APPENDIX 03

Petroleum Officer Information and Fairbanks Information

Essex County Council
Trading Standards
CG32 County Hall
Market Road
Chelmsford
CM1 1QH

Essex County Council

Dominic Goodchild-James
SLR Consulting Limited
7 Wornal Park
Menmarsh Road
Worminghall
Aylesbury
Buckinghnshire
HP18 9PH

Date: 15 February 2022
Our Ref: C/512928
Your Ref: S10/A2-2

Dear Dominic

Laindon Service Station, SS15 6DP
The Petroleum (Consolidation) Regulations 2014
The Environmental Information Regulations 2004

Further to your email of 09 February 2022 and payment of £169 to cover the cost of the petroleum search on the above site.

Tank Farm Details 1986

Tank	Installation Date	Capacity Litres	Product	Construction Type
1	1987	22,020	Petrol	Double Skin Steel
2	1987	22,022	Diesel	Double Skin Steel
3	1987	17,450	Diesel	Double Skin Steel
4	1987	26,380	Diesel	Double Skin Steel
5	1987	44,030	Petrol	Double Skin Steel
6	1987	27,200	Diesel	Double Skin Steel

Incidents

We hold no records for any leaks or spills.

Tank / Suction Line/ Pipework Tests

At date of site being built all tanks, and pipework underwent tests. All were found to be satisfactory.
There are further records of tank/pipeline testing carried out all of which have been enclosed.

Tank Decommission

We hold no records of any decommissioned tanks on this site.

Enclosures

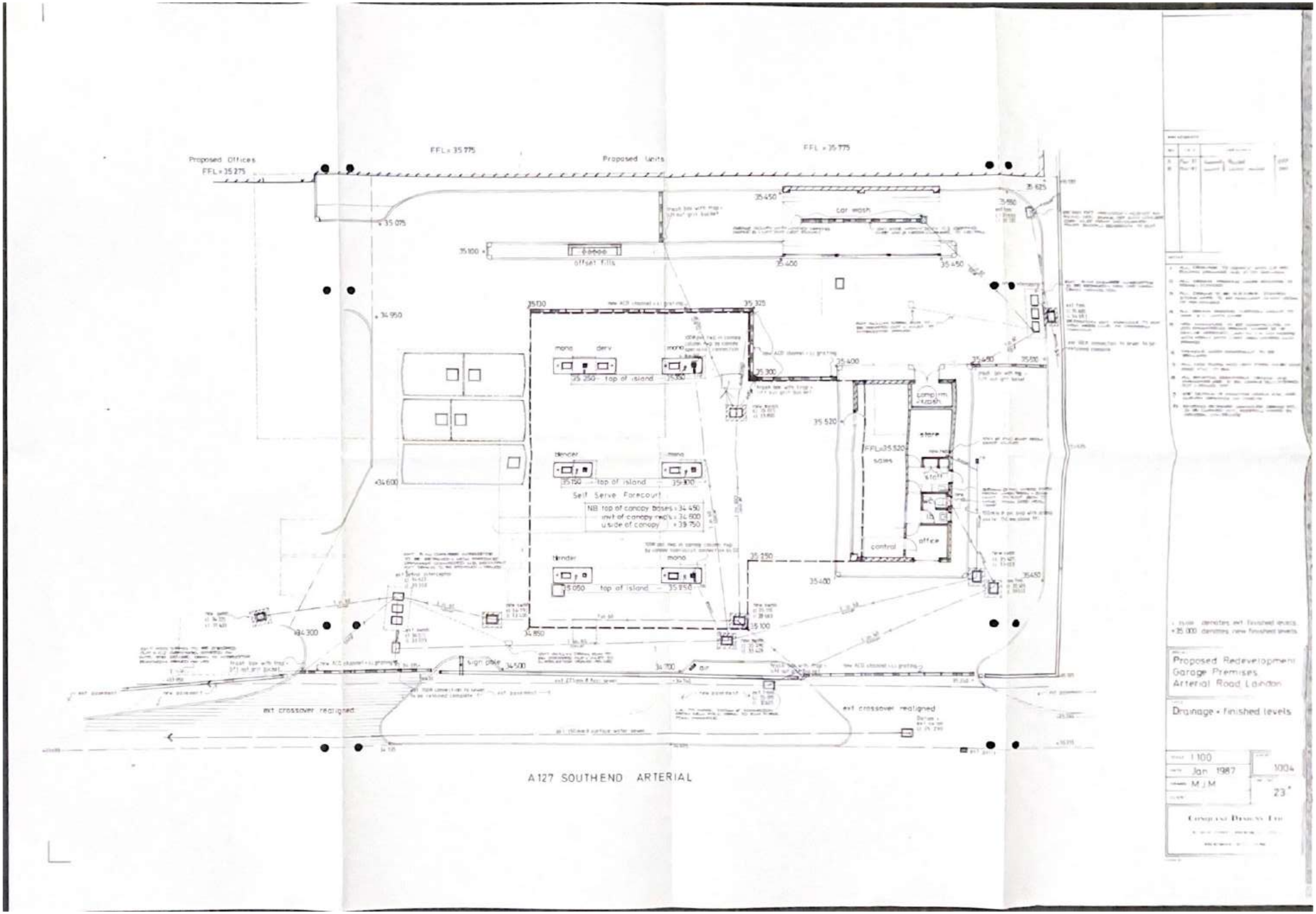
Site drawings showing site layout Jan 1987- 23b, 24, 24b
Tank test 1987
Site drawings showing site layout Jan 199 – 901.296.2-3
Tank Tests 28/06/1999
Pipeline Test 2/02/1999
Pressure Test 30/04/1999
Tank1 Tank Test 11/02/2000
Certificate of new pipework installation 03/03/2000
Certificate of suction line test 03/02/2000
Tank 1 Tank Test 15/08/2005

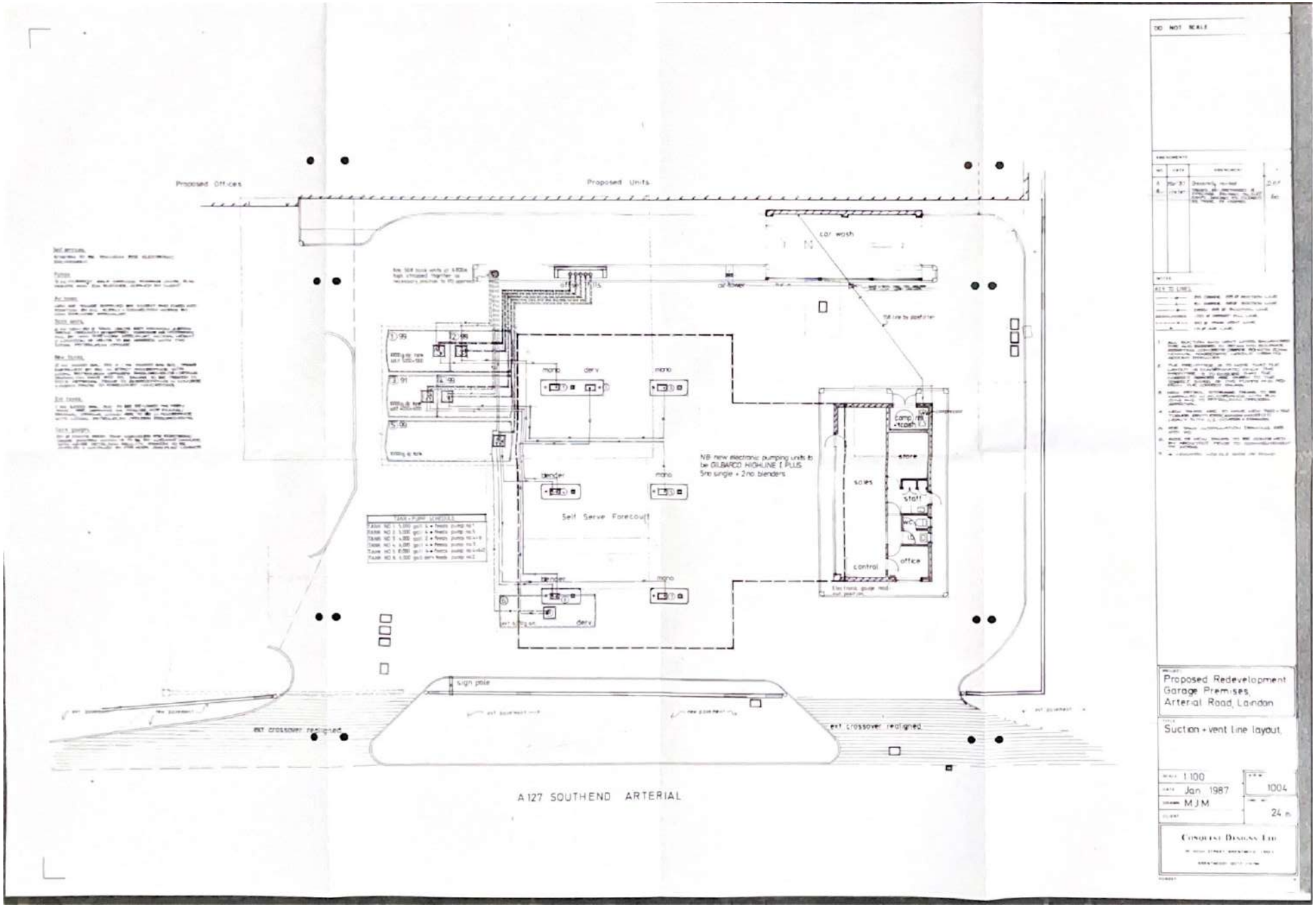
Our records start from 1974, and we are unable to give any information regarding the site prior to that date. Accordingly, we are unable to accept any liability for the accuracy of the information supplied or any loss or damage incurred in consequence thereof.

Yours sincerely

Bev Hughes
Trading Standards Enforcement Officer

Please reply to: Bev Hughes
Telephone: 03330 134160
Email: bev.hughes@essex.gov.uk


Proposed Offices
FFL = 35.275
FFL = 35.775
Proposed Units
FFL = 35.775
car wash
offset fills
mono
derv
mono
blender
mono
blender
mono
top of island
Self Serve Forecourt
NB top of canopy bases = 34.450
u/s of canopy reqd = 34.600
u/side of canopy = 39.750
comp rm / kiosk
store
staff
sales
FFL = 35.520
control
office
sign pole
air
ext crossover realigned
ext crossover realigned
A127 SOUTHEND ARTERIAL
× 35.000 denotes new finished levels
Proposed Redevelopment
Garage Premises
Arterial Road London
Drainage + finished levels
1:100
Jan 1987
MJM
1004
23



DO NOT SCALE

Proposed Redevelopment Garage Premises, Arterial Road, Laindon

Suction + vent line layout

1:100

Jan 1987

M.J.M

1004

24 n

CONQUEST DESIGNS LTD

J
C

Essex County Council

Consumer and Public Protection Department

Underground tank leakage tests

Licence No.	Name of Licensee	Address
	[illegible]	[illegible]

Tank No.	Year installed	Test	Capacity of tank	Result of test
1 T/C	1987	[illegible]	5000	
Date of test	30/3/87	3/9/87		
Time of test	10.15	11.20		
Pressure	7 4			
Temperature				
Barometer				

Suction line(s) X 1	1 o/s	Vent X 1	
Date of test	28.5.84	4.6.84	
Time of test	2.15	10.50	
Pressure	9lbs	7lbs	

ULLAGE TEST

Lines Unbroken - YES/NO

Date and time				
Pump primed, etc.				
Petrol temperature	°F	°F	°F	°F
Temperature in manhole	°F	°F	°F	°F
Depth of water in tank	Cm	Cm	Cm	Cm
Position of ullage rod				
Ullage rod setting	Cm	Cm	Cm	Cm
Depth				
Pump locked and sealed		Orig. Cm	Orig. Cm	Orig. Cm
Dip caps sealed		Drop Rise Cm	Drop Rise Cm	Drop Rise Cm
Weather				

Plan of site on reverse

PET/13

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C

Essex County Council

Consumer and Public Protection Department

Underground tank leakage tests

Licence No.	Name of Licensee	Address
	NAFTA	Arterial Road Laindon

Tank No.	Year installed	Test	Capacity of tank	Result of test
2 T/C	1987	[illegible]	5000	
Date of test	30/3/87	31/3/87		
Time of test	10 15	11.00		
Pressure	7 8			
Temperature				
Barometer				

Suction line(s) × 1	10/s	Vent × 1	
Date of test	28-5-87	4-6-87	
Time of test	2 15	10-50	
Pressure	8 lbs	7 lbs	

ULLAGE TEST

Lines Unbroken - YES/NO

Date and time				
Pump primed, etc.				
Petrol temperature	°F	°F	°F	°F
Temperature in manhole	°F	°F	°F	°F
Depth of water in tank	Cm	Cm	Cm	Cm
Position of ullage rod				
Ullage rod setting	Cm	Cm	Cm	Cm
Depth				
Pump locked and sealed		Orig. Cm	Orig. Cm	Orig. Cm
Dip caps sealed		Drop Rise Cm	Drop Rise Cm	Drop Rise Cm
Weather				

Plan of site on reverse

PET/13

J
C

Essex County Council · Base ready for Inspection

26/3/87 11.00

Consumer and Public Protection Department

Underground tank leakage tests · 2nd Tank ready for test

Licence No. · Name of Licensee · Address · 30/3/87 10.00

		NAFTA		A127 Laindon
Tank No.	Year installed	Test	Capacity of tank	Result of test
3,4,T/C	23/3/87	Hydro 6000	10 000	Passed 6000 DERV.
TANK No	3 DK 6000	4 S/C	5	6
Date of test	23/3/87	23/3/87	23/3/87	23/3/87
Time of test	12.00	12.00	12.40	12.40
Pressure	8 lb	7.5 lb	8 lb	7.5 lb
Temperature				
Barometer				
Suction line(s) × 2. 1 o/s 1 VENT		1 o/s SUCT 1 VENT	3 SUCT. 1 o/s 1 VENT	Vent [illegible] 2 SUC 1 VENT
Date of test	4-6-87	4-6-87	4-6-87	4-6-87
Time of test	10.50	10.50	10.50	12.0
Pressure	7lbs	7lbs	7lbs	8lbs

ULLAGE TEST

Lines Unbroken - YES/NO

Date and time				
Pump primed, etc.				
Petrol temperature	°F	°F	°F	°F
Temperature in manhole	°F	°F	°F	°F
Depth of water in tank	Cm	Cm	Cm	Cm
Position of ullage rod				
Ullage rod setting	Cm	Cm	Cm	Cm
Depth				
Pump locked and sealed		Orig. Cm	Orig. Cm	Orig. Cm
Dip caps sealed		Drop Rise Cm	Drop Rise Cm	Drop Rise Cm
Weather				

Plan of site on reverse

PET/13

Sussex County Council

Consumer and Public Protection Department

ELA 0245

Underground tank leakage tests

Licence No.	Name of Licensee	Address
S10/A2-2.	Q8 SER STN.	A127 ARTERIAL ROAD LAINDON

Tank No.	Year installed	Test	Capacity of tank	Result of test
5				PASSED
Date of test				
Time of test				
Pressure				
Temperature				
Barometer				
Suction line(s)			Vent	
Date of test	29-9-92		P.T.O. FOR	
Time of test	11-15		PIPE LINE	
Pressure	7 75 lbs		LAY-OUT.	

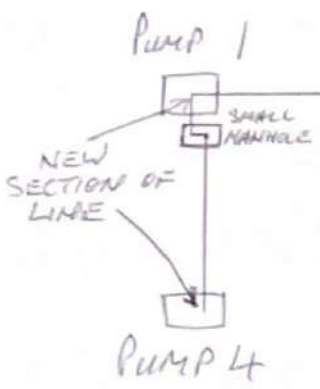
ULLAGE TEST

Lines Unbroken - YES/NO

Date and time				
Pump primed, etc.				
Petrol temperature	°F	°F	°F	°F
Temperature in manhole	°F	°F	°F	°F
Depth of water in tank	Cm	Cm	Cm	Cm
Position of ullage rod				
Ullage rod setting	Cm	Cm	Cm	Cm
Depth				
Pump locked and sealed		Orig. Cm	Orig. Cm	Orig. Cm
Dip caps sealed		Drop Cm Rise	Drop Cm Rise	Drop Cm Rise
Weather				

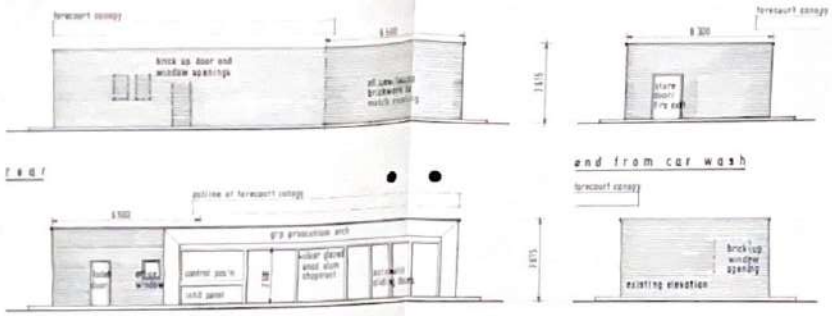
Plan of site on reverse

A127 ARTERIAL ROAD) TO SOUTHEND) →

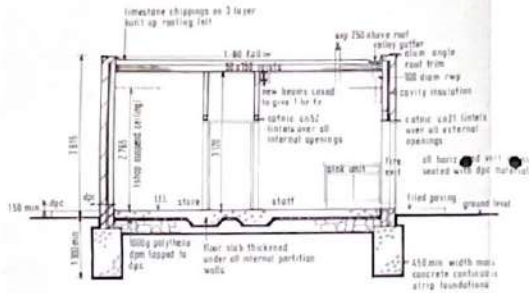


TANK 2 + 5
A.C.Vs. REMOVED.
REPLACED UNDER NEW
PUMPS 1 + 4

TANK 2 NOW U/L PETROL

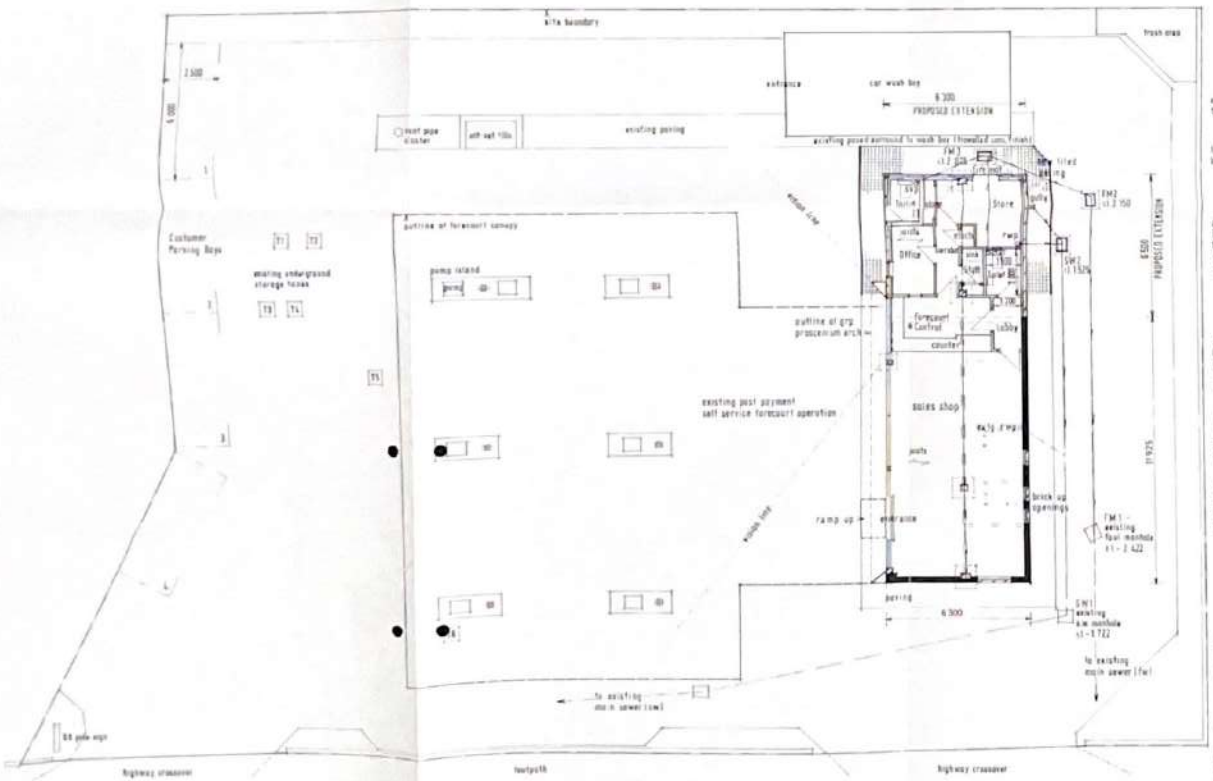


FORECOURT SALES BUILDING ELEVATIONS



SECTIONAL ELEVATION (scale 1:50)

LOCATION PLAN SCALE : 1 1250



SITE LAYOUT PLAN

exstg 100 gallon cold water storage tank to be rested at high level in store

tiled paving surround to existing building to be extended

all waste plumbing to BS 5572 1978 - 32 diam waste from basins, 40 diam waste from sink - with 75 deep seal traps - to discharge to new 100 diam sep's with 100 diam drain connections laid to fall to new foul manholes

toilet, lobby and staffroom heating by light switch operated ducted extract ventilation fan discharging through roof to cowl to give 3 air changes per hour with 15 minute switch-off delay

FM2/3 new 600 x 450 foul manholes to take drains from toilet/and staffroom. 225 thick brickwork walls, concrete base, h.d. steel cover and new 100 diam drain connection to FM1

valley gutter to new roof to discharge to new 100 diam rwp with 100 diam drain connection to SW2 - new storm water manhole constructed as FM2/3 with new 100 diam drain connection to SW1

all internal partition walls, central load bearing wall and end cavity wall to be demolished to exstg. building(s) - exstg and new roof structures to be carried on new steel beams, piers and foundations to structural engineers details

exstg door and window openings on rear and side elevation to be bricked up

exstg lavatory fittings, sink unit etc., to be reuited to new facilities- disconnected drains to FM1 to be sealed with concrete

CONSTRUCTION SPECIFICATION

ROOF - 12.5mm layer limestone chippings bitumen bedded on 3 layer built up roofing felt to BS 747 on 40 thick 'jablite' on felt vapour barrier on 20mm ply decking on s/w firrings laid to fall to rear on 50 x 150 timber joists (grade sc4) at 400 centres - new roof covering to top to and be not bonded to existing

WALLS - external to be conventional cavity type, 102 selected facings (to match existing) outer skin - 50 wide insulated cavity - 100 'thermalite turbo' blockwork inner skin. the two skins to be securely tied together with s.s. wall ties - cavity insulated by 25 thick 'jablite' (or similar) insulation batts fixed to inner skin by polygrip retaining rings clipped to wall ties - new walls to be toothed (or similar tied) to existing and cavities to be continuous

internal to be full height 100 thick 'thermalite turbo' blockwork with double bonded, skin to plant room

FLOOR - 150 thick r.c. floor slab on 1000 g polythene dpm (lapped to dpc) on sand blinding on 150 min thick well consolidated hardcore

FOUNDATIONS - mass concrete continuous strip founds under external walls, floor slab thickened under internal walls

STEELWORK - new steel beams, masonry support piers and mass concrete foundations to be to structural engineers details

DRAINAGE - all new drainage to be 100 diam 'hepworth supersleve' flexible jointed vitrified clay pipes and fittings laid to fall not less than 1:60 on 150 min bed and surround of pea gravel - drains passing under (or through) walls to be protected by p.c.c. lintels

- denotes existing foul drain
- denotes NEW foul drain
- denotes existing storm water drain
- denotes NEW storm water drain

HEATING - throughout to be 3kw wall mounted fan heaters

CEILING - throughout extension to be 12.5mm plasterboard with two coat plaster finish

suspended ceiling to be class 1 standard

Revisions

1 January 1991 - to l.a. requirements
2 February 1991 - customer parking bays added
3 October 1991 - internal layout revised, plan and elevations amended

- this drawing is prepared for local authority applications and is not a working drawing
- do not scale this drawing - check dimensions on site
- figured dimensions shown in millimetres

LANE WRIGHT ASSOCIATES
construction survey and design consultants
8 Cantell Grove Bristol BS14 8TP
telephone 0272 839477

site: Q8 Laindon
Arterial Road (A127), Laindon, Essex

project: Proposed Extension to Forecourt Sales Building

client: Kuwait Petroleum (GB) Limited

drawing no: 901 296 . 2 - 3

scale 1 : 100 date January 1991

CERTIFICATE

CERTIFICATE NO

221/3006/99

PREMISES & DATE OF TEST

Q8 Laindon Service Station
Arterial Road
Laindon
Essex
SS16 6DP

28th 6th 1999

Tank No.	Capacity	Tested	Result	Additional Comments
3 UNL	17,450ltr	TANK VENT SUCTION OFFSET	Pass Pass Pass Pass	
		TANK VENT SUCTION OFFSET		
		TANK VENT SUCTION OFFSET		
		TANK VENT SUCTION OFFSET		
		TANK VENT SUCTION OFFSET		

Chem Safe Tank testing (UK) Ltd certify that the equipment detailed above has been subjected to a leak detection test in accordance with the method statement and protocol as directed by the licensor. This test conforms to the standard E.P.A. test procedure for non-volumetric testing

Signed for Chem Safe Tank Testing (UK) Ltd ..... **Date** 30/06/99

Authentication Stamp (Invalid Without)

S10/A2-2

TANKSAFE® LIMITED
4/5 Gough Square
London EC4A 3DE
Tel: 0171-583 2007
Fax: 0171-583 2008
Mobile: 0850 842828

PIPELINE TEST CERTIFICATE

SITE: Q8 Laindon
Arterial Road
Laindon
Essex

CERT NO. 184

Tank Pump	Product Grade	Suction/Vent Offset Fill	Date	Pressure On	Pressure Off	Duration Hr/Min		Passed Failed
Pump 8 Tank 4	Derv	Suction	12-2-99	10 p.s.i.	5 p.s.i.		20	Failed

Remarks

Suction line was disconnected from tank and from pump for final test.

Engineers Signature	Block Capitals	Date
S Evans	S Evans	12.2.99

Independent Pump Services Ltd

Petroleum Installation

Pressure Test Certificate

Certificate Number 000359

Site Address:	Q8 Laindon S/S ARTERIAL ROAD LAINDON, BASILDON ESSEX SS15 6AP
Job Number	4617

Tank and Pipeline Tests:

Where the result of any test indicates a leak or any other unacceptable condition, the Management of Independent Pump Services Ltd and subsequently the Petroleum Officer, must be notified without undue delay. The subject installation shall be taken out of commission until authorised by the Petroleum Officer or the management of Independent Pump Services Ltd.

Remarks / Actions Taken / Required

On behalf of Independent Pump Services Ltd:

Testing Engineer	G Newington
Reviewed and approved by:	M Hewitt
Dated	30-4-99

Adur Boatyard, Old Shoreham Road,
Shoreham-by-Sea, West Sussex BN43 5TA.
Tel: (01273) 454831 Fax: (01273) 464863.

132 Gulson Road, Coventry, CV1 2JF.
Tel: (01203) 633312 Fax: (01203) 633370.
email sales@sofilam.com

... that the under mentioned tests have been carried out

Tank Tests

Tank No:	Type of Test	Date test Commenced	Length of Test	Applied Pressure	Comments Passed/Failed/Faults

Witnessed by

Position held

Signed

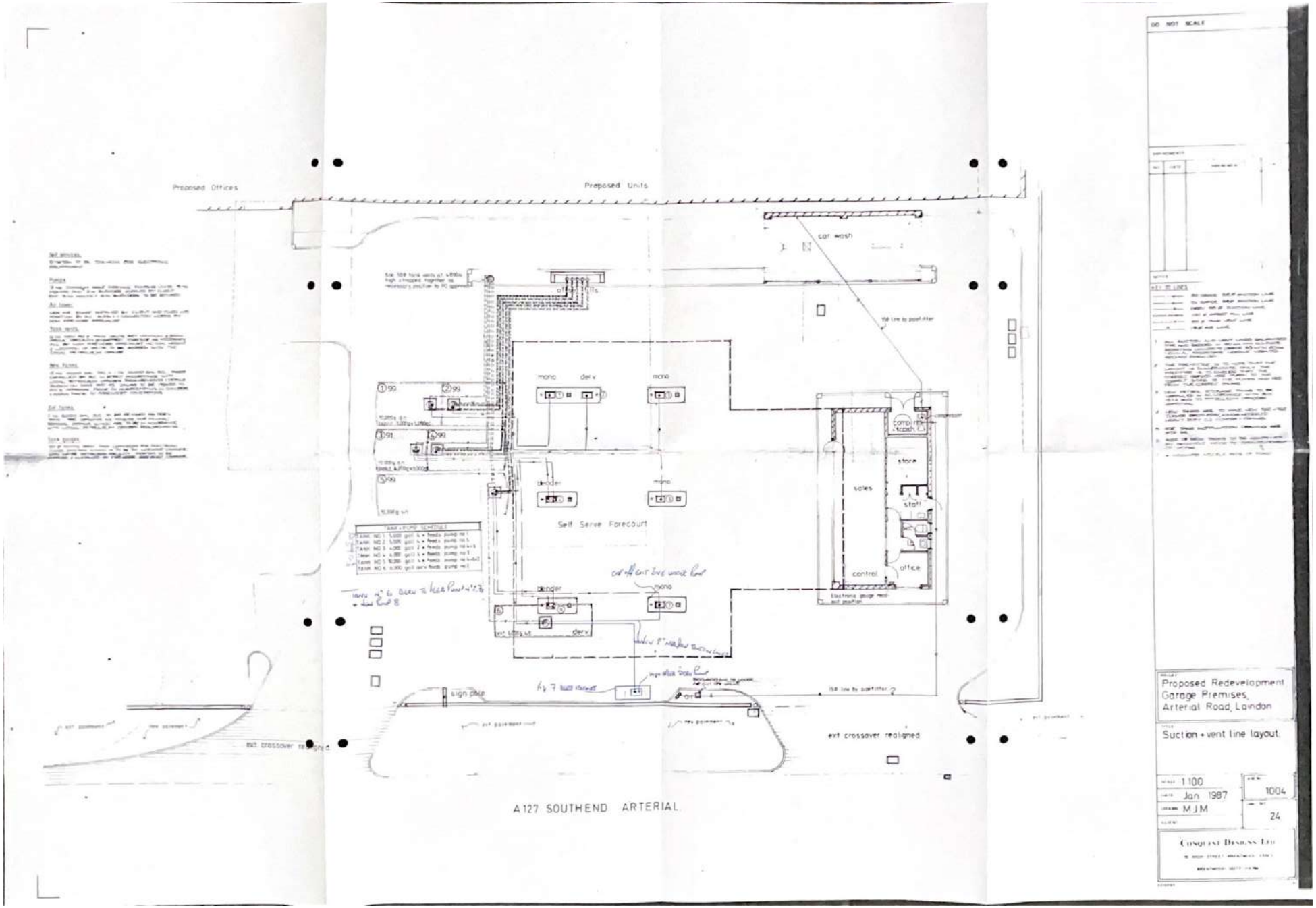
Pipeline Tests

Suction O/S Fill Vent Vap Recover	Connected to Tank Number	Connected to Pump Number	Date	Applied Pressure	Commnets Passed/Failed/Faults
Suction	T1 Dery	P 10	27/6/19	10psi	Passed
Suction	T2 UL	P 4,5	"	"	"
Suction	T3 UL	P 2,3 6,1	"	"	"
Suction	T4 CD	P 8	"	"	"
Suction	T5 UL	P 1 2 3 6 5 6 7	"	"	"
Suction	T6 Dery	P 9	"	"	"
Fill	1 2 3 6 5		27/6/19	10psi	"

Witnessed by S. NEWINGTON

Position held Pipe Fitter

Signed S. Newington



DO NOT SCALE

Proposed Redevelopment Garage Premises, Arterial Road, London

Suction + vent line layout.

