the site – location of WLS105.

Plate 12: Soils from WLS105.

Plate 13: Access on the east of the site, leading to the rear of the EDF building.

Plate 14: Location of WLS106 to the west of the EDF Energy building.

Plate 15: Soils from WLS106.

Plate 16: As plate 15.

Plate 17: As plate 16.

Plate 18: Carpark to the east/southeast of the EDF Energy building.

Plate 19: Area on the west of the site, were aborted boreholes WLS107a and WLS107b were located.

Plate 20: EDF Energy building.

Plate 21: Soils from WLS107, located within the parking area to the southeast of the EDF Energy building.

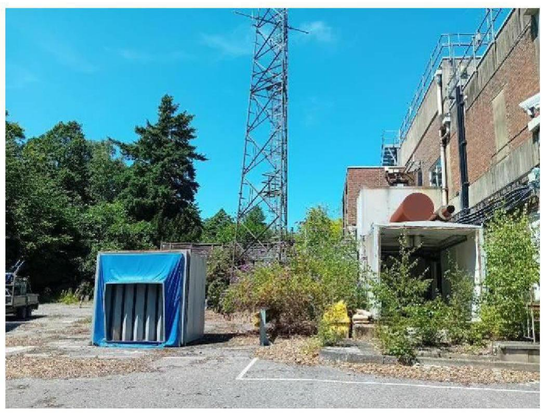


Plate 22: Generator building, telecommunications mast and other infrastructure to the rear of the EDF Energy building.

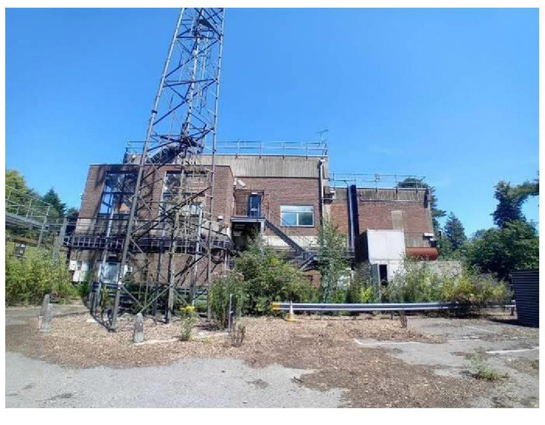


Plate 23: Rear of the of the EDF Energy building – location of WLS108.

Plate 24: Soils from WLS108.

Plate 25: Air conditioning plant to the southwest of the EDF Energy building – location of WLS109.

Plate 26: Soils from WLS109.

Plate 27: Area to the rear of the EDF Energy building – location of WLS110.

Plate 28: Soils from WLS110.

Plate 29: Garden to the rear of Wealden House – location of WLS111.

Plate 30: Soils from WLS111.

Plate 31: Location of WLS112 on the southwest of the site.

Plate 32: Soils from WLS112.

Southern Testing
Environmental & Geotechnical

ST Consult
Environmental & Geotechnical

APPENDIX G

Phase 1 Desk Study – Historical Mapping

G

Historical Ordnance Survey Map Interpretation				
Date	Scale	Features On Site	Features Off Site	Significant Potential Contamination Sources
1874	1:2,500	The west side of the site is occupied by a single, large detached house and its associated garden, with access from Lewes Road. The east side of the site comprises undeveloped land.	The surrounding area has a similar land use, with several large houses set in grounds.	None identified
1899	1:2,500	The site appears unchanged, with the exception of a well shown to the northeast corner of the house.	The surrounding area is also significantly unchanged.	None identified
1910	1:2,500	The house on the west of the site appears to have been redeveloped, and is now named Cuttens. The well is no longer shown. The east of the site remain undeveloped.	The surrounding area appears significantly unchanged.	None identified
1931	1:2,500	The site appears unchanged.	The surrounding area also appears significantly unchanged.	None identified
1964 – 1965	1:2,500	The house has been significantly extended on its eastern side, otherwise it remains unchanged.	Residential development (detached houses with gardens) is evident, especially along Lewes Road.	None identified
1973	1:2,500	The existing EDF energy offices building is present adjoining the house, which is still labelled as Cuttens. An electricity substation is shown on the northeast of the site.	The surrounding area also appears significantly unchanged.	• Electricity substation
1979	1:2,500	The building on site is now labelled as Wealden House, with the layout unchanged.	The surrounding area appears significantly unchanged.	• Electricity substation
1993	1:2,500	The site appears unchanged.	With the exception of some further residential development, the surrounding area is also significantly unchanged.	• Electricity substation
1999	Ariel Photograph	The layout of the buildings appears as they were on the 1993 map extract, with a large office building occupying the east side, with the house to the west. Vehicles are parked on the south of the site. The north of the site is heavily wooded.	The surrounding area appears as it was previously, with residential development along Lewes Road to the north of the site, and largely open land to the south of the site.	None identified

NOTE: Additional maps at 1:10,560 and 1:10000 scale of similar age have been obtained. These maps are appended but do not provide much additional information.

Historical Mapping Legends

Ordnance Survey County Series and Ordnance Survey Plan 1:2,500

Quarry
Gravel Pit
Sand Pit
Clay Pit
Shingle
Refuse Heap
Sloping Masonry
Flat Rock
Marsh
Reeds
Osiers
Rough Pasture
Furze
Wood
Mixed Wood
Brushwood
Orchard
Fir
Ford
Stepping Stones
Ferry
Waterfall
Lock
Trig. Station
507 Altitude at Trig. Station
B.M.325·9 Bench Mark
342 Surface Level
Arrow denotes flow of water
Antiquities (site of)
Cutting
Embankment
Railway crossing Road
Level Crossing
Road crossing Railway
Railway crossing River or Canal
Road over single stream
Road over River or Canal
County Boundary (Geographical)
County & Civil Parish Boundary
Administrative County & Civil Parish Boundary
Co. Boro. Bdy. County Borough Boundary (England)
Co. Burgh Bdy. County Burgh Boundary (Scotland)

B P B S	Boundary Post or Stone	P.C.B	Police Call Box
B.R.	Bridle Road	P	Pump
E.P	Electricity Pylon	S.P	Signal Post
F.B.	Foot Bridge	St.	Sluice
F.P.	Foot Path	Sp.	Spring
G.P	Guide Post or Board	T.C.B	Telephone Call Box
M.S	Mile Stone	Tr.	Trough
M.P M.R	Mooring Post or Ring	W	Well

Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250

Inactive Quarry, Chalk Pit or Clay Pit
Active Quarry, Chalk Pit or Clay Pit
Rock
Boulders
Cliff
Slopes
Top
Roofed Building
Glazed Roof Building
Sloping Masonry
Archway
Non-Coniferous Tree (surveyed)
Coniferous Tree (surveyed)
Non-Coniferous Trees (not surveyed)
Coniferous Trees (not surveyed)
Orchard Tree
Scrub
Bracken
Coppice, Osier
Reeds
Marsh, Saltings
Rough Grassland
Heath
Culvert
Direction of water flow
Bench Mark
Antiquity (site of)
Cave Entrance
Triangulation Station
Electricity Pylon
Electricity Transmission Line
County Boundary (Geographical)
County & Civil Parish Boundary
Civil Parish Boundary
Admin. County or County Bor. Boundary
L B Bdy London Borough Boundary
Symbol marking point where boundary mereing changes

BH	Beer House	P	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
El P	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
H	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	Wr Pt, Wr T	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