1:100

Jan 1987

M.J.M

1004

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Congleat Designs Ltd

CHEM SAFE
2000

BECKBRIDGE HOUSE
UNIT 11
BECKBRIDGE ROAD
NORMANTON INDUSTRIAL ESTATE
NORMANTON
WEST YORKSHIRE
WF6 1TE
TEL: 01924 898193
FAX: 01924 898209
E MAIL: mike@force-group-plc.demon.co.uk

CERTIFICATE

RECEIVED 2000

CERTIFICATE NO
656/1102/00

PREMISES & DATE OF TEST
Q8 Laindon
Arterial Road
Laindon
Essex
SS15 6DP

7th 2nd 2000

Tank No.	Capacity	Tested	Result	Additional Comments
1 DERV	22,700ltr	TANK VENT SUCTION OFFSET	Pass Pass Pass Pass	
		TANK VENT SUCTION OFFSET		
		TANK VENT SUCTION OFFSET		
		TANK VENT SUCTION OFFSET		
		TANK VENT SUCTION OFFSET		

Chem Safe Tank testing (UK) Ltd certify that the equipment detailed above has been subjected to a leak detection test in accordance with the method statement and protocol as directed by the licensor. This test conforms to the standard E.P.A. test procedure for non-volumetric testing.

Signed for Chem Safe Tank Testing (UK) Ltd ..... **Date 11/02/00**
Authentication Stamp (Invalid Without)

ESSEX COUNTY COUNCIL

Trading Standards Service
Beehive Lane, Chelmsford, Essex CM2 9SY

CERTIFICATE OF INSTALLATION: (TO BE COMPLETED BY BUILDING CONTRACTOR)

Site Name GB LAINDON S/S

Address ARTERIAL RD

LAINDON

ESSEX

SS15 6DP

Installers name and address WESTFIELD PUMP + TANK LTD

PENNINE VIEW IND EST

CLECKHEATON RD BIRSTALL

BATLEY WEST YORKS WF17 9NF

The installation of the underground ~~storage tanks~~ / pipelines / ~~drainage system~~ + at the above premises has been carried out in accordance with the recommendations of the APEA/IP Guidance for the Design, Construction, Modification and Maintenance of Petrol Filling Stations and the licensing authority's requirements.

*Competent persons signature

Name (block capitals) M. CLEPLY

Company name and address (block capitals) AS INSTALLERS

Date 3.3.00

*Competent Person. A person with enough practical and theoretical knowledge, training and actual experience to carry out a particular task safely and effectively. The person should have the necessary ability in the particular operation of the type of plant and equipment with which he or she is concerned, an understanding of relevant statutory requirements and an appreciation of the hazards involved. That person should also be able to recognise the need for specialist advice or assistance when necessary and to assess the importance of the results of examinations and tests. A 'person' can be taken to mean more than one, or a body corporate or incorporate. It is therefore possible to appoint appropriate organisations eg (insurance companies or inspection bodies) to carry out tasks designated for competent persons.

+ Delete as necessary.

ESSEX COUNTY COUNCIL
Trading Standards Service
Beehive Lane, Chelmsford, Essex, CM2 9SY

TEST CERTIFICATE FOR PETROLEUM SPIRIT PIPELINES

Site Name GR LAINDON S/S

Address ARTERIAL RD LAINDON ESSEX

+The suction / ~~pressure~~ / vent / ~~offset~~ fill / vapour ~~recovery~~ stage 1B / ~~stage~~ 2 / secondary ~~containment~~ / ~~pipelines~~ associated with the undermentioned petroleum storage tanks at the above premises were tested in accordance with the recommendations of APEA/IP Guidance for the Design, Construction, Modification and Maintenance of Petrol Filling Stations on (date) 3-7-00 and found to be sound.

Signature of competent person* [signature]

Name (Block Capitals) M. CLEARY

Company Name and Address (Block Capitals) WESTFIELD PUMP + TANK LTD

PENNINE VIEW IND TRADING ESTATE CLECKHEATON RD BIRSTALL

BATLEY WF17 9NB.

+ Delete those not applicable.

*Competent Person means a person with enough practical and theoretical knowledge, training and actual experience to carry out a particular task safely and effectively. The person shall have the necessary ability in the particular operation of the type of plant and equipment with which he or she is concerned, an understanding of relevant statutory requirements and an appreciation of the hazards involved. The person shall also be able to recognise the need for specialist advice or assistance when necessary and to assess the importance of the results of examinations and tests. A "person" can be taken to mean more than one or a body corporate or incorporate. It is therefore possible to appoint appropriate organisations (e.g. insurance companies or inspection bodies) to carry out tasks designated for competent persons.

Details of tanks and pipelines

Tank No	Capacity	Feeding Pump Nos	Offsets
6	27 200.	PUMP 6 NEW LINE.	
1	22 700.	PASS PUMP 10.	PASS. (TANK TEST)

Please use other side of form for any comments

UST 2000 System Test
Incorporating the UST 2000P Precision Test & 2000U Ullage Test

TEST EVALUATION REPORT

Customer	Kuwait Petroleum (GB) Ltd	Site Name	Q8 - Laindon
Contact	Mr Neil Julian	Contact	Mr Neil Julian
Address	PO Box 5684 SGP Property Services	Address	Arterial Road
Town	Sunningdale Road	Town	Laindon, Basildon
County	Leicester	County	Essex
Postcode	LE3 1ZE	Postcode	SS15 6DP
Telephone	07836 604510	Telephone	07836 604510

The UST 2000 System declares a tank to be leaking when the measured leak rate exceeds the threshold of 0.190 litres per hour and has a probability of false alarm of <1% and a probability of detection of >99%

Tank Test Results

Tank No	1						
Level	Pass						
Ullage	Pass						
Diameter (cm)	274						
Volume (litres)	22750						
Tank Type (St/Fg)	Steel						
Fluid Level (cm)	158						
Fuel Type	Reg Unld						
Water in (cm)	0						
Ground Water Level (cm)	N/A						

Line Test Results

Tank No	Pump No	Grade of Fuel	P.S.I Start	Time (min)	P.S.I Finish	Result	Vents tested with ullage
1	10	Regular Unleaded	10	30	10	Pass	Yes

Gilbarco Veeder-Root Engineer	Mr C. Powell & Mr S. Powell	Date of Test	15 August 2005

Form – QAAPMH F09/103 Revision 2.01 Issued 13/01/2000

Fairbanks Environmental
Tech. Management Centre
Moss Lane View
Skelmersdale
P: +44 1695 52175
fairbanksglobal.com

04/02/2022

Laindon (MFG) (VMI) (FS678)
Arterial Road, Laindon
Essex, SS15 6DP

Fairbanks Environmental has been monitoring the whole of the site at Laindon (FS678) since August 2008 on behalf of Motor Fuel Group.

We are a specialist wetstock monitoring company with and SIR (Statistical Inventory Reconciliation) leak detection system accredited to 9 ltrs per day.

All of the stations that we monitor on behalf of Motor Fuel Group across the United Kingdom have our own in-house designed system installed and this allows us to gather communication information as it is communicated between the electronic gauge and the POS (point of sale) on each site. This information includes the start and end time of every transaction as well as the volume dispensed.

As we poll the gauge/tills every 15 minutes, we are able to have up to date information including any relevant alarms that are active on the gauge. We also have a pre-defined suite of thresholds that monitor the data we retreive from the sites and send alerts in-house to our team of dedicated analysts.

Fairbanks and Motor Fuel Group work closely to ensure there is a rigid two-way process structure and as a result we work closely with the site, area and regional managers

All deliveries are checked on a daily basis and any anomolies cross referenced with Laindon (FS678) or the fuel supplier and resolved. This is done at both tank and grade level.

On top of this, all sales and deliveries are cross-referenced with site, area and regional managers on a monthly basis and any anomolies investigated and resolved.

The data supplied from the site has been assumed to be correct and the performance of all tanks has been acceptable with no evidence of a loss of product to the ground.

Regards

Peter Monaghan
Wetstock Analysis Assistant
The Technology Management Centre
P: +44 1695 51775

From:	Simon White, Trading Standards Officer <Simon.White@essex.gov.uk>
Sent:	17 January 2018 16:41
To:	Nezamul Ali; Duncan Cartwright
Subject:	FW: Historical Petroleum Records Laindon Service Station, Arterial Road, Laindon, Essex, SS15 6DP
Attachments:	attachment 1.pdf; attachment 2.pdf; attachment 3.pdf; attachment 4.pdf; attachment 5.pdf; attachment 6.pdf

Duncan, Nez,

The Petroleum (Consolidation) Act 1928.
The Health and Safety at Work etc Act 1974.

Please find below the information relating to the search for Laindon Service Station, Arterial Road, Laindon, Essex, SS15 6DP (NGR 567815,190038).

Our records show the site originally had 6 tanks with an additional tank installed in 1979.

Tank Details

Tank Number	Installation Date	Capacity Gallons	Product	Construction Type
1	1944	500	unknown	Single Skin Steel
2	1944	500	unknown	Single Skin Steel
3	1944	500	unknown	Single Skin Steel
4	1944	500	unknown	Single Skin Steel
5	1944	3000	unknown	Single Skin Steel
6	1944	3000	unknown	Single Skin Steel
7	1979	6000	Unknown	Single Skin Steel

We have no site diagrams or further information on these tanks.

The site then went through the following developments

1) Redevelopment in 1987 see attachment 1 for site plan.
2) Development of the forecourt sales building see attachment 2
3) Stage1 Vapour Recovery installation fitting 1994 see attachment 3.
4) Suction line test for Tank No 4 Pump 8 in 1999 (fail), see attachment 4.
5) Further investigation and testing of all suction lines in 1999 (pass), see attachment 5.
6) Grade changes and new suction line 2000, for pump No 1, tank 5 and 6 see attachment 6.
7) September 2000 site re-pumped.

We have one record of a spillage on site when in 05/08/14 the petrol contents of a pump hose was spilled when a customer drove away with the nozzle in the car . The safety cut worked and the spill was contained to the hose contents.

Our records start from 1974 and this is all the relevant information I could draw to answer your request, and we are unable to give any information regarding the site prior to that date. We are unable to accept any liability for the accuracy of the information supplied or any loss or damage incurred in consequence thereof. If you require this information in paper format please let me know although there will be an additional charge.

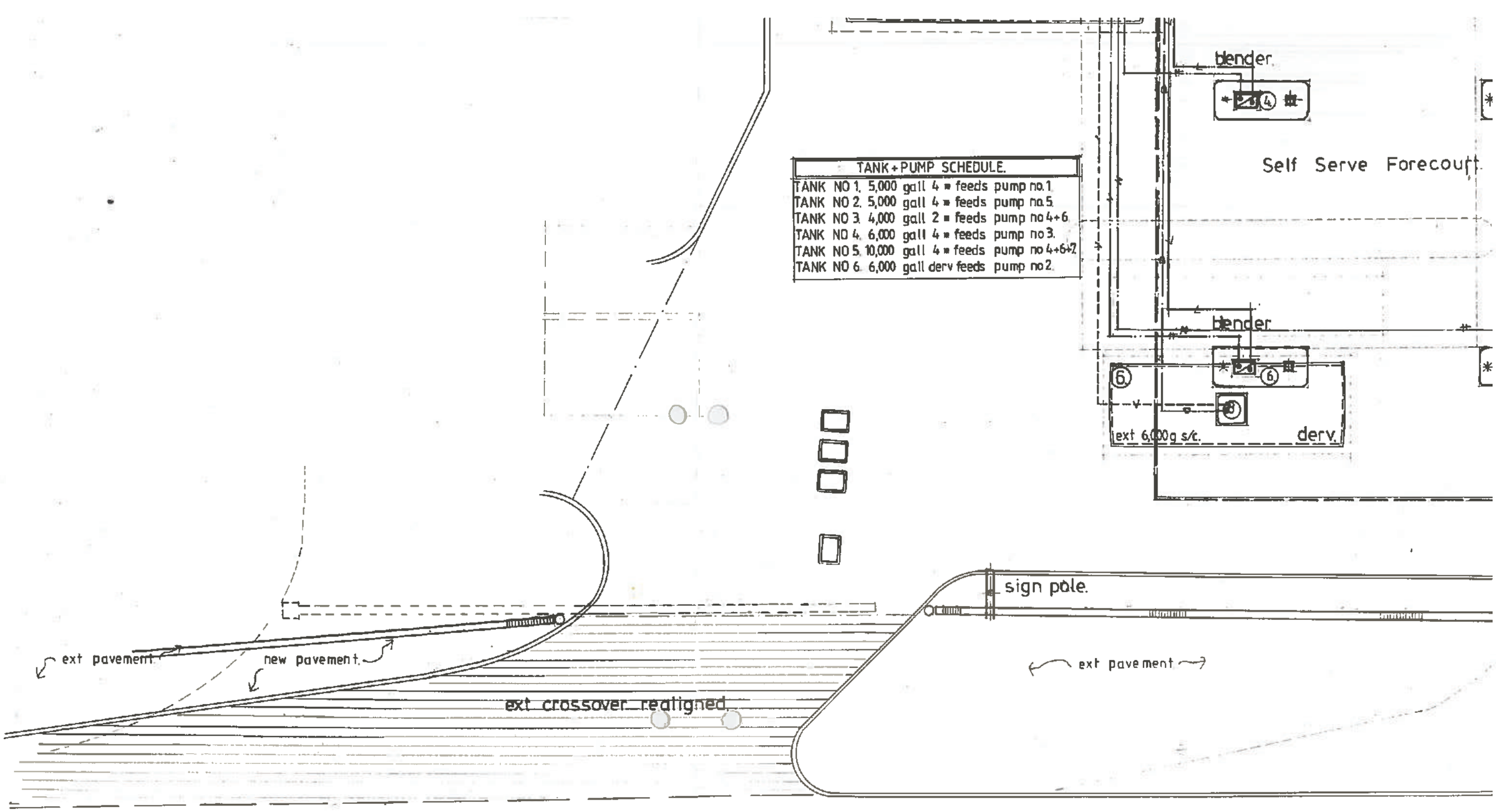
I again I will arrange an invoice for £114 to follow and addressed as specified please note that each petroleum record request will be invoiced separately but to the same purchase order given.

Regards.

Simon White
Trading Standards Officer
Regulatory Services

Essex County Council
Telephone: 03330 134114 | Ext: 34114
simon.white@essex.gov.uk | www.essex.gov.uk

TANK + PUMP SCHEDULE.
TANK NO 1. 5,000 gall 4 = feeds pump no 1.
TANK NO 2. 5,000 gall 4 = feeds pump no 5.
TANK NO 3. 4,000 gall 2 = feeds pump no 4+6.
TANK NO 4. 6,000 gall 4 = feeds pump no 3.
TANK NO 5. 10,000 gall 4 = feeds pump no 4+6+7.
TANK NO 6. 6,000 gall derv feeds pump no 2.



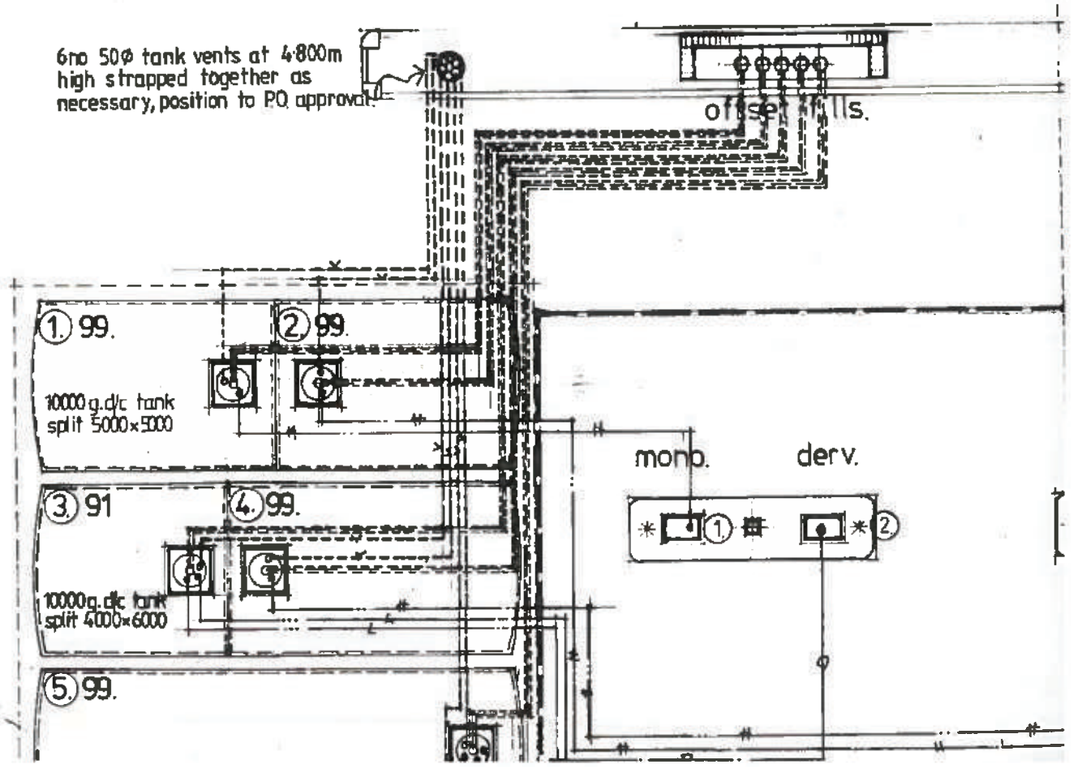
A 127 SOUTHEND ARTE

Proposed Offices.

Proposed Units.

6no 50ø tank vents at 4·800m high strapped together as necessary, position to P.O. approval.

offset fills.



Self services:

SYSTEM TO BE TOKHEIM 800 ELECTRONIC EQUIPEMENT.

Pumps.

7 No GILBARCO' SELF SERVICE PUMPING UNITS: 5 no MONOS AND 2 no BLENDER, SUPPLIED BY CLIENT.

Air tower.

NEW AIR TOWER SUPPLIED BY CLIENT AND FIXED INTO POSITION BY O/C. SUPPLY + CONNECTION WORKS BY NOM PIPEWORK SPECIALIST.

Tank vents.

6 No NEW 50 ø TANK VENTS SET MINIMUM 4·800m ABOVE GROUND + STRAPPED TOGETHER AS NECESSARY, ALL BY NOM PIPEWORK SPECIALIST, ACTUAL HEIGHT + LOCATION OF VENTS TO BE AGREED WITH THE LOCAL PETROLEUM OFFICER.

New tanks.

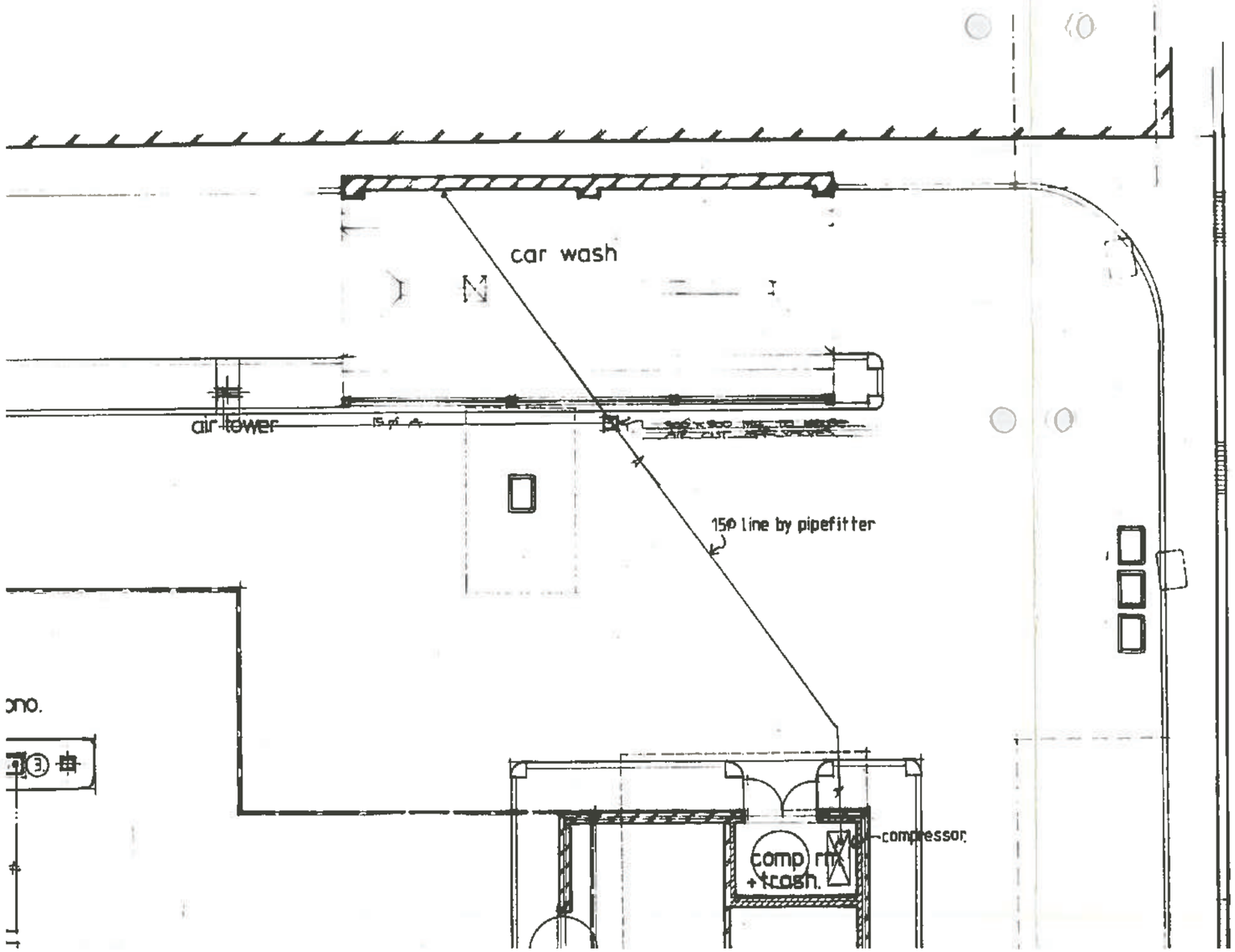
2 No 10,000 GAL P/C + 1 No 10,000 GAL S/C. TANKS INSTALLED BY O/C IN STRICT ACCORDANCE WITH LOCAL PETROLEUM OFFICERS REQUIREMENTS + DETAILS SHOWN ON DWG 3/D 73. TANKS TO BE TESTED TO P.O.'S. APPROVAL PRIOR TO SURROUNDING IN CONCRETE + AGAIN PRIOR TO FORECOURT CONCRETING.

Ext tanks.

1 No 6,000 GAL. S/C TO BE RE-USED AS DIESEL TANK. SEE DRAWING No 1004/82, FOR FILLING/REMOVAL DETAILS, WHICH ARE TO BE IN ACCORDANCE WITH LOCAL PETROLEUM OFFICERS REQUIREMENTS.

Tank gauges.

50 ø DUCTS FROM TANK MANHOLES FOR ELECTRONIC



DO NOT SCALE

AMENDMENTS

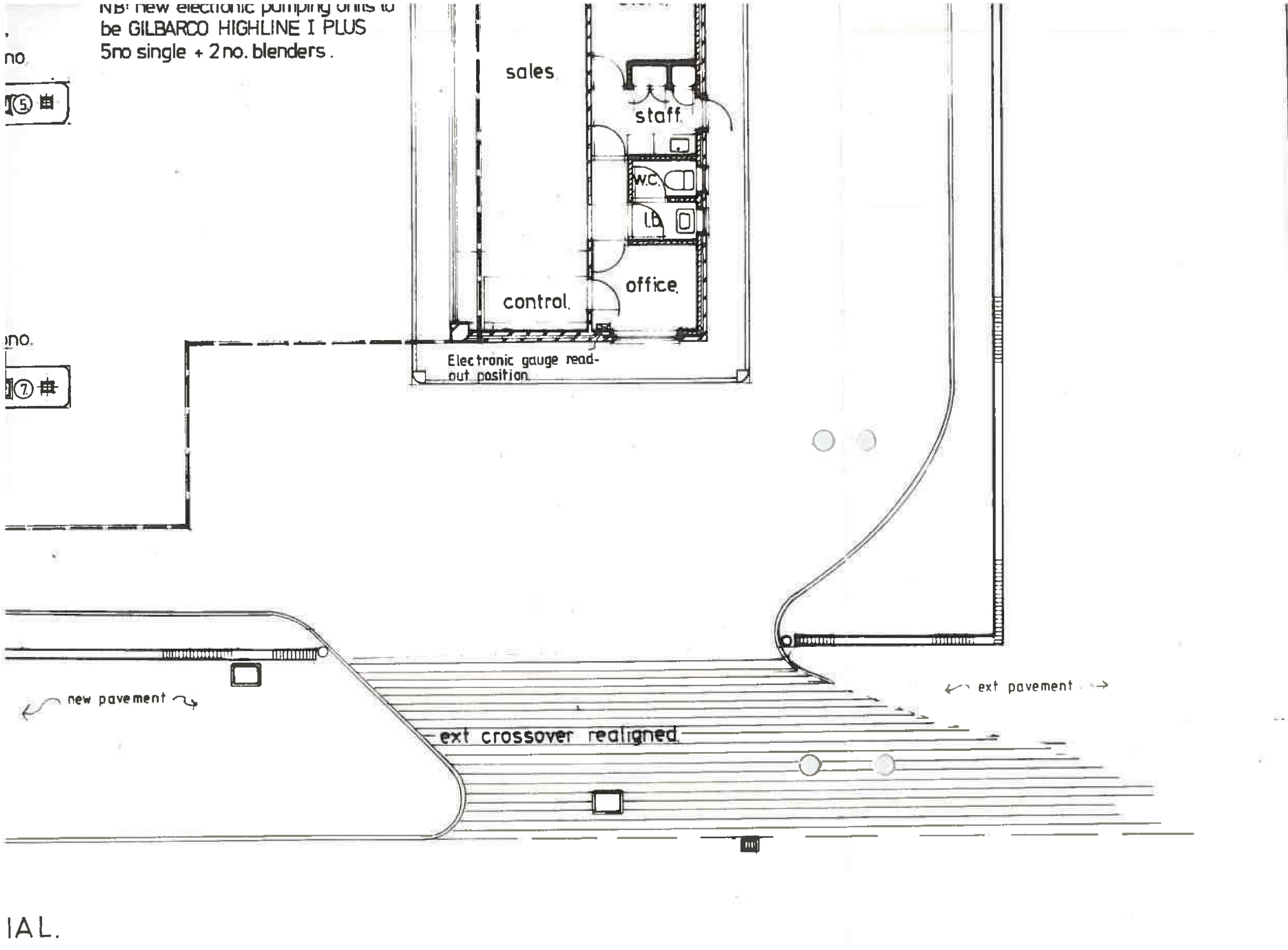
NO	DATE	AMENDMENT	
A	Mar'87	Generally revised	D.R.P
~~B~~	1/5/87.	~~TANKS RE-POSITIONED & PIPEWORK REVISED TO SUIT. PUMPS TRANSFERS TO DISPENSERS AIR TOWER RE LOCATED.~~	leo.

NOTES

KEY TO LINES.

- 09 GRADE 38 Ø SUCTION LINE.
- 01 GRADE 38Ø SUCTION LINE.
- DERV 38 Ø SUCTION LINE
- 100 Ø OFFSET FILL LINE.
- 50 Ø TANK VENT LINE
- 15Ø AIR LINE.

1. ALL SUCTION AND VENT LINES GALVANISED PIPE AND BEDDED IN 150mm MIN SULPHATE RESISTING CONCRETE (GRADE 20 WITH 20mm NOMINAL AGGREGATE NEEDLE VIBRATED AROUND PIPEWORK.
2. THE PIPE-FITTER IS TO NOTE THAT THE LAYOUT IS DIAGRAMATIC ONLY. THE PIPEFITTER IS TO ENSURE THAT THE CORRECT GRADES ARE TAKEN TO THE CORRECT SIDES OF THE PUMPS AND FED FROM THE CORRECT TANKS.
3. NEW PETROL STORAGE TANKS TO BE INSTALLED IN ACCORDANCE WITH B.S. 1974 AND TO PETROLEOM OFFICERS APPROVAL.
4. NEW TANKS ARE TO HAVE NEW 762 x 762 TURNER BROTHERS (KINGSWOOD) LTD HEAVY DUTY CI COVERS + FRAMES.
5. FOR TANK INSTALLATION DRAWING SEE STD 70.
6. SIZE OF NEW TANKS TO BE CONFIRMED BY ARCHITECT PRIOR TO COMMENCEMENT



PROJECT
Proposed Redevelopment,
Garage Premises,
Arterial Road, Laindon

TITLE
Suction + vent line layout.

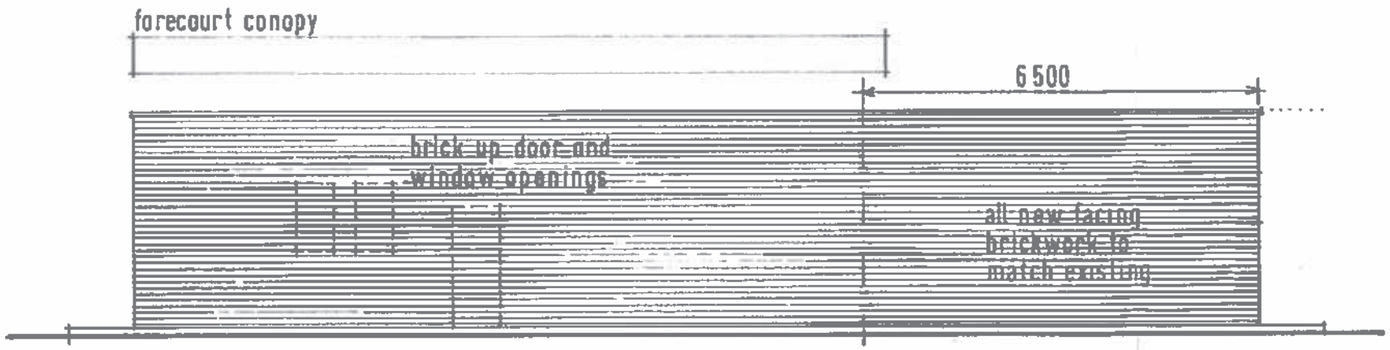
SCALE	1:100
DATE	Jan 1987
DRAWN	M.J.M.
CLIENT	
JOB NO	1004
DWG NO	24.B.

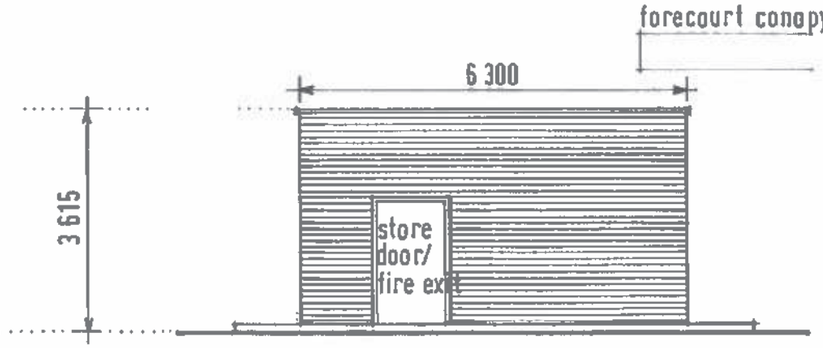
CONQUEST DESIGNS LTD

76 HIGH STREET BRENTWOOD ESSEX

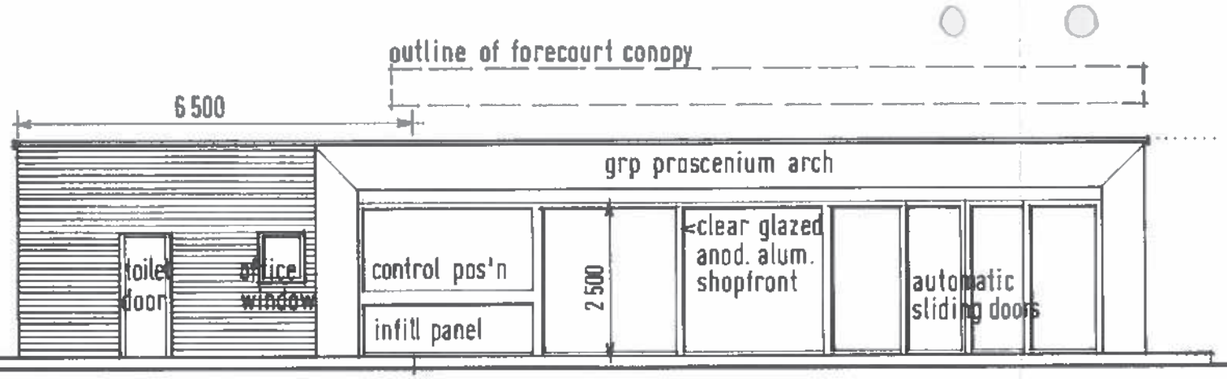
BRENTWOOD (0277) 216784

FOREST

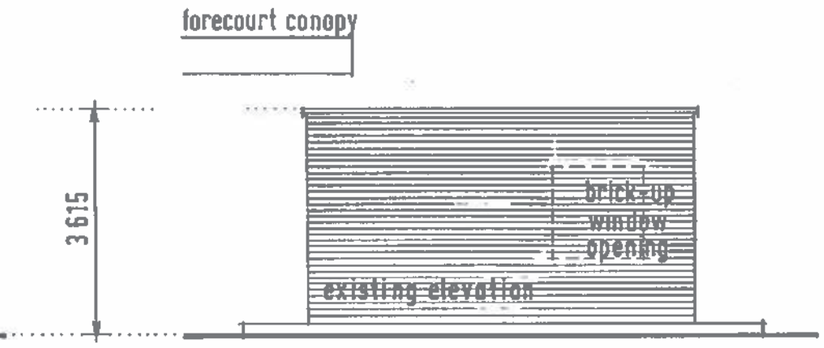




r e a r



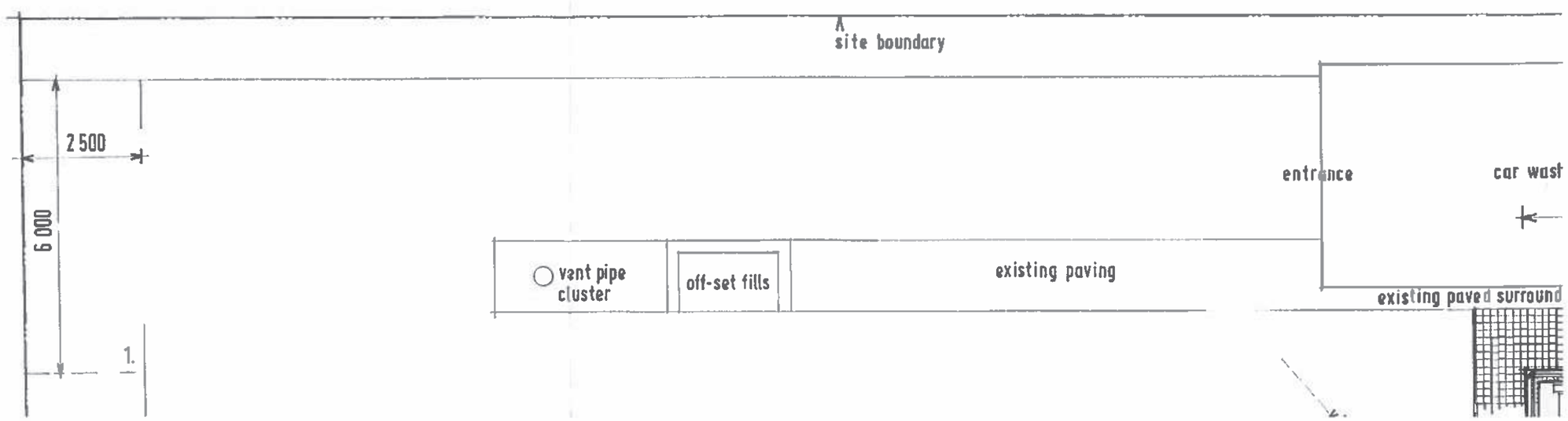
e n d f r o m c a r w a s h

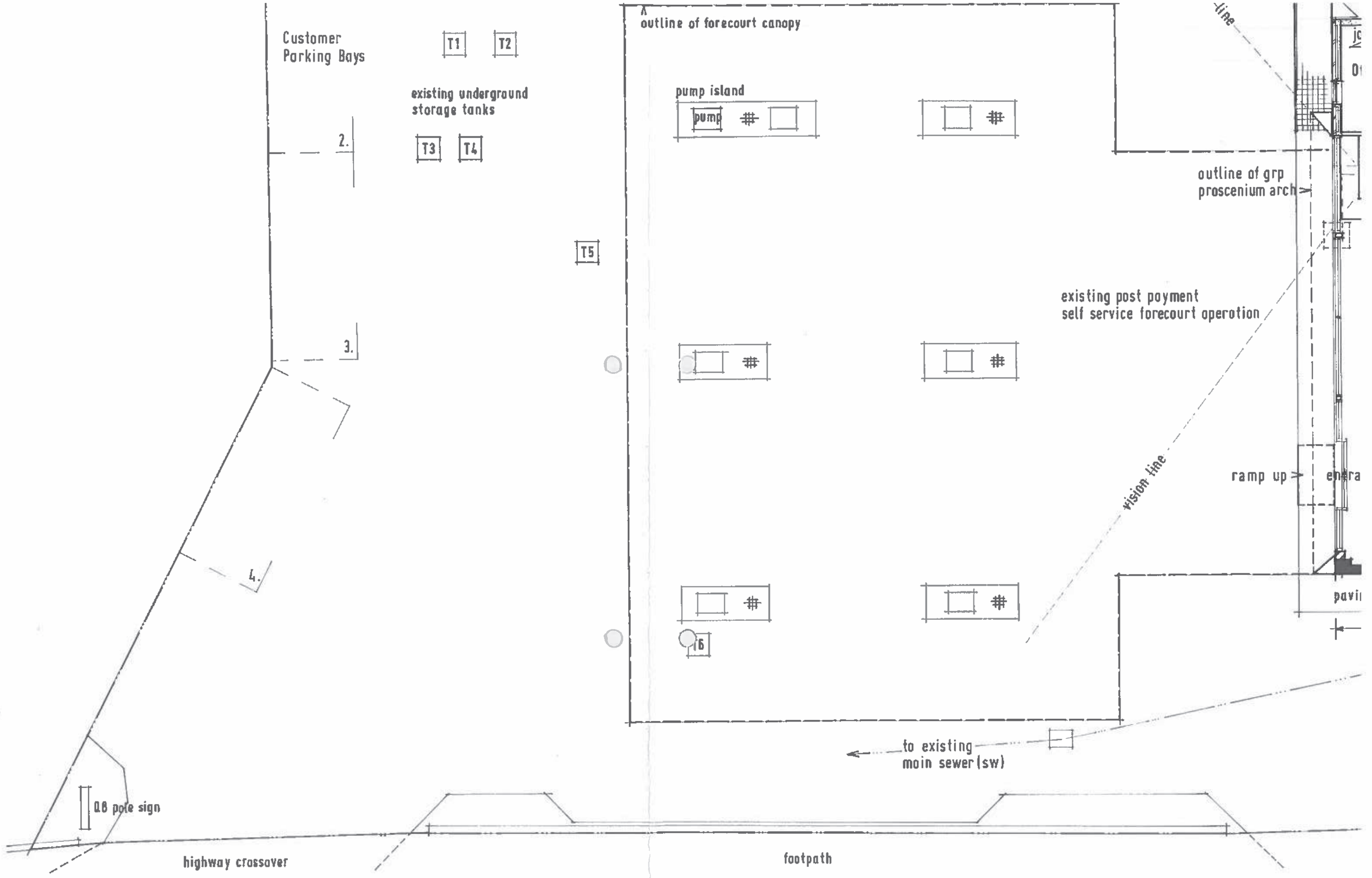


f r o n t

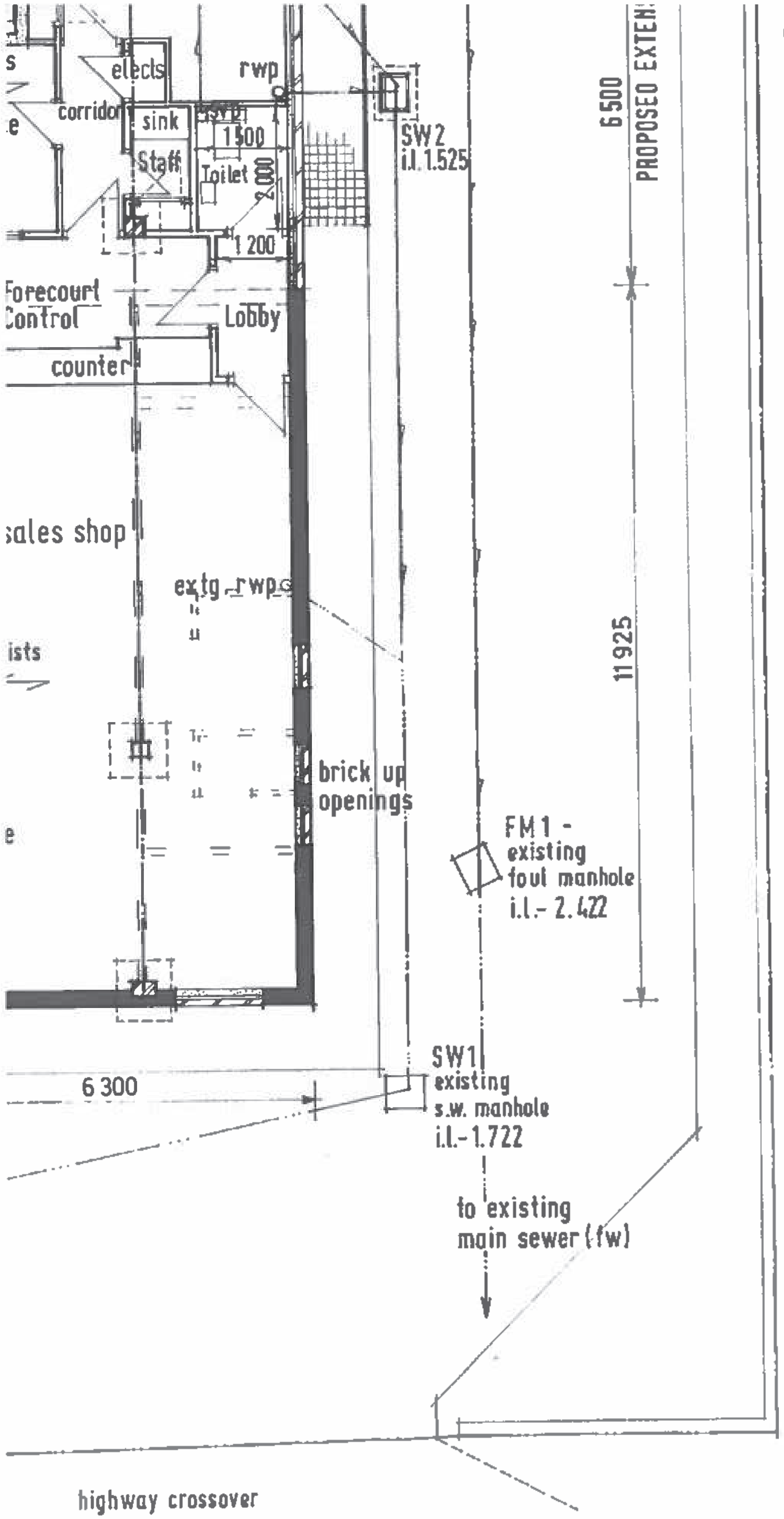
e n d f r o m h i g h w a y

F O R E C O U R T S A L E S B U I L D I N G E L E V A T I O N S





SITE LAYOUT PLAN



all waste plumbing to BS 5572:1978 - 32 diam waste from basins, 40 diam waste from sink - with 75 deep seal traps - to discharge to new 100 diam svp's with 100 diam drain connections laid to fall to new foul manholes

toilet, lobby and staffroom venting by light switch operated ducted extract ventilation fan (discharging through roof to cowl) to give 3 air changes per hour with 15 minute switch-off delay

FM 2/3 new 600 x 450 foul manholes to take drains from toilets and staffroom. 225 thick brickwork walls, concrete base, h.d. steel cover and new 100 diam drain connection to FM1

valley gutter to new roof to discharge to new 100 diam rwp with 100 diam drain connection to SW2 – new storm water manhole (constructed as FM2 / 3) with new 100 diam drain connection to SW1

all internal partition walls, central load-bearing wall and end cavity wall to be demolished (to extg. building) – extg and new roof structures to be carried on new steel beams, piers and foundations to structural engineers details

extg door and window openings on rear and end elevation to be bricked up

extg lavatory fittings, sink unit etc., to be resited to new facilities - disconnected drains to FM1 to be sealed with concrete

—..—..— denotes existing foul drain

—..—..— denotes NEW foul drain

—...—...— denotes existing storm water drain

—...—...— denotes NEW storm water drain

HEATING - throughout to be 3kw wall mounted fan heaters

CEILING - throughout extension to be 12.5mm plasterboard with two coat plaster finish

suspended ceiling to be class 1 standard

Revisions

1 January 1991 - to l.a. requirements

2 February 1991 - customer parking bays added

3 October 1991 - internal layout revised, plan and elevations amended

- this drawing is prepared for local authority applications and is not a working drawing
- do not scale this drawing - check dimensions on site
- figured dimensions shown in millimetres

LANE WRIGHT ASSOCIATES

construction survey and design consultants

8 Cantell Grove Bristol BS14 8TP

telephone: 0272 839477

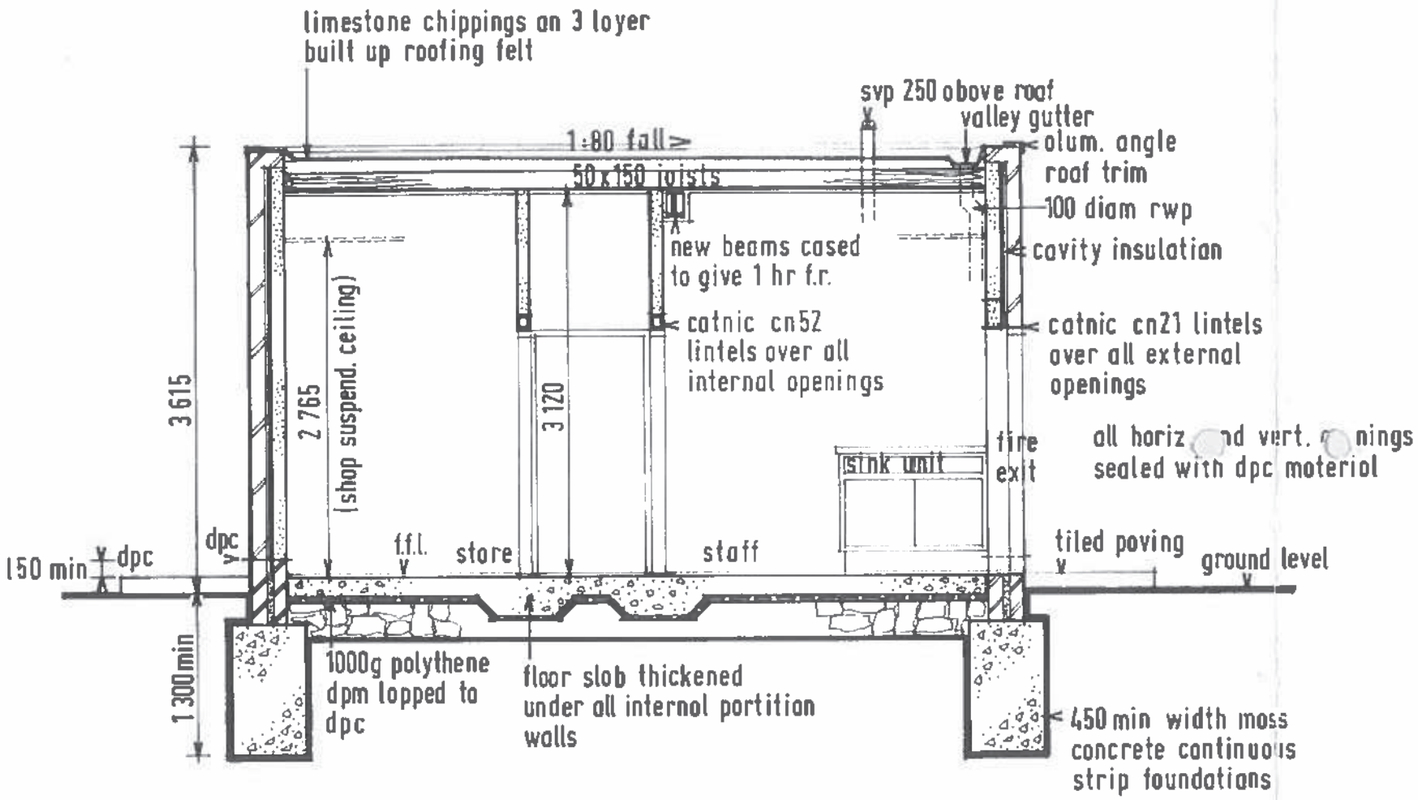
site: Q8 Laindon
Arterial Road (A127), Laindon, Essex

project: Proposed Extension to Forecourt Sales Building

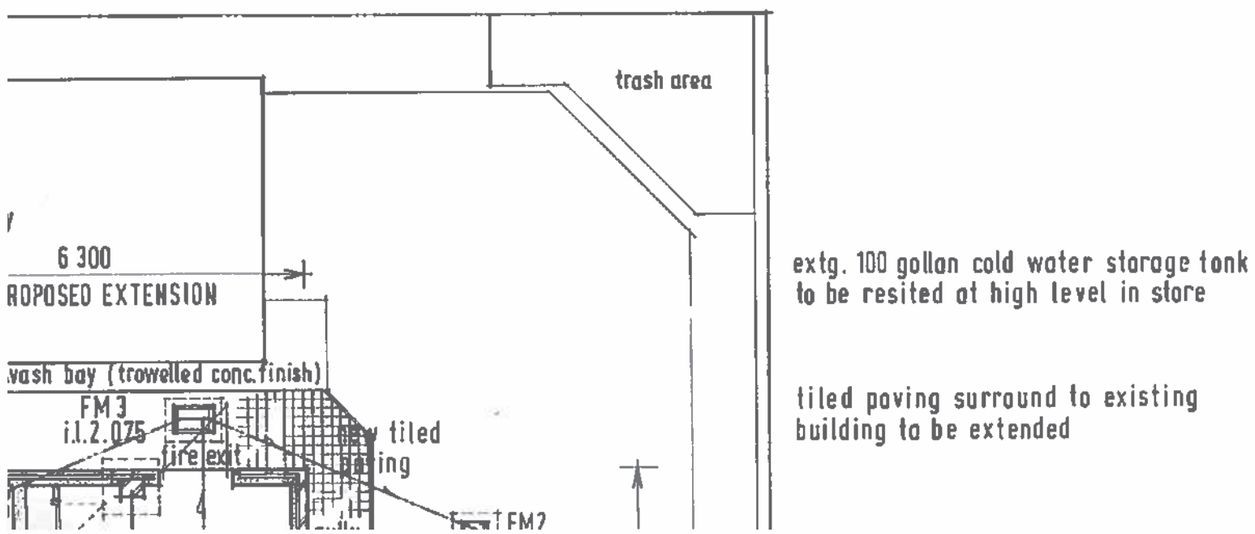
client: Kuwait Petroleum (G.B.) Limited

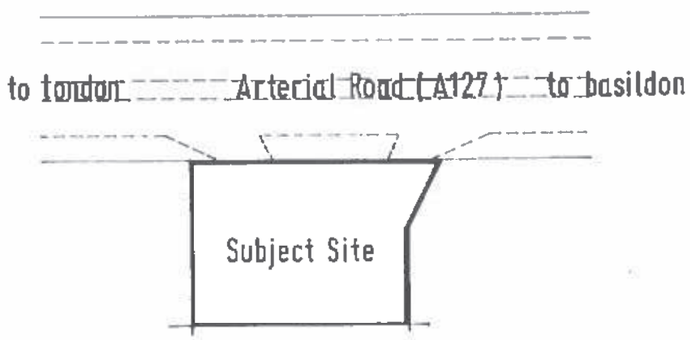
drawing no: 901 . 296 . 2 - 3

scale: 1 : 100 date: January 1991



S E C T I O N A L E L E V A T I O N (scale : 1:50)





LOCATION PLAN

SCALE : 1:1250

CONSTRUCTION SPECIFICATION

ROOF – 12.5mm layer limestone chippings bitumen bedded on 3 layer built-up roofing felt to bs 747 on 80 thick 'jabdeck' on felt vapour barrier on 20mm ply decking on s/wfirrings laid to fall to rear on 50x150 timber joists (grade : sc 4) at 450 centres – new roof covering to lap to and be hot bonded to existing

WALLS – external to be conventional cavity type, 102 selected facings (to match existing) outer skin – 50 wide insulated cavity – 100 'thermalite turbo' blockwork inner skin, the two skins to be securely tied together with s.s. wall ties – cavity insulated by 25 thick 'jablite' (or similar) insulation batts fixed to inner skin by polyprop. retaining rings clipped to wall ties – new walls to be toothed (or similar tied) to existing and cavities to be continuous

internal to be full height 100 thick 'thermalite turbo' blockwork with double, bonded, skin to plant room

FLOOR – 150 thick r.c. floor slab on 1000 g polythene dpm (lapped to dpc) on sand blinding on 150 min thick well consolidated hardcore

FOUNDATIONS – mass concrete continuous strip founds. under external walls, floor slab thickened under internal walls

STEELWORK – new steel beams, masonry support piers and mass concrete foundations to be to structural engineers details

DRAINAGE – all new drainage to be 100 diam 'hepworth supersleve' flexible jointed vitrified clay pipes and fittings laid to fall not less

Telephone: SWINDON 770494 FAX (0793) 772597 V.A.T. Reg. No. 195 7658 09

PETROIL PUMP & TANK SERVICES

(Geo. W. Birch & Sons)

Petroleum bulk storage installations, Maintenance, Tank cleaning and testing, Rebuilt pumps, etc.

39 STONE LANE, LYDIARD MILLICENT,
SWINDON, WILTS.

Our Ref: HAGB/SDB Your Ref: Date: 22nd dec1993.

Petroleum Licensing Dept.
Trading Standards.
Essex County Council,
Beehive Lane,
Chelmsford CM2 9SY.

re: Introduction of Vapour Recovery Stage 1b and Product Balancing on Service Stations for Kuwait Petroleum (GB) Limited.

Kuwait Petroleum (GB) Limited are currently in the process of introducing Vapour Recovery Stage 1b onto a number of their Service Stations in the United Kingdom.

It is proposed that the introduction on existing working Service Stations is carried out using the high level manifolding system, i.e. the manifolding of spirit ventilation pipes at high level (above road tanker height) with a single riser pipe from manifold rising to five metres above forecourt and terminating with an approved pressure vacuum vent.

The vapour return line will be 3" diameter and run to a position adjacent to the existing fill positions and tanker standing areas and to terminate with flame arrestor, vapour recovery adaptor cap and lock.

Where the 3" vapour return line is run underground to its position a small condensation return line will be introduced to prevent build up of liquid. The 3" line will be surrounded by 6" of sulphate resisting concrete.

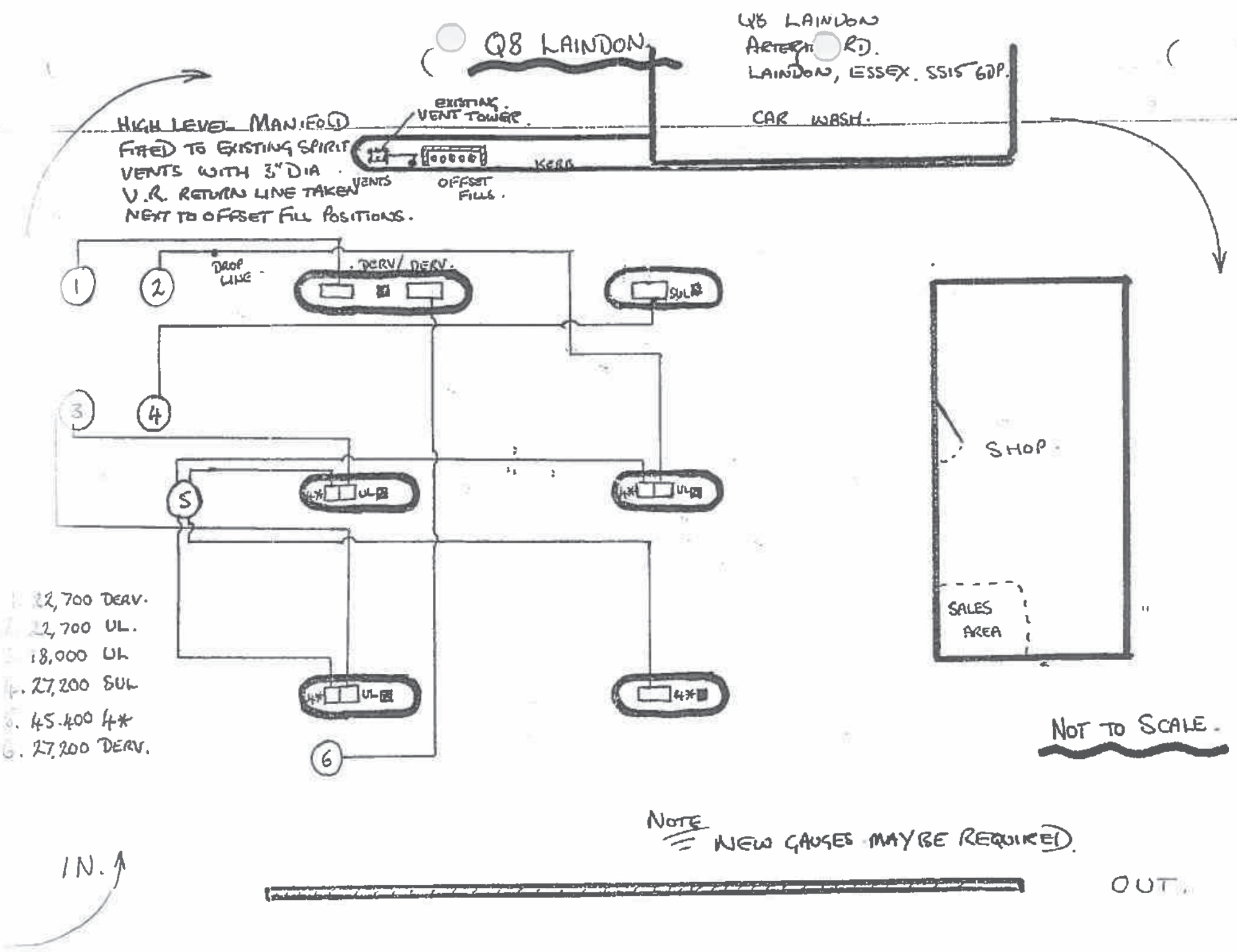
Where the Service Station is using hydrostatic type content gauges these will be replaced with a suitable electronic replacement, e.g. Veeder Root etc. Suitable identity labels will also be provided.

All works will be carried out in a safe and workmanlike manner and within the guide lines of the current HSG 41 recommendations.

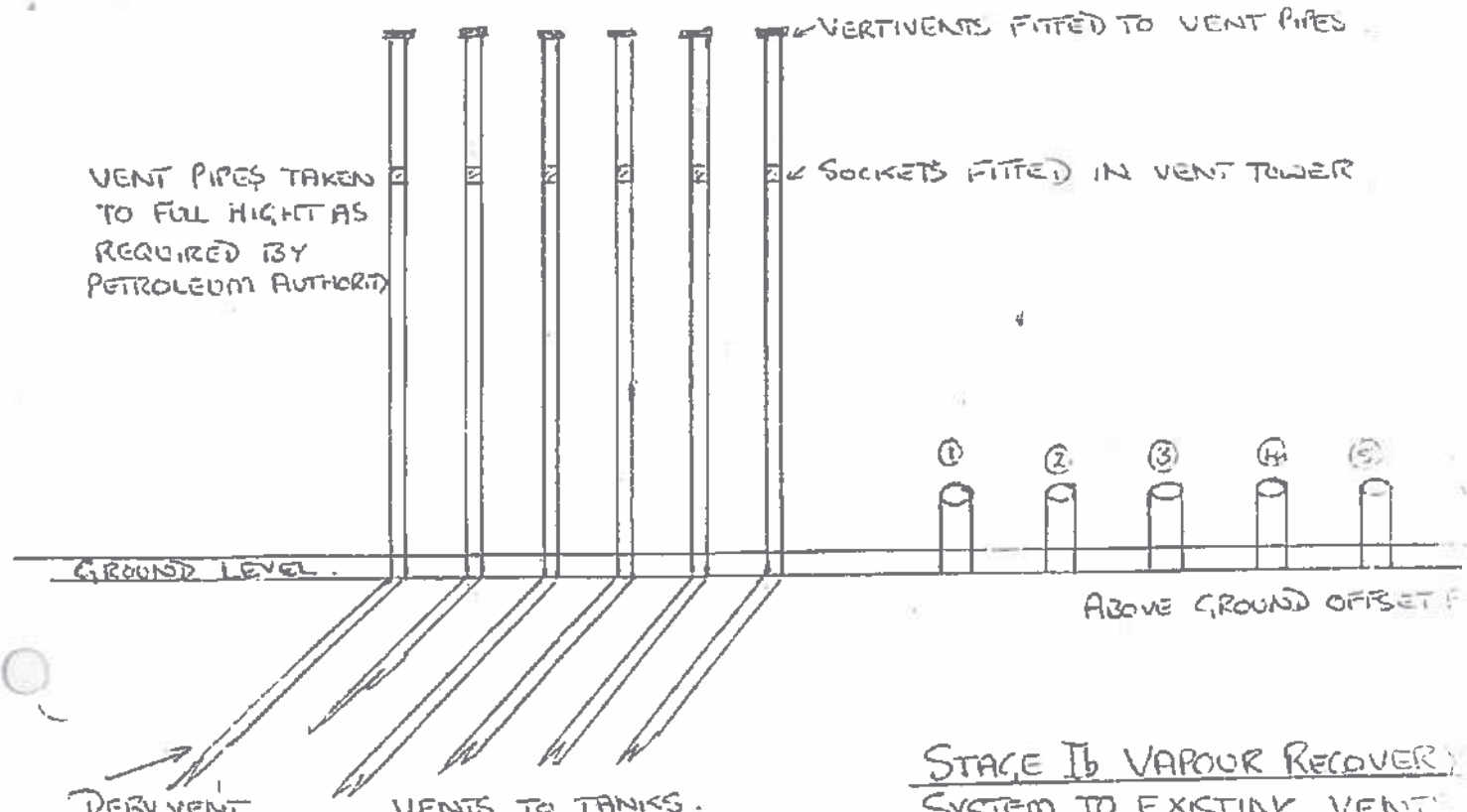
Service Stations within your area are as per attached list and drawings.

Yours faithfully,
PETROIL PUMP & TANK SERVICES

H.A.G. Birch

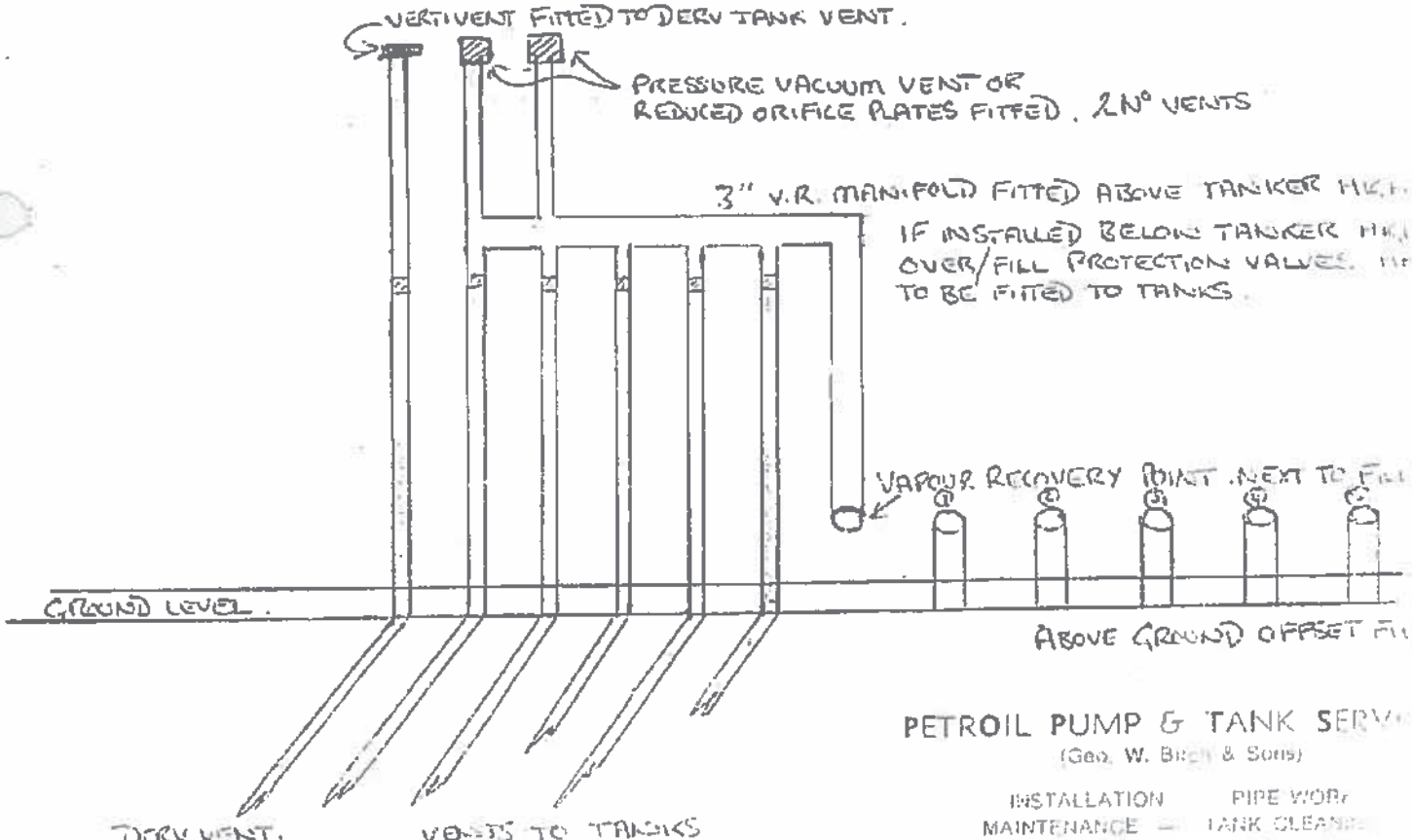

Q8 LAINDON
Q8 LAINDON
ARTERIAL RD.
LAINDON, ESSEX. SS15 6DP.
CAR WASH.
HIGH LEVEL MANIFOLD
FITTED TO EXISTING SPIRIT
VENTS WITH 3" DIA.
V.R. RETURN LINE TAKEN
NEXT TO OFFSET FILL POSITIONS.
EXISTING VENT TOWER.
VENTS
OFFSET FILLS.
KERB
DROP LINE.
DERV/ DERV.
SUL
UL
4*
SHOP
SALES AREA
1. 22,700 DERV.
2. 22,700 UL.
3. 18,000 UL
4. 27,200 SUL
5. 45.400 4*
6. 27,200 DERV.
NOT TO SCALE.
NOTE
NEW GAUGES MAYBE REQUIRED.
IN.
OUT.

VENT SYSTEM AS INSTALLED FOR NON VAPOUR RECOVERY



STAGE Ib VAPOUR RECOVERY SYSTEM TO EXISTING VENT
(NOT TO SCALE. DIAGRAMATIC)

VENT SYSTEM CONVERTED FOR VAPOUR RECOVERY



NOTE. WHEN INSTALLING THIS SYSTEM DO NOT RUN RECOVERY PIPE UNDER GROUND, AS THIS WILL CAUSE A TRAP IN THE SYSTEM AND COULD HOLD PRODUCT (UNLESS DRAIN OFF IS INTRODUCED)

PETROIL PUMP & TANK SERVICE
(Geo. W. Brett & Sons)
INSTALLATION — PIPE WORK
MAINTENANCE — TANK CLEANING
REBUILT PUMPS — PRESSURE TESTING
39 Stone Lane
Lydiard Millicent
Swindon, Wiltshire

S10/A2-2

TANKSAFE® LIMITED
4/5 Gough Square
London EC4A 3DE
Tel: 0171-583 2007
Fax: 0171-583 2008
Mobile: 0850 842828

PIPELINE TEST CERTIFICATE

SITE: Q8 Laindon
Arterial Road
Laindon
Essex

CERT NO. 184

Tank Pump	Product Grade	Suction/Vent Offset Fill	Date	Pressure On	Pressure Off	Duration Hr/Min		Passed Failed
Pump 8 Tank 4	Derv	Suction	12-2-99	10 p.s.i.	5 p.s.i.		20	Failed

Remarks

Suction line was disconnected from tank and from pump for final test.

Engineers Signature	Block Capitals	Date
S Evans	S Evans	12.2.99

Independent Pump Services Ltd

Petroleum Installation

Pressure Test Certificate

Certificate Number 009359

Site Address:	Q8 Laindon S/S ARTERIAL ROAD LAINDON, BASILDON ESSEX SS15 6AP
Job Number	4617

Tank and Pipeline Tests:

Where the result of any test indicates a leak or any other unacceptable condition, the Management of Independent Pump Services Ltd and subsequently the Petroleum Officer, must be notified without undue delay. The subject installation shall be taken out of commission until authorised by the Petroleum Officer or the management of Independent Pump Services Ltd.

Remarks / Actions Taken / Required

On behalf of Independent Pump Services Ltd:

Testing Engineer	S. Newington
Reviewed and approved by:	M. Howell
Dated	30-4-99

Adur Boatyard, Old Shoreham Road,
Shoreham-by-Sea, West Sussex BN43 5TA.
Tel: (01273) 454831. Fax: (01273) 464863.

132 Gulson Road, Coventry, CV1 2JF.
Tel: (01203) 633312. Fax: (01203) 633370.
email: sales@sofitam.com

Registered Office as above: Registered in England No. 2850143. VAT Reg. No. 620 9842 39

o certify that the under mentioned tests have been carried out

Tank Tests

Tank No:	Type of Test	Date test Commenced	Length of Test	Applied Pressure	Comments Passed/Failed/Faults

Witnessed by [ ] Position held [ ]

Signed [ ]

Pipeline Tests

Suction O/S Fill Vent Vap Recover	Connected to Tank Number	Connected to Pump Number	Date	Applied Pressure	Commnets Passed/Failed/Faults
Suction	T1 Derv	P 10	27/4/99	10psi	Passed
Suction	T2 UL	P 4\5	"	"	"
Suction	T3 UL	P 2\3 6\1	"	"	"
Suction	T4 C.D	P 8	"	"	"
Suction	T5 UL	P 1 2 3 4 5 6 7	"	"	"
Suction	T6 Derv	P 9	"	"	"
ds fills	1 2 3 4 5		27/4/99	10psi	"

Witnessed by S. NEWINGTON Pusition held PIPE FITTER

Signed S. Newington

WESTFIELD

S10/A2-2

Pennine View Industrial Trading Estate, Gelderd Road, Batley, W. Yorkshire WF17 9NF
Telephone: (01924) 502802 Fax: (01924) 502812
email:westfield@westfield.prestel.co.uk

ESSEX COUNTY COUNCIL
RECEIVED
1- FEB 2000
TRADING STANDARDS DEPARTMENT

Our ref : MC/PA/WFLD/1676

31st January 2000

For the attention of Mr M Alston
Senior Enforcement Officer
Essex County Council
Trading Standards
Beehive Lane
Chelmsford
CM2 9SY

Dear Sir,

Ref : Q8, Laindon Service Station

We have recently been instructed by Kuwait Petroleum to carry out grade change works at the above site, which I believe to be in your area.

The scope of works are as follows:

1. To carry out trench excavations from tank 6 Derv to pump 1 and to install 1 No new suction line.
2. To pressure test to the satisfaction of the local Petroleum Officer and backfill to existing levels
3. To disconnect line from tank 5 and cap off to pump 1.
4. To test tank 1 Derv to enable change to spirit.
5. To carry out fuel transfers as required by means of an air driven transfer pump.

Tank 1	Derv	to change to	ULG
Tank 2	ULG	to change to	City Petrol → SL.
Tank 3	ULG	to change to	LRP
Tank 4	Derv	to stay	Derv
Tank 5	LRP	to change to	ULG
Tank 6	Derv	to stay	Derv

6. To re-programme pump controller and edacom.
7. To re-programme gauges to new configurations
8. To alter vapour recovery manifold to new tank configurations.
9. To change hoses, nozzle spouts and pump décor as required.

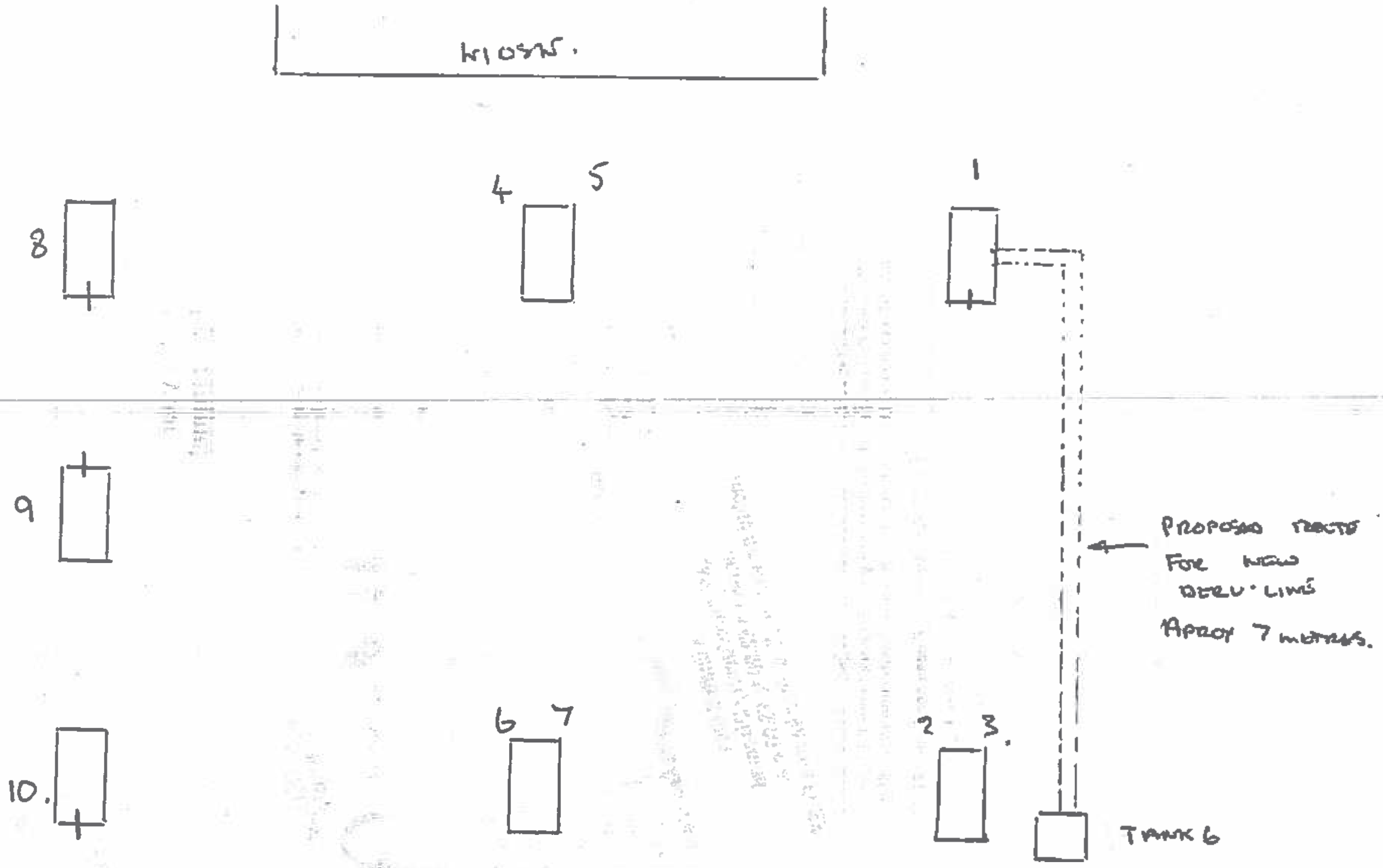
Please find forwarded to yourselves, a proposed route for the new Derv line. It is hoped to commence these works on Monday 7th February 2000, with your approval.

Please do not hesitate to contact me should you require any further information.

Yours faithfully
for Westfield Pump & Tank Ltd

M CIEPLY
Contracts Manager

GB LAINDON.


KIOSK.
8
4
5
1
9
PROPOSED ROUTE
FOR NEW
DELIV. LINE
APPROX 7 METRES.
10.
6
7
2
3.
TANK 6

APPENDIX 04

EnviroInsight Report

Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

567813 190034

Order Details

Date: 10/02/2022

Your ref: EMS_758710_982618

Our Ref: EMS-758710_982618

Client: emapsite

Site Details

Location: 567813 190034

Area: 0.15 ha

Authority: Basildon Borough Council

Contact us with any questions at:
info@groundsure.com
08444 159 000

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
14	1.1	Historical industrial land uses	2	0	1	0	-
15	1.2	Historical tanks	0	1	0	1	-
15	1.3	Historical energy features	0	0	5	5	-
16	1.4	Historical petrol stations	0	0	0	0	-
16	1.5	Historical garages	2	2	2	0	-
17	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
18	2.1	Historical industrial land uses	2	0	1	0	-
19	2.2	Historical tanks	0	1	0	1	-
19	2.3	Historical energy features	0	0	15	13	-
20	2.4	Historical petrol stations	0	0	0	0	-
21	2.5	Historical garages	3	3	2	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
22	3.1	Active or recent landfill	0	0	0	0	-
22	3.2	Historical landfill (BGS records)	0	0	0	0	-
23	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
23	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
23	3.5	Historical waste sites	0	0	0	0	-
23	3.6	Licensed waste sites	0	0	0	0	-
23	3.7	Waste exemptions	0	0	14	0	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
26	4.1	Recent industrial land uses	2	3	42	-	-
29	4.2	Current or recent petrol stations	0	2	1	0	-
30	4.3	Electricity cables	0	0	0	0	-
30	4.4	Gas pipelines	0	0	0	0	-
30	4.5	Sites determined as Contaminated Land	0	0	0	0	-

30	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
31	4.7	Regulated explosive sites	0	0	0	0	-
31	4.8	Hazardous substance storage/usage	0	0	0	0	-
31	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
31	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
31	**4.11**	**Licensed pollutant release (Part A(2)/B)**	3	1	4	1	-
33	4.12	Radioactive Substance Authorisations	0	0	0	0	-
33	**4.13**	**Licensed Discharges to controlled waters**	0	0	0	3	-
33	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
34	4.15	Pollutant release to public sewer	0	0	0	0	-
34	4.16	List 1 Dangerous Substances	0	0	0	0	-
34	4.17	List 2 Dangerous Substances	0	0	0	0	-
34	**4.18**	**Pollution Incidents (EA/NRW)**	0	0	3	7	-
36	4.19	Pollution inventory substances	0	0	0	0	-
36	4.20	Pollution inventory waste transfers	0	0	0	0	-
36	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
37	**5.1**	**Superficial aquifer**	Identified (within 500m)				
39	**5.2**	**Bedrock aquifer**	Identified (within 500m)				
41	**5.3**	**Groundwater vulnerability**	Identified (within 50m)				
42	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
42	5.5	Groundwater vulnerability- local information	None (within 0m)				
43	5.6	Groundwater abstractions	0	0	0	0	0
44	**5.7**	**Surface water abstractions**	0	0	0	0	2
44	5.8	Potable abstractions	0	0	0	0	0
45	5.9	Source Protection Zones	0	0	0	0	-
45	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
46	**6.1**	**Water Network (OS MasterMap)**	0	0	3	-	-

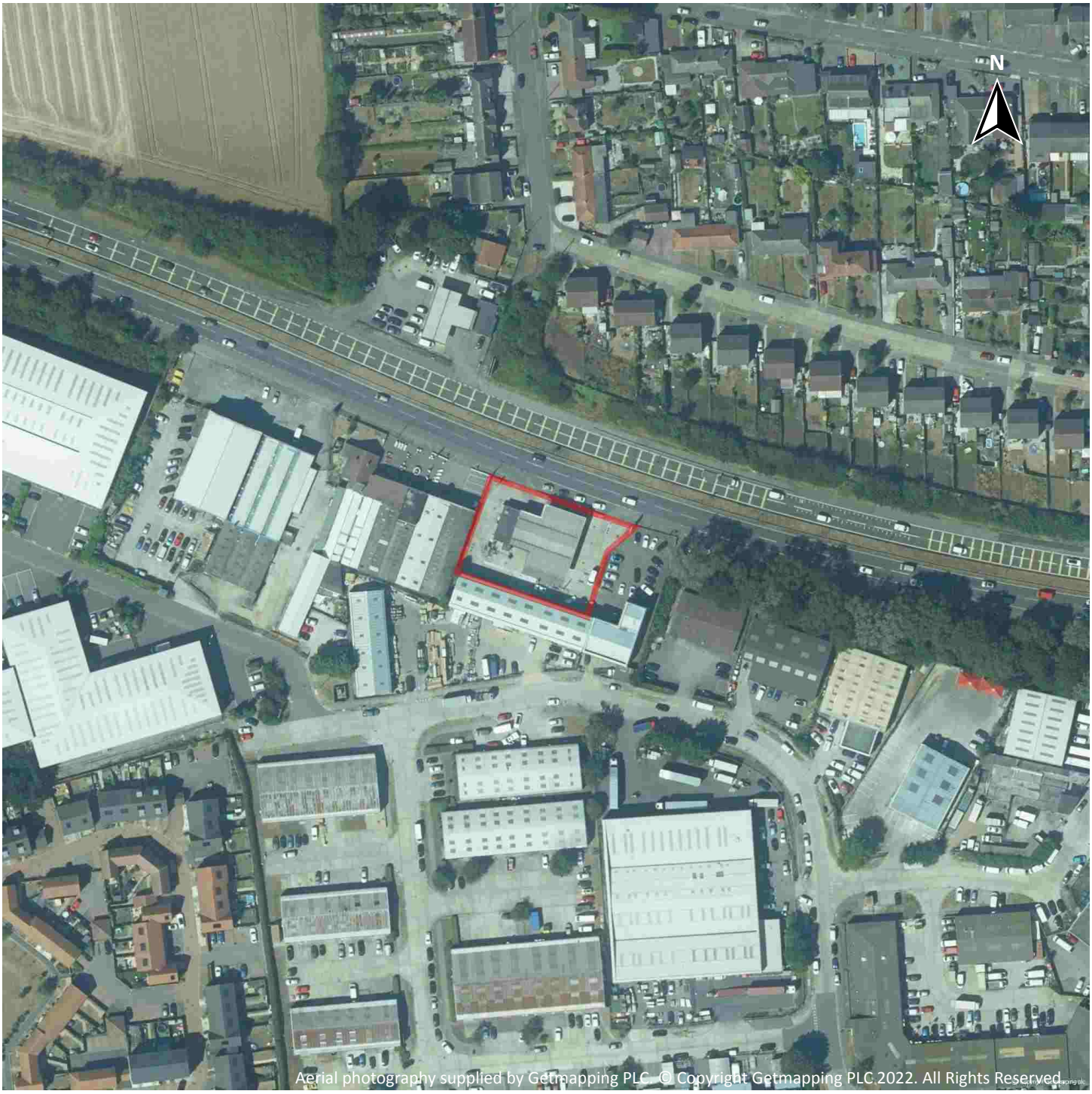
47	6.2	Surface water features	0	0	1	-	-
47	6.3	WFD Surface water body catchments	1	-	-	-	-
48	6.4	WFD Surface water bodies	0	0	0	-	-
48	6.5	WFD Groundwater bodies	0	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
49	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
49	7.2	Historical Flood Events	0	0	0	-	-
49	7.3	Flood Defences	0	0	0	-	-
50	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
50	7.5	Flood Storage Areas	0	0	0	-	-
51	7.6	Flood Zone 2	None (within 50m)				
51	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
52	8.1	Surface water flooding	Negligible (within 50m)				
Page	Section	Groundwater flooding					
53	9.1	Groundwater flooding	Low (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
54	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	2
55	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
55	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
55	10.4	Special Protection Areas (SPA)	0	0	0	0	0
55	10.5	National Nature Reserves (NNR)	0	0	0	0	0
56	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
56	10.7	Designated Ancient Woodland	0	0	0	0	0
56	10.8	Biosphere Reserves	0	0	0	0	0
56	10.9	Forest Parks	0	0	0	0	0
57	10.10	Marine Conservation Zones	0	0	0	0	0
57	10.11	Green Belt	0	0	1	0	0
57	10.12	Proposed Ramsar sites	0	0	0	0	0

57	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
58	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
58	10.15	Nitrate Sensitive Areas	0	0	0	0	0
58	**10.16**	**Nitrate Vulnerable Zones**	1	0	0	0	1
59	**10.17**	**SSSI Impact Risk Zones**	1	-	-	-	-
60	**10.18**	**SSSI Units**	0	0	0	0	2
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
62	11.1	World Heritage Sites	0	0	0	-	-
62	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
62	11.3	National Parks	0	0	0	-	-
62	11.4	Listed Buildings	0	0	0	-	-
63	11.5	Conservation Areas	0	0	0	-	-
63	11.6	Scheduled Ancient Monuments	0	0	0	-	-
63	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
64	**12.1**	**Agricultural Land Classification**	Urban (within 250m)				
65	12.2	Open Access Land	0	0	0	-	-
65	12.3	Tree Felling Licences	0	0	0	-	-
65	12.4	Environmental Stewardship Schemes	0	0	0	-	-
65	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
66	**13.1**	**Priority Habitat Inventory**	0	0	3	-	-
67	13.2	Habitat Networks	0	0	0	-	-
67	13.3	Open Mosaic Habitat	0	0	0	-	-
67	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
68	**14.1**	**10k Availability**	Identified (within 500m)				
69	**14.2**	**Artificial and made ground (10k)**	0	0	1	2	-
70	**14.3**	**Superficial geology (10k)**	1	1	0	2	-

71	14.4	Landslip (10k)	0	0	0	0	-
72	14.5	Bedrock geology (10k)	1	1	0	2	-
73	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
74	15.1	50k Availability	Identified (within 500m)				
75	15.2	Artificial and made ground (50k)	0	0	1	2	-
76	15.3	Artificial ground permeability (50k)	0	0	-	-	-
77	15.4	Superficial geology (50k)	1	0	0	2	-
78	15.5	Superficial permeability (50k)	Identified (within 50m)				
78	15.6	Landslip (50k)	0	0	0	0	-
78	15.7	Landslip permeability (50k)	None (within 50m)				
79	15.8	Bedrock geology (50k)	1	0	0	1	-
80	15.9	Bedrock permeability (50k)	Identified (within 50m)				
80	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
81	16.1	BGS Boreholes	0	0	41	-	-
Page	Section	Natural ground subsidence					
84	17.1	Shrink swell clays	Moderate (within 50m)				
85	17.2	Running sands	Very low (within 50m)				
87	17.3	Compressible deposits	Negligible (within 50m)				
88	17.4	Collapsible deposits	Very low (within 50m)				
89	17.5	Landslides	Very low (within 50m)				
91	17.6	Ground dissolution of soluble rocks	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
93	18.1	Natural cavities	0	0	0	0	-
94	18.2	BritPits	0	0	0	0	-
94	18.3	Surface ground workings	0	0	3	-	-
94	18.4	Underground workings	0	0	0	0	0
94	18.5	Historical Mineral Planning Areas	0	0	0	0	-

95	18.6	Non-coal mining	0	0	0	0	0
95	18.7	Mining cavities	0	0	0	0	0
95	18.8	JPB mining areas	None (within 0m)				
95	18.9	Coal mining	None (within 0m)				
95	18.10	Brine areas	None (within 0m)				
96	18.11	Gypsum areas	None (within 0m)				
96	18.12	Tin mining	None (within 0m)				
96	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
97	**19.1**	**Radon**	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
98	**20.1**	**BGS Estimated Background Soil Chemistry**	1	1	-	-	-
98	**20.2**	**BGS Estimated Urban Soil Chemistry**	2	4	-	-	-
99	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
100	21.1	Underground railways (London)	0	0	0	-	-
100	21.2	Underground railways (Non-London)	0	0	0	-	-
100	21.3	Railway tunnels	0	0	0	-	-
100	21.4	Historical railway and tunnel features	0	0	0	-	-
100	21.5	Royal Mail tunnels	0	0	0	-	-
101	21.6	Historical railways	0	0	0	-	-
101	21.7	Railways	0	0	0	-	-
101	21.8	Crossrail 1	0	0	0	0	-
101	21.9	Crossrail 2	0	0	0	0	-
101	21.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 02/08/2018

Site Area: 0.15ha

Recent site history - 2014 aerial photograph

Capture Date: 24/08/2014

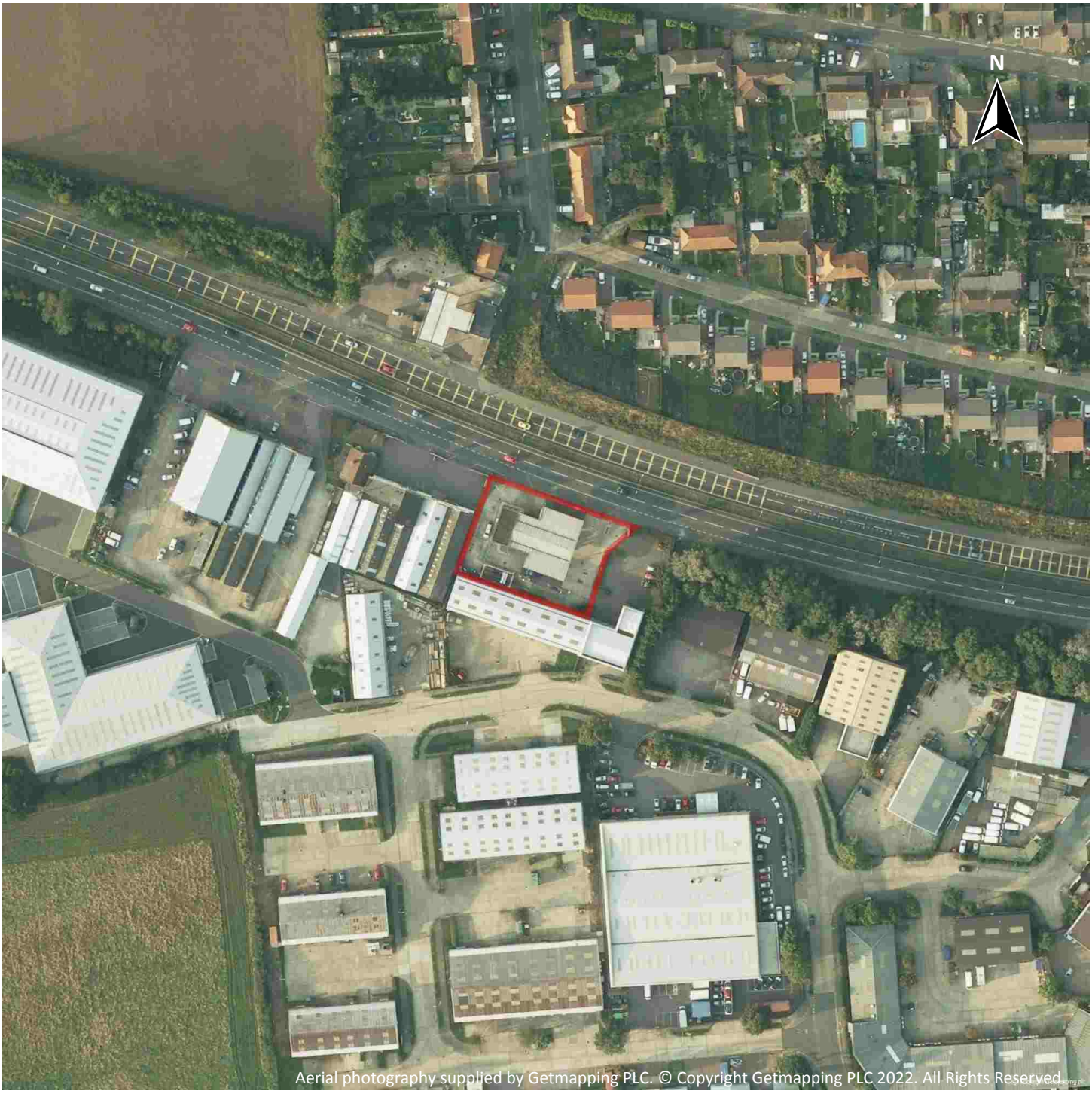
Site Area: 0.15ha

Recent site history - 2012 aerial photograph

Capture Date: 25/05/2012

Site Area: 0.15ha

Recent site history - 2008 aerial photograph



Capture Date: 20/09/2008

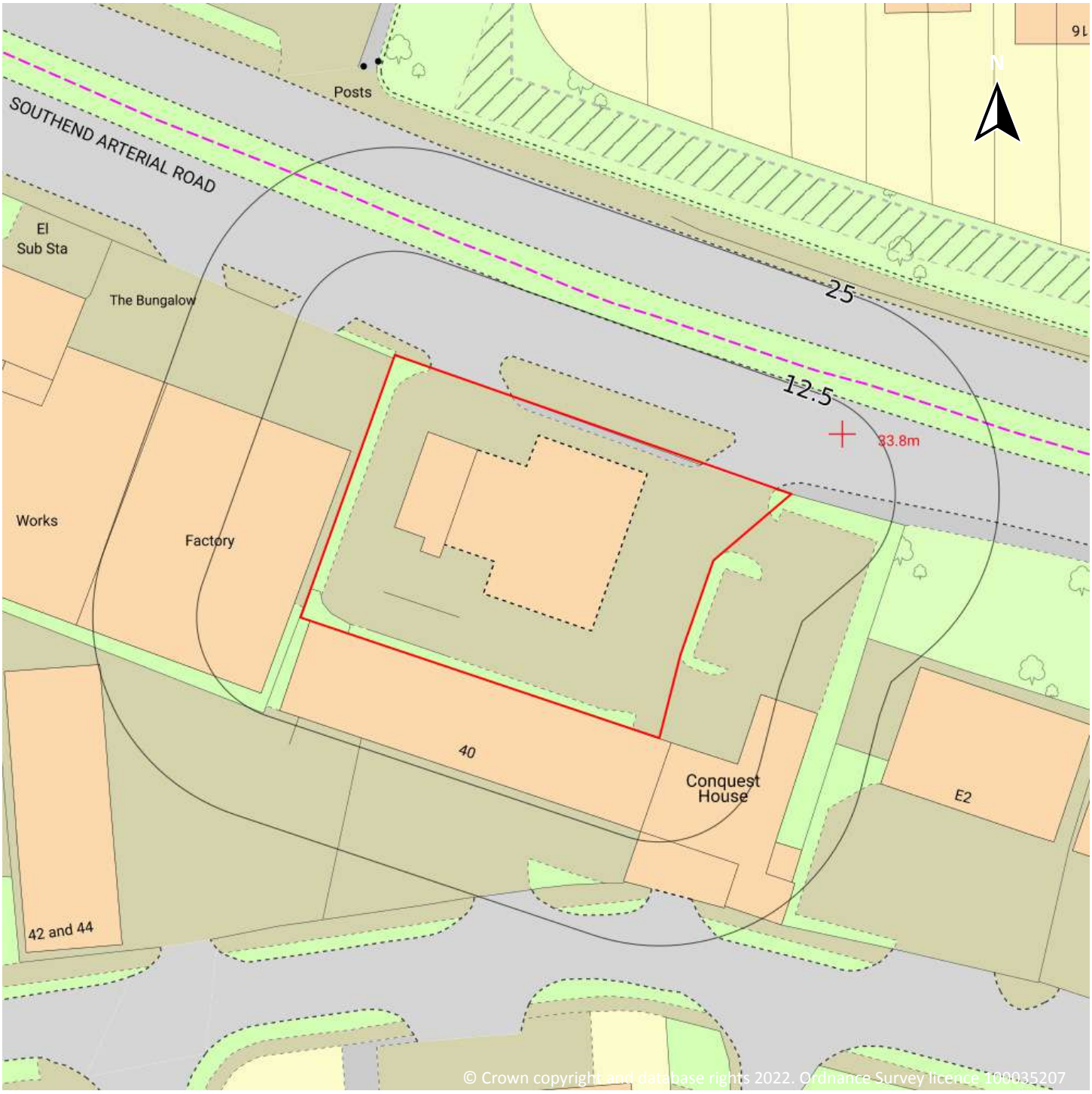
Site Area: 0.15ha

Recent site history - 1999 aerial photograph

Capture Date: 03/09/1999

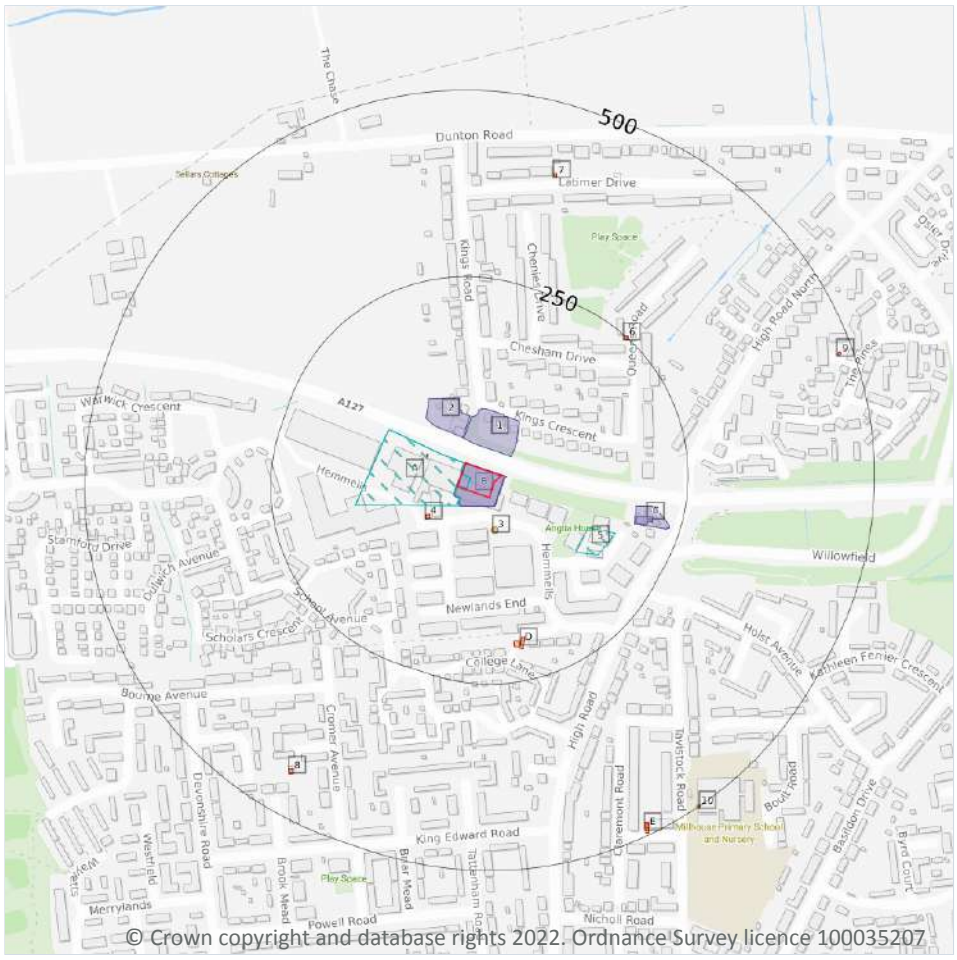
Site Area: 0.15ha

OS MasterMap site plan



Site Area: 0.15ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

1.1 Historical industrial land uses

Records within 500m	3

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Unspecified Factory**	**1982**	**2232300**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Unspecified Factory**	**1971**	**2292776**
5	135m SE	Abattoir	1978	2168452

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**2**

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
3	40m S	Unspecified Tank	1995	368016
10	497m SE	Unspecified Tank	1955	368013

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	**10**

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
A	52m W	Electricity Substation	1979 - 1989	264337
4	53m SW	Electricity Substation	1987 - 1995	268214
D	192m S	Electricity Substation	1970	246052
D	195m S	Electricity Substation	1987 - 1995	272707

ID	Location	Land use	Dates present	Group ID
6	246m NE	Electricity Substation	1980 - 1995	280853
7	401m N	Electricity Substation	1981 - 1989	283906
8	438m SW	Electricity Substation	1970 - 1995	257749
9	479m E	Electricity Substation	1992 - 1995	262467
E	482m SE	Electricity Substation	1968 - 1969	261623
E	483m SE	Electricity Substation	1984 - 1993	291799

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	**0**

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	**6**

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
B	**On site**	**Garage**	**1969**	**79593**
B	**On site**	**Garage**	**1979 - 1981**	**85458**
1	29m N	Garage	1969 - 1979	84949
2	35m N	Garage	1969	73600
C	185m E	Garage	1969	77053

ID	Location	Land use	Dates present	Group ID
C	190m E	Garage	1968	75857

This data is sourced from Ordnance Survey / Groundsure.

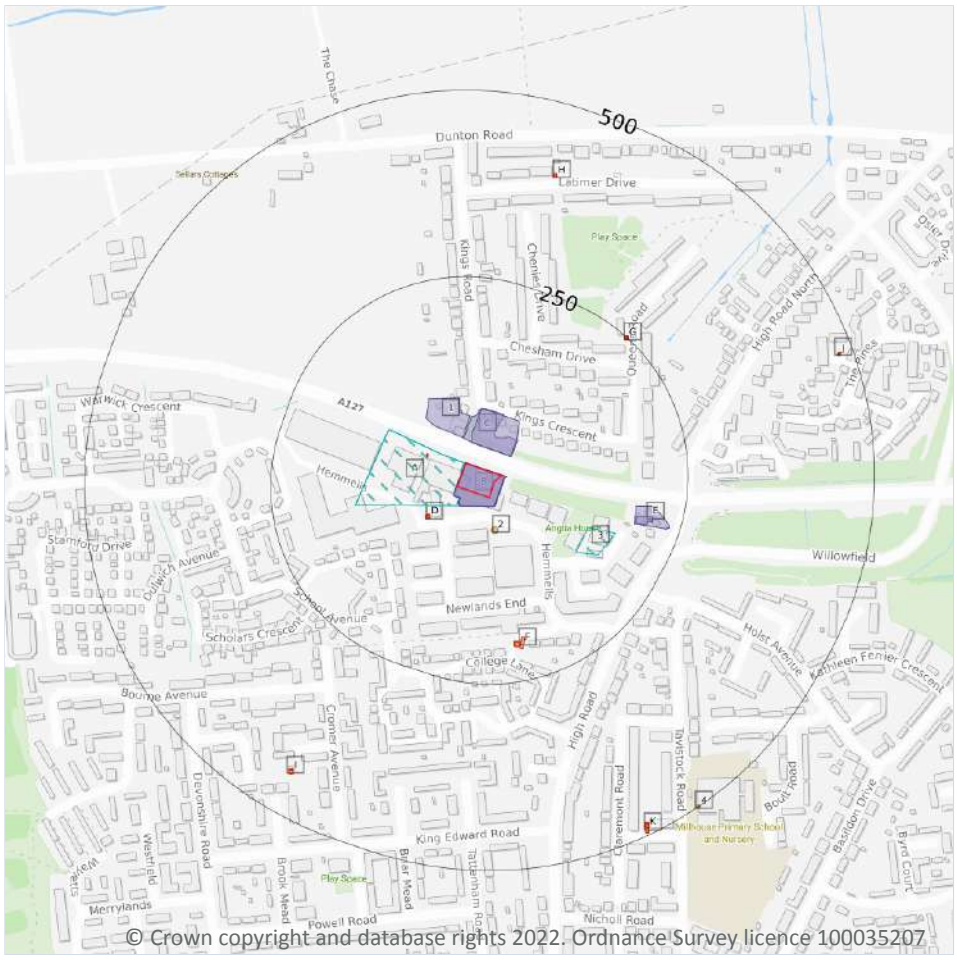
1.6 Historical military land

Records within 500m	**0**

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.

2 Past land use - un-grouped



2.1 Historical industrial land uses

Records within 500m	3

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 18**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Unspecified Factory**	**1971**	**2292776**
A	**On site**	**Unspecified Factory**	**1982**	**2232300**
3	135m SE	Abattoir	1978	2168452

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	2

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 18**

ID	Location	Land Use	Date	Group ID
2	40m S	Unspecified Tank	1995	368016
4	497m SE	Unspecified Tank	1955	368013

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	28

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 18**

ID	Location	Land Use	Date	Group ID
A	52m W	Electricity Substation	1979	264337
A	52m W	Electricity Substation	1981	264337
A	52m W	Electricity Substation	1989	264337
D	53m SW	Electricity Substation	1995	268214
D	54m SW	Electricity Substation	1987	268214
F	192m S	Electricity Substation	1970	246052
F	195m S	Electricity Substation	1987	272707
F	197m S	Electricity Substation	1995	272707
G	246m NE	Electricity Substation	1992	280853
G	247m NE	Electricity Substation	1980	280853

ID	Location	Land Use	Date	Group ID
G	247m NE	Electricity Substation	1989	280853
G	247m NE	Electricity Substation	1989	280853
G	247m NE	Electricity Substation	1990	280853
G	247m NE	Electricity Substation	1995	280853
G	247m NE	Electricity Substation	1993	280853
H	401m N	Electricity Substation	1981	283906
H	401m N	Electricity Substation	1989	283906
I	438m SW	Electricity Substation	1987	257749
I	438m SW	Electricity Substation	1970	257749
I	439m SW	Electricity Substation	1995	257749
J	479m E	Electricity Substation	1992	262467
J	480m E	Electricity Substation	1995	262467
J	480m E	Electricity Substation	1993	262467
K	482m SE	Electricity Substation	1969	261623
K	482m SE	Electricity Substation	1968	261623
K	483m SE	Electricity Substation	1984	291799
K	483m SE	Electricity Substation	1990	291799
K	484m SE	Electricity Substation	1993	291799

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	**0**

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m	8

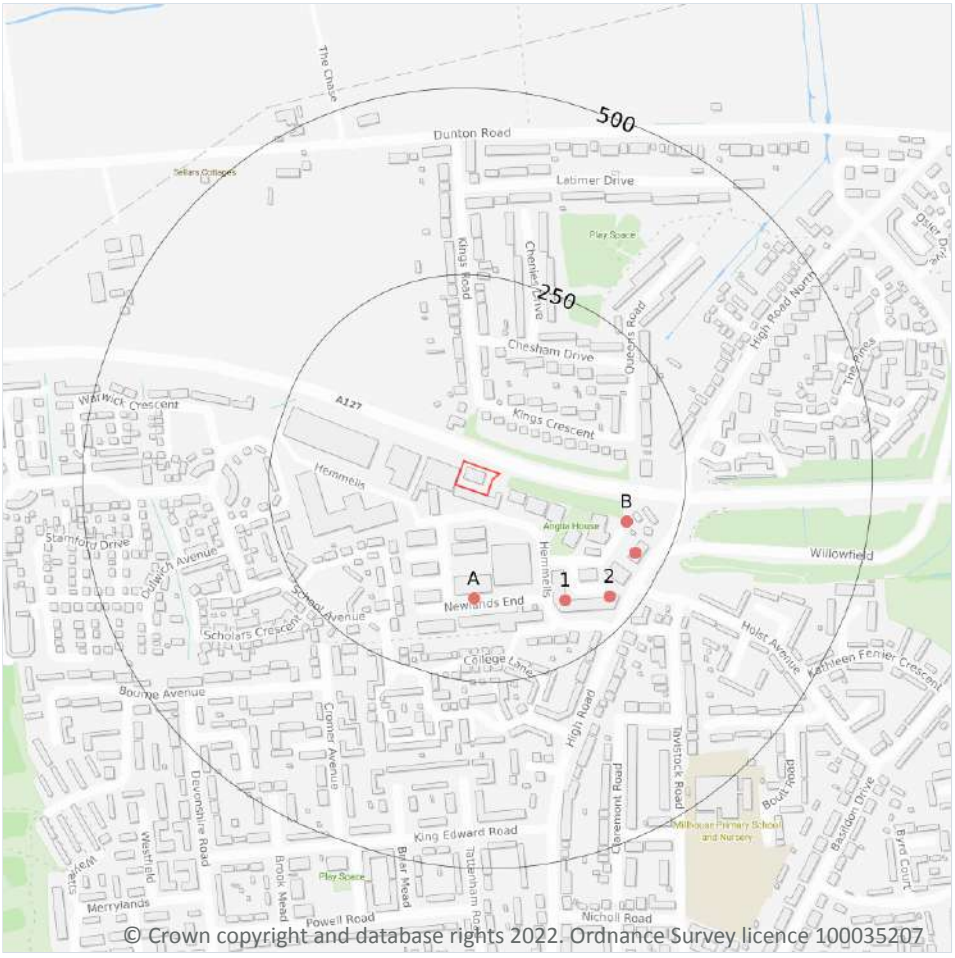
Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 18**

ID	Location	Land Use	Date	Group ID
B	**On site**	**Garage**	**1969**	**79593**
B	**On site**	**Garage**	**1979**	**85458**
B	**On site**	**Garage**	**1981**	**85458**
C	29m N	Garage	1969	84949
C	29m N	Garage	1979	84949
1	35m N	Garage	1969	73600
E	185m E	Garage	1969	77053
E	190m E	Garage	1968	75857

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



Site Outline

Search buffers in metres (m)

Waste exemptions

3.1 Active or recent landfill

Records within 500m	0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m	0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0

Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m	0

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.5 Historical waste sites

Records within 500m	0

Waste site records derived from Local Authority planning records and high detail historical mapping.

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m	0

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.7 Waste exemptions

Records within 500m	14

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

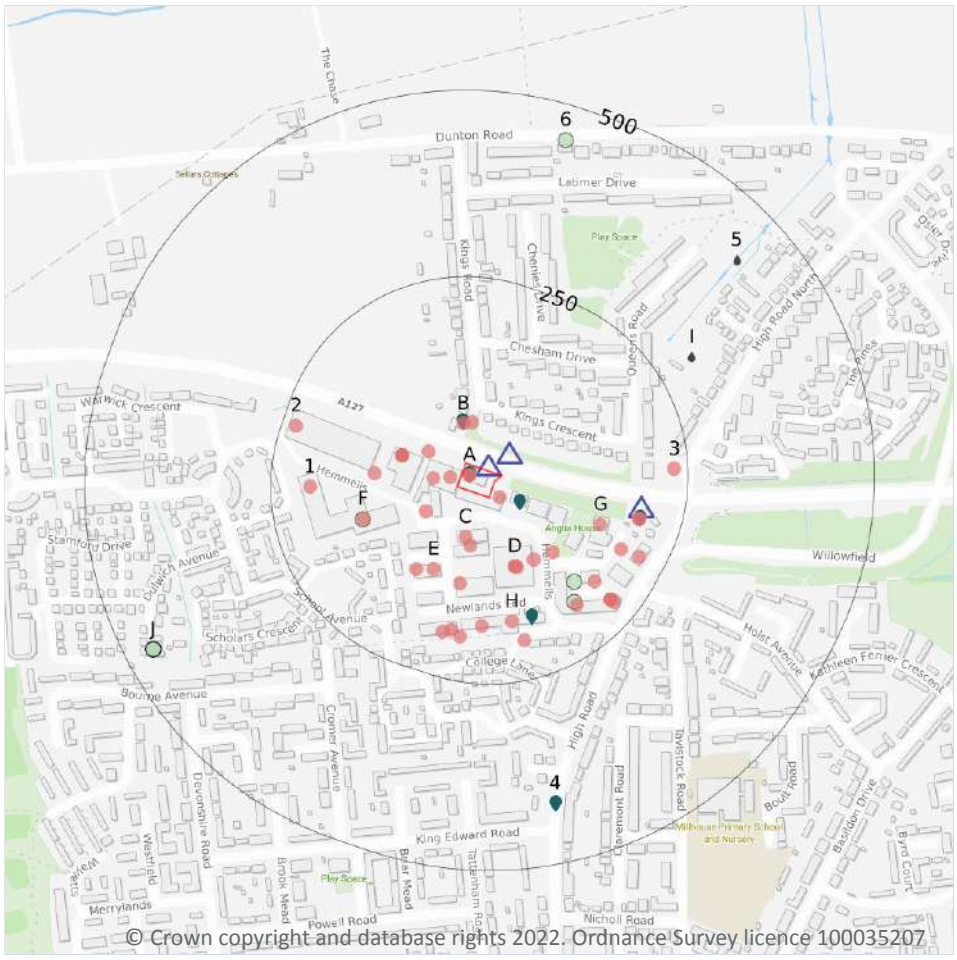
Features are displayed on the Waste and landfill map on **page 22**

ID	Location	Site	Reference	Category	Sub-Category	Description
A	140m S	11 Newlands End Laindon Basildon Essex SS15 6DU	EPR/LE5454WE/A001	Storing waste exemption	Both agricultural and non-agricultural waste	Storage of waste in secure containers
A	140m S	11 Newlands End Laindon Basildon Essex SS15 6DU	EPR/LE5454WE/A001	Storing waste exemption	Both agricultural and non-agricultural waste	Storage of waste in a secure place
1	175m SE	Denmans The Hemmells Basildon SS15 6ED	EPR/HF0830JW/A001	Treating waste exemption	Non-Agricultural Waste Only	Crushing waste fluorescent tubes
B	182m E	yard 1 fortune house basildon essex ss15 6dn	EPR/EF0803GN/A001	Disposing of waste exemption	Non-Agricultural Waste Only	Burning waste in the open
B	182m E	yard 1 fortune house basildon essex ss15 6dn	EPR/EF0803GN/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in secure containers
B	182m E	yard 1 fortune house basildon essex ss15 6dn	EPR/EF0803GN/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in a secure place
B	182m E	yard 1 fortune house basildon essex ss15 6dn	EPR/EF0803GN/A001	Treating waste exemption	Non-Agricultural Waste Only	Sorting mixed waste
B	182m E	yard 1 fortune house basildon essex ss15 6dn	EPR/EF0803GN/A001	Treating waste exemption	Non-Agricultural Waste Only	Treatment of waste aerosol cans
B	182m E	yard 1 fortune house basildon essex ss15 6dn	EPR/EF0803GN/A001	Treating waste exemption	Non-Agricultural Waste Only	Preparatory treatments (baling, sorting, shredding etc)
B	182m E	yard 1 fortune house basildon essex ss15 6dn	EPR/EF0803GN/A001	Treating waste exemption	Non-Agricultural Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
B	182m E	yard 1 fortune house basildon essex ss15 6dn	EPR/EF0803GN/A001	Treating waste exemption	Non-Agricultural Waste Only	Recovery of scrap metal
B	211m SE	STANNETTS, LAINDON, BASILDON, SS15 6DN	WEX075473	Storing waste exemption	Not on a farm	Storage of waste in secure containers
B	211m SE	STANNETTS, LAINDON, BASILDON, SS15 6DN	WEX075473	Storing waste exemption	Not on a farm	Storage of waste in a secure place

ID	Location	Site	Reference	Category	Sub-Category	Description
2	212m SE	COLLINSON YARD Stannetts Basildon Essex SS15 6DN	EPR/NE5942FU/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in a secure place

This data is sourced from the Environment Agency and Natural Resources Wales.

4 Current industrial land use



Site Outline

Search buffers in metres (m)

Recent industrial land uses

Current or recent petrol stations

Licensed pollutant release (Part A(2)/B)

Licensed Discharges to controlled waters

Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m	47

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 26**

ID	Location	Company	Address	Activity	Category
A	**On site**	**Esso**	**Arterial Road A127, Laindon, Basildon, Essex, SS15 6DP**	**Petrol and Fuel Stations**	**Road and Rail**
A	**On site**	**Mfg Laindon**	**Service Station, Arterial Road, Laindon, Basildon, Essex, SS15 6DP**	**Vehicle Cleaning Services**	**Personal, Consumer and Other Services**
A	13m W	Factory	Essex, SS15	Unspecified Works Or Factories	Industrial Features

ID	Location	Company	Address	Activity	Category
A	13m E	Essex Quads & Bikes	Conquest House, Arterial Road, Laindon, Basildon, Essex, SS15 6DP	New Vehicles	Motoring
A	34m W	Works	Essex, SS15	Unspecified Works Or Factories	Industrial Features
A	53m W	Electricity Sub Station	Essex, SS15	Electrical Features	Infrastructure and Facilities
B	53m N	Enterprise Rent-A-Car	Arterial Road, Laindon, Basildon, Essex, SS15 6DR	Vehicle Hire and Rental	Hire Services
A	54m SW	Electricity Sub Station	Essex, SS15	Electrical Features	Infrastructure and Facilities
B	56m N	Gas Governor	Essex, SS15	Gas Features	Infrastructure and Facilities
C	60m S	Redline Tuning	5, Hemmells, Basildon, Essex, SS15 6ED	Vehicle Repair, Testing and Servicing	Repair and Servicing
C	69m S	Colbrook Binding	Unit 14-16, Braiswick Place, Laindon, Basildon, Essex, SS15 6EB	Printing Related Machinery	Industrial Products
A	84m W	Services & Supplies Basildon Ltd	Unit 6 Samson House, Arterial Road, Laindon, Basildon, Essex, SS15 6DR	General Construction Supplies	Industrial Products
A	84m W	Linear Systems & Equipment Ltd	Unit 9 Samson House, Arterial Road, Laindon, Basildon, Essex, SS15 6DR	Bearing, Gear and Drive Elements	Industrial Products
A	84m W	The Piano Man	Unit 14 Samson House, Arterial Road, Laindon, Basildon, Essex, SS15 6DR	Musical Instruments	Consumer Products
A	84m W	Face Graphics Ltd	Unit 20 Samson House, Arterial Road, Laindon, Basildon, Essex, SS15 6DR	Published Goods	Industrial Products
A	84m W	S D S Alloys	Unit 15 Samson House, Arterial Road, Laindon, Basildon, Essex, SS15 6DR	Vehicle Repair, Testing and Servicing	Repair and Servicing
D	98m S	Edg	Unit 1 Fortune Business Park, Hemmells, Basildon, Essex, SS15 6ED	Distribution and Haulage	Transport, Storage and Delivery
D	98m S	Magnet Trade	Unit 1 Hemmells Park, Hemmells, Laindon, Basildon, Essex, SS15 6GF	General Construction Supplies	Industrial Products
D	100m S	Factory	Essex, SS15	Unspecified Works Or Factories	Industrial Features
D	102m SE	Electricity Sub Station	Essex, SS15	Electrical Features	Infrastructure and Facilities

ID	Location	Company	Address	Activity	Category
D	112m SE	Mast (Telecommunication)	Essex, SS15	Telecommunications Features	Infrastructure and Facilities
A	113m W	Mast	Essex, SS15	Telecommunications Features	Infrastructure and Facilities
E	115m S	Abel Alarm Company Ltd	Unit 14-16, Braiswick Place, Laindon, Basildon, Essex, SS15 6EB	Electronic Equipment	Industrial Products
E	122m S	Swift Catering Equipment Ltd	10-11, Braiswick Place, Laindon, Basildon, Essex, SS15 6EB	Food and Beverage Industry Machinery	Industrial Products
E	123m SW	R M C Motor Sport	9, Braiswick Place, Laindon, Basildon, Essex, SS15 6EB	Motorsport Services	Sport and Entertainment Support Services
F	134m W	R T Litho Ltd	Unit E1, Hemmells, Basildon, Essex, SS15 6ED	Plate Makers, Print Finishers and Type Setters	IT, Advertising, Marketing and Media Services
G	148m SE	Total Vehicle Services Ltd	Fortune House, Stannetts, Laindon, Basildon, Essex, SS15 6DN	Vehicle Repair, Testing and Servicing	Repair and Servicing
H	169m S	L V Repairs	Unit 4a, Newlands End, Basildon, Essex, SS15 6DU	Vehicle Repair, Testing and Servicing	Repair and Servicing
H	172m S	Phoenix Green UK Ltd	Unit 6, Newlands End, Basildon, Essex, SS15 6DU	Recycling, Reclamation and Disposal	Recycling Services
D	180m SE	Auto Express Vehicle Rental	14, Stannetts, Laindon, Basildon, Essex, SS15 6DN	Vehicle Hire and Rental	Hire Services
H	185m S	Sun Changing Rooms Ltd	Unit 9 Newlands End, Laindon North Industrial Estate, Basildon, Essex, SS15 6DU	Shelving, Storage, Safes and Vaults	Industrial Products
D	185m SE	4Site Implementation Ltd	22, Hemmells, Basildon, Essex, SS15 6ED	Signs	Industrial Products
G	188m SE	Mast	Essex, SS15	Telecommunications Features	Infrastructure and Facilities
H	191m S	Insulation Sheet Metal	10, Newlands End, Basildon, Essex, SS15 6DU	General Construction Supplies	Industrial Products

ID	Location	Company	Address	Activity	Category
H	191m S	Gas Governor	Essex, SS15	Gas Features	Infrastructure and Facilities
G	193m E	BP Service Station	Arterial Road, Laindon, Basildon, Essex, SS15 6DH	Petrol and Fuel Stations	Road and Rail
G	193m E	B P Car Wash	Arterial Road, Laindon, Basildon, Essex, SS15 6DH	Vehicle Cleaning Services	Personal, Consumer and Other Services
H	197m S	Electricity Sub Station	Essex, SS15	Electrical Features	Infrastructure and Facilities
1	198m W	Granite Granite Ltd	Unit 4 Hemmells Park, Hemmells, Laindon, Basildon, Essex, SS15 6GF	Stone Quarrying and Preparation	Extractive Industries
D	212m SE	John Scott	Stannetts, Laindon, Basildon, Essex, SS15 6DN	Fish, Meat and Poultry Products	Foodstuffs
D	212m SE	John Coysten Meats	6, Hemmells, Basildon, Essex, SS15 6ED	Fish, Meat and Poultry Products	Foodstuffs
D	212m SE	T Bates Interiors Ltd	4, Hemmells, Basildon, Essex, SS15 6ED	Office and Shop Equipment	Industrial Products
D	212m SE	Office Express Ltd	8, Hemmells, Basildon, Essex, SS15 6ED	Office and Shop Equipment	Industrial Products
G	214m SE	Works	Essex, SS15	Unspecified Works Or Factories	Industrial Features
D	219m SE	Love Freight Ltd	2, Hemmells, Basildon, Essex, SS15 6ED	Distribution and Haulage	Transport, Storage and Delivery
2	231m W	Trio Lighting UK Ltd	Unit 5 Hemmells Park, Hemmells, Laindon, Basildon, Essex, SS15 6GF	Lampshades and Lighting	Consumer Products
3	232m E	Electricity Sub Station	Essex, SS15	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	**3**

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 26**

ID	Location	Company	Address	LPG	Status
A	7m N	ESSO	Arterial Road, Laindon, Basildon, Essex, SS15 6DP	No	Open
A	32m N	GULF	Southend Arterial Road, Laindon, Basildon, Essex, SS15 6EG	Not Applicable	Obsolete
G	192m E	BP	Fortune Of War Roundabout, High Road, Laindon, Basildon, Essex, SS15 6DH	No	Open

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m	9

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 26**

ID	Location	Address	Details	
A	**On site**	**Malthurst Petroleum, Southend Arterial Road, Laindon, Basildon, Essex, SS16 5UH**	**Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B**	**Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified**
A	**On site**	**Q8, Arterial Rd, Basildon, Laindon, SS15 6DR**	**Process: Petrol Vapour Recovery Status: Historical Permit Permit Type: Part B**	**Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified**
A	**On site**	**Shell, Arterial Rd, Basildon, Essex, SS15 6EG**	**Process: Petrol Vapour Recovery Status: Historical Permit Permit Type: Part B**	**Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified**
A	40m E	Romford Toyota, Fortune Industrial Park, Hemmells, Basildon, Essex, SS15 6ED	Process: Coating Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
B	55m N	Gulf Service Station, Arterial Road, Laindon, Basildon, Essex, SS15 6EG	Process: Unloading of Petrol into Storage at Service Stations Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
H	169m S	Denham Motors, 1-4 Newlands End, Laindon, Essex, SS15 6DU	Process: Coating Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
G	193m E	BP Fortune Of War Roundabout, Arterial Rd, Laindon, Essex, SS15 4DP	Process: Petrol Vapour Recovery Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
G	193m E	Fortune Connect Service Station, Arterial Road, Laindon, Basildon, Essex, SS15 6DH	Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
4	419m S	Presstige Dry Cleaners, 32a High Road, Laindon, Basildon, Essex, SS15 6NR	Process: Dry Cleaning Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.13 Licensed Discharges to controlled waters

Records within 500m	3

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on **page 26**

ID	Location	Address	Details	
I	300m NE	STEEPLE VIEW, BASILDON, ESSEX	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: PR2NFE00877 Permit Version: 1 Receiving Water: Laindon Barns Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 09/03/1977 Effective Date: 09/03/1977 Revocation Date: 05/05/1992
I	300m NE	STEEPLE VIEW, BASILDON, ESSEX	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: PR2NFC6385 Permit Version: 1 Receiving Water: trib River Crouch	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 12/02/1985 Effective Date: 12/02/1985 Revocation Date: 08/03/1993
5	427m NE	LATIMER DRIVE SPS, LAINDON, ESSEX., SS15 4DJ	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: AW2NF536 Permit Version: 1 Receiving Water: River Crouch	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 09/02/1988 Effective Date: 09/02/1988 Revocation Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 List 1 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 2 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 Pollution Incidents (EA/NRW)

Records within 500m	10

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on **page 26**

ID	Location	Details	
F	134m W	Incident Date: 01/02/2013 Incident Identification: 1082954 Pollutant: Inorganic Chemicals/Products Pollutant Description: Alkalis	Water Impact: Category 3 (Minor) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
D	159m SE	Incident Date: 11/06/2003 Incident Identification: 165043 Pollutant: Organic Chemicals/Products Pollutant Description: Solvents	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

ID	Location	Details	
D	179m SE	Incident Date: 12/06/2003 Incident Identification: 165363 Pollutant: Organic Chemicals/Products Pollutant Description: Solvents	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
6	453m N	Incident Date: 29/12/2002 Incident Identification: 127933 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
J	462m SW	Incident Date: 23/07/2001 Incident Identification: 18306 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Vegetable Cuttings and Deposits	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
J	462m SW	Incident Date: 23/07/2001 Incident Identification: 18306 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
J	462m SW	Incident Date: 23/07/2001 Incident Identification: 18306 Pollutant: Specific Waste Materials Pollutant Description: Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
J	462m SW	Incident Date: 23/07/2001 Incident Identification: 18306 Pollutant: General Biodegradable Materials and Wastes : Specific Waste Materials Pollutant Description: Vegetable Cuttings and Deposits :Commercial Waste :Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
J	462m SW	Incident Date: 23/07/2001 Incident Identification: 18306 Pollutant: Specific Waste Materials Specific Waste Materials Pollutant Description: Vegetable Cuttings and Deposits Commercial Waste Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)
J	462m SW	Incident Date: 23/07/2001 Incident Identification: 18306 Pollutant: General Biodegradable Materials and Wastes:Specific Waste Materials:Specific Waste Materials Pollutant Description: Vegetable Cuttings and Deposits:Commercial Waste:Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)

This data is sourced from the Environment Agency and Natural Resources Wales.

4.19 Pollution inventory substances

Records within 500m	0

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m	0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

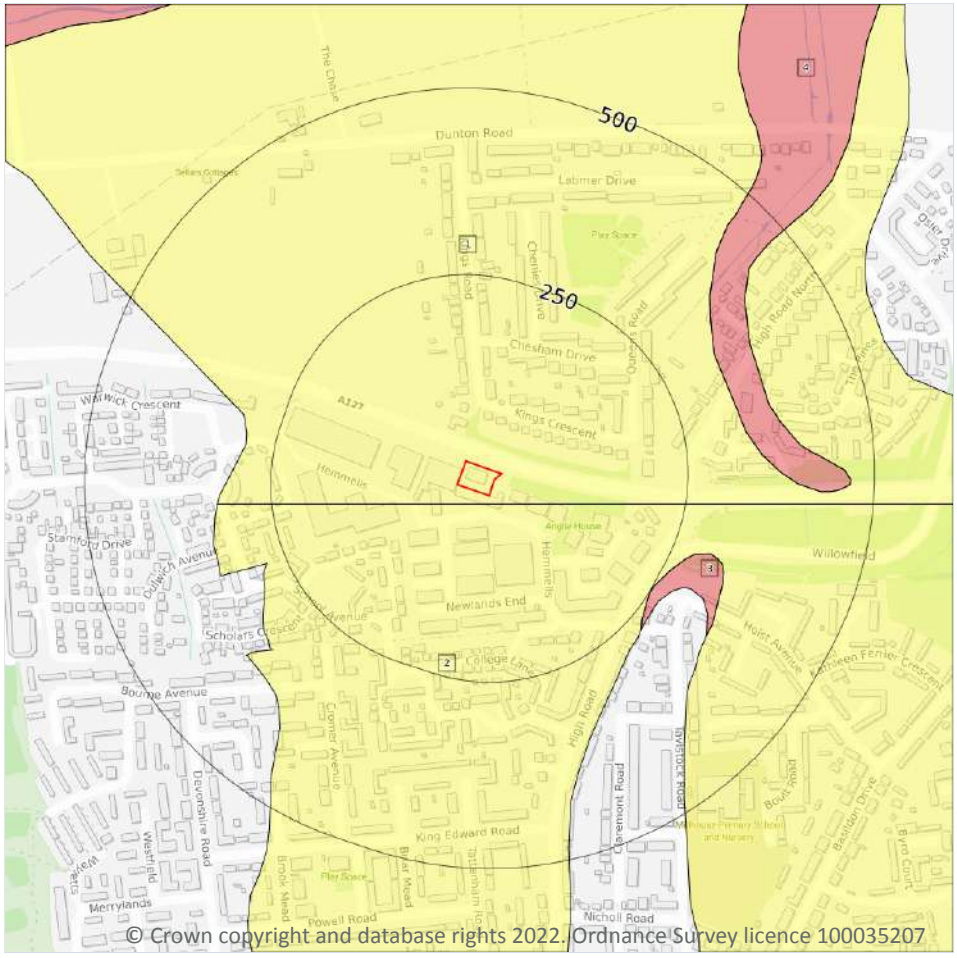
4.21 Pollution inventory radioactive waste

Records within 500m	0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive
- Unknown

5.1 Superficial aquifer

Records within 500m	4

Aquifer status of groundwater held within superficial geology.

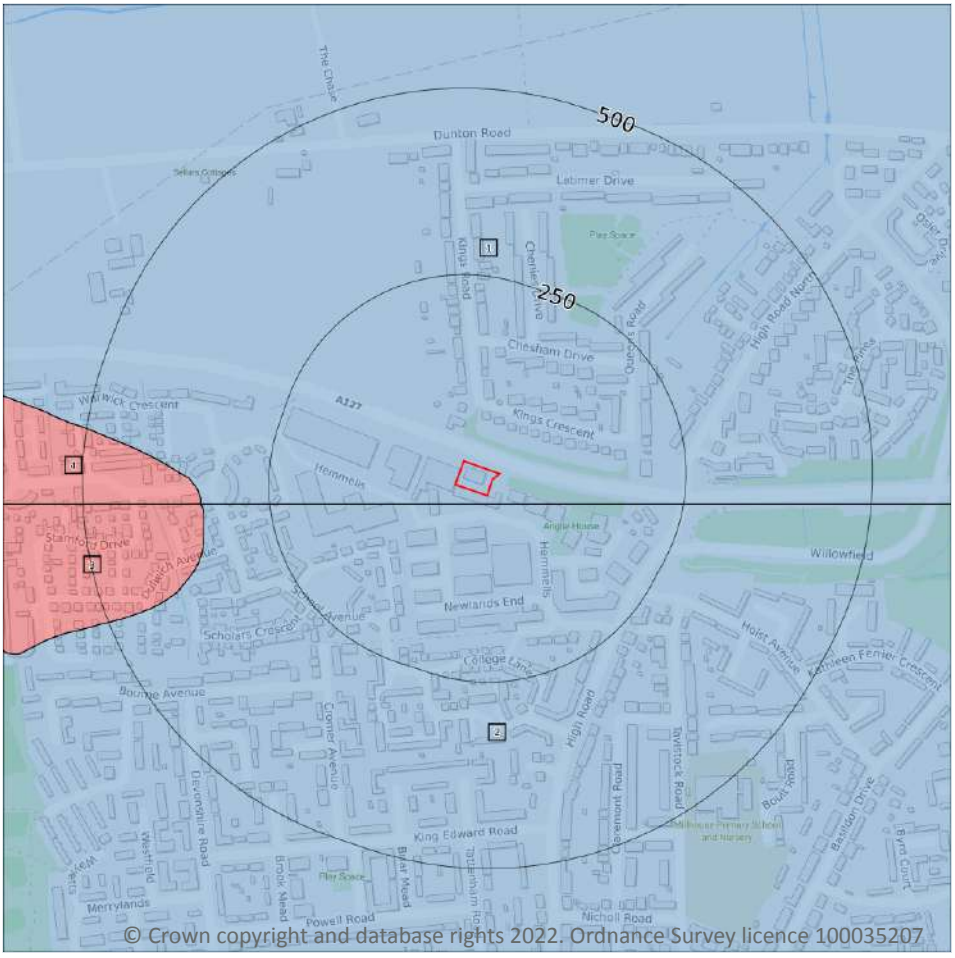
Features are displayed on the Hydrogeology map on **page 37**

ID	Location	Designation	Description
1	**On site**	**Secondary Undifferentiated**	**Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type**
2	12m S	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

ID	Location	Designation	Description
3	251m SE	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	325m E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Bedrock aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive

5.2 Bedrock aquifer

Records within 500m	4

Aquifer status of groundwater held within bedrock geology.

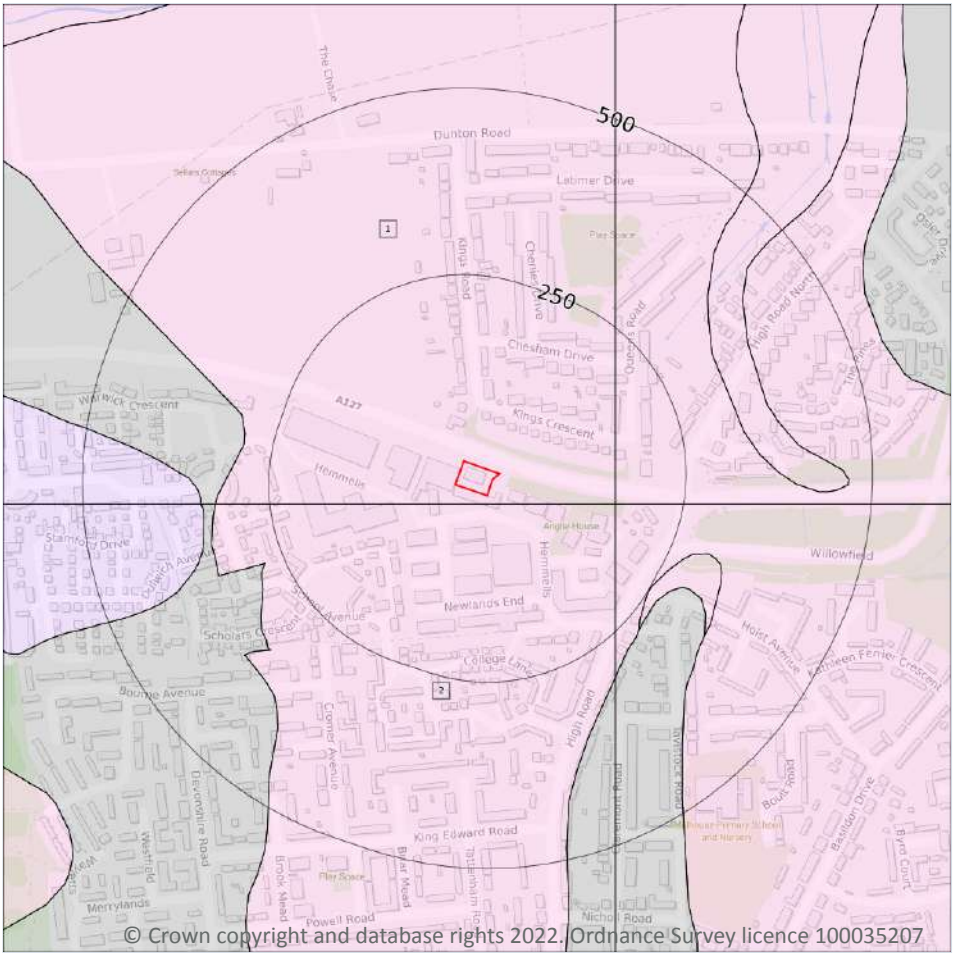
Features are displayed on the Bedrock aquifer map on **page 39**

ID	Location	Designation	Description
1	**On site**	**Unproductive**	**These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow**
2	12m S	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

ID	Location	Designation	Description
3	340m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	341m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m	2

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on **page 41**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	**On site**	**Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer**	**Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year**	**Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Mixed**
2	11m S	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Mixed

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

5.4 Groundwater vulnerability- soluble rock risk

Records on site	**0**

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

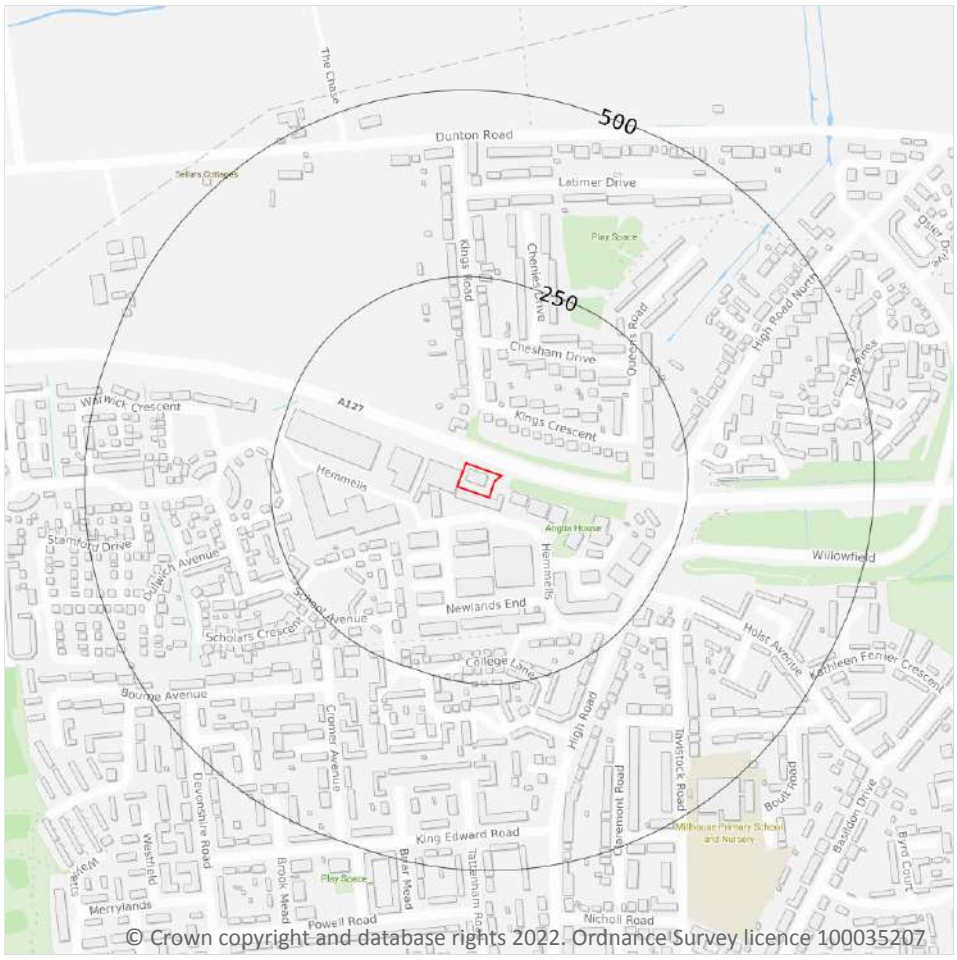
5.5 Groundwater vulnerability- local information

Records on site	**0**

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk.

This data is sourced from the British Geological Survey and the Environment Agency.

Abstractions and Source Protection Zones



5.6 Groundwater abstractions

Records within 2000m	0

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m	2

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 43**

ID	Location	Details	
-	1135m NW	Status: Historical Licence No: 8/37/41/*S/0016 Details: Make-Up Or Top Up Water Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: DUNTON BROOK AT CHASE FARM, LITTLE BURSTEAD Data Type: Point Name: A CULLEN & SONS LTD Easting: 566800 Northing: 190600	Annual Volume (m^3): 4000 Max Daily Volume (m^3): 800 Original Application No: - Original Start Date: 18/10/2007 Expiry Date: 31/03/2010 Issue No: 1 Version Start Date: 18/10/2007 Version End Date: -
-	1245m NE	Status: Historical Licence No: 8/37/41/*S/0014 Details: Fish Farm/Cress Pond Throughflow Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER CROUCH AT GT BURSTEAD Data Type: Point Name: DALLAS Easting: 568500 Northing: 191100	Annual Volume (m^3): 47782 Max Daily Volume (m^3): 1310 Original Application No: - Original Start Date: 01/08/1998 Expiry Date: 31/08/2018 Issue No: 100 Version Start Date: 01/08/1998 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m	0

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.9 Source Protection Zones

Records within 500m	0

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

This data is sourced from the Environment Agency and Natural Resources Wales.

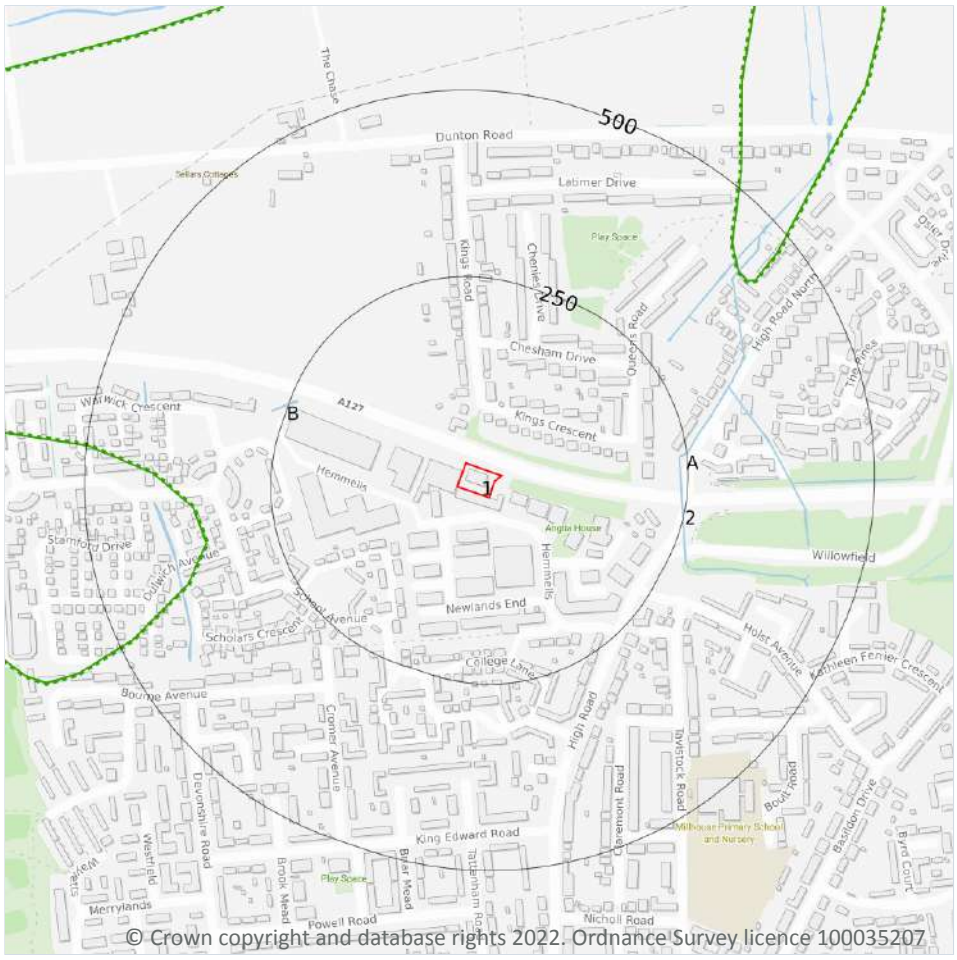
5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.

6 Hydrology



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Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	**3**

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on **page 46**

ID	Location	Type of water feature	Ground level	Permanence	Name
2	239m E	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
A	239m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	239m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	**1**

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on **page 46**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	**1**

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on **page 46**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	**On site**	**River**	**Crouch (Upper) - u/s A129**	**GB105037028500**	**Crouch and Roach**	**Essex Combined**

This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified	1

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on **page 46**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	718m N	River	Crouch (Upper) - u/s A129	GB105037028500	Moderate	Fail	Moderate	2019

This data is sourced from the Environment Agency and Natural Resources Wales.

6.5 WFD Groundwater bodies

Records on site	0

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

This data is sourced from the Environment Agency and Natural Resources Wales.

7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m	0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

This data is sourced from the Environment Agency and Natural Resources Wales.

7.2 Historical Flood Events

Records within 250m	0

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.3 Flood Defences

Records within 250m	0

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.4 Areas Benefiting from Flood Defences

Records within 250m	0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.5 Flood Storage Areas

Records within 250m	0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

This data is sourced from the Environment Agency and Natural Resources Wales.

River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m	0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.7 Flood Zone 3

Records within 50m	0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

8 Surface water flooding

8.1 Surface water flooding

Highest risk on site	**Negligible**
Highest risk within 50m	**Negligible**

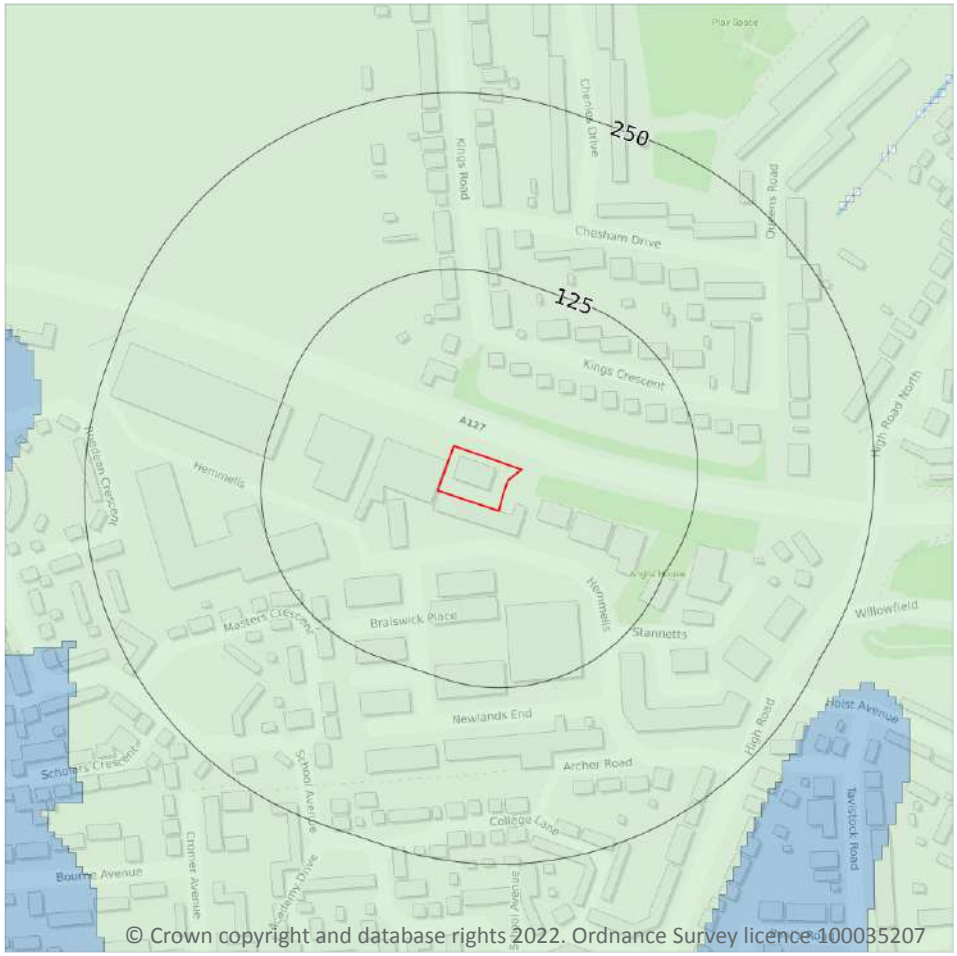
Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site. The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Negligible
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



9.1 Groundwater flooding

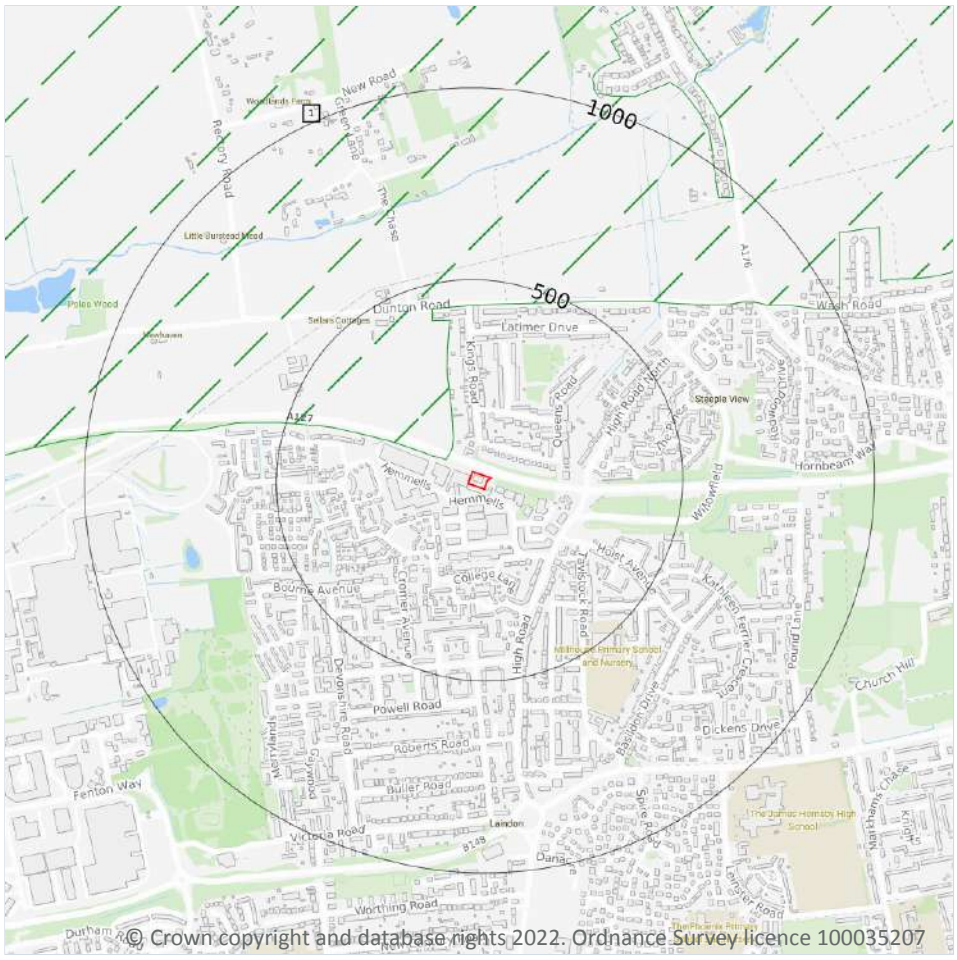
Highest risk on site	**Low**
Highest risk within 50m	**Low**

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on **page 53**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



Site Outline

Search buffers in metres (m)

Sites of Special Scientific Interest (SSSI)

Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	2

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

Features are displayed on the Environmental designations map on **page 54**

ID	Location	Name	Data source
-	1883m S	Langdon Ridge	Natural England

ID	Location	Name	Data source
-	1938m S	Langdon Ridge	Natural England

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.4 Special Protection Areas (SPA)

Records within 2000m	0

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.5 National Nature Reserves (NNR)

Records within 2000m	0

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.6 Local Nature Reserves (LNR)

Records within 2000m	0

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.7 Designated Ancient Woodland

Records within 2000m	0

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.8 Biosphere Reserves

Records within 2000m	0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.9 Forest Parks

Records within 2000m	0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.11 Green Belt

Records within 2000m	1

Areas designated to prevent urban sprawl by keeping land permanently open.

Features are displayed on the Environmental designations map on **page 54**

ID	Location	Name	Local Authority name
1	75m NW	London	Basildon

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m	0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

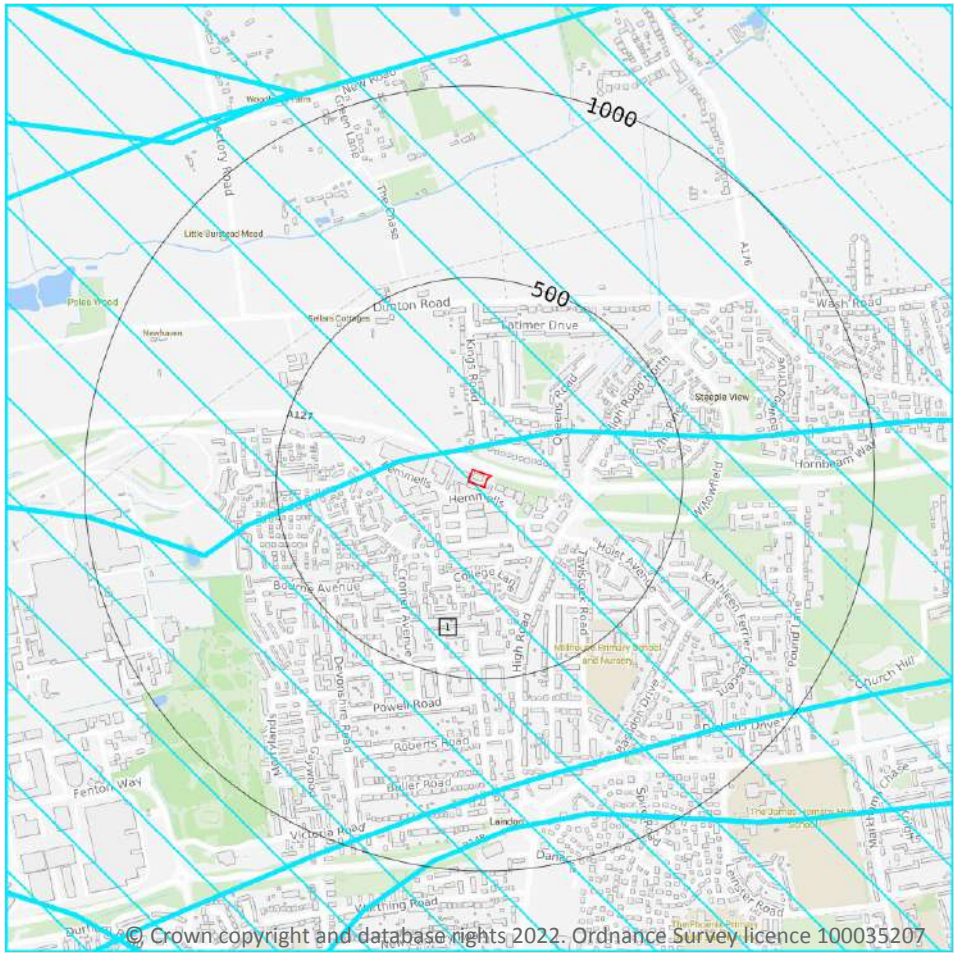
Records within 2000m	2

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	**Crouch NVZ**	**Surface Water**	**425**	**Existing**
1341m SW	Mardyke NVZ	Surface Water	442	Existing

This data is sourced from Natural England and Natural Resources Wales.

SSSI Impact Zones and Units



10.17 SSSI Impact Risk Zones

Records on site	1

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on **page 59**

ID	Location	Type of developments requiring consultation
1	On site	**Infrastructure - Pipelines, pylons and overhead cables. any transport proposal including road, rail and by water (excluding routine maintenance). airports, helipads and other aviation proposals. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, review of minerals permissions (romp), extensions, variations to conditions etc. oil & gas exploration/extraction. Air pollution - Any industrial/agricultural development that could cause air pollution (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 200m², manure stores > 250t). Combustion - General combustion processes >20mw energy input. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Landfill. incl: inert landfill, non-hazardous landfill, hazardous landfill. Composting - Any composting proposal with more than 75000 tonnes maximum annual operational throughput. incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management. Water supply - Large infrastructure such as warehousing / industry where total net additional gross internal floorspace following development is 1,000m² or more.**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	**2**

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

Features are displayed on the SSSI Impact Zones and Units map on **page 59**

ID: -
Location: 1883m S
SSSI name: Langdon Ridge
Unit name: Marks Hill Nature Reserve & Hoppits Shaw
Broad habitat:
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
Lowland mixed deciduous woodland	Unfavourable - Recovering	27/06/2018

ID: -
Location: 1938m S
SSSI name: Langdon Ridge
Unit name: Marks Hill Nature Reserve & Hoppits Shaw
Broad habitat:
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
Lowland mixed deciduous woodland	Unfavourable - Recovering	27/06/2018

This data is sourced from Natural England and Natural Resources Wales.

11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m	0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m	0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m	0

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m	0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m	0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

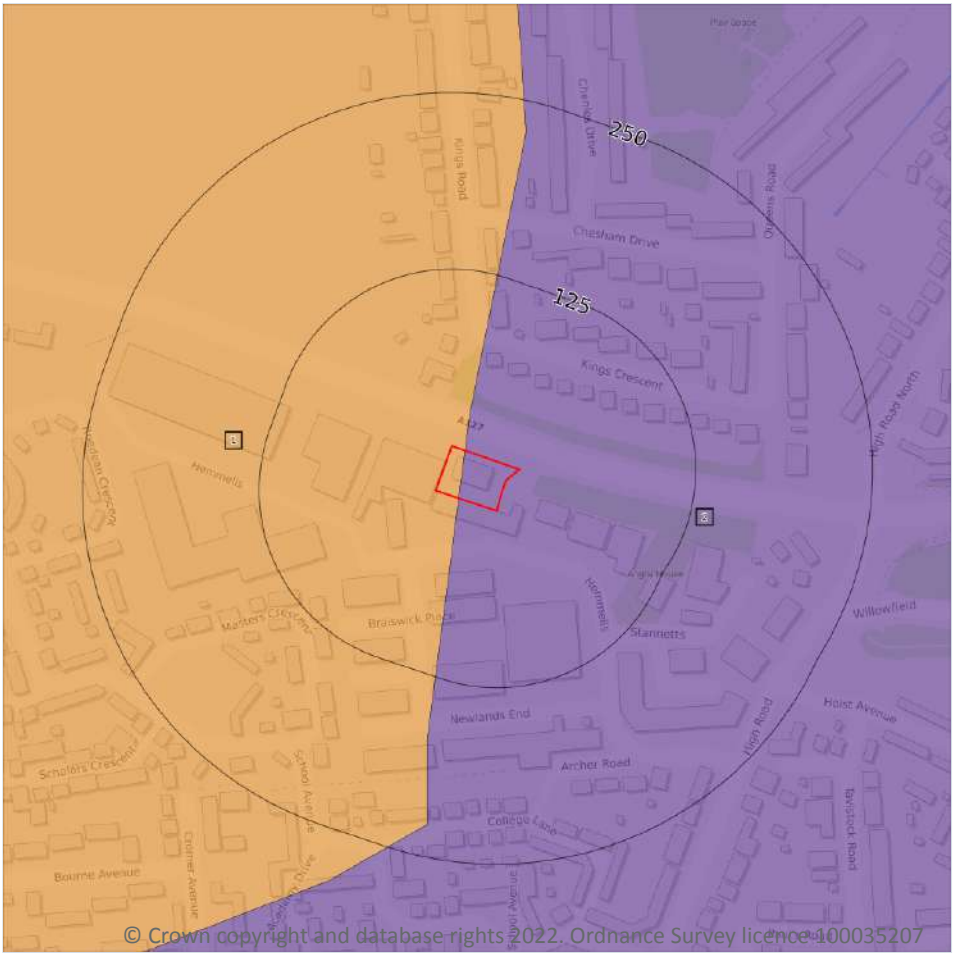
11.7 Registered Parks and Gardens

Records within 250m	0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

12 Agricultural designations



Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m	2

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 64**

ID	Location	Classification	Description
1	On site	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.
2	On site	Urban	-

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m	0

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m	0

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

This data is sourced from Natural England.

13 Habitat designations

Site Outline

Search buffers in metres (m)

Priority Habitat Inventory
Open Mosaic Habitat
Limestone Pavement Orders

Habitat Networks

Primary Habitat
Restorable Habitat
Associated Habitats
Habitat Restoration-Creation
Network Enhancement Zone 1
Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m	3

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on **page 66**

ID	Location	Main Habitat	Other habitats
1	227m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	242m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	244m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	0

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	0

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

This data is sourced from Natural England.

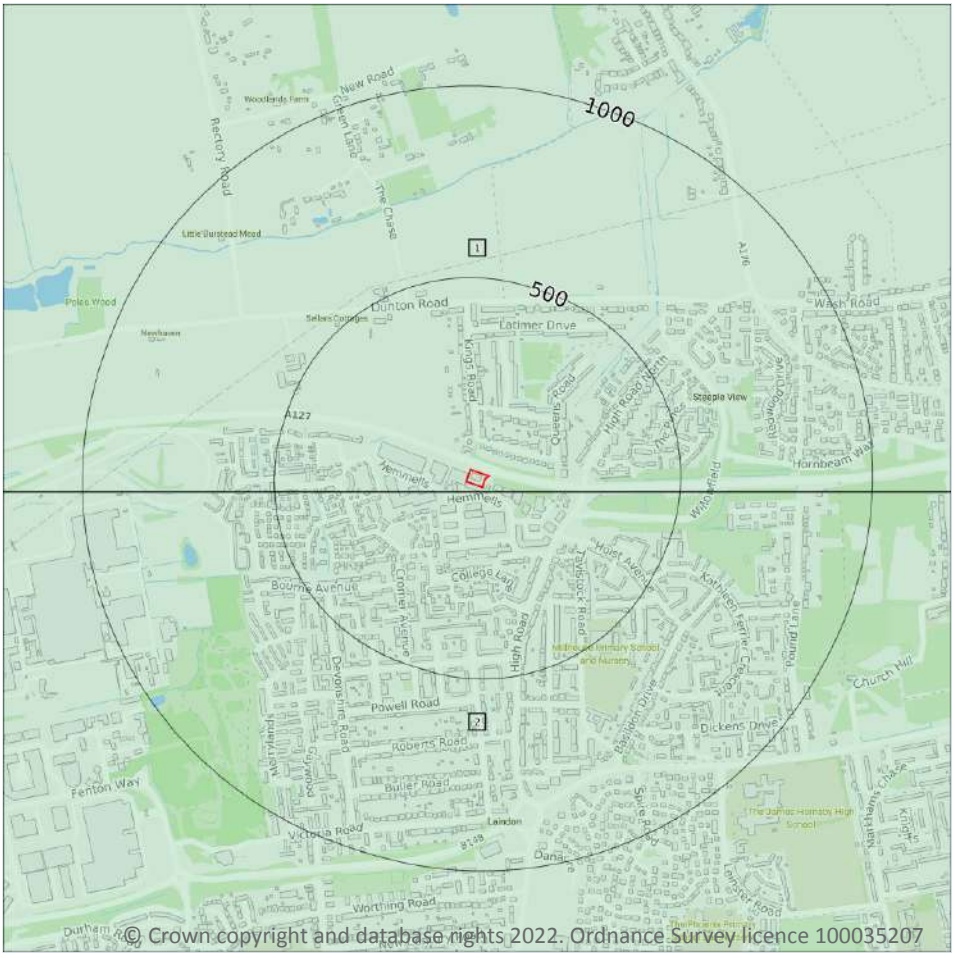
13.4 Limestone Pavement Orders

Records within 250m	0

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



Site Outline

Search buffers in metres (m)

Full coverage

Partial coverage

No coverage

14.1 10k Availability

Records within 500m	2

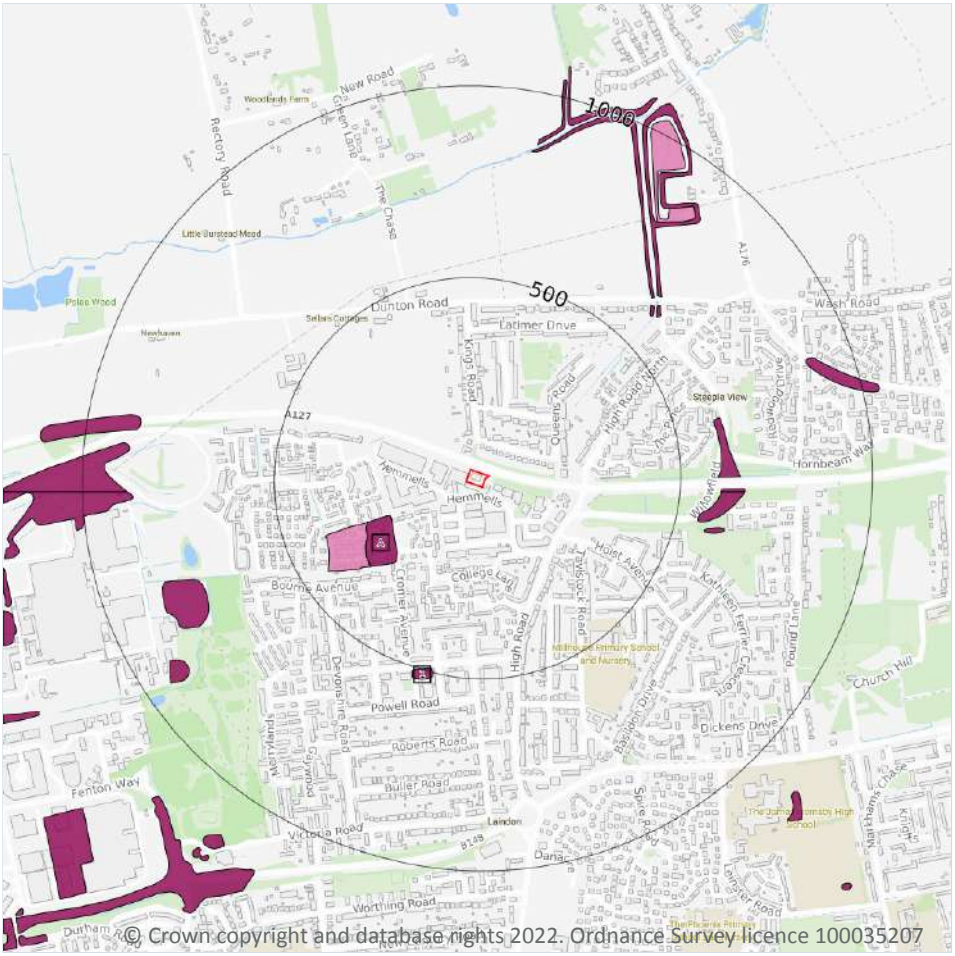
An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 68**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**TQ69SE**
2	12m S	Full	Full	Full	Full	TQ68NE

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Artificial and made ground



Site Outline

Search buffers in metres (m)

- Reclaimed ground
- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m	3

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 69**

ID	Location	LEX Code	Description	Rock description
A	217m SW	MGR-UKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry
A	276m W	WGR-UKNOWN	Worked Ground (Undivided)	Unknown/unclassified Entry
1	492m S	MGR-UKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

Site Outline

Search buffers in metres (m)

Landslip (10k)

Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m **4**

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 70**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**HEAD-C**	**Head - Clay (unlithified Deposits Coding Scheme)**	**Clay**
2	12m S	HEAD-C	Head - Clay (unlithified Deposits Coding Scheme)	Clay
3	251m SE	RTDU-XSV	River Terrace Deposits (undifferentiated) - Sand And Gravel	Sand And Gravel
4	323m E	ALV-Z	Alluvium - Silt (unlithified Deposits Coding Scheme)	Silt

This data is sourced from the British Geological Survey.

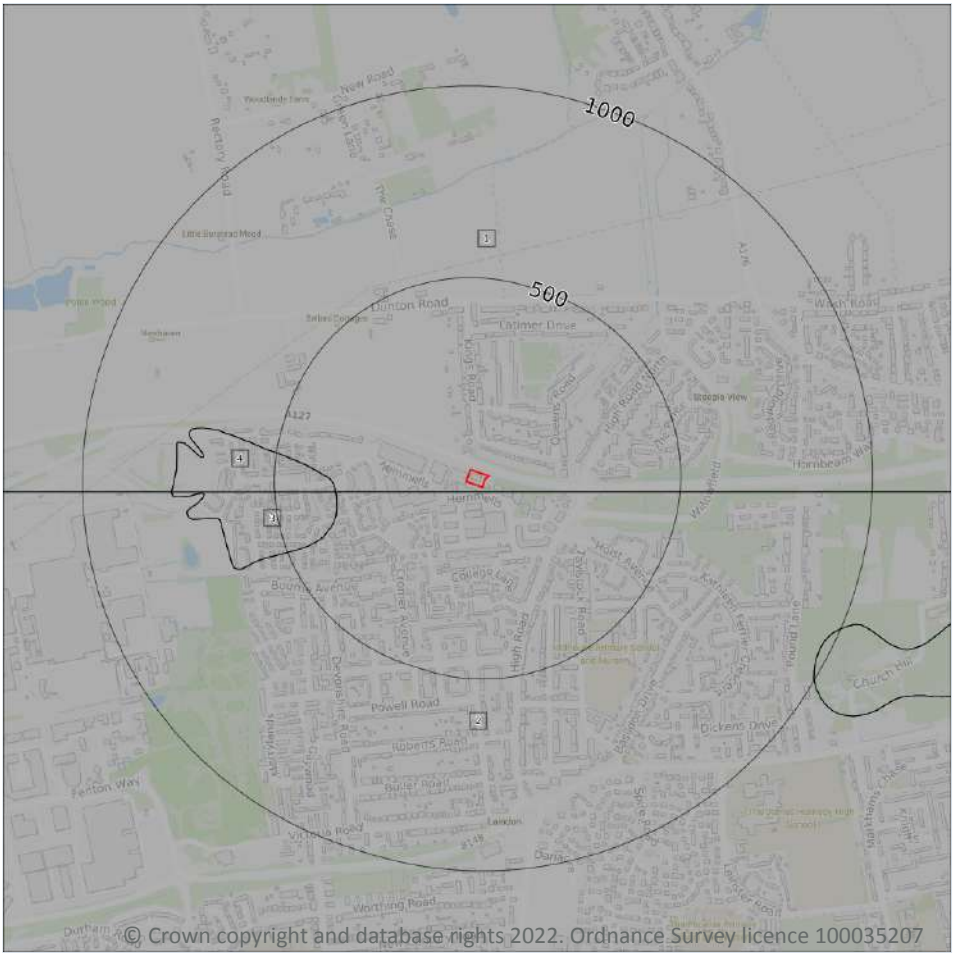
14.4 Landslip (10k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m **4**

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 72**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**LC-CLAY**	**London Clay Formation - Clay**	**Eocene Epoch**
2	12m S	LC-CLAY	London Clay Formation - Clay	Eocene Epoch
3	340m W	CLGB-SACL	Claygate Member - Sandy Clay	Eocene Epoch
4	341m W	CLGB-SACL	Claygate Member - Sandy Clay	Eocene Epoch

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m	0

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability

Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m	1

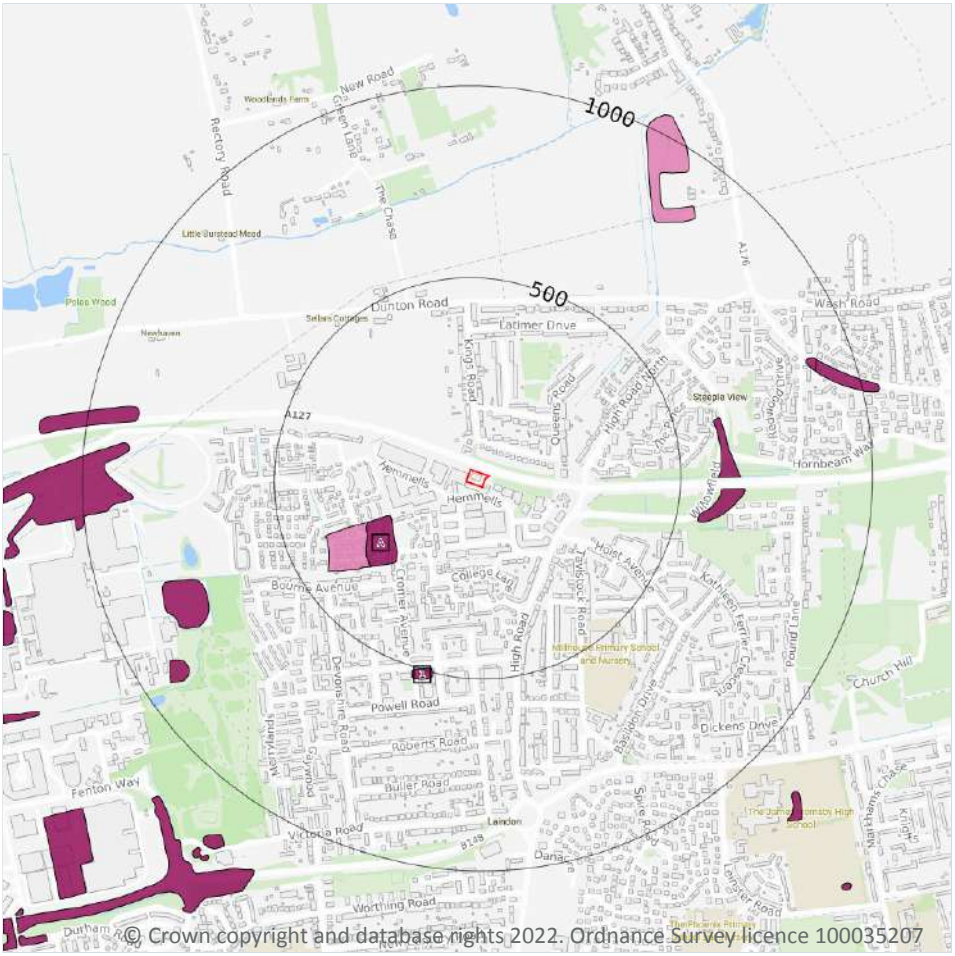
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 74**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**Full**	**EW257_romford_v4**

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Artificial and made ground



Site Outline

Search buffers in metres (m)

- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

15.2 Artificial and made ground (50k)

Records within 500m	3

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 75**

ID	Location	LEX Code	Description	Rock description
A	217m SW	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
A	276m SW	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
1	491m S	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

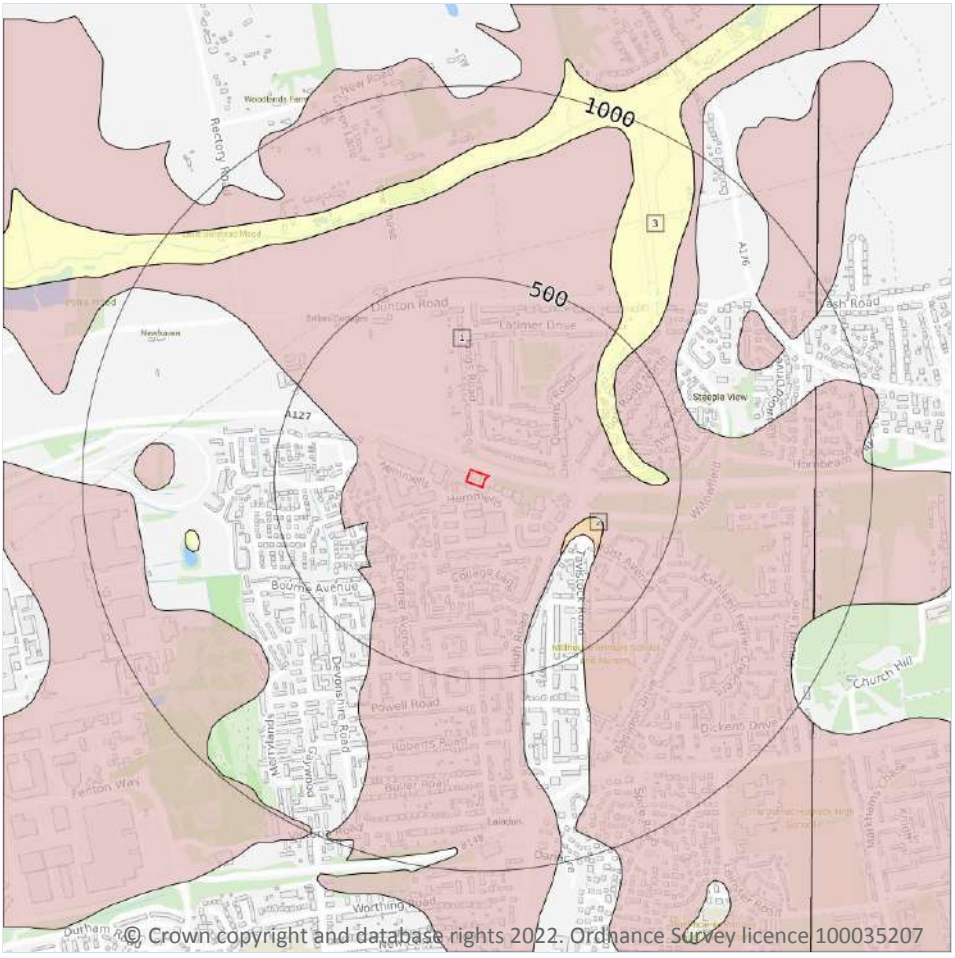
15.3 Artificial ground permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m **3**

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 77**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**HEAD-XCZSV**	**HEAD**	**CLAY, SILT, SAND AND GRAVEL**
2	251m SE	RTDU-XSV	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND AND GRAVEL
3	325m E	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	2

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Mixed**	**High**	**Very Low**
12m SE	Mixed	High	Very Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

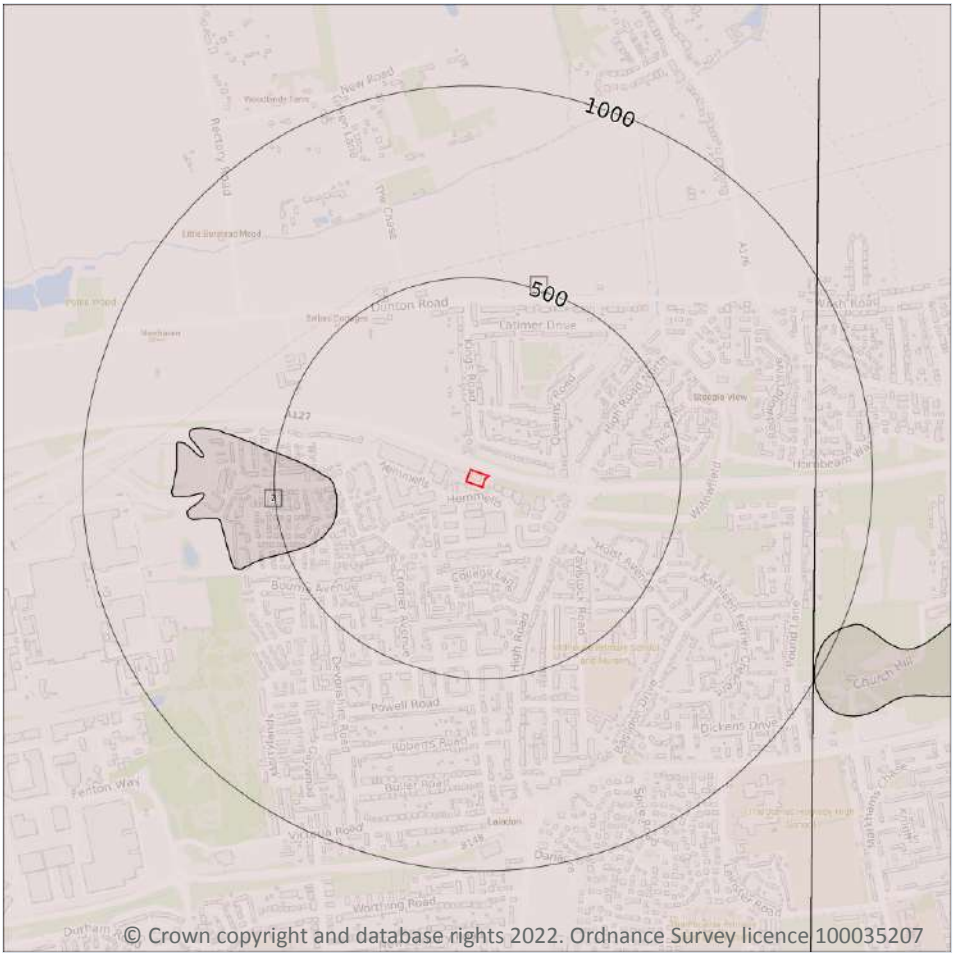
15.7 Landslip permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m	2

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 79**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**LC-XCZS**	**LONDON CLAY FORMATION - CLAY, SILT AND SAND**	**YPRESIAN**
2	340m W	CLGB-XCZS	CLAYGATE MEMBER - CLAY, SILT AND SAND	YPRESIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	2

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Mixed**	**Moderate**	**Very Low**
12m S	Mixed	Moderate	Very Low

This data is sourced from the British Geological Survey.

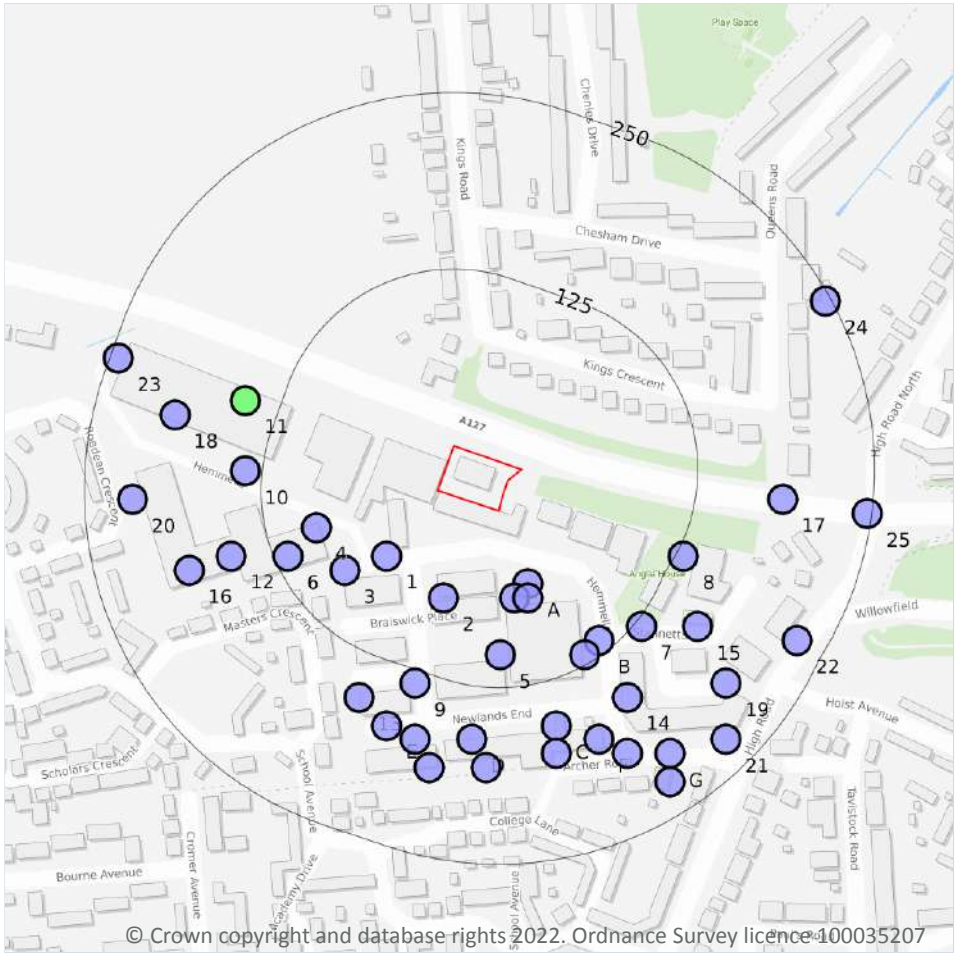
15.10 Bedrock faults and other linear features (50k)

Records within 500m	0

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.

16 Boreholes



Site Outline

Search buffers in metres (m)

Confidential

0 - 10m

10 - 30m

30m+

Unknown

16.1 BGS Boreholes

Records within 250m **41**

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on **page 81**

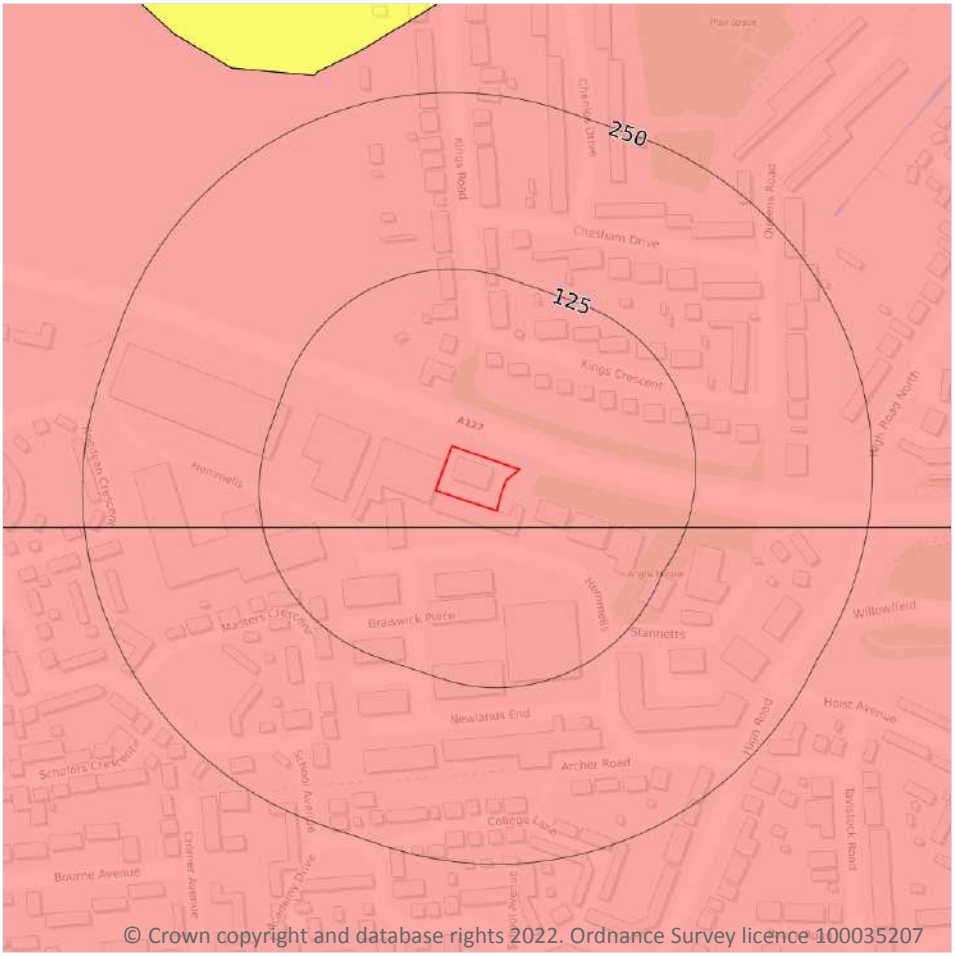
ID	Location	Grid reference	Name	Length	Confidential	Web link
A	56m S	567850 189960	BASILDON DEVELOPMENT CORP BH3046	6.0	N	882359
1	59m SW	567750 189980	BASILDON DEVELOPMENT CORP BH3024	6.0	N	882354

ID	Location	Grid reference	Name	Length	Confidential	Web link
A	63m S	567840 189950	BASILDON DEVELOPMENT CORP BH3047	6.0	N	882360
A	65m S	567850 189950	BASILDON DEVELOPMENT CORP BH3048	6.0	N	882361
2	71m S	567790 189950	BASILDON DEVELOPMENT CORP BH3017	6.0	N	882357
3	87m SW	567720 189970	BASILDON DEVELOPMENT CORP BH3023	6.0	N	882353
4	90m W	567700 190000	HEMMELS BASILDON ESSEX TP 5	3.0	N	18498318
5	102m S	567830 189910	BASILDON DEVELOPMENT CORP BH3015	6.0	N	882364
6	116m SW	567680 189980	HEMMELS BASILDON ESSEX TP 6	3.0	N	18498310
B	116m SE	567900 189920	BASILDON DEVELOPMENT CORP BH3014	6.0	N	882378
B	119m SE	567890 189910	BASILDON DEVELOPMENT CORP BH2682	-2.0	N	882370
7	130m SE	567930 189930	BASILDON DEVELOPMENT CORP BH2683	3.65	N	882362
8	130m SE	567960 189980	BASILDON DEVELOPMENT CORP BH3025	2.0	N	882355
9	134m S	567770 189890	BASILDON DEVELOPMENT CORP BH3022	1.0	N	882358
10	137m W	567650 190040	HEMMELS BASILDON ESSEX TP 3	3.0	N	18498316
11	150m W	567650 190090	HEMMELS BASILDON ESSEX 3	15.0	N	18498312
12	153m W	567640 189980	HEMMELS BASILDON ESSEX TP 4	3.0	N	18498309
13	157m S	567730 189880	BASILDON DEVELOPMENT CORP BH3026	1.0	N	882356
C	157m S	567870 189860	BASILDON DEVELOPMENT CORP BH3034	2.0	N	882376
14	160m SE	567920 189880	BASILDON DEVELOPMENT CORP BH2681	4.0	N	882369
15	163m SE	567970 189930	BASILDON DEVELOPMENT CORP BH3013	6.0	N	882363
D	163m S	567810 189850	BASILDON DEVELOPMENT CORP BH3033	6.0	N	882375
E	169m S	567750 189860	BASILDON DEVELOPMENT CORP BH3020	4.0	N	882373
E	172m S	567770 189850	BASILDON DEVELOPMENT CORP BH3021	6.0	N	882374
C	177m S	567870 189840	BASILDON DEVELOPMENT CORP BH2680	3.65	N	882368
F	177m SE	567900 189850	BASILDON DEVELOPMENT CORP BH3016	6.0	N	882377
D	182m S	567820 189830	BASILDON DEVELOPMENT CORP BH3018	6.0	N	882371
16	185m W	567610 189970	HEMMELS BASILDON ESSEX 1	10.0	N	18498308
17	186m E	568030 190020	BASILDON DEVELOPMENT CORP BH1635	3.66	N	729597
E	188m S	567780 189830	BASILDON DEVELOPMENT CORP BH3019	1.0	N	882372

ID	Location	Grid reference	Name	Length	Confidential	Web link
18	194m W	567600 190080	HEMMELS BASILDON ESSEX TP 1	3.0	N	18498313
F	194m SE	567920 189840	BASILDON DEVELOPMENT CORP BH2679	3.65	N	882367
19	202m SE	567990 189890	BASILDON DEVELOPMENT CORP BH3012	6.0	N	883146
G	210m SE	567950 189840	BASILDON DEVELOPMENT CORP BH2678	3.65	N	882366
20	216m W	567570 190020	HEMMELS BASILDON ESSEX TP 2	3.0	N	18498314
G	227m SE	567950 189820	BASILDON DEVELOPMENT CORP BH3011	6.0	N	882379
21	228m SE	567990 189850	BASILDON DEVELOPMENT CORP BH2677	3.65	N	882365
22	230m SE	568040 189920	BASILDON DEVELOPMENT CORP BH1627	3.65	N	882439
23	244m W	567560 190120	HEMMELS BASILDON ESSEX 2	10.0	N	18498311
24	246m NE	568060 190160	BASILDON DEVELOPMENT CORP BH1636	3.66	N	729596
25	247m E	568090 190010	BASILDON DEVELOPMENT CORP BH1634	3.65	N	729601

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.1 Shrink swell clays

Records within 50m	2

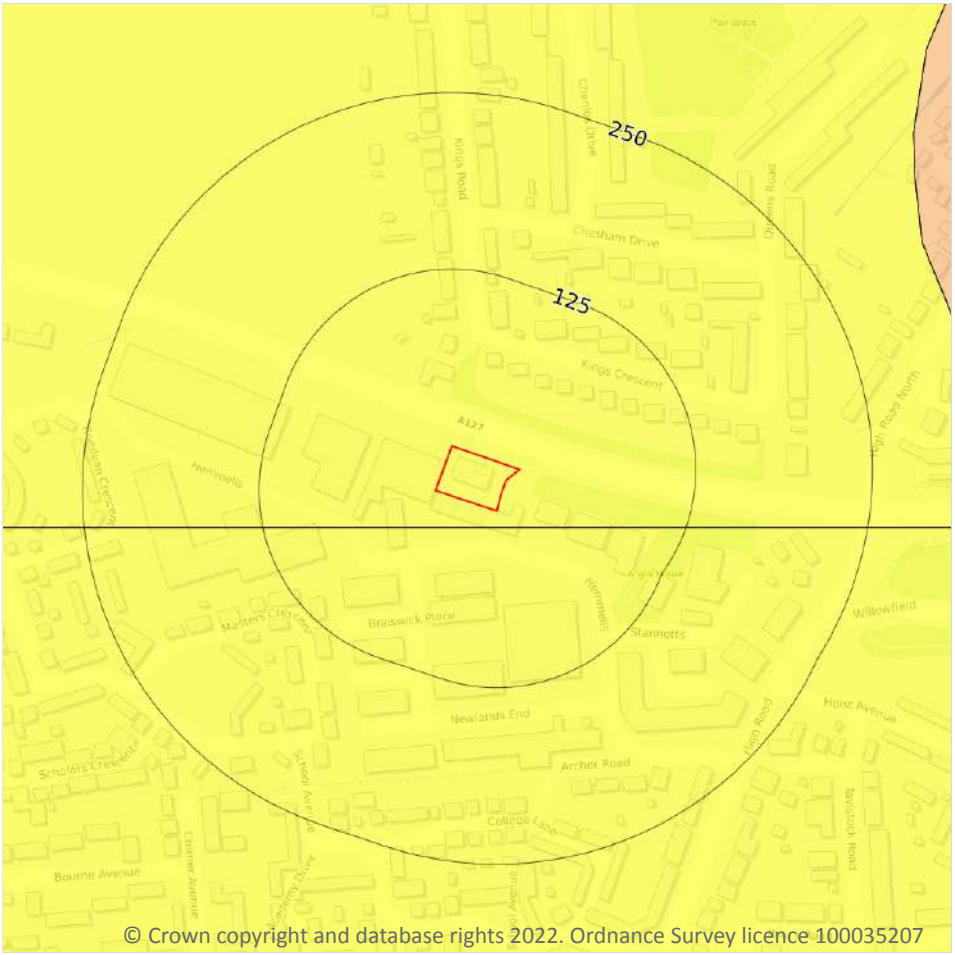
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 84**

Location	Hazard rating	Details
On site	**Moderate**	**Ground conditions predominantly high plasticity.**
12m S	Moderate	Ground conditions predominantly high plasticity.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m	2

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

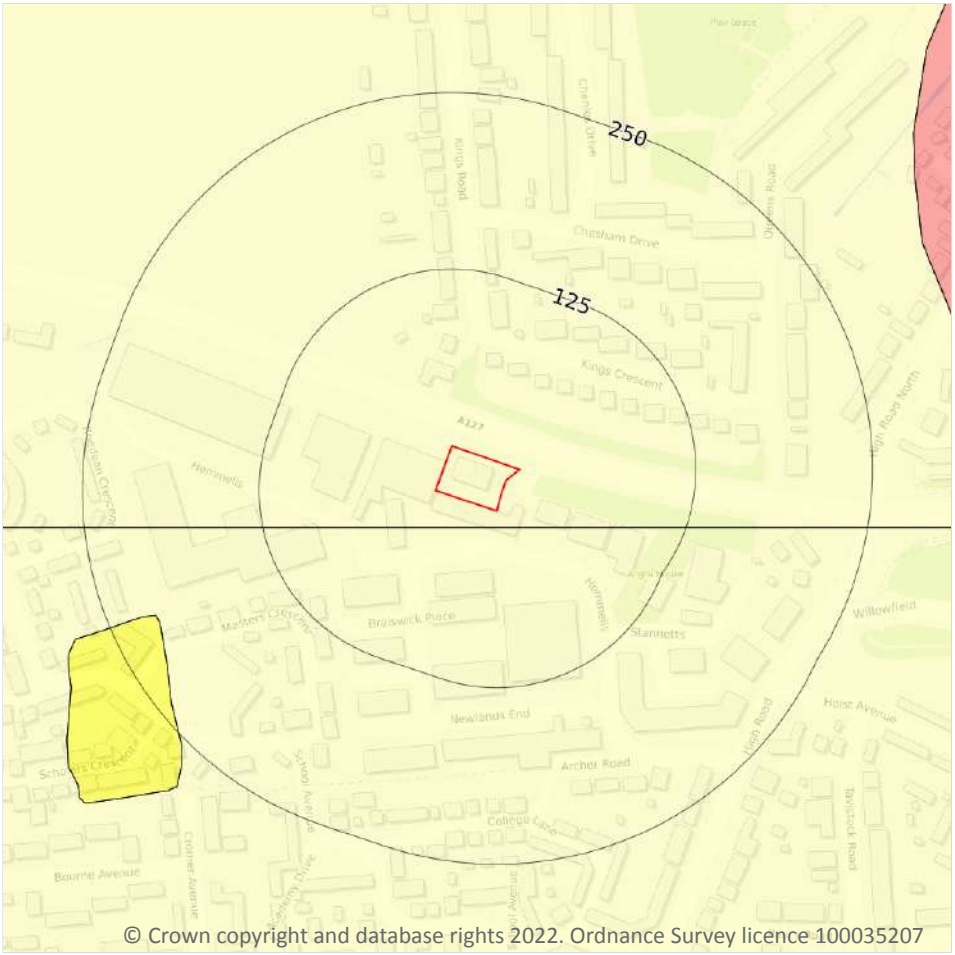
Features are displayed on the Natural ground subsidence - Running sands map on **page 85**

Location	Hazard rating	Details
On site	**Very low**	**Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.**

Location	Hazard rating	Details
12m S	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.3 Compressible deposits

Records within 50m	2

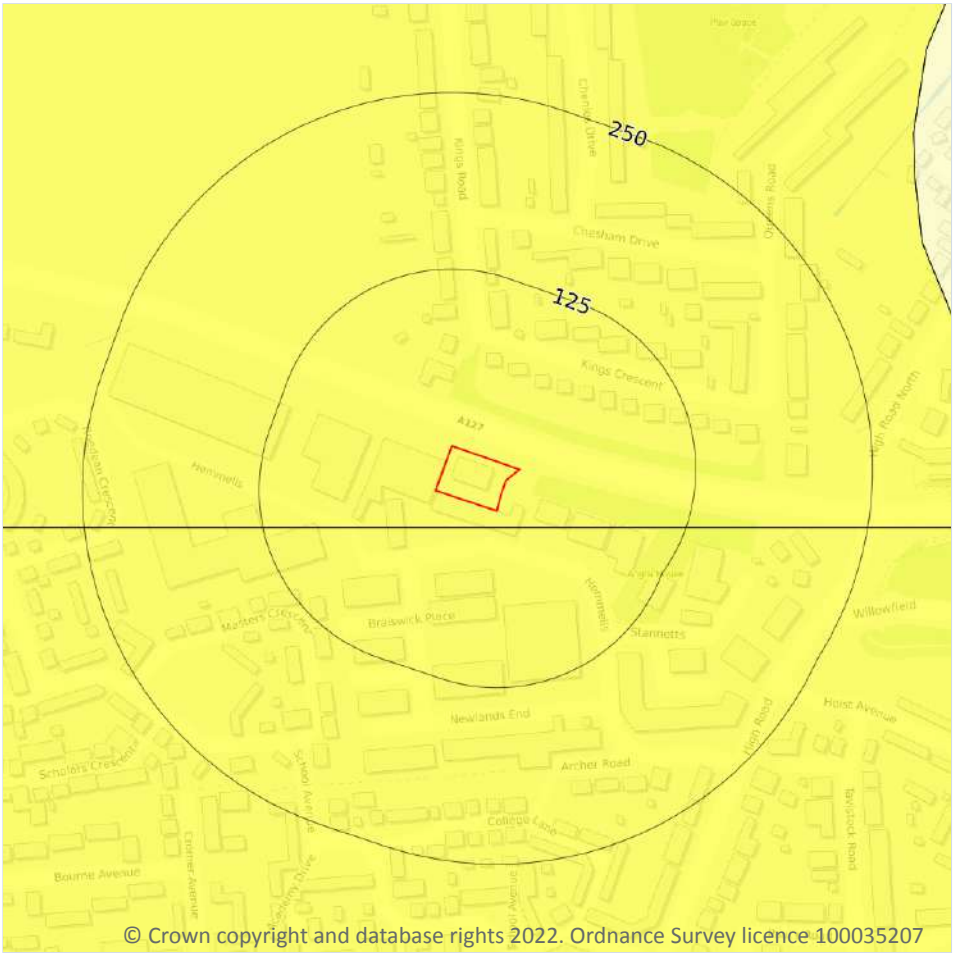
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 87**

Location	Hazard rating	Details
On site	**Negligible**	**Compressible strata are not thought to occur.**
12m S	Negligible	Compressible strata are not thought to occur.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.4 Collapsible deposits

Records within 50m	2

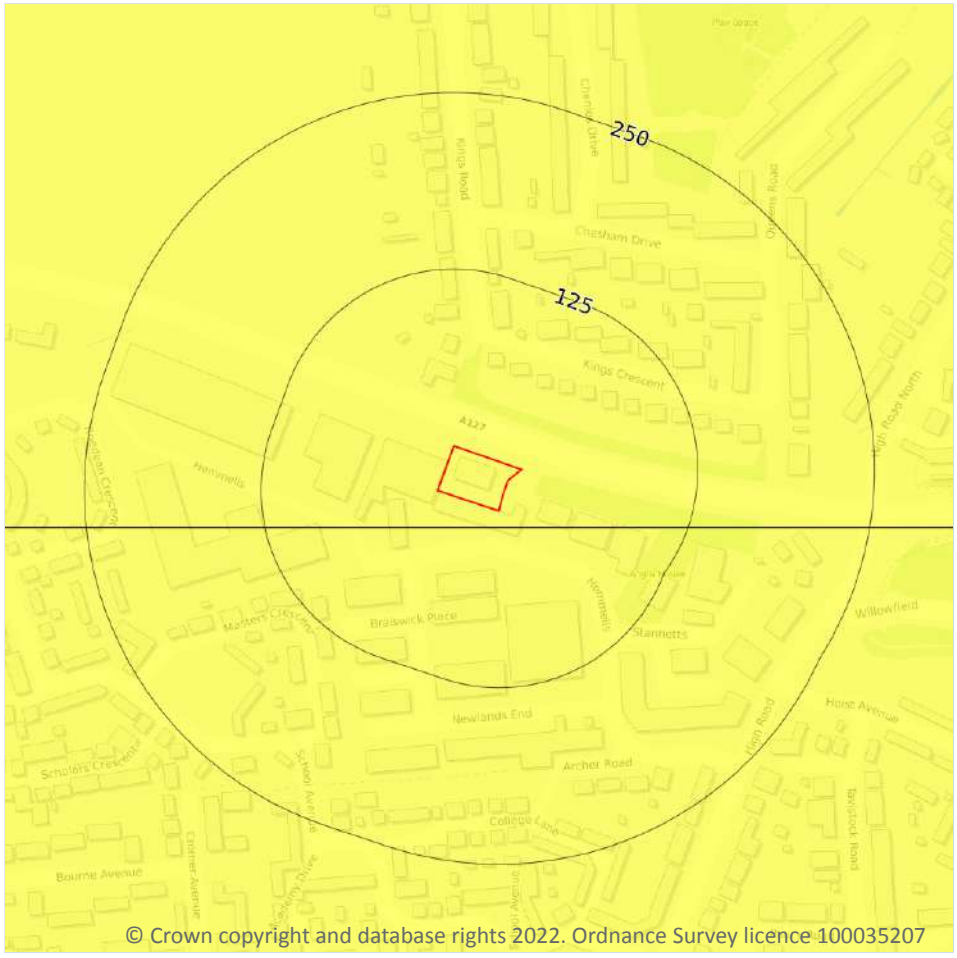
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 88**

Location	Hazard rating	Details
On site	**Very low**	**Deposits with potential to collapse when loaded and saturated are unlikely to be present.**
12m S	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.5 Landslides

Records within 50m	2

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

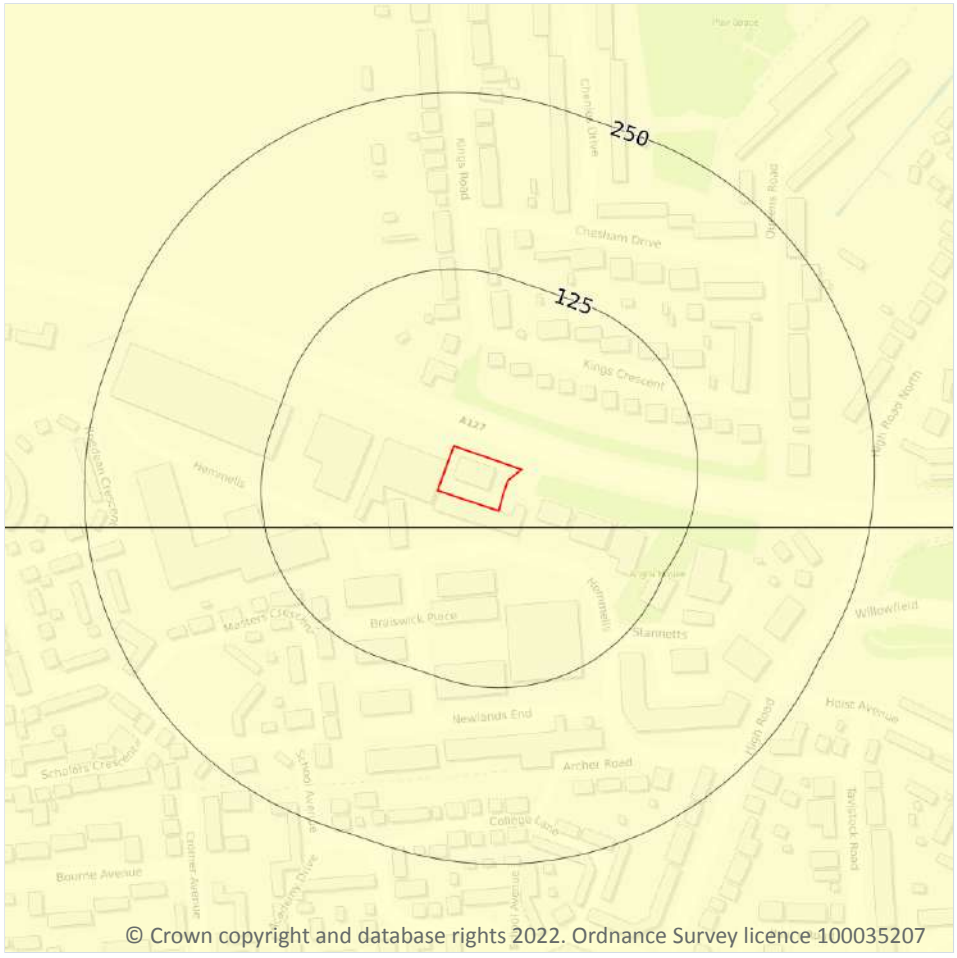
Features are displayed on the Natural ground subsidence - Landslides map on **page 89**

Location	Hazard rating	Details
On site	**Very low**	**Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.**

Location	Hazard rating	Details
12m S	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.6 Ground dissolution of soluble rocks

Records within 50m	2

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

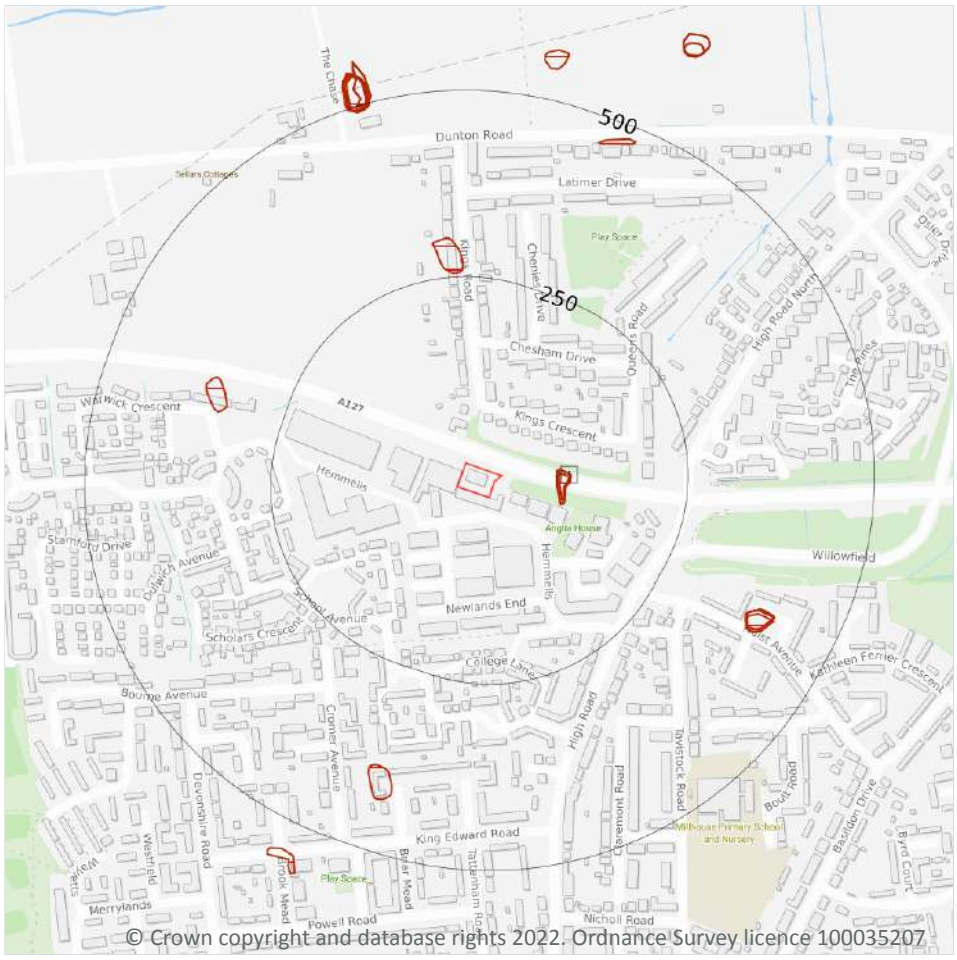
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 91**

Location	Hazard rating	Details
On site	**Negligible**	**Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.**

Location	Hazard rating	Details
12m S	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.

This data is sourced from the British Geological Survey.

18 Mining, ground workings and natural cavities



18.1 Natural cavities

Records within 500m	0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m	0

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m	3

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining, ground workings and natural cavities map on **page 93**

ID	Location	Land Use	Year of mapping	Mapping scale
A	74m E	Pond	1924	1:10560
A	75m E	Pond	1920	1:10560
A	78m E	Pond	1895	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m	0

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

This is data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	0

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	0

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m	0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

18.8 JPB mining areas

Records on site	0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.9 Coal mining

Records on site	0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.10 Brine areas

Records on site	0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.11 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

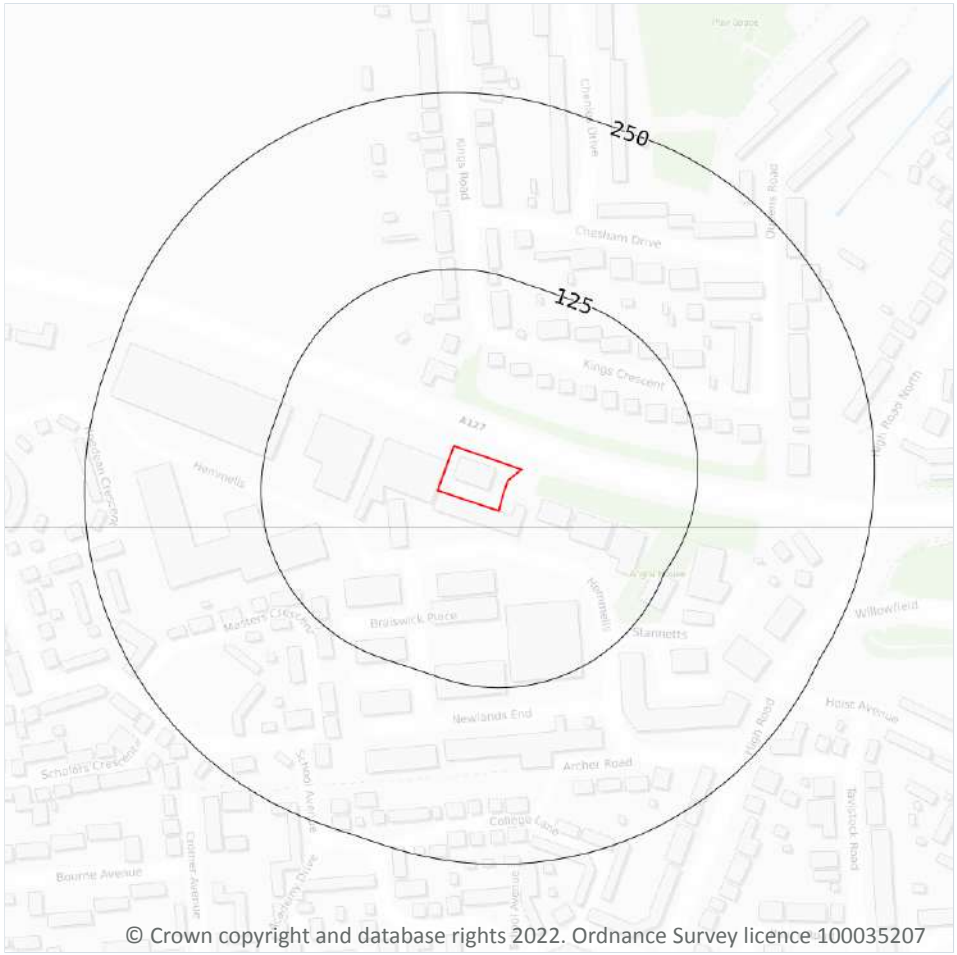
18.13 Clay mining

Records on site	0

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Radon



19.1 Radon

Records on site	1

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

Features are displayed on the Radon map on **page 97**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Less than 1%**	**None****

This data is sourced from the British Geological Survey and Public Health England.

20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m	2

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km^2. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**15 - 30 mg/kg**
12m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m	6

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

Location	Arsenic (mg/kg)	Bioaccessible Arsenic (mg/kg)	Lead (mg/kg)	Bioaccessible Lead (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Nickel (mg/kg)	Tin (mg/kg)
On site	**16**	**2.8**	**105**	**72**	**0.2**	**86**	**44**	**24**	**10**
On site	**17**	**3**	**93**	**64**	**0.1**	**89**	**41**	**24**	**9**
12m SE	15	2.6	134	92	0.3	76	59	24	11
20m SW	16	2.8	126	87	0.3	78	56	24	11
42m N	17	3	91	63	0.1	92	39	24	9
42m NW	18	3.2	78	54	0.1	95	36	23	9

This data is sourced from the British Geological Survey.

20.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

21 Railway infrastructure and projects

21.1 Underground railways (London)

Records within 250m	0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

21.2 Underground railways (Non-London)

Records within 250m	0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

21.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m	0

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

This data is sourced from Ordnance Survey/Groundsure.

21.5 Royal Mail tunnels

Records within 250m	0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

21.6 Historical railways

Records within 250m	0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m	0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m	0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

21.9 Crossrail 2

Records within 500m	0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m	0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 ltd.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: https://www.groundsure.com/terms-and-conditions-jan-2020/.

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