Large-Scale National Grid Data 1:2,500 and 1:1,250

Cliff
Slopes
Top
Rock
Rock (scattered)
Boulders
Boulders (scattered)
Positioned Boulder
Scree
Non-Coniferous Tree (surveyed)
Coniferous Tree (surveyed)
Non-Coniferous Trees (not surveyed)
Coniferous Trees (not surveyed)
Orchard Tree
Scrub
Bracken
Coppice, Osier
Reeds
Marsh, Saltings
Rough Grassland
Heath
Culvert
Direction of water flow
Triangulation Station
Antiquity (site of)
Electricity Transmission Line
Electricity Pylon
BM 231.60m Bench Mark
Buildings with Building Seed
Roofed Building
Glazed Roof Building
Civil parish/community boundary
District boundary
County boundary
Boundary post/stone
Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

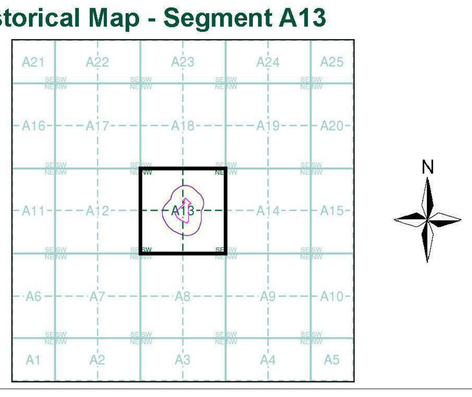
Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	Tk	Tank or Track
Gas Gov	Gas Valve Compound	Tr	Trough
GVC	Gas Governer	Wd Pp	Wind Pump
GP	Guide Post	Wr Pt, Wr T	Water Point, Water Tap
MH	Manhole	Wks	Works (building or area)
MP, MS	Mile Post or Mile Stone	W	Well

Southern Testing
Environmental & Geotechnical

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Sussex	1:2,500	1874	2
Sussex	1:2,500	1899	3
Sussex	1:2,500	1910	4
Sussex	1:2,500	1931	5
Ordnance Survey Plan	1:2,500	1964 - 1965	6
Supply of Unpublished Survey Information	1:2,500	1973	7
Ordnance Survey Plan	1:2,500	1979	8
Large-Scale National Grid Data	1:2,500	1993	9
Large-Scale National Grid Data	1:1,250	1993	10
Large-Scale National Grid Data	1:2,500	1994	11
Historical Aerial Photography	1:2,500	1999	12

Historical Map - Segment A13



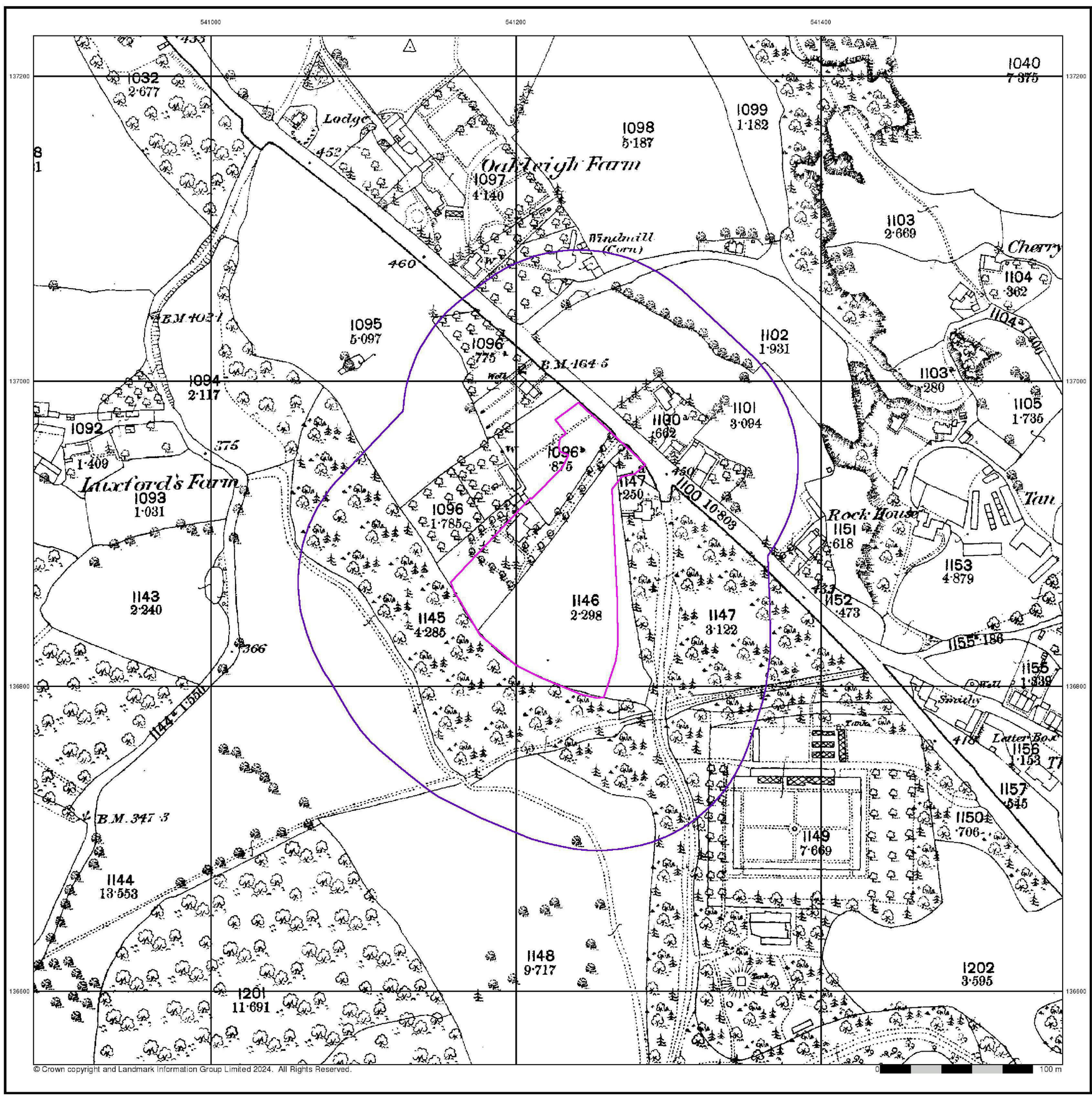
Order Details

Order Number: 352930749_1_1
Customer Ref: J15778
National Grid Reference: 541230, 136890
Slice: A
Site Area (Ha): 1.27
Search Buffer (m): 100

Site Details

Wealden House/Former EDF Energy Offices, Lewes Road, EAST GRINSTEAD, RH19 3TB

Landmark INFORMATION GROUP
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



© Crown copyright and Landmark Information Group Limited 2024. All Rights Reserved.

Southern Testing
Environmental & Geotechnical

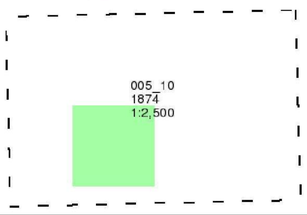
Sussex

Published 1874

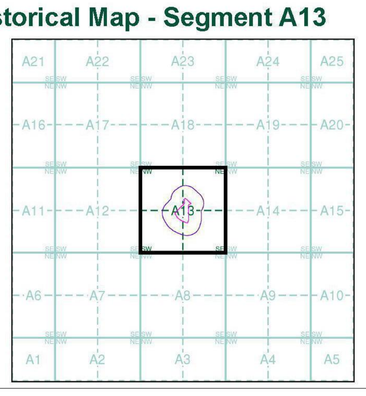
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



N

Order Details

Order Number:	352930749_1_1
Customer Ref:	J15778
National Grid Reference:	541230, 136890
Slice:	A
Site Area (Ha):	1.27
Search Buffer (m):	100

Site Details

Wealden House/Former EDF Energy Offices, Lewes Road, EAST GRINSTEAD, RH19 3TB

Landmark INFORMATION GROUP
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk