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DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS TYPE/ DEPTH (m)	TEST RESULTS RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
Grass onto brown very sandy organic CLAY with frequent rootlets. TOPSOIL						0.20		D
Firm high strength orangish brown silty CLAY with occasional gravels of medium to coarse sandstone and quartzite. DEVENSIAN TILL		0.35		HVP 0.50	84	0.60		D
Stiff high strength reddish brown mottled grey slightly silty CLAY. DEVENSIAN TILL		1.20		HVP 1.30	145	1.40		D
...between 1.5m and 1.9m depth, becoming sandy.						1.70		D
Stiff very high strength brown mottled bluish grey slightly silty CLAY with occasional gravels of medium sandstone. DEVENSIAN TILL		1.90		HVP 2.50	163			
Stiff very high strength brown very silty CLAY. DEVENSIAN TILL		3.00		HVP 3.40	198	3.40		D
TRIAL PIT TERMINATED AT 3.50m		3.50						

Notes: Trial pit sides remained upright and stable upon completion.

Ground level (mAOD)	**Co-ordinates**	**Title**	**Surface breaking**
105.05	360213, 438024	Trial pit record	No
Groundwater observations	**Dimensions (W x L)**	**Date of excavation (range if applicable)**	**Appendix**
No groundwater encountered.	0.60m x 2.50m	04/02/2016	C
	Method of excavation	**Location plan on drawing number**	**TP12**
	JCB 3CX	02b	

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DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS TYPE/ DEPTH (m)	TEST RESULTS RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
Grass onto dark brown very clayey organic SAND with frequent rootlets. **TOPSOIL**						0.10		D
		0.40						
Firm medium and high strength orangish brown silty CLAY. **DEVENSIAN TILL**						0.50		D
				HVP 0.60	77			
...between 0.8m and 1.2m depth, becoming soft to firm.								
				HVP 1.00	66	1.00		D
		1.20						
Firm to stiff high becoming very high strength reddish brown mottled orange slightly silty CLAY. DEVENSIAN TILL								
...from 1.8m depth, becoming stiff.								
...occasional rounded cobbles of sandstone from 2.0m depth.				HVP 2.00	145	2.00		D
...from 2.8m depth, becoming very stiff.								
				HVP 3.00	213			
						3.40		D
TRIAL PIT TERMINATED AT 3.50m		3.50						

Notes: Trial pit sides remained upright and stable upon completion.

Ground level (mAOD)	**Co-ordinates**	**Title**	**Surface breaking**
104.40	360205, 438065	Trial pit record	No
Groundwater observations	**Dimensions (W x L)**	**Date of excavation (range if applicable)**	**Appendix**
No groundwater encountered.	0.60m x 2.50m	04/02/2016	C
	Method of excavation	**Location plan on drawing number**	**TP13**
	JCB 3CX	02b	

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DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS TYPE/ DEPTH (m)	TEST RESULTS RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
Grass onto brown very sandy organic CLAY with frequent rootlets. TOPSOIL						0.10		B
		0.25						
Firm medium strength orangish brown slightly silty sandy CLAY. DEVENSIAN TILL								
...lamination of dark brown sand between 0.4m and 0.55m depth.				HVP 0.50	55	0.50		D
				HVP 0.90	68			
						1.00		B
		1.30						
Stiff high strength brown mottled grey slightly silty CLAY with occasional gravels of medium rounded sandstone and cobbles of the same. DEVENSIAN TILL				HVP 1.40	87			
						1.60		B
...from 2m depth, becoming very stiff.				HVP 2.00	134			
		2.80						
Stiff high strength brown very silty CLAY with occasional gravels of rounded medium sandstone. DEVENSIAN TILL								
				HVP 3.20	132	3.20		B
TRIAL PIT TERMINATED AT 3.30m		3.30						

Notes: Trial pit sides remained upright and stable upon completion.

Ground level (mAOD)	**Co-ordinates**	**Title**	**Surface breaking**
104.85	360249, 438060	Trial pit record	No
Groundwater observations	**Dimensions (W x L)**	**Date of excavation (range if applicable)**	**Appendix**
No groundwater encountered.	0.60m x 2.50m	04/02/2016	C
	Method of excavation	**Location plan on drawing number**	**TP14**
	JCB 3CX	02b	

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DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS TYPE/ DEPTH (m)	TEST RESULTS RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
Grass onto brown very sandy organic CLAY with frequent rootlets. TOPSOIL						0.20		D
Soft to firm medium strength orangish grey slightly silty gravelly CLAY. Gravel consists of medium sandstone. DEVENSIAN TILL		0.30		HVP 0.50	71	0.50		D
...0.2m diameter stone land drain trending north to south in side of trial pit 0.4m depth.								
Stiff high strength brown mottled grey silty sandy CLAY. DEVENSIAN TILL		0.80				1.10		D
				HVP 1.20	103			
...from 1.4m depth, becoming very stiff and friable.				HVP 1.60	141			
Very stiff very high and high strength grey mottled brown slightly silty CLAY. DEVENSIAN TILL		2.10		HVP 2.30	213	2.30		ES
				HVP 3.10	103			
						3.20		D
TRIAL PIT TERMINATED AT 3.30m		3.30						

Notes: Trial pit sides remained upright and stable upon completion.

Ground level (mAOD)	**Co-ordinates**	Title	**Surface breaking**
106.51	360190, 437933	Trial pit record	No
Groundwater observations	**Dimensions (W x L)**	**Date of excavation (range if applicable)**	**Appendix**
No groundwater encountered.	0.60m x 2.50m	04/02/2016	C
	Method of excavation	**Location plan on drawing number**	**TP15**
	JCB 3CX	02b	

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DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS TYPE/ DEPTH (m)	TEST RESULTS RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
Grass onto dark brown sandy organic CLAY with frequent rootlets. TOPSOIL						0.10		D
Firm to stiff high strength orange brown silty CLAY with occasional medium to coarse gravels and cobbles of sub-angular sandstone. DEVENSIAN TILL		0.35		HVP 0.60	88			
						0.70		D
Stiff high becoming very high strength brown mottled grey gravelly CLAY. Gravel consists of fine to medium rounded sandstone. DEVENSIAN TILL		1.00				1.10		D
				HVP 1.20	103			
...from 2m depth, becoming very stiff.								
						2.40		D
				HVP 2.50	198			
Stiff high strength reddish brown silty CLAY with occasional cobbles of sandstone. DEVENSIAN TILL		2.60						
				HVP 3.00	87	3.00		D
CONTINUED ON NEXT SHEET								

Notes: Trial pit sides remained upright and stable upon completion.

Ground level (mAOD)	**Co-ordinates**	**Title**	**Surface breaking**
107.60	360253, 437879	Trial pit record	No
Groundwater observations	**Dimensions (W x L)**	**Date of excavation (range if applicable)**	**Appendix**
No groundwater encountered.	0.60m x 2.50m	04/02/2016	C
	Method of excavation	**Location plan on drawing number**	**TP16**
	JCB 3CX	02b	

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DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS		SAMPLING		
				TYPE/ DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
				HVP 4.60	94	4.60		D
TRIAL PIT TERMINATED AT 4.70m		4.70						

Notes: Trial pit sides remained upright and stable upon completion.

Ground level (mAOD)	**Co-ordinates**	**Title**	**Surface breaking**
107.60	360253, 437879	Trial pit record	No
Groundwater observations	**Dimensions (W x L)**	**Date of excavation (range if applicable)**	**Appendix**
No groundwater encountered.	0.60m x 2.50m	04/02/2016	C
	Method of excavation	**Location plan on drawing number**	**TP16**
	JCB 3CX	02b	

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DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS TYPE/ DEPTH (m)	TEST RESULTS RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
Grass onto dark brown very clayey organic SAND with frequent rootlets. TOPSOIL						0.10		D
		0.40						
Firm to stiff orangish brown slightly sandy slightly gravelly silty CLAY. Gravel consists of fine sandstone. **DEVENSIAN** TILL				HVP 0.50	82			
				HVP 1.00	116			
		1.20						
Stiff high becoming very high strength reddish brown mottled grey CLAY. **DEVENSIAN** TILL								
				HVP 1.50	146			
						1.80		D
from 2m depth, becoming very stiff				HVP 2.00	213			
		2.60						
Stiff very high strength brown silty CLAY. **DEVENSIAN** TILL								
				HVP 3.00	176			
						3.20		D
TRIAL PIT TERMINATED AT 3.30m		3.30						

Notes: Trial pit sides remained upright and stable upon completion.

Ground level (mAOD)	**Co-ordinates**	**Title**	**Surface breaking**
107.25	360264, 437925	Trial pit record	No
Groundwater observations	**Dimensions (W x L)**	**Date of excavation (range if applicable)**	**Appendix**
No groundwater encountered.	0.60m x 2.50m	04/02/2016	C
	Method of excavation	**Location plan on drawing number**	**TP17**
	JCB 3CX	02b	

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DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS TYPE/ DEPTH (m)	TEST RESULTS RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
Grass onto dark brown organic CLAY with frequent rootlets. TOPSOIL						0.10		D
		0.40						
Firm to stiff high strength orangish brown slightly sandy slightly gravelly silty CLAY. Gravel consists of fine to medium sandstone and mudstone. DEVENSIAN TILL				HVP 0.50	81	0.50		D
		0.90						
Stiff high becoming very high strength reddish brown mottled grey CLAY. DEVENSIAN TILL				HVP 1.10	146			
...from 1.5m depth, becoming very stiff and friable.				HVP 1.50	205			
						1.70		D
		1.90						
Stiff high becoming very high strength reddish brown silty CLAY. DEVENSIAN TILL				HVP 2.00	137			
...from 2m depth, becoming very stiff.								
				HVP 3.50	162			
TRIAL PIT TERMINATED AT 3.60m		3.60						

Notes: Trial pit sides remained upright and stable upon completion.

Ground level (mAOD)	**Co-ordinates**	**Title**	**Surface breaking**
106.49	360251, 437981	Trial pit record	No
Groundwater observations	**Dimensions (W x L)**	**Date of excavation (range if applicable)**	**Appendix**
No groundwater encountered.	0.60m x 2.50m	04/02/2016	C
	Method of excavation	**Location plan on drawing number**	**TP18**
	JCB 3CX	02b	

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DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS TYPE/ DEPTH (m)	TEST RESULTS RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
Grass onto brown very clayey organic SAND with occasional gravels of medium sandstone and quartzite and frequent roots and rootlets. TOPSOIL						0.10		B
		0.40						
Firm to stiff high strength orangish brown CLAY with occasional gravels of medium sandstone and quartzite. DEVENSIAN TILL				HVP 0.50	106			
				HVP 1.00	113			
						1.20		B
		1.50						
Stiff very high strength brown mottled grey slightly silty CLAY. DEVENSIAN TILL								
...from 2m depth, becoming very stiff.				HVP 2.00	156	2.00		B
		2.30						
Stiff high strength reddish brown silty CLAY. DEVENSIAN TILL								
				HVP 3.00	129			
TRIAL PIT TERMINATED AT 3.20m		3.20						

Notes: Trial pit sides remained upright and stable upon completion.

Ground level (mAOD)
109.40

Co-ordinates
360298, 437923

Title
Trial pit record

Surface breaking
No

Groundwater observations
No groundwater encountered.

Dimensions (W x L)
0.60m x 2.50m

Date of excavation (range if applicable)
04/02/2016

Appendix
C

Method of excavation
JCB 3CX

Location plan on drawing number
02b

TP19

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DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS TYPE/ DEPTH (m)	TEST RESULTS RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
Grass onto brown very clayey organic SAND with frequent roots and rootlets. **TOPSOIL**						0.10		D
Firm to stiff high becoming very high strength brownish grey slightly sandy slightly gravelly silty CLAY. Gravel consists of fine to medium sandstone and quartzite. DEVENSIAN TILL		0.40		HVP 0.50	81	0.60		D
from 0.8m depth, becoming very stiff				HVP 1.00	207			
Stiff very high strength grey slightly silty slightly gravelly CLAY. Gravel consists of medium sandstone. DEVENSIAN TILL		1.60		HVP 2.00	184	2.00		D
from 2.6m depth, becoming very stiff								
Very stiff very high strength grey silty CLAY. DEVENSIAN TILL		2.60		HVP 3.00	171			
TRIAL PIT TERMINATED AT 3.40m		3.40						

Notes: Trial pit sides remained upright and stable upon completion.

Ground level (mAOD) 103.45	**Co-ordinates** 360210, 438115	**Title** Trial pit record	**Surface breaking** No
Groundwater observations No groundwater encountered.	**Dimensions (W x L)** 0.60m x 2.50m	**Date of excavation (range if applicable)** 04/02/2016	**Appendix** C
	Method of excavation JCB 3CX	**Location plan on drawing number** 02b	**TP20**

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Key to legends

Composite materials, soils and lithology

Topsoil	Made Ground	Boulders
Chalk	Clay	Coal
Cobbles	Cobbles & Boulders	Concrete
Gravel	Limestone	Mudstone
Peat	Sand	Sand and Gravel
Sandstone	Silt	Silt / Clay
		Siltstone

Note: Composite soil types are signified by combined symbols.

Key to 'test results' and 'sampling' columns

Test result

Depth	Records depth that the test was carried out *(i.e.: at 2.10m or between 2.10m and 2.55m)*
Result	PID - Photo Ionisation Detector result (ppm equivalent Isobutylene) PP – Pocket penetrometer result (kN/m^2) HVP – Hand held shear vane result (kN/m^2) *PP result converted to an equivalent undrained shear strength by applying a factor of 50. Where at least 3 results obtained at same depth then an average value may be reported.* *SPT – Standard Penetration Test result (uncorrected)* *SPT(c) – Standard Penetration Test result (solid cone) (uncorrected)*

Sampling

From (m) To (m)	Records depth of sampling	
Type	D	Disturbed sample
	B	Bulk disturbed sample
	ES	Environmental sample comprising plastic and/or glass container
	W	Water sample
	U (32)	Undisturbed sample 100mm diameter sampler with number of blows of driving equipment required to obtain sample

Water observations

Described at foot of log and shown in the 'water strike' column.

▼ = water level observed after specified delay in drilling

▽ = water strike

Standpipe details

Gravel filter

Arisings

Bentonite

Slotted pipe

Unslotted pipe

Density

Density recorded in brackets inferred from density testing and soil descriptions from across the site (i.e.: [Medium dense]).

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WELL	DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS TYPE/ DEPTH (m)	TEST RESULTS RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Grass onto dark brown slightly silty organic CLAY with frequent rootlets and root hairs. TOPSOIL						0.00	0.20	D
	Stiff medium strength dark brown and grey slightly silty slightly gravelly CLAY with frequent root hairs. Gravel consists of fine sub-angular sandstone. DEVENSIAN TILL (POSSIBLY REWORKED)		0.20		PP 0.30	46	0.40	0.50	D
	Firm low to extremely low strength dark brown and grey slightly sandy silty CLAY with frequent dark stained rootlets. DEVENSIAN TILL (POSSIBLY REWORKED)		0.60		PP 0.60	25	0.80	0.90	D
					PP 0.90	25			
	Soft to firm low strength brown mottled grey slightly gravelly silty CLAY with some dark stained rootlets and root hairs. Gravel consists of fine sub-angular sandstone. DEVENSIAN TILL (POSSIBLY REWORKED)		1.30		PP 1.30	21			
					PP 1.60	25			
					PP 1.90	25	1.90	2.00	D
	Very stiff very high strength reddish mottled grey brown silty CLAY with occasional gravels of fine sub-angular to sub-rounded sandstone and mudstone. DEVENSIAN TILL		2.10		PP 2.30	225			
					PP 2.60	221			
					PP 2.90	225	2.90	3.00	D
	Stiff high strength reddish brown slightly silty slightly gravelly CLAY. Gravel consists of sub-angular to sub-rounded mudstone. DEVENSIAN TILL		3.60		PP 3.60	83			
					PP 3.90	125			
	BOREHOLE TERMINATED AT 4.00m		4.00						

Notes: No recovery of sample between depths of 3.0m to 3.5m

Ground level (mAOD)
104.73

Co-ordinates
360073, 438033

Title
Driven tube sampler borehole record

Surface breaking
No

Groundwater observations
No groundwater encountered.

Date of excavation (range if applicable)
04/02/2016

Appendix
D

Location plan on drawing number
02b

DTS01

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WELL	DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS TYPE/ DEPTH (m)	TEST RESULTS RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Grass onto dark brown slightly sandy slightly gravelly organic CLAY with frequent rootlets. Gravel consists of fine sub-angular quartzite. TOPSOIL						0.00	0.35	D
							0.10		D
	Stiff high strength brown mottled grey silty CLAY with occasional gravels of fine sub-angular to sub-rounded mudstone and quartzite and root hairs and dark stained root hairs. DEVENSIAN TILL		0.35		PP 0.60	63			
					PP 0.90	63	1.00		D
					PP 1.30	125			
	Very stiff very high and high strength brown mottled grey slightly silty CLAY with occasional gravels of fine sub-rounded quartzite. DEVENSIAN TILL		1.55		PP 1.60	163	1.50		D
					PP 1.90	125			
					PP 2.30	100			
	Very stiff very high becoming high strength brown slightly gravelly silty CLAY. Gravel consists of fine sub-rounded quartzite. DEVENSIAN TILL		2.65		PP 2.60	117	2.50		D
					PP 2.90	183			
	...from 3.2m depth, becoming stiff.				PP 3.30	133			
					PP 3.60	75			
					PP 3.90	75			
	BOREHOLE TERMINATED AT 4.00m		4.00						

Notes: Standpipe installed to 3.5m depth with 0.5m above ground.

Ground level (mAOD)
105.50

Co-ordinates
360062, 437970

Title
Driven tube sampler borehole record

Surface breaking
No

Groundwater observations
No groundwater encountered.

Date of excavation (range if applicable)
04/02/2016

Appendix
D

Location plan on drawing number
02b

DTS02

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WELL	DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS TYPE/ DEPTH (m)	TEST RESULTS RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Grass onto dark brown slightly silty slightly gravelly organic CLAY with frequent root hairs. Gravel consists of sub-angular to sub-rounded fine sandstone, mudstone and quartzite. TOPSOIL						0.00	0.20	D
							0.10		D
	Stiff medium strength orangish brown slightly gravelly silty CLAY with occasional gravels of fine sub-rounded mudstone. DEVENSIAN TILL		0.50		PP 0.60	67	0.50		D
					PP 0.90	54	0.90	1.00	D
	Very stiff high to very high strength brown mottled grey slightly sandy silty CLAY with occasional gravels of fine to medium sub-rounded mudstone and quartzite. DEVENSIAN TILL		1.00				1.20		D
					PP 1.30	117			
					PP 1.60	208			
					PP 1.90	225			
					PP 2.30	225			
	Very stiff very high strength brown slightly sandy slightly gravelly silty CLAY. Gravel consists of fine to medium sub-rounded mudstone and quartzite. DEVENSIAN TILL		2.50		PP 2.60	217	2.50		D
					PP 2.90	183			
					PP 3.30	171			
					PP 3.60	163			
					PP 3.90	196			
	BOREHOLE TERMINATED AT 4.00m		4.00						

Notes: Standpipe installed to 3.5m depth with 0.5m above ground.

Ground level (mAOD)
105.80

Co-ordinates
360126, 437971

Title
Driven tube sampler borehole record

Surface breaking
No

Groundwater observations
No groundwater encountered.

Date of excavation (range if applicable)
04/02/2016

Appendix
D

Location plan on drawing number
02b

DTS03

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WELL	DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS TYPE/ DEPTH (m)	TEST RESULTS RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Grass onto dark brown silty organic CLAY with frequent rootlets. TOPSOIL						0.00	0.50	D
							0.10		D
	Firm low strength brown mottled orange and grey slightly silty CLAY with occasional rootlets and gravels of fine sub-angular to sub-rounded sandstone, mudstone and quartzite. DEVENSIAN TILL		0.50		PP 0.60	25	0.50		D
					PP 0.90	38	0.90	1.00	D
	Very stiff high to very high strength dark brown mottled grey slightly sandy slightly gravelly silty CLAY. Gravel consists of fine sub-angular to sub-rounded sandstone, mudstone and quartzite. DEVENSIAN TILL		1.00		PP 1.20	113	1.20		D
					PP 1.30	167			
					PP 1.60	192			
					PP 1.90	200			
	Very stiff very high becoming medium strength brown mottled grey slightly gravelly silty CLAY. Gravel consists of fine to medium sub-angular to sub-rounded sandstone, mudstone and quartzite. DEVENSIAN TILL		2.15		PP 2.30	225			
					PP 2.60	188	2.50		D
	...from 3.1m depth, becoming stiff.				PP 3.30	75			
					PP 3.60	58			
					PP 3.90	63			
	BOREHOLE TERMINATED AT 4.00m		4.00						

Notes: No recovery of sample between depths of 2.65m to 3.0m.

Ground level (mAOD)
105.20

Co-ordinates
360185, 438012

Title
Driven tube sampler borehole record

Surface breaking
No

Groundwater observations
No groundwater encountered.

Date of excavation (range if applicable)
04/02/2016

Appendix
D

Location plan on drawing number
02b

DTS04

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WELL	DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS TYPE/ DEPTH (m)	TEST RESULTS RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Grass onto dark brown silty organic CLAY with frequent rootlets. TOPSOIL						0.00	0.70	D
							0.10		D
	Very low strength brown slightly gravelly sandy silty CLAY with some pseudo fibrous plant remains and dark stained rootlets. Gravel consists of fine to medium sub-angular to sub-rounded sandstone and mudstone. DEVENSIAN TILL		0.50		PP 0.90	13			
	Stiff to very stiff very high strength dark brown mottled grey slightly silty CLAY with occasional gravels of fine sub-rounded mudstone. DEVENSIAN TILL		1.00		PP 1.30	158	1.20		D
					PP 1.60	225			
	Very stiff very high strength dark brown slightly gravelly silty CLAY. Gravel consists of fine to medium sub-angular mudstone and quartzite. DEVENSIAN TILL		1.75		PP 1.90	200			
					PP 2.30	213			
					PP 2.60	235	2.50		D
					PP 2.90	208			
	Soft very low strength dark brown silty CLAY with some thin laminations of fine brown SAND. DEVENSIAN TILL		3.50		PP 3.60	13			
					PP 3.90	13	3.90		D
	BOREHOLE TERMINATED AT 4.00m		4.00						

Notes: Standpipe installed to 3.5m depth with 0.5m above ground. No recovery of sample between depths of 2.9m to 3.5m

Ground level (mAOD)
103.85

Co-ordinates
360244, 438100

Title
Driven tube sampler borehole record

Surface breaking
No

Groundwater observations
No groundwater encountered.

Date of excavation (range if applicable)
04/02/2016

Appendix
D

Location plan on drawing number
02b

DTS05

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WELL	DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS TYPE/ DEPTH (m)	TEST RESULTS RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Grass onto dark brown slightly silty slightly gravelly organic CLAY with frequent rootlets. Gravel consists of fine to medium sub-rounded sandstone and mudstone. **TOPSOIL**						0.00	0.50	D
	Firm to stiff low to medium strength dark brown mottled grey slightly silty slightly gravelly sandy CLAY. Gravel consists of fine to medium sub-rounded mudstone. **DEVENSIAN TILL**		0.50		PP 0.60	38			
					PP 0.80	58	0.80	1.00	D
	Stiff high to very high strength brown mottled grey slightly silty slightly gravelly CLAY with occasional dark stained rootlets. Gravel consists of sub-rounded fine to medium mudstone. DEVENSIAN TILL		1.00				1.00	1.10	D
	...from 1.4m depth, becoming very stiff.						1.20		D
					PP 1.30	83			
					PP 1.60	92			
					PP 1.90	150			
	Very stiff very high strength dark brown slightly silty CLAY with occasional gravels of sub-rounded fine to medium mudstone. DEVENSIAN TILL		1.95						
					PP 2.30	188			
							2.40		D
					PP 2.90	163			
	Firm becoming very stiff medium to very high strength dark brown slightly gravelly CLAY. Gravel consists of fine sub-rounded mudstone. **DEVENSIAN TILL**		3.00						
					PP 3.30	71			
					PP 3.60	125			
					PP 3.90	163			
	BOREHOLE TERMINATED AT 4.00m		4.00						

Notes: Standpipe installed to 3.5m depth with 0.5m above ground. No recovery of sample between depths of 2.5m to 2.85m.

Ground level (mAOD)
107.15

Co-ordinates
360259, 437955

Title
Driven tube sampler borehole record

Surface breaking
No

Groundwater observations
No groundwater encountered.

Date of excavation (range if applicable)
04/02/2016

Appendix
D

Location plan on drawing number
02b

DTS06

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environmental and geotechnical consultants

WELL	DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS TYPE/ DEPTH (m)	TEST RESULTS RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Grass onto dark brown slightly gravelly silty organic CLAY with frequent rootlets. Gravel consists of fine to coarse sub-angular to sub-rounded mudstone, quartzite and sandstone. TOPSOIL						0.00	0.40	D
							0.10		D
	Stiff medium to high strength orangish brown mottled grey slightly silty slightly sandy slightly gravelly CLAY with occasional root hairs. Gravel consists of fine to medium sub-rounded mudstone DEVENSIAN TILL		0.40		PP 0.60	50			
					PP 0.80	75	0.80	0.90	D
	Very stiff high becoming very high strength brown mottled grey slightly sandy slightly gravelly CLAY. Gravel consists of fine to coarse sub-angular to sub-rounded mudstone and red sandstone. DEVENSIAN TILL		0.90		PP 0.90	75	0.90	1.00	D
					PP 1.30	225	1.20		D
					PP 1.60	225			
					PP 1.90	225			
	Firm medium strength brown slightly gravelly sandy CLAY. Gravel consists of fine sub-rounded mudstone. DEVENSIAN TILL		2.00		PP 2.30	58			
					PP 2.60	67	2.50		D
	Stiff high becoming medium strength dark brown slightly sandy silty CLAY. DEVENSIAN TILL		2.70		PP 2.90	104			
	...from 3m depth, becoming firm.				PP 3.30	50			
					PP 3.60	50			
	BOREHOLE TERMINATED AT 4.00m		4.00						

Notes:

Ground level (mAOD)
106.55

Co-ordinates
360225, 437945

Title
Driven tube sampler borehole record

Surface breaking
No

Groundwater observations
No groundwater encountered.

Date of excavation (range if applicable)
04/02/2016

Appendix
D

Location plan on drawing number
02b

DTS07

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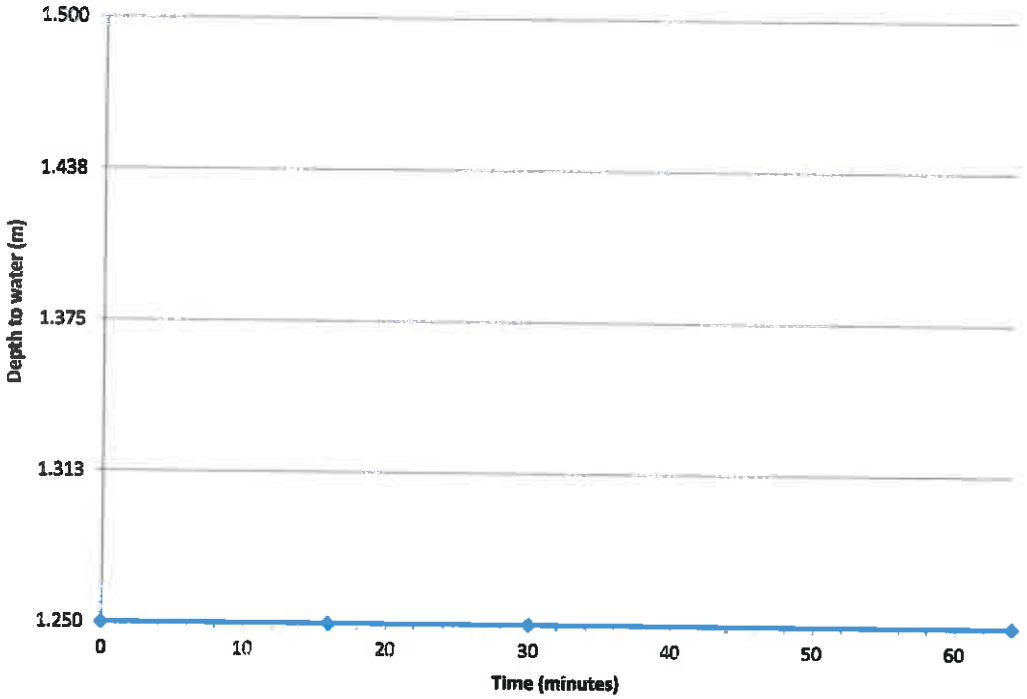
Plot showing time against depth to water:



Test observations:

TIME (mins)	DEPTH TO WATER (m)	TIME (mins)	DEPTH TO WATER (m)
0	1.25		
16	1.25		
30	1.25		
64	1.25		

Calculations:

No movement in water level over 64 minutes of monitoring therefore unable to calculate soil infiltration rate.

Groundwater observations
Slight groundwater seepage from 1.1m depth, insufficient to record in base of trial pit after completion.

Trial pit dimensions (width x length)
0.6m x 2.5m

Ground level
105.35

Depth of trial pit at start of test (m)
1.5

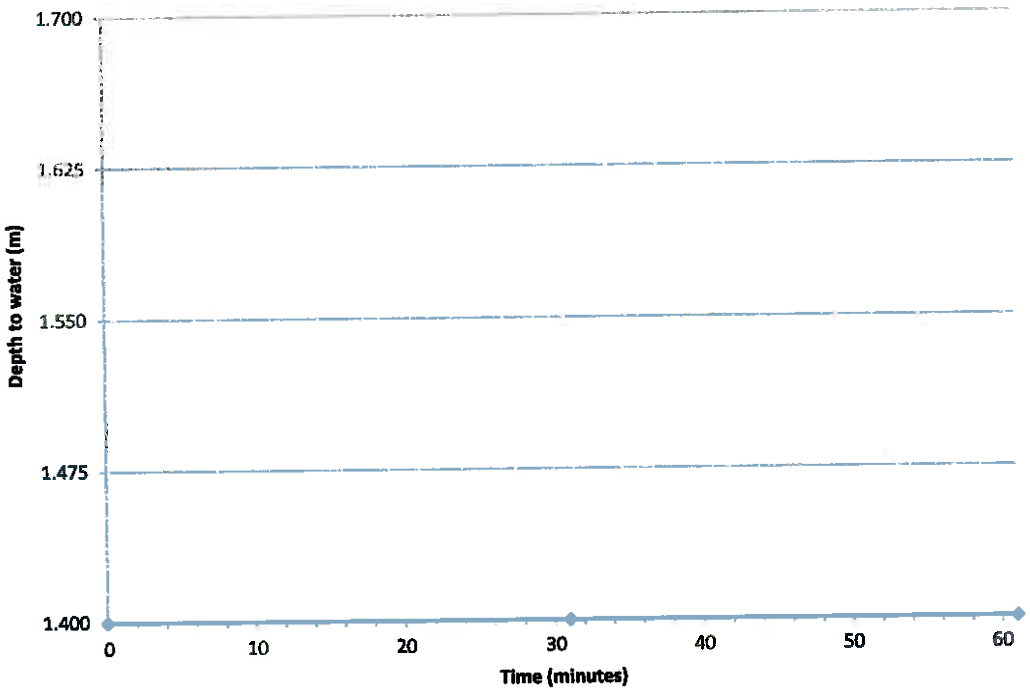
Co-ordinates
360098,438008

Title
Soil infiltration test (following principles of the Building Research Establishment Digest 365 2007)

Location plan on drawing number
02b

Trial pit number	Cycle number	Date of excavation
TP04	1	03/02/2016

Plot showing time against depth to water:



Test observations:

TIME (mins)	DEPTH TO WATER (m)	TIME (mins)	DEPTH TO WATER (m)
0	1.4		
31	1.4		
61	1.4		

Calculations:

No movement in water level over 61 minutes of monitoring therefore unable to calculate soil infiltration rate.

Groundwater observations
No groundwater encountered.

Title
Soil Infiltration test (following principles of the Building Research Establishment Digest 365 2007)

Trial pit dimensions (width x length)	Ground level	Location plan on drawing number		
0m x 0m	106.7	02b		
Depth of trial pit at start of test (m)	**Co-ordinates**	**Trial pit number**	**Cycle number**	**Date of excavation**
1.7	360082,437927	TP09	1	03/02/2016

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TEST REPORT

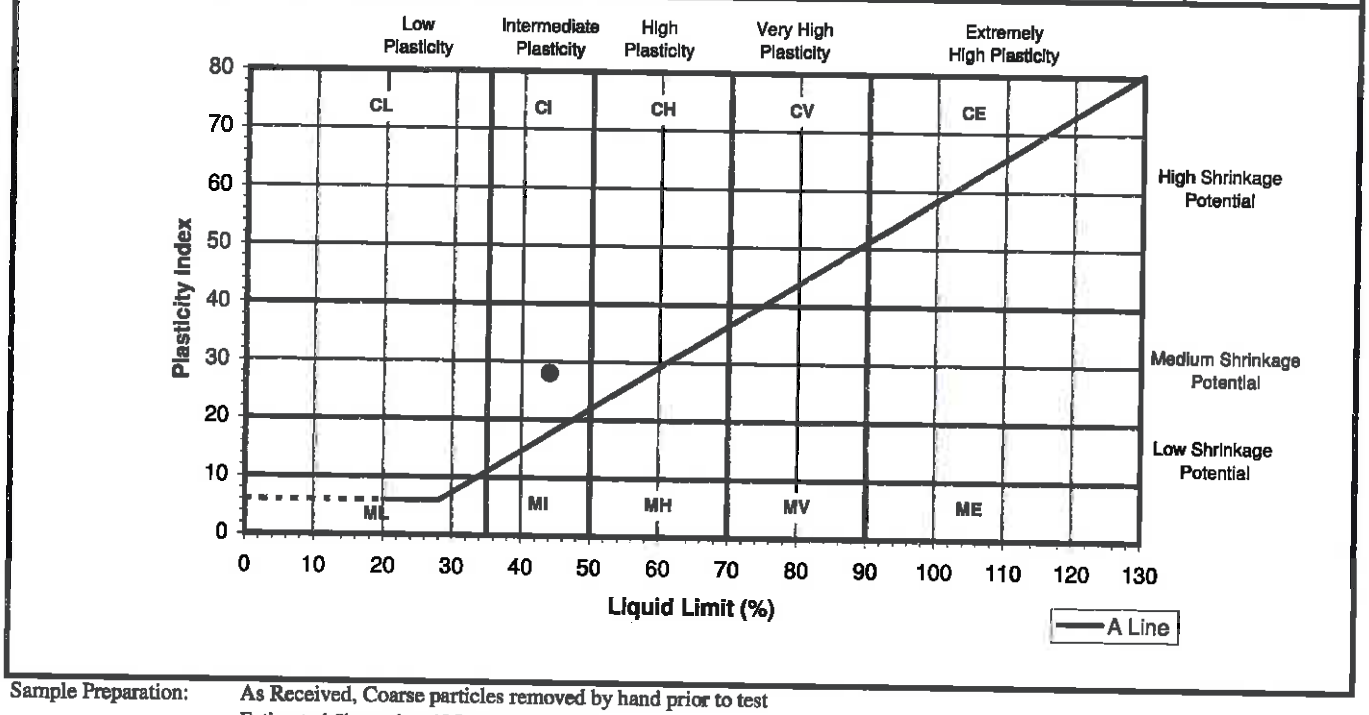
Determination of Moisture Content and Atterberg Limits

Client:	Soiltechnics Limited	Report No:	51021428/16/01
Client Address:	Cedar Barn, White Lodge Walgrave	Batch Number:	DAM0058803
Postcode:	NN6 9PY	Client Reference:	STN3505NM
Contact:	Andy Keeler	Sampled by:	Client
		Date Sampled:	09.02.16
		Date Received:	11.02.16
Site:	Chipping Lane, Longbridge	Tested From:	17.02.16-18.02.16
		Sample Type:	Disturbed

Test Results:

Description: Brown CLAY

Laboratory Reference	Location	Depth (m)	As Received Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
45270321	DTS03	0.90-1.00	N/A	44	16	28	100



Sample Preparation: As Received, Coarse particles removed by hand prior to test
Estimated % passing 425µm BS Test Sieve

Certified that the laboratory testing was carried out in accordance with BS 1377-2: 1990: Method 3.2, 4.4 and 5

Page: 1 of 1
Date: 23.02.16

Signed M. Carr

[✓] M. Carr - Section Manager
[ ] D. Berrill - Laboratory Manager

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TEST REPORT

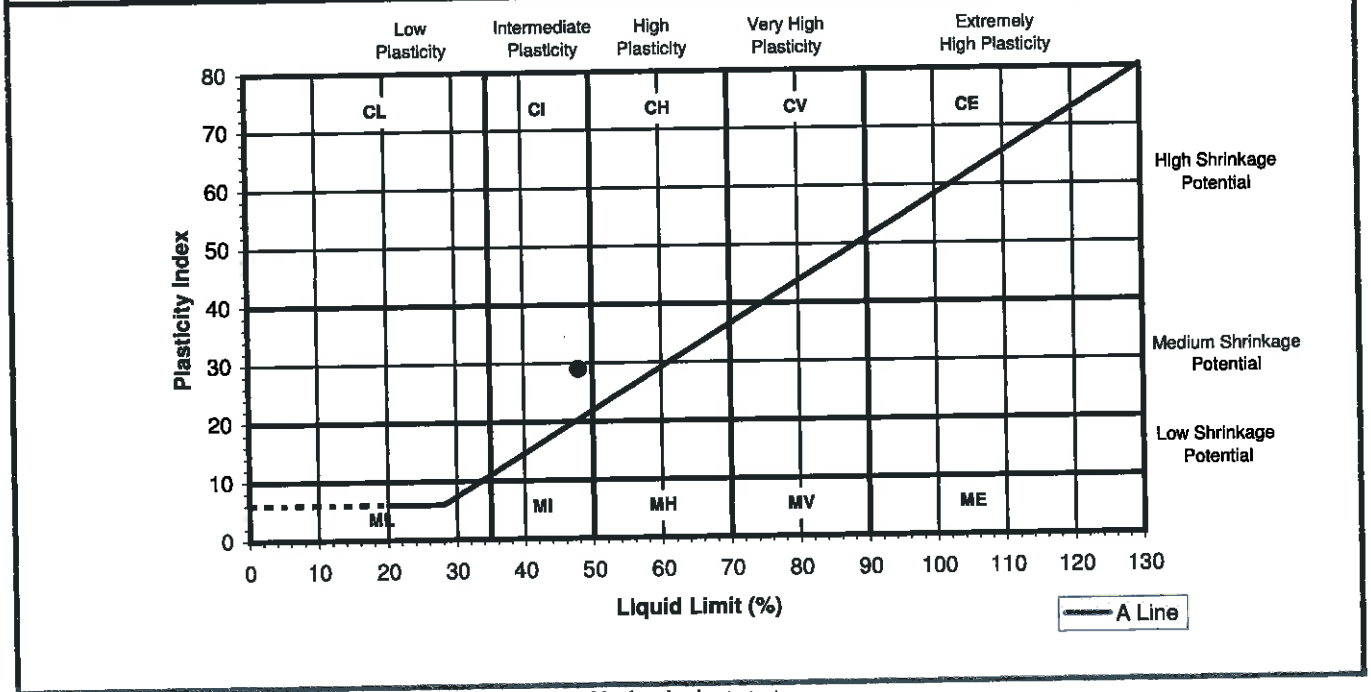
Determination of Moisture Content and Atterberg Limits

Client:	Soiltechnics Limited	Report No:	51021428/16/02
Client Address:	Cedar Barn,	Batch Number:	DAM0058803
	White Lodge		
	Walgrave	Client Reference:	STN3505NM
Postcode:	NN6 9PY	Sampled by:	Client
Contact:	Andy Keeler	Date Sampled:	09.02.16
		Date Received:	11.02.16
Site:	Chipping Lane, Longbridge	Tested From:	17.02.16-18.02.16
		Sample Type:	Disturbed

Test Results:

Description: Brown CLAY

Laboratory Reference	Location	Depth (m)	As Received Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
45270322	DTS04	0.90-1.00	N/A	48	19	29	100



Sample Preparation: As Received, Coarse particles removed by hand prior to test
Estimated % passing 425µm BS Test Sieve

Certified that the laboratory testing was carried out in accordance with BS 1377-2: 1990: Method 3.2, 4.4 and 5

Page: 1 of 1
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TEST REPORT

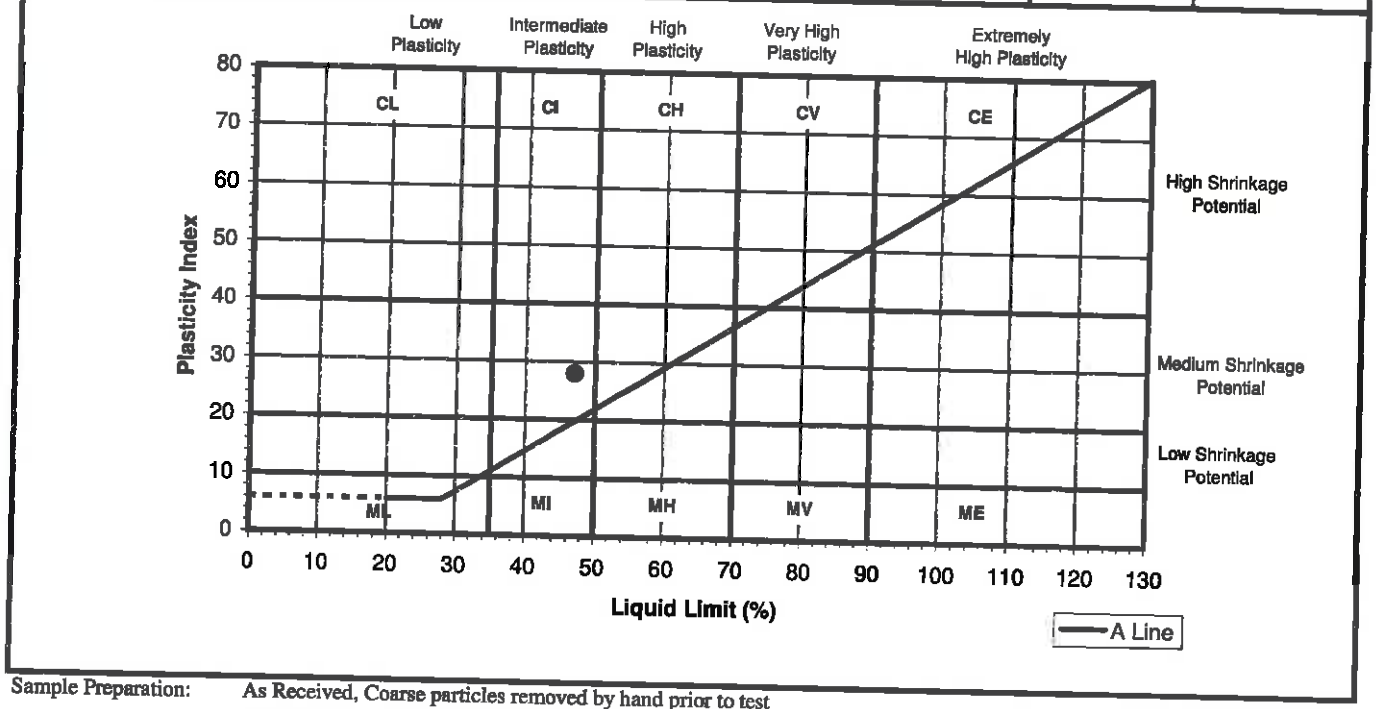
Determination of Moisture Content and Atterberg Limits

Client:	Soiltechnics Limited	Report No:	51021428/16/03
Client Address:	Cedar Barn, White Lodge Walgrave	Batch Number:	DAM0058803
Postcode:	NN6 9PY	Client Reference:	STN3505NM
Contact:	Andy Keeler	Sampled by:	Client
		Date Sampled:	09.02.16
Site:	Chipping Lane, Longbridge	Date Received:	11.02.16
		Tested From:	17.02.16-18.02.16
		Sample Type:	Disturbed

Test Results:

Description: Brown sandy CLAY

Laboratory Reference	Location	Depth (m)	As Received Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
45270323	DTS06	1.00-1.10	N/A	47	19	28	100



Sample Preparation: As Received, Coarse particles removed by hand prior to test
Estimated % passing 425µm BS Test Sieve

Certified that the laboratory testing was carried out in accordance with BS 1377-2: 1990: Method 3.2, 4.4 and 5

Page: 1 of 1
Date: 23.02.16

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TEST REPORT

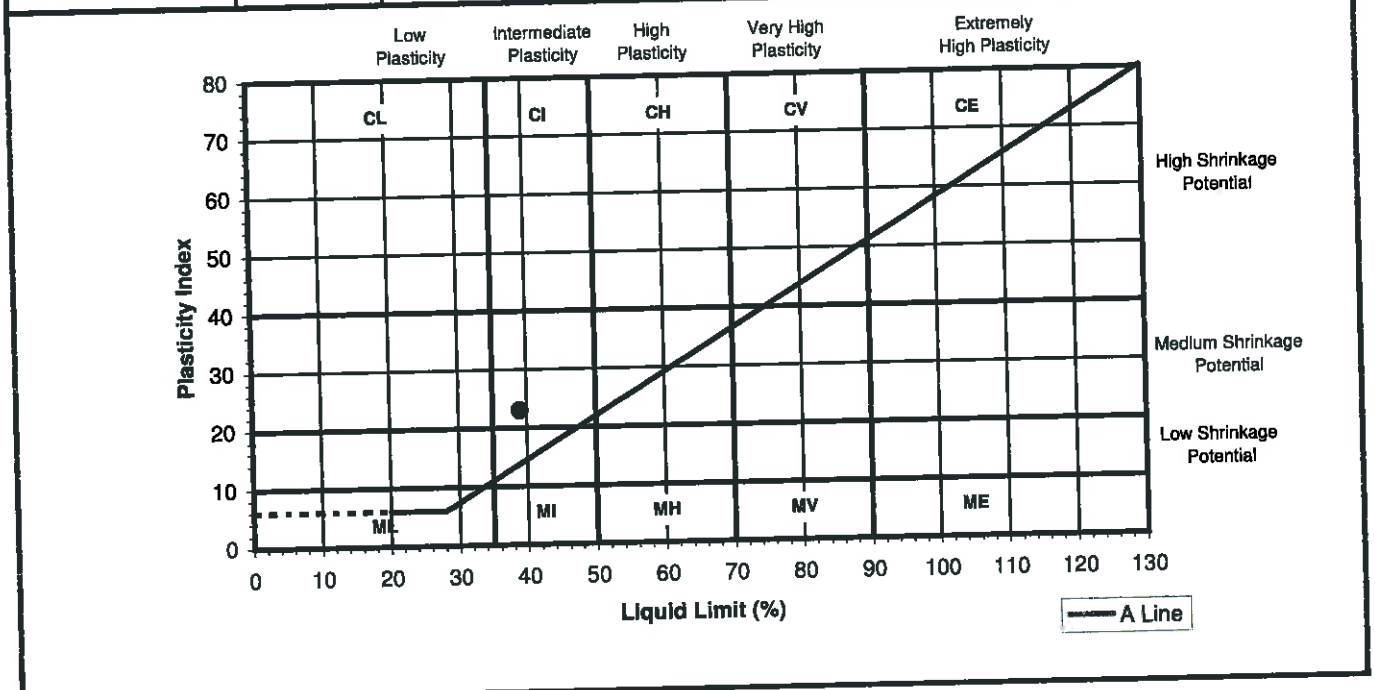
Determination of Moisture Content and Atterberg Limits

Client:	Soiltechnics Limited	Report No:	51021428/16/04
Client Address:	Cedar Barn,	Batch Number:	DAM0058803
	White Lodge		
	Walgrave	Client Reference:	STN3505NM
Postcode:	NN6 9PY	Sampled by:	Client
Contact:	Andy Keeler	Date Sampled:	09.02.16
		Date Received:	11.02.16
Site:	Chipping Lane, Longbridge	Tested From:	17.02.16-19.02.16
		Sample Type:	Disturbed

Test Results:

Description: Brown sandy CLAY

Laboratory Reference	Location	Depth (m)	As Received Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
45270324	DTS07	0.90-1.00	N/A	39	16	23	100



Sample Preparation: As Received, Coarse particles removed by hand prior to test
Estimated % passing 425µm BS Test Sieve

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Page: 1 of 1
Date: 23.02.16

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TEST REPORT

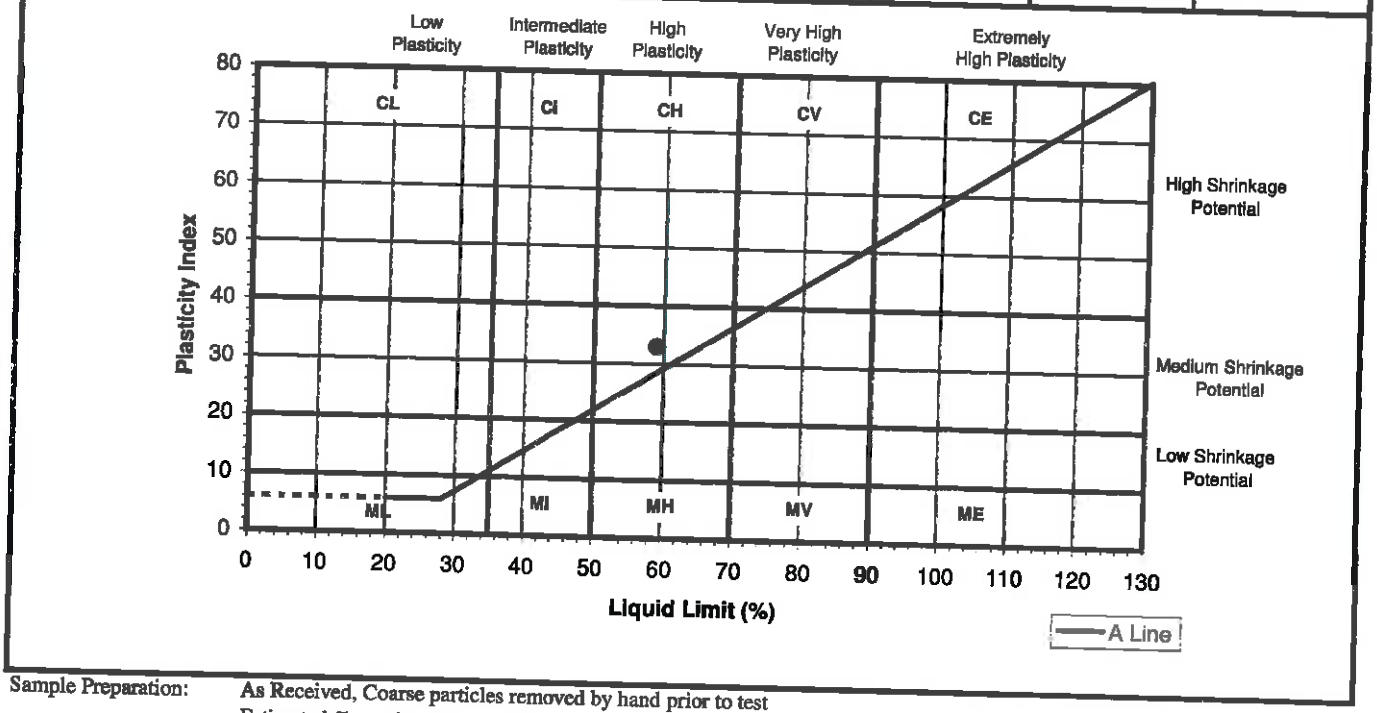
Determination of Moisture Content and Atterberg Limits

Client:	Soiltechnics Limited	Report No:	51021428/16/05
Client Address:	Cedar Barn, White Lodge Walgrave	Batch Number:	DAM0058803
Postcode:	NN6 9PY	Client Reference:	STN3505NM
Contact:	Andy Keeler	Sampled by:	Client
		Date Sampled:	09.02.16
Site:	Chipping Lane, Longbridge	Date Received:	11.02.16
		Tested From:	17.02.16-19.02.16
		Sample Type:	Disturbed

Test Results:

Description: Brown grey sandy CLAY

Laboratory Reference	Location	Depth (m)	As Received Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
45270325	TP05	0.60	N/A	59	26	33	100



Sample Preparation: As Received, Coarse particles removed by hand prior to test
Estimated % passing 425µm BS Test Sieve

Certified that the laboratory testing was carried out in accordance with BS 1377-2: 1990: Method 3.2, 4.4 and 5

Page: 1 of 1
Date: 23.02.16

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TEST REPORT

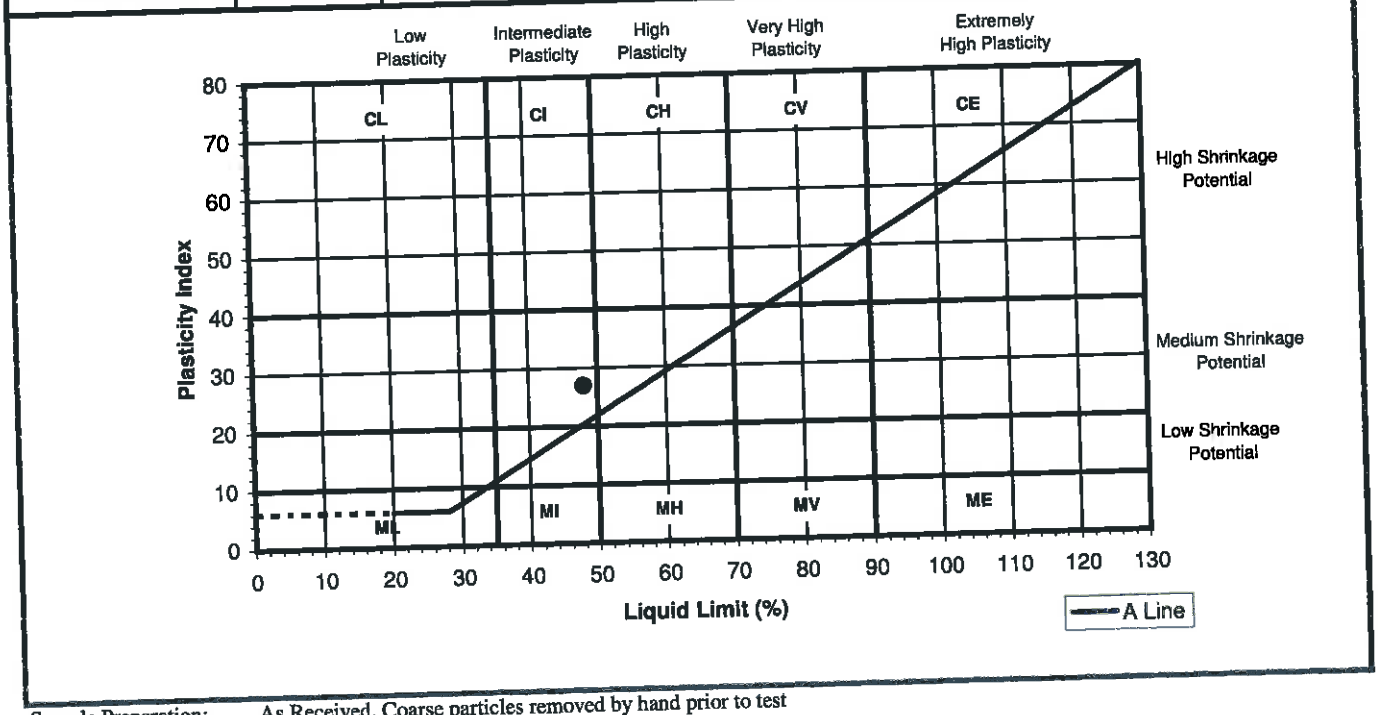
Determination of Moisture Content and Atterberg Limits

Client:	Soiltechnics Limited	Report No:	51021428/16/06
Client Address:	Cedar Barn, White Lodge Walgrave	Batch Number:	DAM0058803
		Client Reference:	STN3505NM
Postcode:	NN6 9PY	Sampled by:	Client
Contact:	Andy Keeler	Date Sampled:	09.02.16
		Date Received:	11.02.16
Site:	Chipping Lane, Longbridge	Tested From:	17.02.16-19.02.16
		Sample Type:	Disturbed

Test Results:

Description: Brown CLAY

Laboratory Reference	Location	Depth (m)	As Received Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
45270326	TP06	1.00	N/A	48	21	27	100



Sample Preparation: As Received, Coarse particles removed by hand prior to test
Estimated % passing 425µm BS Test Sieve

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Page: 1 of 1
Date: 23.02.16

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TEST REPORT

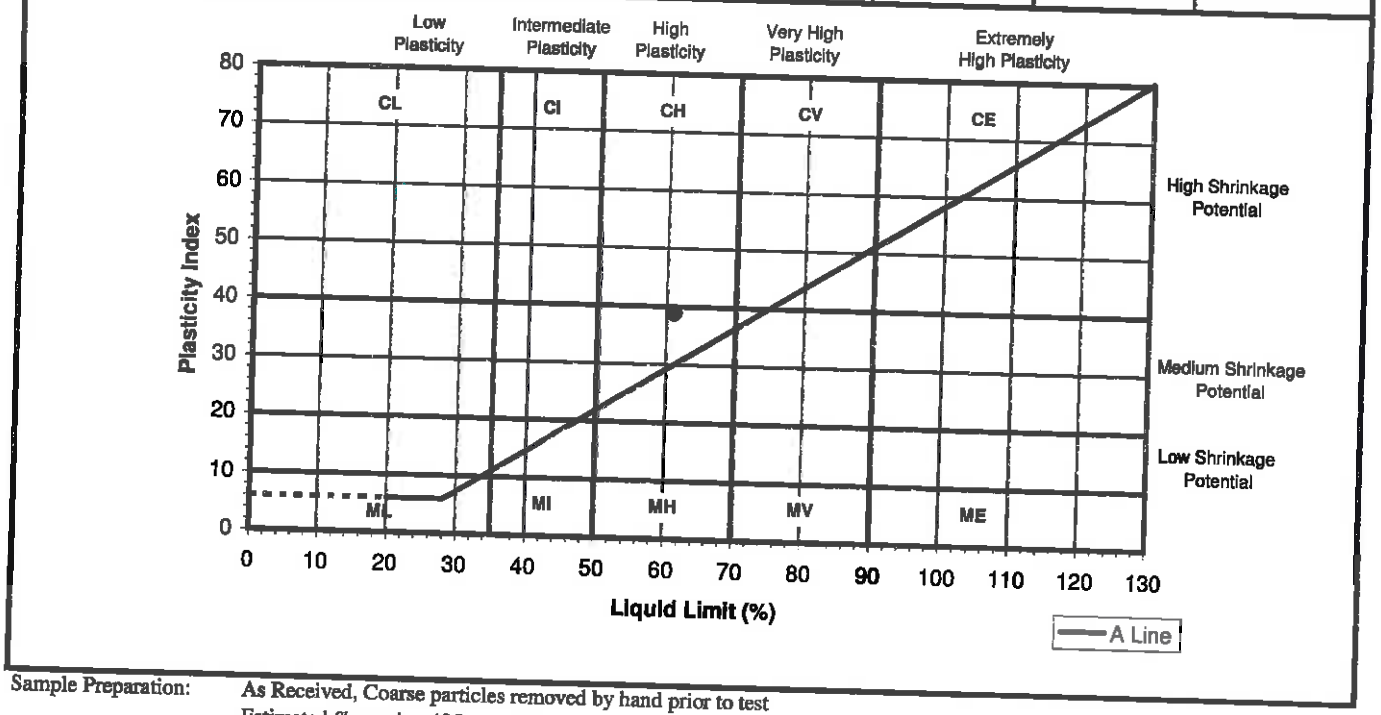
Determination of Moisture Content and Atterberg Limits

Client:	Soiltechnics Limited	Report No:	51021428/16/07
Client Address:	Cedar Barn, White Lodge Walgrave	Batch Number:	DAM0058803
Postcode:	NN6 9PY	Client Reference:	STN3505NM
Contact:	Andy Keeler	Sampled by:	Client
		Date Sampled:	09.02.16
Site:	Chipping Lane, Longbridge	Date Received:	11.02.16
		Tested From:	17.02.16-19.02.16
		Sample Type:	Disturbed

Test Results:

Description: Brown slightly sandy CLAY

Laboratory Reference	Location	Depth (m)	As Received Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
45270327	TP15	0.50	N/A	61	22	39	100



Sample Preparation: As Received, Coarse particles removed by hand prior to test
Estimated % passing 425µm BS Test Sieve

Certified that the laboratory testing was carried out in accordance with BS 1377-2: 1990: Method 3.2, 4.4 and 5

Page: 1 of 1
Date: 23.02.16

Signed M. Carr

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TEST REPORT

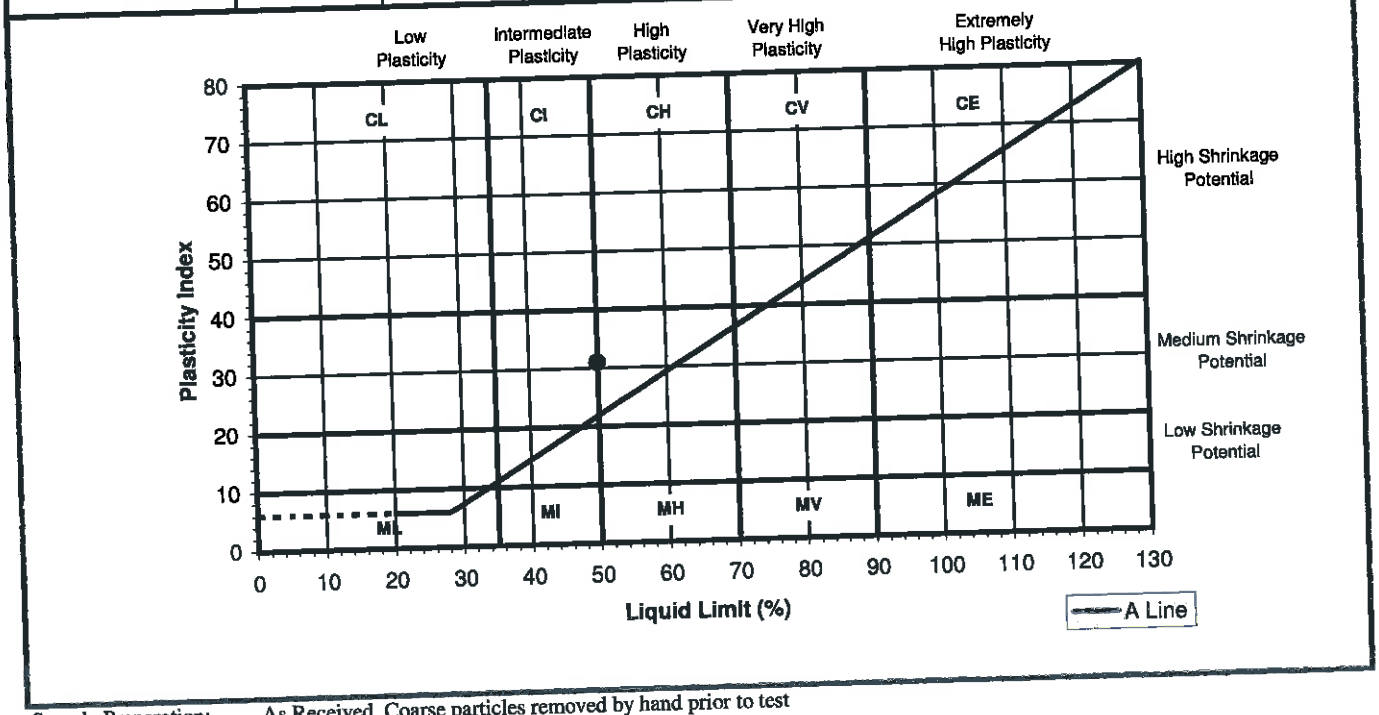
Determination of Moisture Content and Atterberg Limits

Client:	Soiltechnics Limited	Report No:	51021428/16/08
Client Address:	Cedar Barn,	Batch Number:	DAM0058803
	White Lodge		
	Walgrave	Client Reference:	STN3505NM
Postcode:	NN6 9PY	Sampled by:	Client
Contact:	Andy Keeler	Date Sampled:	09.02.16
		Date Received:	11.02.16
Site:	Chipping Lane, Longbridge	Tested From:	17.02.16-19.02.16
		Sample Type:	Disturbed

Test Results:

Description: Brown CLAY

Laboratory Reference	Location	Depth (m)	As Received Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
45270328	TP20	0.60	N/A	50	19	31	100



Sample Preparation: As Received, Coarse particles removed by hand prior to test
Estimated % passing 425µm BS Test Sieve

Certified that the laboratory testing was carried out in accordance with BS 1377-2: 1990: Method 3.2, 4.4 and 5

Page: 1 of 1
Date: 23.02.16

Signed M. Carr

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For and on behalf of Environmental Scientifics Group

UKAS TESTING
2183

Chemtest
The right chemistry to deliver results
Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.co.uk

Final Report

Report No.:	16-03414-1
Initial Date of Issue:	18-Feb-2016
Client	Soiltechnics Limited
Client Address:	Cedar Barn White Lodge Walgrave Northampton Northamptonshire NN6 9PY
Contact(s):	Rachel Brown
Project	STN3505NM - Chipping Lane, Longridge
Quotation No.:	
Order No.:	20922
No. of Samples:	31
Turnaround (Wkdays):	5
Date Approved:	18-Feb-2016
Approved By:	

Date Received:	12-Feb-2016
Date Instructed:	12-Feb-2016
Target Date:	18-Feb-2016
Results Due:	18-Feb-2016

Details: Keith Jones, Technical Manager

Chemtest
The right chemistry to deliver results

Results - Leachate

Project: STN3505NM - Chipping Lane, Longridge

Client: Soiltechnics Limited				Chemtest Job No.:	16-03414	16-03414	16-03414	16-03414
Quotation No.:				Chemtest Sample ID.:	254258	254266	254269	254276
Order No.: 20922				Client Sample Ref.:	TP03	TP08	TP11	TP16
				Client Sample ID.:	1-048	1-047	1-046	1-045
				Sample Type:	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):	0.10	0.10	0.10	0.10
				Date Sampled:	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**				
pH	U	1010		N/A	7.1	6.5	6.5	6.4
Nitrate	U	1220	mg/l	0.50	3.0	2.2	2.9	0.88
Sulphate	U	1220	mg/l	1.0	4.6	1.4	1.5	3.1
Cyanide (Total)	U	1300	mg/l	0.050	< 0.050	< 0.050	< 0.050	< 0.050
Cyanide (Free)	U	1300	mg/l	0.050	< 0.050	< 0.050	< 0.050	< 0.050
Cyanide (Complex)	U	1300	mg/l	0.050	< 0.050	< 0.050	< 0.050	< 0.050
Sulphide	U	1325	mg/l	0.050	0.065	< 0.050	< 0.050	0.057
Arsenic (Dissolved)	U	1450	µg/l	1.0	1.5	< 1.0	1.4	3.2
Boron (Dissolved)	U	1450	µg/l	20	< 20	< 20	< 20	< 20
Beryllium (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cadmium (Dissolved)	U	1450	µg/l	0.080	0.11	< 0.080	0.13	0.16
Chromium (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper (Dissolved)	U	1450	µg/l	1.0	14	4.8	12	18
Mercury (Dissolved)	U	1450	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Nickel (Dissolved)	U	1450	µg/l	1.0	3.0	1.7	3.8	4.2
Lead (Dissolved)	U	1450	µg/l	1.0	7.2	3.6	6.2	9.8
Selenium (Dissolved)	U	1450	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (Dissolved)	U	1450	µg/l	1.0	2.2	1.2	2.1	6.9
Zinc (Dissolved)	U	1450	µg/l	1.0	35	14	13	23
Naphthalene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	1800	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	U	1800	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Phenols	U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030

Chemtest
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Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Soiltechnics Limited													
Quotation No.:				Chemtest Job No.:	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414
Order No.: 20922				Chemtest Sample ID.:	254250	254251	254252	254253	254254	254255	254256	254257
				Client Sample Ref.:	DTS02	DTS03	DTS04	DTS05	DTS07	TP01	TP01	TP01
				Client Sample ID.:	1-001	1-007	1-013	1-019	1-030	1-052	1-055	1-060
				Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):	0.10	0.10	0.10	0.10	0.10	1.00	0.60	0.10
				Date Sampled:	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
Moisture	N	2030	%	0.020	32	26	35	33	30	22	28	39
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones, Roots	Stones	Stones, Roots	Stones, Roots	Stones, Roots	NONE	NONE	Stones, Roots
Soil Texture	N	2040		N/A	Loam	Loam	Loam	Loam	Loam	Clay	Clay	Loam
pH	M	2010		N/A	5.8	6.2	5.8	6.3	5.4	8.1	7.0	6.1
Boron (Hot Water Soluble)	M	2120	mg/kg	0.40	0.60	0.46	0.52	0.68	0.51			0.45
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010						< 0.010	0.013	
Total Sulphur	M	2175	%	0.010						0.020	0.030	
Cyanide (Complex)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50
Cyanide (Free)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50
Cyanide (Total)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50
Sulphate (Acid Soluble)	M	2430	%	0.010						< 0.010	< 0.010	
Arsenic	M	2450	mg/kg	1.0	6.2	12	15	9.6	11			7.6
Beryllium	U	2450	mg/kg	1.0	< 1.0	1.3	1.3	1.0	< 1.0			1.5
Cadmium	M	2450	mg/kg	0.10	0.20	0.42	0.56	0.39	0.35			0.50
Chromium	M	2450	mg/kg	1.0	14	34	35	27	29			46
Copper	M	2450	mg/kg	0.50	15	35	37	35	54			30
Mercury	M	2450	mg/kg	0.10	< 0.10	0.17	0.16	0.10	0.11			0.12
Nickel	M	2450	mg/kg	0.50	10	29	30	23	22			34
Lead	M	2450	mg/kg	0.50	38	73	83	67	72			39
Selenium	M	2450	mg/kg	0.20	0.33	0.37	0.55	0.51	0.44			0.58
Vanadium	U	2450	mg/kg	5.0	15	36	38	28	28			41
Zinc	M	2450	mg/kg	0.50	65	120	120	96	93			72
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50			< 0.50
Organic Matter	M	2625	%	0.40	4.3	6.6	7.6	8.5	5.9			11
Total Organic Carbon	M	2625	%	0.20								
Aliphatic TPH >C5-C6	N	2680	mg/kg	0.010								
Aliphatic TPH >C6-C8	N	2680	mg/kg	0.010								
Aliphatic TPH >C8-C10	N	2680	mg/kg	0.10								
Aliphatic TPH >C10-C12	N	2680	mg/kg	0.10								
Aliphatic TPH >C12-C16	N	2680	mg/kg	0.10								
Aliphatic TPH >C16-C21	N	2680	mg/kg	0.10								
Aliphatic TPH >C21-C35	N	2680	mg/kg	0.10								
Aliphatic TPH >C35-C44	N	2680	mg/kg	0.10								
Total Aliphatic Hydrocarbons	N	2680	mg/kg	1.0								
Aromatic TPH >C5-C7	N	2680	mg/kg	0.010								
Aromatic TPH >C7-C8	N	2680	mg/kg	0.010								
Aromatic TPH >C8-C10	N	2680	mg/kg	0.10								
Aromatic TPH >C10-C12	N	2680	mg/kg	0.10								

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Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Soiltechnics Limited	Chemtest Job No.:	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414
Quotation No.:	Chemtest Sample ID.:	254250	254251	254252	254253	254254	254255	254256	254257
Order No.: 20922	Client Sample Ref.:	DTS02	DTS03	DTS04	DTS05	DTS07	TP01	TP01	TP01
	Client Sample ID.:	1-001	1-007	1-013	1-019	1-030	1-052	1-055	1-060
	Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):	0.10	0.10	0.10	0.10	0.10	1.00	0.60	0.10
	Date Sampled:	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016

Determinand	Accred.	SOP	Units	LOD							
Aromatic TPH >C12-C16	N	2680	mg/kg	0.10							
Aromatic TPH >C16-C21	N	2680	mg/kg	0.10							
Aromatic TPH >C21-C35	N	2680	mg/kg	0.10							
Aromatic TPH >C35-C44	N	2680	mg/kg	0.10							
Total Aromatic Hydrocarbons	N	2680	mg/kg	1.0							
Total Petroleum Hydrocarbons	N	2680	mg/kg	2.0							
Dichlorodifluoromethane	U	2760	µg/kg	1.0							
Chloromethane	M	2760	µg/kg	1.0							
Vinyl Chloride	M	2760	µg/kg	1.0							
Bromomethane	M	2760	µg/kg	20							
Chloroethane	U	2760	µg/kg	2.0							
Trichlorofluoromethane	M	2760	µg/kg	1.0							
1,1-Dichloroethene	M	2760	µg/kg	1.0							
Trans 1,2-Dichloroethene	M	2760	µg/kg	1.0							
1,1-Dichloroethane	M	2760	µg/kg	1.0							
cis 1,2-Dichloroethene	M	2760	µg/kg	1.0							
Bromochloromethane	U	2760	µg/kg	5.0							
Trichloromethane	M	2760	µg/kg	1.0							
1,1,1-Trichloroethane	M	2760	µg/kg	1.0							
Tetrachloromethane	M	2760	µg/kg	1.0							
1,1-Dichloropropene	U	2760	µg/kg	1.0							
Benzene	M	2760	µg/kg	1.0							
1,2-Dichloroethane	M	2760	µg/kg	2.0							
Trichloroethene	M	2760	µg/kg	1.0							
1,2-Dichloropropane	M	2760	µg/kg	1.0							
Dibromomethane	M	2760	µg/kg	1.0							
Bromodichloromethane	M	2760	µg/kg	5.0							
cis-1,3-Dichloropropene	N	2760	µg/kg	10							
Toluene	M	2760	µg/kg	1.0							
Trans-1,3-Dichloropropene	N	2760	µg/kg	10							
1,1,2-Trichloroethane	M	2760	µg/kg	10							
Tetrachloroethene	M	2760	µg/kg	1.0							
1,3-Dichloropropane	U	2760	µg/kg	2.0							
Dibromochloromethane	U	2760	µg/kg	10							
1,2-Dibromoethane	M	2760	µg/kg	5.0							
Chlorobenzene	M	2760	µg/kg	1.0							
1,1,1,2-Tetrachloroethane	M	2760	µg/kg	2.0							
Ethylbenzene	M	2760	µg/kg	1.0							
m & p-Xylene	M	2760	µg/kg	1.0							

Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Solitechnics Limited					Chemtest Job No.:	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414
Quotation No.:					Chemtest Sample ID.:	254250	254251	254252	254253	254254	254255	254256	254257
Order No.: 20922					Client Sample Ref.:	DTS02	DTS03	DTS04	DTS05	DTS07	TP01	TP01	TP01
					Client Sample ID.:	1-001	1-007	1-013	1-019	1-030	1-052	1-055	1-060
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.10	0.10	0.10	0.10	0.10	1.00	0.60	0.10
					Date Sampled:	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
o-Xylene	M	2760	µg/kg	1.0									
Styrene	M	2760	µg/kg	1.0									
Tribromomethane	U	2760	µg/kg	1.0									
Isopropylbenzene	M	2760	µg/kg	1.0									
Bromobenzene	M	2760	µg/kg	1.0									
1,2,3-Trichloropropane	N	2760	µg/kg	50									
N-Propylbenzene	U	2760	µg/kg	1.0									
2-Chlorotoluene	M	2760	µg/kg	1.0									
1,3,5-Trimethylbenzene	M	2760	µg/kg	1.0									
4-Chlorotoluene	U	2760	µg/kg	1.0									
Tert-Butylbenzene	U	2760	µg/kg	1.0									
1,2,4-Trimethylbenzene	M	2760	µg/kg	1.0									
Sec-Butylbenzene	U	2760	µg/kg	1.0									
1,3-Dichlorobenzene	M	2760	µg/kg	1.0									
4-Isopropyltoluene	U	2760	µg/kg	1.0									
1,4-Dichlorobenzene	M	2760	µg/kg	1.0									
N-Butylbenzene	U	2760	µg/kg	1.0									
1,2-Dichlorobenzene	M	2760	µg/kg	1.0									
1,2-Dibromo-3-Chloropropane	U	2760	µg/kg	50									
1,2,4-Trichlorobenzene	M	2760	µg/kg	1.0									
Hexachlorobutadiene	U	2760	µg/kg	1.0									
1,2,3-Trichlorobenzene	U	2760	µg/kg	2.0									
Carbon Disulphide	N	2760	µg/kg	50									
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0									
N-Nitrosodimethylamine	N	2790	mg/kg	0.50									
Phenol	N	2790	mg/kg	0.50									
2-Chlorophenol	N	2790	mg/kg	0.50									
Bis-(2-Chloroethyl)Ether	N	2790	mg/kg	0.50									
1,3-Dichlorobenzene	N	2790	mg/kg	0.50									
1,4-Dichlorobenzene	N	2790	mg/kg	0.50									
1,2-Dichlorobenzene	N	2790	mg/kg	0.50									
2-Methylphenol	N	2790	mg/kg	0.50									
Bis(2-Chloroisopropyl)Ether	N	2790	mg/kg	0.50									
Hexachloroethane	N	2790	mg/kg	0.50									
N-Nitrosodi-n-propylamine	N	2790	mg/kg	0.50									
4-Methylphenol	N	2790	mg/kg	0.50									
Nitrobenzene	N	2790	mg/kg	0.50									
Isophorone	N	2790	mg/kg	0.50									
2-Nitrophenol	N	2790	mg/kg	0.50									

Chemtest
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Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Soiltechnics Limited	Chemtest Job No.:	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414
Quotation No.:	Chemtest Sample ID.:	254250	254251	254252	254253	254254	254255	254256	254257
Order No.: 20922	Client Sample Ref.:	DTS02	DTS03	DTS04	DTS05	DTS07	TP01	TP01	TP01
	Client Sample ID.:	1-001	1-007	1-013	1-019	1-030	1-052	1-055	1-060
	Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):	0.10	0.10	0.10	0.10	0.10	1.00	0.60	0.10
	Date Sampled:	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016

Determinand	Accred.	SOP	Units	LOD							
2,4-Dimethylphenol	N	2790	mg/kg	0.50							
Bis(2-Chloroethoxy)Methane	N	2790	mg/kg	0.50							
2,4-Dichlorophenol	N	2790	mg/kg	0.50							
1,2,4-Trichlorobenzene	N	2790	mg/kg	0.50							
Naphthalene	N	2790	mg/kg	0.50							
4-Chloroaniline	N	2790	mg/kg	0.50							
Hexachlorobutadiene	N	2790	mg/kg	0.50							
4-Chloro-3-Methylphenol	N	2790	mg/kg	0.50							
2-Methylnaphthalene	N	2790	mg/kg	0.50							
Hexachlorocyclopentadiene	N	2790	mg/kg	0.50							
2,4,6-Trichlorophenol	N	2790	mg/kg	0.50							
2,4,5-Trichlorophenol	N	2790	mg/kg	0.50							
2-Chloronaphthalene	N	2790	mg/kg	0.50							
2-Nitroaniline	N	2790	mg/kg	0.50							
Acenaphthylene	N	2790	mg/kg	0.50							
Dimethylphthalate	N	2790	mg/kg	0.50							
2,6-Dinitrotoluene	N	2790	mg/kg	0.50							
Acenaphthene	N	2790	mg/kg	0.50							
Dibenzofuran	N	2790	mg/kg	0.50							
4-Chlorophenylphenylether	N	2790	mg/kg	0.50							
2,4-Dinitrotoluene	N	2790	mg/kg	0.50							
Fluorene	N	2790	mg/kg	0.50							
Diethyl Phthalate	N	2790	mg/kg	0.50							
4-Nitroaniline	N	2790	mg/kg	0.50							
2-Methyl-4,6-Dinitrophenol	N	2790	mg/kg	0.50							
Azobenzene	N	2790	mg/kg	0.50							
4-Bromophenylphenyl Ether	N	2790	mg/kg	0.50							
Hexachlorobenzene	N	2790	mg/kg	0.50							
Pentachlorophenol	N	2790	mg/kg	0.50							
Phenanthrene	N	2790	mg/kg	0.50							
Anthracene	N	2790	mg/kg	0.50							
Carbazole	N	2790	mg/kg	0.50							
Di-N-Butyl Phthalate	N	2790	mg/kg	0.50							
Fluoranthene	N	2790	mg/kg	0.50							
Pyrene	N	2790	mg/kg	0.50							
Butylbenzyl Phthalate	N	2790	mg/kg	0.50							
Benzo[a]anthracene	N	2790	mg/kg	0.50							
Chrysene	N	2790	mg/kg	0.50							
Bis(2-Ethylhexyl)Phthalate	N	2790	mg/kg	0.50							

Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Soiltechnics Limited													
Quotation No.:			Chemtest Job No.:		16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414
Order No.: 20922			Chemtest Sample ID.:		254250	254251	254252	254253	254254	254255	254256	254257
			Client Sample Ref.:		DTS02	DTS03	DTS04	DTS05	DTS07	TP01	TP01	TP01
			Client Sample ID.:		1-001	1-007	1-013	1-019	1-030	1-052	1-055	1-060
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.10	0.10	0.10	0.10	0.10	1.00	0.60	0.10
			Date Sampled:		09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
Di-N-Octyl Phthalate	N	2790	mg/kg	0.50								
Benzo[b]fluoranthene	N	2790	mg/kg	0.50								
Benzo[k]fluoranthene	N	2790	mg/kg	0.50								
Benzo[a]pyrene	N	2790	mg/kg	0.50								
Indeno(1,2,3-c,d)Pyrene	N	2790	mg/kg	0.50								
Dibenz(a,h)Anthracene	N	2790	mg/kg	0.50								
Benzo[g,h,i]perylene	N	2790	mg/kg	0.50								
Naphthalene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			< 0.10
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			< 0.10
Acenaphthene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			< 0.10
Fluorene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			< 0.10
Phenanthrene	M	2800	mg/kg	0.10	< 0.10	0.11	0.11	< 0.10	< 0.10			< 0.10
Anthracene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			< 0.10
Fluoranthene	M	2800	mg/kg	0.10	< 0.10	0.24	0.19	< 0.10	0.21			< 0.10
Pyrene	M	2800	mg/kg	0.10	< 0.10	0.21	0.16	< 0.10	0.16			< 0.10
Benzo[a]anthracene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			< 0.10
Chrysene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			< 0.10
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			< 0.10
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			< 0.10
Benzo[a]pyrene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			< 0.10
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10			< 0.10
Total Of 16 PAH's	N	2800	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0			< 2.0
Total Phenols	M	2920	mg/kg	0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30			< 0.30

Chemtest
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Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Soiltechnics Limited														
				Chemtest Job No.:	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414
Quotation No.:				Chemtest Sample ID.:	254259	254260	254261	254262	254263	254264	254265	254267	254268
Order No.: 20922				Client Sample Ref.:	TP04	TP05	TP05	TP06	TP06	TP07	TP07	TP09	TP10
				Client Sample ID.:	1-064	1-050	1-065	1-039	1-058	1-051	1-057	1-059	1-040
				Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):	0.10	1.10	0.10	0.50	0.10	0.70	0.10	0.10	1.00
				Date Sampled:	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
Moisture	N	2030	%	0.020	32	16	26	24	37	28	15	23	15
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Roots	NONE	Roots	NONE	Roots	NONE	NONE	Roots	NONE
Soil Texture	N	2040		N/A	Loam	Clay	Loam	Clay	Loam	Clay	Loam	Loam	Clay
pH	M	2010		N/A	5.9	8.0	6.2		5.7	6.0	6.1	6.0	
Boron (Hot Water Soluble)	M	2120	mg/kg	0.40	0.55		< 0.40		0.51		< 0.40	< 0.40	
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010		< 0.010				< 0.010			
Total Sulphur	M	2175	%	0.010		0.020				0.050			
Cyanide (Complex)	M	2300	mg/kg	0.50	< 0.50		< 0.50		< 0.50		< 0.50	< 0.50	
Cyanide (Free)	M	2300	mg/kg	0.50	< 0.50		< 0.50		< 0.50		< 0.50	< 0.50	
Cyanide (Total)	M	2300	mg/kg	0.50	< 0.50		< 0.50		< 0.50		< 0.50	< 0.50	
Sulphate (Acid Soluble)	M	2430	%	0.010		< 0.010				0.035			
Arsenic	M	2450	mg/kg	1.0	14		8.0		11		2.9	5.1	
Beryllium	U	2450	mg/kg	1.0	1.4		< 1.0		< 1.0		< 1.0	< 1.0	
Cadmium	M	2450	mg/kg	0.10	0.43		0.28		0.23		0.10	0.14	
Chromium	M	2450	mg/kg	1.0	42		31		16		11	15	
Copper	M	2450	mg/kg	0.50	36		22		21		9.5	21	
Mercury	M	2450	mg/kg	0.10	0.13		14		0.13		< 0.10	< 0.10	
Nickel	M	2450	mg/kg	0.50	34		23		13		8.3	12	
Lead	M	2450	mg/kg	0.50	64		42		52		14	31	
Selenium	M	2450	mg/kg	0.20	0.29		0.37		0.39		0.21	0.27	
Vanadium	U	2450	mg/kg	5.0	45		32		22		12	17	
Zinc	M	2450	mg/kg	0.50	120		84		79		36	78	
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50		< 0.50		< 0.50		< 0.50	< 0.50	
Organic Matter	M	2625	%	0.40	8.3		4.7	1.3	5.2		2.1	3.1	0.71
Total Organic Carbon	M	2625	%	0.20				0.74					0.41
Aliphatic TPH >C5-C6	N	2680	mg/kg	0.010				< 0.010					< 0.010
Aliphatic TPH >C6-C8	N	2680	mg/kg	0.010				< 0.010					< 0.010
Aliphatic TPH >C8-C10	N	2680	mg/kg	0.10				< 0.10					< 0.10
Aliphatic TPH >C10-C12	N	2680	mg/kg	0.10				< 0.10					< 0.10
Aliphatic TPH >C12-C16	N	2680	mg/kg	0.10				< 0.10					< 0.10
Aliphatic TPH >C16-C21	N	2680	mg/kg	0.10				< 0.10					< 0.10
Aliphatic TPH >C21-C35	N	2680	mg/kg	0.10				< 0.10					< 0.10
Aliphatic TPH >C35-C44	N	2680	mg/kg	0.10				< 0.10					< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	1.0				< 1.0					< 0.010
Aromatic TPH >C5-C7	N	2680	mg/kg	0.010				< 0.010					< 0.010
Aromatic TPH >C7-C8	N	2680	mg/kg	0.010				< 0.010					< 0.010
Aromatic TPH >C8-C10	N	2680	mg/kg	0.10				< 0.10					< 0.10
Aromatic TPH >C10-C12	N	2680	mg/kg	0.10				< 0.10					< 0.10

Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Soiltechnics Limited					Chemtest Job No.:	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414
Quotation No.:					Chemtest Sample ID.:	254259	254260	254261	254262	254263	254264	254265	254267	254268
Order No.: 20922					Client Sample Ref.:	TP04	TP05	TP05	TP06	TP06	TP07	TP07	TP09	TP10
					Client Sample ID.:	1-064	1-050	1-065	1-039	1-058	1-051	1-057	1-059	1-040
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.10	1.10	0.10	0.50	0.10	0.70	0.10	0.10	1.00
					Date Sampled:	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Aromatic TPH >C12-C16	N	2680	mg/kg	0.10					< 0.10					< 0.10
Aromatic TPH >C16-C21	N	2680	mg/kg	0.10					< 0.10					< 0.10
Aromatic TPH >C21-C35	N	2680	mg/kg	0.10					< 0.10					< 0.10
Aromatic TPH >C35-C44	N	2680	mg/kg	0.10					< 0.10					< 0.10
Total Aromatic Hydrocarbons	N	2680	mg/kg	1.0					< 1.0					< 1.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	2.0					< 2.0					< 2.0
Dichlorodifluoromethane	U	2760	µg/kg	1.0					< 1.0					< 1.0
Chloromethane	M	2760	µg/kg	1.0					< 1.0					< 1.0
Vinyl Chloride	M	2760	µg/kg	1.0					< 1.0					< 1.0
Bromomethane	M	2760	µg/kg	20					< 20					< 20
Chloroethane	U	2760	µg/kg	2.0					< 2.0					< 2.0
Trichlorofluoromethane	M	2760	µg/kg	1.0					< 1.0					< 1.0
1,1-Dichloroethene	M	2760	µg/kg	1.0					< 1.0					< 1.0
Trans 1,2-Dichloroethene	M	2760	µg/kg	1.0					< 1.0					< 1.0
1,1-Dichloroethane	M	2760	µg/kg	1.0					< 1.0					< 1.0
cis 1,2-Dichloroethene	M	2760	µg/kg	1.0					< 1.0					< 1.0
Bromochloromethane	U	2760	µg/kg	5.0					< 5.0					< 5.0
Trichloromethane	M	2760	µg/kg	1.0					< 1.0					< 1.0
1,1,1-Trichloroethane	M	2760	µg/kg	1.0					< 1.0					< 1.0
Tetrachloromethane	M	2760	µg/kg	1.0					< 1.0					< 1.0
1,1-Dichloropropene	U	2760	µg/kg	1.0					< 1.0					< 1.0
Benzene	M	2760	µg/kg	1.0					< 1.0					< 1.0
1,2-Dichloroethane	M	2760	µg/kg	2.0					< 2.0					< 2.0
Trichloroethene	M	2760	µg/kg	1.0					< 1.0					< 1.0
1,2-Dichloropropane	M	2760	µg/kg	1.0					< 1.0					< 1.0
Dibromomethane	M	2760	µg/kg	1.0					< 1.0					< 1.0
Bromodichloromethane	M	2760	µg/kg	5.0					< 5.0					< 5.0
cis-1,3-Dichloropropene	N	2760	µg/kg	10					< 10					< 10
Toluene	M	2760	µg/kg	1.0					< 1.0					< 1.0
Trans-1,3-Dichloropropene	N	2760	µg/kg	10					< 10					< 10
1,1,2-Trichloroethane	M	2760	µg/kg	10					< 10					< 10
Tetrachloroethene	M	2760	µg/kg	1.0					< 1.0					< 1.0
1,3-Dichloropropane	U	2760	µg/kg	2.0					< 2.0					< 2.0
Dibromochloromethane	U	2760	µg/kg	10					< 10					< 10
1,2-Dibromoethane	M	2760	µg/kg	5.0					< 5.0					< 5.0
Chlorobenzene	M	2760	µg/kg	1.0					< 1.0					< 1.0
1,1,1,2-Tetrachloroethane	M	2760	µg/kg	2.0					< 2.0					< 2.0
Ethylbenzene	M	2760	µg/kg	1.0					< 1.0					< 1.0
m & p-Xylene	M	2760	µg/kg	1.0					< 1.0					< 1.0

Chemtest
The right chemistry to deliver results

Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Soiltechnics Limited					Chemtest Job No.:	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414
Quotation No.:					Chemtest Sample ID.:	254259	254260	254261	254262	254263	254264	254265	254267	254268
Order No.: 20922					Client Sample Ref.:	TP04	TP05	TP05	TP06	TP06	TP07	TP07	TP09	TP10
					Client Sample ID.:	1-064	1-050	1-065	1-039	1-058	1-051	1-057	1-059	1-040
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.10	1.10	0.10	0.50	0.10	0.70	0.10	0.10	1.00
					Date Sampled:	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
o-Xylene	M	2760	µg/kg	1.0					< 1.0					< 1.0
Styrene	M	2760	µg/kg	1.0					< 1.0					< 1.0
Tribromomethane	U	2760	µg/kg	1.0					< 1.0					< 1.0
Isopropylbenzene	M	2760	µg/kg	1.0					< 1.0					< 1.0
Bromobenzene	M	2760	µg/kg	1.0					< 1.0					< 1.0
1,2,3-Trichloropropane	N	2760	µg/kg	50					< 50					< 50
N-Propylbenzene	U	2760	µg/kg	1.0					< 1.0					< 1.0
2-Chlorotoluene	M	2760	µg/kg	1.0					< 1.0					< 1.0
1,3,5-Trimethylbenzene	M	2760	µg/kg	1.0					< 1.0					< 1.0
4-Chlorotoluene	U	2760	µg/kg	1.0					< 1.0					< 1.0
Tert-Butylbenzene	U	2760	µg/kg	1.0					< 1.0					< 1.0
1,2,4-Trimethylbenzene	M	2760	µg/kg	1.0					< 1.0					< 1.0
Sec-Butylbenzene	U	2760	µg/kg	1.0					< 1.0					< 1.0
1,3-Dichlorobenzene	M	2760	µg/kg	1.0					< 1.0					< 1.0
4-Isopropyltoluene	U	2760	µg/kg	1.0					< 1.0					< 1.0
1,4-Dichlorobenzene	M	2760	µg/kg	1.0					< 1.0					< 1.0
N-Butylbenzene	U	2760	µg/kg	1.0					< 1.0					< 1.0
1,2-Dichlorobenzene	M	2760	µg/kg	1.0					< 1.0					< 50
1,2-Dibromo-3-Chloropropane	U	2760	µg/kg	50					< 50					< 1.0
1,2,4-Trichlorobenzene	M	2760	µg/kg	1.0					< 1.0					< 1.0
Hexachlorobutadiene	U	2760	µg/kg	1.0					< 1.0					< 1.0
1,2,3-Trichlorobenzene	U	2760	µg/kg	2.0					< 2.0					< 2.0
Carbon Disulphide	N	2760	µg/kg	50					< 50					< 50
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0					< 1.0					< 1.0
N-Nitrosodimethylamine	N	2790	mg/kg	0.50					< 1.0					< 0.50
Phenol	N	2790	mg/kg	0.50					< 0.50					< 0.50
2-Chlorophenol	N	2790	mg/kg	0.50					< 0.50					< 0.50
Bis-(2-Chloroethyl)Ether	N	2790	mg/kg	0.50					< 0.50					< 0.50
1,3-Dichlorobenzene	N	2790	mg/kg	0.50					< 0.50					< 0.50
1,4-Dichlorobenzene	N	2790	mg/kg	0.50					< 0.50					< 0.50
1,2-Dichlorobenzene	N	2790	mg/kg	0.50					< 0.50					< 0.50
2-Methylphenol	N	2790	mg/kg	0.50					< 0.50					< 0.50
Bis(2-Chloroisopropyl)Ether	N	2790	mg/kg	0.50					< 0.50					< 0.50
Hexachloroethane	N	2790	mg/kg	0.50					< 0.50					< 0.50
N-Nitrosodi-n-propylamine	N	2790	mg/kg	0.50					< 0.50					< 0.50
4-Methylphenol	N	2790	mg/kg	0.50					< 0.50					< 0.50
Nitrobenzene	N	2790	mg/kg	0.50					< 0.50					< 0.50
Isophorone	N	2790	mg/kg	0.50					< 0.50					< 0.50
2-Nitrophenol														

Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Soiltechnics Limited					Chemtest Job No.:	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414
Quotation No.:					Chemtest Sample ID.:	254259	254260	254261	254262	254263	254264	254265	254267	254268
Order No.: 20922					Client Sample Ref.:	TP04	TP05	TP05	TP06	TP06	TP07	TP07	TP09	TP10
					Client Sample ID.:	1-064	1-050	1-065	1-039	1-058	1-051	1-057	1-059	1-040
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.10	1.10	0.10	0.50	0.10	0.70	0.10	0.10	1.00
					Date Sampled:	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
2,4-Dimethylphenol	N	2790	mg/kg	0.50					< 0.50					< 0.50
Bis(2-Chloroethoxy)Methane	N	2790	mg/kg	0.50					< 0.50					< 0.50
2,4-Dichlorophenol	N	2790	mg/kg	0.50					< 0.50					< 0.50
1,2,4-Trichlorobenzene	N	2790	mg/kg	0.50					< 0.50					< 0.50
Naphthalene	N	2790	mg/kg	0.50					< 0.50					< 0.50
4-Chloroaniline	N	2790	mg/kg	0.50					< 0.50					< 0.50
Hexachlorobutadiene	N	2790	mg/kg	0.50					< 0.50					< 0.50
4-Chloro-3-Methylphenol	N	2790	mg/kg	0.50					< 0.50					< 0.50
2-Methylnaphthalene	N	2790	mg/kg	0.50					< 0.50					< 0.50
Hexachlorocyclopentadiene	N	2790	mg/kg	0.50					< 0.50					< 0.50
2,4,6-Trichlorophenol	N	2790	mg/kg	0.50					< 0.50					< 0.50
2,4,5-Trichlorophenol	N	2790	mg/kg	0.50					< 0.50					< 0.50
2-Chloronaphthalene	N	2790	mg/kg	0.50					< 0.50					< 0.50
2-Nitroaniline	N	2790	mg/kg	0.50					< 0.50					< 0.50
Acenaphthylene	N	2790	mg/kg	0.50					< 0.50					< 0.50
Dimethylphthalate	N	2790	mg/kg	0.50					< 0.50					< 0.50
2,6-Dinitrotoluene	N	2790	mg/kg	0.50					< 0.50					< 0.50
Acenaphthene	N	2790	mg/kg	0.50					< 0.50					< 0.50
Dibenzofuran	N	2790	mg/kg	0.50					< 0.50					< 0.50
4-Chlorophenylphenylether	N	2790	mg/kg	0.50					< 0.50					< 0.50
2,4-Dinitrotoluene	N	2790	mg/kg	0.50					< 0.50					< 0.50
Fluorene	N	2790	mg/kg	0.50					< 0.50					< 0.50
Diethyl Phthalate	N	2790	mg/kg	0.50					< 0.50					< 0.50
4-Nitroaniline	N	2790	mg/kg	0.50					< 0.50					< 0.50
2-Methyl-4,6-Dinitrophenol	N	2790	mg/kg	0.50					< 0.50					< 0.50
Azobenzene	N	2790	mg/kg	0.50					< 0.50					< 0.50
4-Bromophenylphenyl Ether	N	2790	mg/kg	0.50					< 0.50					< 0.50
Hexachlorobenzene	N	2790	mg/kg	0.50					< 0.50					< 0.50
Pentachlorophenol	N	2790	mg/kg	0.50					< 0.50					< 0.50
Phenanthrene	N	2790	mg/kg	0.50					< 0.50					< 0.50
Anthracene	N	2790	mg/kg	0.50					< 0.50					< 0.50
Carbazole	N	2790	mg/kg	0.50					< 0.50					< 0.50
Di-N-Butyl Phthalate	N	2790	mg/kg	0.50					< 0.50					< 0.50
Fluoranthene	N	2790	mg/kg	0.50					< 0.50					< 0.50
Pyrene	N	2790	mg/kg	0.50					< 0.50					< 0.50
Butylbenzyl Phthalate	N	2790	mg/kg	0.50					< 0.50					< 0.50
Benzo[a]anthracene	N	2790	mg/kg	0.50					< 0.50					< 0.50
Chrysene	N	2790	mg/kg	0.50					< 0.50					< 0.50
Bis(2-Ethylhexyl)Phthalate	N	2790	mg/kg	0.50					< 0.50					< 0.50

Chemtest
The right chemistry to deliver results

Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Soiltechnics Limited					Chemtest Job No.:	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414
Quotation No.:					Chemtest Sample ID.:	254259	254260	254261	254262	254263	254264	254265	254267	254268
Order No.: 20922					Client Sample Ref.:	TP04	TP05	TP05	TP06	TP06	TP07	TP07	TP09	TP10
					Client Sample ID.:	1-064	1-050	1-065	1-039	1-058	1-051	1-057	1-059	1-040
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.10	1.10	0.10	0.50	0.10	0.70	0.10	0.10	1.00
					Date Sampled:	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Di-N-Octyl Phthalate	N	2790	mg/kg	0.50				< 0.50						< 0.50
Benzo[b]fluoranthene	N	2790	mg/kg	0.50				< 0.50						< 0.50
Benzo[k]fluoranthene	N	2790	mg/kg	0.50				< 0.50						< 0.50
Benzo[a]pyrene	N	2790	mg/kg	0.50				< 0.50						< 0.50
Indeno(1,2,3-c,d)Pyrene	N	2790	mg/kg	0.50				< 0.50						< 0.50
Dibenz(a,h)Anthracene	N	2790	mg/kg	0.50				< 0.50						< 0.50
Benzo[g,h,i]perylene	N	2790	mg/kg	0.50				< 0.50						< 0.50
Naphthalene	M	2800	mg/kg	0.10	0.12		< 0.10	< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10		< 0.10	< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	M	2800	mg/kg	0.10	< 0.10		< 0.10	< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	M	2800	mg/kg	0.10	< 0.10		< 0.10	< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	M	2800	mg/kg	0.10	0.11		< 0.10	< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	M	2800	mg/kg	0.10	< 0.10		< 0.10	< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	M	2800	mg/kg	0.10	0.45		0.28	< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	M	2800	mg/kg	0.10	0.43		0.27	< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	M	2800	mg/kg	0.10	0.16		< 0.10	< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	M	2800	mg/kg	0.10	0.14		< 0.10	< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	< 0.10		< 0.10	< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	< 0.10		< 0.10	< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	M	2800	mg/kg	0.10	< 0.10		< 0.10	< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	< 0.10		< 0.10	< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	< 0.10		< 0.10	< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	< 0.10		< 0.10	< 0.10	< 0.10		< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	N	2800	mg/kg	2.0	< 2.0		< 2.0	< 2.0	< 2.0		< 2.0	< 2.0	< 2.0	< 2.0
Total Phenols	M	2920	mg/kg	0.30	< 0.30		< 0.30		< 0.30		< 0.30	< 0.30		

Chemtest
The right chemistry to deliver results

Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Soiltechnics Limited					Chemtest Job No.:	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414
Quotation No.:					Chemtest Sample ID.:	254270	254271	254272	254273	254274	254275	254277	254278	254279
Order No.: 20922					Client Sample Ref.:	TP12	TP13	TP14	TP15	TP15	TP15	TP16	TP17	TP18
					Client Sample ID.:	1-056	1-066	1-054	1-041	1-049	1-061	1-053	1-062	1-063
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.60	0.10	0.50	2.30	1.10	0.20	1.10	0.10	0.10
					Date Sampled:	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Moisture	N	2030	%	0.020		19	51	18	14	12	24	15	24	22
Soil Colour	N	2040		N/A		Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A		NONE	Roots	NONE	NONE	NONE	Roots	NONE	Stones	NONE
Soil Texture	N	2040		N/A		Clay	Loam	Clay	Clay	Clay	Loam	Clay	Loam	Loam
pH	M	2010		N/A		6.6	6.2	6.5		8.0	5.7	8.2	6.3	6.0
Boron (Hot Water Soluble)	M	2120	mg/kg	0.40			0.53				0.42		0.57	0.61
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010		< 0.010		< 0.010		< 0.010		< 0.010		
Total Sulphur	M	2175	%	0.010		0.010		0.020		0.010		0.020		
Cyanide (Complex)	M	2300	mg/kg	0.50			< 0.50				< 0.50		< 0.50	< 0.50
Cyanide (Free)	M	2300	mg/kg	0.50			< 0.50				< 0.50		< 0.50	< 0.50
Cyanide (Total)	M	2300	mg/kg	0.50			< 0.50				< 0.50		< 0.50	< 0.50
Sulphate (Acid Soluble)	M	2430	%	0.010		< 0.010		< 0.010		< 0.010		< 0.010		
Arsenic	M	2450	mg/kg	1.0			6.6				7.5		13	7.7
Beryllium	U	2450	mg/kg	1.0			< 1.0				< 1.0		< 1.0	< 1.0
Cadmium	M	2450	mg/kg	0.10			0.36				0.21		0.25	0.17
Chromium	M	2450	mg/kg	1.0			23				27		23	22
Copper	M	2450	mg/kg	0.50			18				19		23	15
Mercury	M	2450	mg/kg	0.10			0.11				< 0.10		< 0.10	< 0.10
Nickel	M	2450	mg/kg	0.50			13				19		18	17
Lead	M	2450	mg/kg	0.50			21				31		53	23
Selenium	M	2450	mg/kg	0.20			0.95				0.32		0.39	0.22
Vanadium	U	2450	mg/kg	5.0			24				30		25	25
Zinc	M	2450	mg/kg	0.50			25				62		76	48
Chromium (Hexavalent)	N	2490	mg/kg	0.50			< 0.50				< 0.50		< 0.50	< 0.50
Organic Matter	M	2625	%	0.40			13		0.98		5.3		4.5	7.1
Total Organic Carbon	M	2625	%	0.20					0.57					
Aliphatic TPH >C5-C6	N	2680	mg/kg	0.010					< 0.010					
Aliphatic TPH >C6-C8	N	2680	mg/kg	0.010					< 0.010					
Aliphatic TPH >C8-C10	N	2680	mg/kg	0.10					< 0.10					
Aliphatic TPH >C10-C12	N	2680	mg/kg	0.10					< 0.10					
Aliphatic TPH >C12-C16	N	2680	mg/kg	0.10					< 0.10					
Aliphatic TPH >C16-C21	N	2680	mg/kg	0.10					< 0.10					
Aliphatic TPH >C21-C35	N	2680	mg/kg	0.10					< 0.10					
Aliphatic TPH >C35-C44	N	2680	mg/kg	0.10					< 0.10					
Total Aliphatic Hydrocarbons	N	2680	mg/kg	1.0					< 1.0					
Aromatic TPH >C5-C7	N	2680	mg/kg	0.010					< 0.010					
Aromatic TPH >C7-C8	N	2680	mg/kg	0.010					< 0.010					
Aromatic TPH >C8-C10	N	2680	mg/kg	0.10					< 0.10					
Aromatic TPH >C10-C12	N	2680	mg/kg	0.10					< 0.10					

Chemtest
The right chemistry to deliver results

Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Soiltechnics Limited					Chemtest Job No.:	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414
Quotation No.:					Chemtest Sample ID.:	254270	254271	254272	254273	254274	254275	254277	254278	254279
Order No.: 20922					Client Sample Ref.:	TP12	TP13	TP14	TP15	TP15	TP15	TP16	TP17	TP18
					Client Sample ID.:	1-056	1-066	1-054	1-041	1-049	1-061	1-053	1-062	1-063
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.60	0.10	0.50	2.30	1.10	0.20	1.10	0.10	0.10
					Date Sampled:	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Aromatic TPH >C12-C16	N	2680	mg/kg	0.10					< 0.10					
Aromatic TPH >C16-C21	N	2680	mg/kg	0.10					< 0.10					
Aromatic TPH >C21-C35	N	2680	mg/kg	0.10					< 0.10					
Aromatic TPH >C35-C44	N	2680	mg/kg	0.10					< 0.10					
Total Aromatic Hydrocarbons	N	2680	mg/kg	1.0					< 1.0					
Total Petroleum Hydrocarbons	N	2680	mg/kg	2.0					< 2.0					
Dichlorodifluoromethane	U	2760	µg/kg	1.0					< 1.0					
Chloromethane	M	2760	µg/kg	1.0					< 1.0					
Vinyl Chloride	M	2760	µg/kg	1.0					< 1.0					
Bromomethane	M	2760	µg/kg	20					< 20					
Chloroethane	U	2760	µg/kg	2.0					< 2.0					
Trichlorofluoromethane	M	2760	µg/kg	1.0					< 1.0					
1,1-Dichloroethene	M	2760	µg/kg	1.0					< 1.0					
Trans 1,2-Dichloroethene	M	2760	µg/kg	1.0					< 1.0					
1,1-Dichloroethane	M	2760	µg/kg	1.0					< 1.0					
cis 1,2-Dichloroethene	M	2760	µg/kg	1.0					< 1.0					
Bromochloromethane	U	2760	µg/kg	5.0					< 5.0					
Trichloromethane	M	2760	µg/kg	1.0					< 1.0					
1,1,1-Trichloroethane	M	2760	µg/kg	1.0					< 1.0					
Tetrachloromethane	M	2760	µg/kg	1.0					< 1.0					
1,1-Dichloropropene	U	2760	µg/kg	1.0					< 1.0					
Benzene	M	2760	µg/kg	1.0					< 1.0					
1,2-Dichloroethane	M	2760	µg/kg	2.0					< 2.0					
Trichloroethene	M	2760	µg/kg	1.0					< 1.0					
1,2-Dichloropropane	M	2760	µg/kg	1.0					< 1.0					
Dibromomethane	M	2760	µg/kg	1.0					< 1.0					
Bromodichloromethane	M	2760	µg/kg	5.0					< 5.0					
cis-1,3-Dichloropropene	N	2760	µg/kg	10					< 10					
Toluene	M	2760	µg/kg	1.0					< 1.0					
Trans-1,3-Dichloropropene	N	2760	µg/kg	10					< 10					
1,1,2-Trichloroethane	M	2760	µg/kg	10					< 10					
Tetrachloroethene	M	2760	µg/kg	1.0					< 1.0					
1,3-Dichloropropane	U	2760	µg/kg	2.0					< 2.0					
Dibromochloromethane	U	2760	µg/kg	10					< 10					
1,2-Dibromoethane	M	2760	µg/kg	5.0					< 5.0					
Chlorobenzene	M	2760	µg/kg	1.0					< 1.0					
1,1,1,2-Tetrachloroethane	M	2760	µg/kg	2.0					< 2.0					
Ethylbenzene	M	2760	µg/kg	1.0					< 1.0					
m & p-Xylene	M	2760	µg/kg	1.0					< 1.0					

Results - Soil

Client: Soiltechnics Limited					Chemtest Job No.:	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414
Quotation No.:					Chemtest Sample ID.:	254270	254271	254272	254273	254274	254275	254277	254278	254279
Order No.: 20922					Client Sample Ref.:	TP12	TP13	TP14	TP15	TP15	TP15	TP16	TP17	TP18
					Client Sample ID.:	1-056	1-066	1-054	1-041	1-049	1-061	1-053	1-062	1-063
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.60	0.10	0.50	2.30	1.10	0.20	1.10	0.10	0.10
					Date Sampled:	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
o-Xylene	M	2760	µg/kg	1.0					< 1.0					
Styrene	M	2760	µg/kg	1.0					< 1.0					
Tribromomethane	U	2760	µg/kg	1.0					< 1.0					
Isopropylbenzene	M	2760	µg/kg	1.0					< 1.0					
Bromobenzene	M	2760	µg/kg	1.0					< 1.0					
1,2,3-Trichloropropane	N	2760	µg/kg	50					< 50					
N-Propylbenzene	U	2760	µg/kg	1.0					< 1.0					
2-Chlorotoluene	M	2760	µg/kg	1.0					< 1.0					
1,3,5-Trimethylbenzene	M	2760	µg/kg	1.0					< 1.0					
4-Chlorotoluene	U	2760	µg/kg	1.0					< 1.0					
Tert-Butylbenzene	U	2760	µg/kg	1.0					< 1.0					
1,2,4-Trimethylbenzene	M	2760	µg/kg	1.0					< 1.0					
Sec-Butylbenzene	U	2760	µg/kg	1.0					< 1.0					
1,3-Dichlorobenzene	M	2760	µg/kg	1.0					< 1.0					
4-Isopropyltoluene	U	2760	µg/kg	1.0					< 1.0					
1,4-Dichlorobenzene	M	2760	µg/kg	1.0					< 1.0					
N-Butylbenzene	U	2760	µg/kg	1.0					< 1.0					
1,2-Dichlorobenzene	M	2760	µg/kg	1.0					< 1.0					
1,2-Dibromo-3-Chloropropane	U	2760	µg/kg	50					< 1.0					
1,2,4-Trichlorobenzene	M	2760	µg/kg	1.0					< 50					
Hexachlorobutadiene	U	2760	µg/kg	1.0					< 1.0					
1,2,3-Trichlorobenzene	U	2760	µg/kg	2.0					< 1.0					
Carbon Disulphide	N	2760	µg/kg	50					< 2.0					
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0					< 50					
N-Nitrosodimethylamine	N	2790	mg/kg	0.50					< 1.0					
Phenol	N	2790	mg/kg	0.50					< 0.50					
2-Chlorophenol	N	2790	mg/kg	0.50					< 0.50					
Bis-(2-Chloroethyl)Ether	N	2790	mg/kg	0.50					< 0.50					
1,3-Dichlorobenzene	N	2790	mg/kg	0.50					< 0.50					
1,4-Dichlorobenzene	N	2790	mg/kg	0.50					< 0.50					
1,2-Dichlorobenzene	N	2790	mg/kg	0.50					< 0.50					
2-Methylphenol	N	2790	mg/kg	0.50					< 0.50					
Bis(2-Chloroisopropyl)Ether	N	2790	mg/kg	0.50					< 0.50					
Hexachloroethane	N	2790	mg/kg	0.50					< 0.50					
N-Nitrosodi-n-propylamine	N	2790	mg/kg	0.50					< 0.50					
4-Methylphenol	N	2790	mg/kg	0.50					< 0.50					
Nitrobenzene	N	2790	mg/kg	0.50					< 0.50					
Isophorone	N	2790	mg/kg	0.50					< 0.50					
2-Nitrophenol	N	2790	mg/kg	0.50					< 0.50					

Chemtest
The right chemistry to deliver results

Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Solitechnics Limited														
Quotation No.:	Chemtest Job No.:				16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	
Order No.: 20922	Chemtest Sample ID.:				254270	254271	254272	254273	254274	254275	254277	254278	254279	
	Client Sample Ref.:				TP12	TP13	TP14	TP15	TP15	TP15	TP16	TP17	TP18	
	Client Sample ID.:				1-056	1-066	1-054	1-041	1-049	1-061	1-053	1-062	1-063	
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	Top Depth (m):				0.60	0.10	0.50	2.30	1.10	0.20	1.10	0.10	0.10	
	Date Sampled:				09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
2,4-Dimethylphenol	N	2790	mg/kg	0.50				< 0.50						
Bis(2-Chloroethoxy)Methane	N	2790	mg/kg	0.50				< 0.50						
2,4-Dichlorophenol	N	2790	mg/kg	0.50				< 0.50						
1,2,4-Trichlorobenzene	N	2790	mg/kg	0.50				< 0.50						
Naphthalene	N	2790	mg/kg	0.50				< 0.50						
4-Chloroaniline	N	2790	mg/kg	0.50				< 0.50						
Hexachlorobutadiene	N	2790	mg/kg	0.50				< 0.50						
4-Chloro-3-Methylphenol	N	2790	mg/kg	0.50				< 0.50						
2-Methylnaphthalene	N	2790	mg/kg	0.50				< 0.50						
Hexachlorocyclopentadiene	N	2790	mg/kg	0.50				< 0.50						
2,4,6-Trichlorophenol	N	2790	mg/kg	0.50				< 0.50						
2,4,5-Trichlorophenol	N	2790	mg/kg	0.50				< 0.50						
2-Chloronaphthalene	N	2790	mg/kg	0.50				< 0.50						
2-Nitroaniline	N	2790	mg/kg	0.50				< 0.50						
Acenaphthylene	N	2790	mg/kg	0.50				< 0.50						
Dimethylphthalate	N	2790	mg/kg	0.50				< 0.50						
2,6-Dinitrotoluene	N	2790	mg/kg	0.50				< 0.50						
Acenaphthene	N	2790	mg/kg	0.50				< 0.50						
Dibenzofuran	N	2790	mg/kg	0.50				< 0.50						
4-Chlorophenylphenylether	N	2790	mg/kg	0.50				< 0.50						
2,4-Dinitrotoluene	N	2790	mg/kg	0.50				< 0.50						
Fluorene	N	2790	mg/kg	0.50				< 0.50						
Diethyl Phthalate	N	2790	mg/kg	0.50				< 0.50						
4-Nitroaniline	N	2790	mg/kg	0.50				< 0.50						
2-Methyl-4,6-Dinitrophenol	N	2790	mg/kg	0.50				< 0.50						
Azobenzene	N	2790	mg/kg	0.50				< 0.50						
4-Bromophenylphenyl Ether	N	2790	mg/kg	0.50				< 0.50						
Hexachlorobenzene	N	2790	mg/kg	0.50				< 0.50						
Pentachlorophenol	N	2790	mg/kg	0.50				< 0.50						
Phenanthrene	N	2790	mg/kg	0.50				< 0.50						
Anthracene	N	2790	mg/kg	0.50				< 0.50						
Carbazole	N	2790	mg/kg	0.50				< 0.50						
Di-N-Butyl Phthalate	N	2790	mg/kg	0.50				< 0.50						
Fluoranthene	N	2790	mg/kg	0.50				< 0.50						
Pyrene	N	2790	mg/kg	0.50				< 0.50						
Butylbenzyl Phthalate	N	2790	mg/kg	0.50				< 0.50						
Benzo[a]anthracene	N	2790	mg/kg	0.50				< 0.50						
Chrysene	N	2790	mg/kg	0.50				< 0.50						
Bis(2-Ethylhexyl)Phthalate	N	2790	mg/kg	0.50				< 0.50						

Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Solitechnics Limited					Chemtest Job No.:	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414	16-03414
Quotation No.:					Chemtest Sample ID.:	254270	254271	254272	254273	254274	254275	254277	254278	254279
Order No.: 20922					Client Sample Ref.:	TP12	TP13	TP14	TP15	TP15	TP15	TP16	TP17	TP18
					Client Sample ID.:	1-056	1-066	1-054	1-041	1-049	1-061	1-053	1-062	1-063
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.60	0.10	0.50	2.30	1.10	0.20	1.10	0.10	0.10
					Date Sampled:	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016	09-Feb-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Di-N-Octyl Phthalate	N	2790	mg/kg	0.50					< 0.50					
Benzo[b]fluoranthene	N	2790	mg/kg	0.50					< 0.50					
Benzo[k]fluoranthene	N	2790	mg/kg	0.50					< 0.50					
Benzo[a]pyrene	N	2790	mg/kg	0.50					< 0.50					
Indeno(1,2,3-c,d)Pyrene	N	2790	mg/kg	0.50					< 0.50					
Dibenz(a,h)Anthracene	N	2790	mg/kg	0.50					< 0.50					
Benzo[g,h,i]perylene	N	2790	mg/kg	0.50					< 0.50					
Naphthalene	M	2800	mg/kg	0.10		< 0.10			< 0.10		< 0.10		< 0.10	< 0.10
Acenaphthylene	N	2800	mg/kg	0.10		< 0.10			< 0.10		< 0.10		< 0.10	< 0.10
Acenaphthene	M	2800	mg/kg	0.10		< 0.10			< 0.10		< 0.10		< 0.10	< 0.10
Fluorene	M	2800	mg/kg	0.10		< 0.10			< 0.10		< 0.10		< 0.10	< 0.10
Phenanthrene	M	2800	mg/kg	0.10		< 0.10			< 0.10		< 0.10		< 0.10	< 0.10
Anthracene	M	2800	mg/kg	0.10		< 0.10			< 0.10		< 0.10		< 0.10	< 0.10
Fluoranthene	M	2800	mg/kg	0.10		< 0.10			< 0.10		< 0.10		< 0.10	< 0.10
Pyrene	M	2800	mg/kg	0.10		< 0.10			< 0.10		< 0.10		< 0.10	< 0.10
Benzo[a]anthracene	M	2800	mg/kg	0.10		< 0.10			< 0.10		< 0.10		< 0.10	< 0.10
Chrysene	M	2800	mg/kg	0.10		< 0.10			< 0.10		< 0.10		< 0.10	< 0.10
Benzo[b]fluoranthene	M	2800	mg/kg	0.10		< 0.10			< 0.10		< 0.10		< 0.10	< 0.10
Benzo[k]fluoranthene	M	2800	mg/kg	0.10		< 0.10			< 0.10		< 0.10		< 0.10	< 0.10
Benzo[a]pyrene	M	2800	mg/kg	0.10		< 0.10			< 0.10		< 0.10		< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10		< 0.10			< 0.10		< 0.10		< 0.10	< 0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10		< 0.10			< 0.10		< 0.10		< 0.10	< 0.10
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10		< 0.10			< 0.10		< 0.10		< 0.10	< 0.10
Total Of 16 PAH's	N	2800	mg/kg	2.0		< 2.0			< 2.0		< 2.0		< 2.0	< 2.0
Total Phenols	M	2920	mg/kg	0.30		< 0.30					< 0.30		< 0.30	< 0.30

Chemtest
The right chemistry to deliver results

Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Soiltechnics Limited			**Chemtest Job No.:**		16-03414
Quotation No.:			**Chemtest Sample ID.:**		254280
Order No.: 20922			Client Sample Ref.:		TP20
			Client Sample ID.:		1-067
			Sample Type:		SOIL
			Top Depth (m):		0.10
			Date Sampled:		09-Feb-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Moisture	N	2030	%	0.020	31
Soil Colour	N	2040		N/A	Brown
Other Material	N	2040		N/A	NONE
Soil Texture	N	2040		N/A	Loam
pH	M	2010		N/A	6.2
Boron (Hot Water Soluble)	M	2120	mg/kg	0.40	0.57
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	
Total Sulphur	M	2175	%	0.010	
Cyanide (Complex)	M	2300	mg/kg	0.50	< 0.50
Cyanide (Free)	M	2300	mg/kg	0.50	< 0.50
Cyanide (Total)	M	2300	mg/kg	0.50	< 0.50
Sulphate (Acid Soluble)	M	2430	%	0.010	
Arsenic	M	2450	mg/kg	1.0	15
Beryllium	U	2450	mg/kg	1.0	1.1
Cadmium	M	2450	mg/kg	0.10	0.23
Chromium	M	2450	mg/kg	1.0	37
Copper	M	2450	mg/kg	0.50	17
Mercury	M	2450	mg/kg	0.10	0.10
Nickel	M	2450	mg/kg	0.50	24
Lead	M	2450	mg/kg	0.50	24
Selenium	M	2450	mg/kg	0.20	0.67
Vanadium	U	2450	mg/kg	5.0	43
Zinc	M	2450	mg/kg	0.50	52
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50
Organic Matter	M	2625	%	0.40	15
Total Organic Carbon	M	2625	%	0.20	
Aliphatic TPH >C5-C6	N	2680	mg/kg	0.010	
Aliphatic TPH >C6-C8	N	2680	mg/kg	0.010	
Aliphatic TPH >C8-C10	N	2680	mg/kg	0.10	
Aliphatic TPH >C10-C12	N	2680	mg/kg	0.10	
Aliphatic TPH >C12-C16	N	2680	mg/kg	0.10	
Aliphatic TPH >C16-C21	N	2680	mg/kg	0.10	
Aliphatic TPH >C21-C35	N	2680	mg/kg	0.10	
Aliphatic TPH >C35-C44	N	2680	mg/kg	0.10	
Total Aliphatic Hydrocarbons	N	2680	mg/kg	1.0	
Aromatic TPH >C5-C7	N	2680	mg/kg	0.010	
Aromatic TPH >C7-C8	N	2680	mg/kg	0.010	
Aromatic TPH >C8-C10	N	2680	mg/kg	0.10	
Aromatic TPH >C10-C12	N	2680	mg/kg	0.10	

Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Soiltechnics Limited			Chemtest Job No.:		16-03414
Quotation No.:			Chemtest Sample ID.:		254280
Order No.: 20922			Client Sample Ref.:		TP20
			Client Sample ID.:		1-067
			Sample Type:		SOIL
			Top Depth (m):		0.10
			Date Sampled:		09-Feb-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Aromatic TPH >C12-C16	N	2680	mg/kg	0.10	
Aromatic TPH >C16-C21	N	2680	mg/kg	0.10	
Aromatic TPH >C21-C35	N	2680	mg/kg	0.10	
Aromatic TPH >C35-C44	N	2680	mg/kg	0.10	
Total Aromatic Hydrocarbons	N	2680	mg/kg	1.0	
Total Petroleum Hydrocarbons	N	2680	mg/kg	2.0	
Dichlorodifluoromethane	U	2760	µg/kg	1.0	
Chloromethane	M	2760	µg/kg	1.0	
Vinyl Chloride	M	2760	µg/kg	1.0	
Bromomethane	M	2760	µg/kg	20	
Chloroethane	U	2760	µg/kg	2.0	
Trichlorofluoromethane	M	2760	µg/kg	1.0	
1,1-Dichloroethene	M	2760	µg/kg	1.0	
Trans 1,2-Dichloroethene	M	2760	µg/kg	1.0	
1,1-Dichloroethane	M	2760	µg/kg	1.0	
cis 1,2-Dichloroethene	M	2760	µg/kg	1.0	
Bromochloromethane	U	2760	µg/kg	5.0	
Trichloromethane	M	2760	µg/kg	1.0	
1,1,1-Trichloroethane	M	2760	µg/kg	1.0	
Tetrachloromethane	M	2760	µg/kg	1.0	
1,1-Dichloropropene	U	2760	µg/kg	1.0	
Benzene	M	2760	µg/kg	1.0	
1,2-Dichloroethane	M	2760	µg/kg	2.0	
Trichloroethene	M	2760	µg/kg	1.0	
1,2-Dichloropropane	M	2760	µg/kg	1.0	
Dibromomethane	M	2760	µg/kg	1.0	
Bromodichloromethane	M	2760	µg/kg	5.0	
cis-1,3-Dichloropropene	N	2760	µg/kg	10	
Toluene	M	2760	µg/kg	1.0	
Trans-1,3-Dichloropropene	N	2760	µg/kg	10	
1,1,2-Trichloroethane	M	2760	µg/kg	10	
Tetrachloroethene	M	2760	µg/kg	1.0	
1,3-Dichloropropane	U	2760	µg/kg	2.0	
Dibromochloromethane	U	2760	µg/kg	10	
1,2-Dibromoethane	M	2760	µg/kg	5.0	
Chlorobenzene	M	2760	µg/kg	1.0	
1,1,1,2-Tetrachloroethane	M	2760	µg/kg	2.0	
Ethylbenzene	M	2760	µg/kg	1.0	
m & p-Xylene	M	2760	µg/kg	1.0	

Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Soiltechnics Limited	Chemtest Job No.:	16-03414
Quotation No.:	Chemtest Sample ID.:	254280
Order No.: 20922	Client Sample Ref.:	TP20
	Client Sample ID.:	1-067
	Sample Type:	SOIL
	Top Depth (m):	0.10
	Date Sampled:	09-Feb-2016

Determinand	Accred.	SOP	Units	LOD	
o-Xylene	M	2760	µg/kg	1.0	
Styrene	M	2760	µg/kg	1.0	
Tribromomethane	U	2760	µg/kg	1.0	
Isopropylbenzene	M	2760	µg/kg	1.0	
Bromobenzene	M	2760	µg/kg	1.0	
1,2,3-Trichloropropane	N	2760	µg/kg	50	
N-Propylbenzene	U	2760	µg/kg	1.0	
2-Chlorotoluene	M	2760	µg/kg	1.0	
1,3,5-Trimethylbenzene	M	2760	µg/kg	1.0	
4-Chlorotoluene	U	2760	µg/kg	1.0	
Tert-Butylbenzene	U	2760	µg/kg	1.0	
1,2,4-Trimethylbenzene	M	2760	µg/kg	1.0	
Sec-Butylbenzene	U	2760	µg/kg	1.0	
1,3-Dichlorobenzene	M	2760	µg/kg	1.0	
4-Isopropyltoluene	U	2760	µg/kg	1.0	
1,4-Dichlorobenzene	M	2760	µg/kg	1.0	
N-Butylbenzene	U	2760	µg/kg	1.0	
1,2-Dichlorobenzene	M	2760	µg/kg	1.0	
1,2-Dibromo-3-Chloropropane	U	2760	µg/kg	50	
1,2,4-Trichlorobenzene	M	2760	µg/kg	1.0	
Hexachlorobutadiene	U	2760	µg/kg	1.0	
1,2,3-Trichlorobenzene	U	2760	µg/kg	2.0	
Carbon Disulphide	N	2760	µg/kg	50	
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	
N-Nitrosodimethylamine	N	2790	mg/kg	0.50	
Phenol	N	2790	mg/kg	0.50	
2-Chlorophenol	N	2790	mg/kg	0.50	
Bis-(2-Chloroethyl)Ether	N	2790	mg/kg	0.50	
1,3-Dichlorobenzene	N	2790	mg/kg	0.50	
1,4-Dichlorobenzene	N	2790	mg/kg	0.50	
1,2-Dichlorobenzene	N	2790	mg/kg	0.50	
2-Methylphenol	N	2790	mg/kg	0.50	
Bis(2-Chloroisopropyl)Ether	N	2790	mg/kg	0.50	
Hexachloroethane	N	2790	mg/kg	0.50	
N-Nitrosodi-n-propylamine	N	2790	mg/kg	0.50	
4-Methylphenol	N	2790	mg/kg	0.50	
Nitrobenzene	N	2790	mg/kg	0.50	
Isophorone	N	2790	mg/kg	0.50	
2-Nitrophenol	N	2790	mg/kg	0.50	

Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Soiltechnics Limited			Chemtest Job No.:		16-03414
Quotation No.:			Chemtest Sample ID.:		254280
Order No.: 20922			Client Sample Ref.:		TP20
			Client Sample ID.:		1-067
			Sample Type:		SOIL
			Top Depth (m):		0.10
			Date Sampled:		09-Feb-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
2,4-Dimethylphenol	N	2790	mg/kg	0.50	
Bis(2-Chloroethoxy)Methane	N	2790	mg/kg	0.50	
2,4-Dichlorophenol	N	2790	mg/kg	0.50	
1,2,4-Trichlorobenzene	N	2790	mg/kg	0.50	
Naphthalene	N	2790	mg/kg	0.50	
4-Chloroaniline	N	2790	mg/kg	0.50	
Hexachlorobutadiene	N	2790	mg/kg	0.50	
4-Chloro-3-Methylphenol	N	2790	mg/kg	0.50	
2-Methylnaphthalene	N	2790	mg/kg	0.50	
Hexachlorocyclopentadiene	N	2790	mg/kg	0.50	
2,4,6-Trichlorophenol	N	2790	mg/kg	0.50	
2,4,5-Trichlorophenol	N	2790	mg/kg	0.50	
2-Chloronaphthalene	N	2790	mg/kg	0.50	
2-Nitroaniline	N	2790	mg/kg	0.50	
Acenaphthylene	N	2790	mg/kg	0.50	
Dimethylphthalate	N	2790	mg/kg	0.50	
2,6-Dinitrotoluene	N	2790	mg/kg	0.50	
Acenaphthene	N	2790	mg/kg	0.50	
Dibenzofuran	N	2790	mg/kg	0.50	
4-Chlorophenylphenylether	N	2790	mg/kg	0.50	
2,4-Dinitrotoluene	N	2790	mg/kg	0.50	
Fluorene	N	2790	mg/kg	0.50	
Diethyl Phthalate	N	2790	mg/kg	0.50	
4-Nitroaniline	N	2790	mg/kg	0.50	
2-Methyl-4,6-Dinitrophenol	N	2790	mg/kg	0.50	
Azobenzene	N	2790	mg/kg	0.50	
4-Bromophenylphenyl Ether	N	2790	mg/kg	0.50	
Hexachlorobenzene	N	2790	mg/kg	0.50	
Pentachlorophenol	N	2790	mg/kg	0.50	
Phenanthrene	N	2790	mg/kg	0.50	
Anthracene	N	2790	mg/kg	0.50	
Carbazole	N	2790	mg/kg	0.50	
Di-N-Butyl Phthalate	N	2790	mg/kg	0.50	
Fluoranthene	N	2790	mg/kg	0.50	
Pyrene	N	2790	mg/kg	0.50	
Butylbenzyl Phthalate	N	2790	mg/kg	0.50	
Benzo[a]anthracene	N	2790	mg/kg	0.50	
Chrysene	N	2790	mg/kg	0.50	
Bis(2-Ethylhexyl)Phthalate	N	2790	mg/kg	0.50	

Chemtest
The right chemistry to deliver results

Results - Soil

Project: STN3505NM - Chipping Lane, Longridge

Client: Soiltechnics Limited					Chemtest Job No.:	16-03414
Quotation No.:					Chemtest Sample ID.:	254280
Order No.: 20922					Client Sample Ref.:	TP20
					Client Sample ID.:	1-067
					Sample Type:	SOIL
					Top Depth (m):	0.10
					Date Sampled:	09-Feb-2016
Determinand	**Accred.**	**SOP**	**Units**	**LOD**		
Di-N-Octyl Phthalate	N	2790	mg/kg	0.50		
Benzo[b]fluoranthene	N	2790	mg/kg	0.50		
Benzo[k]fluoranthene	N	2790	mg/kg	0.50		
Benzo[a]pyrene	N	2790	mg/kg	0.50		
Indeno(1,2,3-c,d)Pyrene	N	2790	mg/kg	0.50		
Dibenz(a,h)Anthracene	N	2790	mg/kg	0.50		
Benzo[g,h,i]perylene	N	2790	mg/kg	0.50		
Naphthalene	M	2800	mg/kg	0.10	< 0.10	
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10	
Acenaphthene	M	2800	mg/kg	0.10	< 0.10	
Fluorene	M	2800	mg/kg	0.10	< 0.10	
Phenanthrene	M	2800	mg/kg	0.10	< 0.10	
Anthracene	M	2800	mg/kg	0.10	< 0.10	
Fluoranthene	M	2800	mg/kg	0.10	< 0.10	
Pyrene	M	2800	mg/kg	0.10	< 0.10	
Benzo[a]anthracene	M	2800	mg/kg	0.10	< 0.10	
Chrysene	M	2800	mg/kg	0.10	< 0.10	
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	< 0.10	
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	< 0.10	
Benzo[a]pyrene	M	2800	mg/kg	0.10	< 0.10	
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	< 0.10	
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	< 0.10	
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	< 0.10	
Total Of 16 PAH's	N	2800	mg/kg	2.0	< 2.0	
Total Phenols	M	2920	mg/kg	0.30	< 0.30	

Chemtest
The right chemistry to deliver results

Report Information

Key

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

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at our Coventry laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container

Sample Retention and Disposal

All soil samples will be retained for a period of 60 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.co.uk

Analysis of test data in relation to concentrations of inorganic chemical contaminants

Adopted Model: Residential without plant uptake
Receptor: Current site user

Test procedure	Summary of test data							Initial comparison		Outlier test					Normality test			UCL	
Contaminant	Guideline value	Guideline source	No. of tests	Min.	Max.	Mean	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth	Concentration	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean	Contaminant
	mg/kg			mg/kg	mg/kg	mg/kg							mg/kg				mg/kg	
Arsenic	40	S4UL	16	2.9	15.0	9.5	0	Mean value below guideline	y	0				normal	normal	y	11.2	Arsenic
Beryllium	1.7	S4UL	16	1.0	1.5	1.1	0	Mean value below guideline	y	0				not normal	not normal	n	1.3	Beryllium
Boron	11000	S4UL	16	0.4	0.7	0.5	0	Mean value below guideline	y	0				normal	not normal	n	0.6	Boron
Cadmium	85	S4UL	16	0.1	0.6	0.3	0	Mean value below guideline	y	0				normal	normal	y	0.4	Cadmium
Chromium	910	S4UL	16	11.0	46.0	27.0	0	Mean value below guideline	y	0				normal	normal	y	31.5	Chromium
Copper	7100	S4UL	16	9.5	54.0	25.5	0	Mean value below guideline	n	0				normal	not normal	n	37.9	Copper
Cyanide (total)	34	ATK	16	0.5	0.5	0.5	0	Mean value below guideline	y	0				not normal	not normal	n	0.5	Cyanide (total)
Lead	383	ATK	16	14.0	83.0	45.4	0	Mean value below guideline	y	0				normal	normal	y	54.0	Lead
Mercury#	1.2	S4UL	16	0.1	0.2	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Mercury#
Nickel	180	S4UL	16	8.3	34.0	20.6	0	Mean value below guideline	y	0				normal	normal	y	24.2	Nickel
Selenium	430	S4UL	16	0.2	1.0	0.4	0	Mean value below guideline	n	0				not normal	not normal	n	0.6	Selenium
Vanadium	1200	S4UL	16	12.0	45.0	28.8	0	Mean value below guideline	y	0				normal	normal	y	33.2	Vanadium
Zinc	40000	S4UL	16	25.0	120.0	76.6	0	Mean value below guideline	y	0				normal	normal	y	39.3	Zinc

S4UL	Suitable 4 Use Levels published by LQM and CIEH
SSV	Soil Screening Value as derived by Soiltechnics
ATK	Soil Screening Value derived by Atkins
NGV	No Guideline Value
BPG5	Guideline from BPG Note 5 as published by Forest Research
#	Assumed to be elemental mercury as initial screening value

Title: Analysis of test data in relation to concentrations of inorganic chemical contaminants
Table number: 1

soiltechnics
environmental and geotechnical consultants

Analysis of test data in relation to concentrations of inorganic chemical contaminants

Adopted Model: Residential
Receptor: Proposed site user

Test procedure			Summary of test data				Initial comparison		Outlier test					Normality test			UCL	
Contaminant	Guideline value mg/kg	Guideline source	No. of tests	Min. mg/kg	Max. mg/kg	Mean mg/kg	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth	Concentration mg/kg	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean mg/kg	Contaminant
Arsenic	37	S4UL	16	2.9	15.0	9.5	0	Mean value below guideline	y	0				normal	normal	y	11.1	Arsenic
Beryllium	1.7	S4UL	16	1.0	1.5	1.1	0	Mean value below guideline	y	0				not normal	not normal	n	1.3	Beryllium
Boron	290	S4UL	16	0.4	0.7	0.5	0	Mean value below guideline	y	0				normal	not normal	n	0.6	Boron
Cadmium	11	S4UL	16	0.1	0.6	0.3	0	Mean value below guideline	y	0				normal	normal	y	0.4	Cadmium
Chromium	910	S4UL	16	11.0	46.0	27.0	0	Mean value below guideline	y	0				normal	normal	y	31.5	Chromium
Copper	2400	S4UL	16	9.5	54.0	25.5	0	Mean value below guideline	n	0				normal	not normal	n	37.9	Copper
Cyanide (total)	34	ATK	16	0.5	0.5	0.5	0	Mean value below guideline	y	0				not normal	not normal	n	0.5	Cyanide (total)
Lead	276	ATK	16	14.0	83.0	45.4	0	Mean value below guideline	y	0				normal	normal	y	54.8	Lead
Mercury#	1.2	S4UL	16	0.1	0.2	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Mercury#
Nickel	130	S4UL	16	8.3	34.0	20.6	0	Mean value below guideline	y	0				normal	normal	y	24.2	Nickel
Selenium	250	S4UL	16	0.2	1.0	0.4	0	Mean value below guideline	n	0				not normal	not normal	n	0.6	Selenium
Vanadium	410	S4UL	16	12.0	45.0	28.8	0	Mean value below guideline	y	0				normal	normal	y	33.2	Vanadium
Zinc	3700	S4UL	16	25.0	120.0	76.6	0	Mean value below guideline	y	0				normal	normal	y	89.3	Zinc

S4UL — Suitable 4 Use Levels published by LQM and CIEH
SSV — Soil Screening Value as derived by Soiltechnics
ATK — Soil Screening Value derived by Atkins
NGV — No Guideline Value
BPG5 — Guideline from BPG Note 5 as published by Forest Research
\# — Assumed to be elemental mercury as initial screening value

Title	Table number
Analysis of test data in relation to concentrations of inorganic chemical contaminants	2

soiltechnics
environmental and geotechnical consultants

Analysis of test data in relation to concentrations of inorganic chemical contaminants

Adopted Model: Industrial/Commercial
Receptor: Construction operative

Test procedure			Summary of test data					Initial comparison	Outlier test					Normality test			UCL	
Contaminant	Guideline source	Guideline value mg/kg	No. of tests	Min. mg/kg	Max. mg/kg	Mean mg/kg	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth	Concentration mg/kg	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean mg/kg	Contaminant
Arsenic	S4UL	640	16	2.9	15.0	9.5	0	Mean value below guideline	y	0				normal	normal	y	11.1	Arsenic
Beryllium	S4UL	12	16	1.0	1.5	1.1	0	Mean value below guideline	y	0				not normal	not normal	n	1.3	Beryllium
Boron	S4UL	240000	16	0.4	0.7	0.5	0	Mean value below guideline	y	0				normal	not normal	n	0.6	Boron
Cadmium	S4UL	190	16	0.1	0.6	0.3	0	Mean value below guideline	y	0				normal	normal	y	0.4	Cadmium
Chromium	S4UL	8600	16	11.0	46.0	27.0	0	Mean value below guideline	y	0				normal	normal	y	31.5	Chromium
Copper	S4UL	68000	16	9.5	54.0	25.5	0	Mean value below guideline	n	0				normal	not normal	n	37.9	Copper
Cyanide (total)	ATK	34	16	0.5	0.5	0.5	0	Mean value below guideline	y	0				not normal	not normal	n	0.5	Cyanide (total)
Lead	ATK	6490	16	14.0	83.0	45.4	0	Mean value below guideline	y	0				normal	normal	y	54.8	Lead
Mercury#	S4UL	25.8	16	0.1	0.2	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.2	Mercury#
Nickel	S4UL	980	16	8.3	34.0	20.6	0	Mean value below guideline	y	0				normal	normal	y	24.2	Nickel
Selenium	S4UL	12000	16	0.2	1.0	0.4	0	Mean value below guideline	n	0				not normal	not normal	n	0.6	Selenium
Vanadium	S4UL	9000	16	12.0	45.0	28.8	0	Mean value below guideline	y	0				normal	normal	y	33.2	Vanadium
Zinc	S4UL	730000	16	25.0	120.0	76.6	0	Mean value below guideline	y	0				normal	normal	y	89.8	Zinc

S4UL	Suitable 4 Use Levels published by LQM and CIEH
SSV	Soil Screening Value as derived by Soiltechnics
ATK	Soil Screening Value derived by Atkins
NGV	No Guideline Value
BPG5	Guideline from BPG Note 5 as published by Forest Research
#	Assumed to be elemental mercury as initial screening value

Title	Table number
Analysis of test data in relation to concentrations of inorganic chemical contaminants	3

soiltechnics
environmental and geotechnical consultants

Analysis of test data in relation to concentrations of inorganic chemical contaminants

Adopted Model: Industrial/Commercial and BPG5
Receptor: Vegetation

Test procedure			Summary of test data					Initial comparison		Outlier test			
Contaminant	Guideline value	Guideline source	No. of tests	Min.	Max.	Mean	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth	Concentration
	mg/kg			mg/kg	mg/kg	mg/kg							mg/kg
Arsenic	640	S4UL	16	2.9	15.0	9.5	0	Mean value below guideline	y	0			
Beryllium	12	S4UL	16	1.0	1.5	1.1	0	Mean value below guideline	y	0			
Boron	240000	S4UL	16	0.4	0.7	0.5	0	Mean value below guideline	y	0			
Cadmium	190	S4UL	16	0.1	0.6	0.3	0	Mean value below guideline	y	0			
Chromium	8600	S4UL	16	11.0	46.0	27.0	0	Mean value below guideline	y	0			
Copper	130	BPG5	16	9.5	54.0	25.5	0	Mean value below guideline	y	0			
Cyanide (total)	34	ATK	16	0.5	0.5	0.5	0	Mean value below guideline	n	0			
Lead	6490	ATK	16	14.0	83.0	45.4	0	Mean value below guideline	y	0			
Mercury#	25.8	S4UL	16	0.1	0.2	0.1	0	Mean value below guideline	y	0			
Nickel	980	S4UL	16	8.3	34.0	20.6	0	Mean value below guideline	y	0			
Selenium	12000	S4UL	16	0.2	1.0	0.4	0	Mean value below guideline	y	0			
Vanadium	9000	S4UL	16	12.0	45.0	28.8	0	Mean value below guideline	n	0			
Zinc	300	300	16	25.0	120.0	76.6	0	Mean value below guideline	y	0			

Normality test			UCL	
Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean	Contaminant
			mg/kg	
normal	normal	y	11.1	Arsenic
not normal	not normal	n	1.3	Beryllium
normal	not normal	n	0.6	Boron
normal	normal	y	0.4	Cadmium
normal	normal	y	31.5	Chromium
normal	not normal	n	37.9	Copper
not normal	not normal	n	0.5	Cyanide (total)
normal	normal	y	54.8	Lead
not normal	not normal	n	0.1	Mercury#
normal	normal	y	24.2	Nickel
not normal	not normal	n	0.6	Selenium
normal	normal	y	33.2	Vanadium
normal	normal	y	89.3	Zinc

S4UL Suitable 4 Use Levels published by LQM and CIEH
SSV Soil Screening Value as derived by Soiltechnics
ATK Soil Screening Value derived by Atkins
NGV No Guideline Value
BPG5 Guideline from BPG Note 5 as published by Forest Research
Assumed to be elemental mercury as initial screening value

Title
Analysis of test data in relation to concentrations of inorganic chemical contaminants

Table number
4

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environmental and geotechnical consultants

Analysis of test data in relation to concentrations of organic chemical contaminants

Adopted model: Residential without plant uptake
Receptor: Current site user

Test procedure			Summary of test data					Initial Screening	Oulier test				Normality test			UCL	
Contaminant	Guideline source	Guideline value mg/kg	No. of tests	Min. mg/kg	Max. mg/kg	Mean mg/kg	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth	Concentration mg/kg	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean mg/kg	Contaminant
Acenaphthene	S4UL	3000	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Acenaphthene
Acenaphthylene	S4UL	2900	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Acenaphthylene
Anthracene	S4UL	31000	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Anthracene
Benzo(a)anthracene	S4UL	11	16	0.1	0.2	0.1	0	Mean value below guideline	n	0				not normal	not normal	n	0.1	Benzo(a)anthracene
Benzo(a)pyrene	S4UL	3.2	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Benzo(a)pyrene
Benzo(b)fluoranthene	S4UL	3.9	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Benzo(b)fluoranthene
Benzo(g,h,i)perylene	S4UL	360	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Benzo(g,h,i)perylene
Benzo(k)fluoranthene	S4UL	110	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Benzo(k)fluoranthene
Chrysene	S4UL	30	16	0.1	0.1	0.1	0	Mean value below guideline	n	0				not normal	not normal	n	0.1	Chrysene
Dibenzo(a,h)anthracene	S4UL	0.31	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Dibenzo(a,h)anthracene
Fluoranthene	S4UL	1500	16	0.1	0.5	0.2	0	Mean value below guideline	n	0				not normal	not normal	n	0.1	Fluoranthene
Fluorene	S4UL	2800	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Fluorene
Indeno(1,2,3-cd)pyrene	S4UL	45	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Indeno(1,2,3-cd)pyrene
Naphthalene	S4UL	2.3	16	0.1	0.1	0.1	0	Mean value below guideline	n	0				not normal	not normal	n	0.1	Naphthalene
Phenanthrene	S4UL	1300	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Phenanthrene
Phenols	S4UL	440	16	0.3	0.3	0.3	0	Mean value below guideline	y	0				not normal	not normal	n	0.3	Phenols
Pyrene	S4UL	3700	16	0.1	0.4	0.1	0	Mean value below guideline	n	0				not normal	not normal	n	0.2	Pyrene

Notes

S4UL	Suitable 4 Use Levels published by LQM and CIEH
SSV	Soil Screening Value as derived by Soiltechnics
ATK	Soil Screening Value derived by Atkins
NGV	No Guideline Value

Title	Table number
Analysis of test data in relation to concentrations of organic chemical contaminants.	5

soiltechnics
environmental and geotechnical consultants

Analysis of test data in relation to concentrations of organic chemical contaminants

Adopted model: Residential
Receptor: Proposed site user

Test procedure

Contaminant	Guideline source	Guideline value mg/kg	No. of tests	Min. mg/kg	Max. mg/kg	Mean mg/kg	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth	Concentration mg/kg	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean mg/kg	Contaminant
	Summary of test data						Initial Screening		Oulier test				Normality test				UCL	
Acenaphthene	210	S4UL	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Acenaphthene
Acenaphthylene	170	S4UL	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Acenaphthylene
Anthracene	2400	S4UL	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Anthracene
Benzo(a)anthracene	7.2	S4UL	16	0.1	0.2	0.1	0	Mean value below guideline	n	0				not normal	not normal	n	0.1	Benzo(a)anthracene
Benzo(a)pyrene	2.2	S4UL	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Benzo(a)pyrene
Benzo(b)fluoranthene	2.6	S4UL	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Benzo(b)fluoranthene
Benzo(g,h,i)perylene	320	S4UL	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Benzo(g,h,i)perylene
Benzo(k)fluoranthene	77	S4UL	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Benzo(k)fluoranthene
Chrysene	15	S4UL	16	0.1	0.1	0.1	0	Mean value below guideline	n	0				not normal	not normal	n	0.1	Chrysene
Dibenzo(a,h)anthracene	0.24	S4UL	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Dibenzo(a,h)anthracene
Fluoranthene	280	S4UL	16	0.1	0.5	0.2	0	Mean value below guideline	n	0				not normal	not normal	n	0.3	Fluoranthene
Fluorene	170	S4UL	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Fluorene
Indeno(1,2,3-cd)pyrene	27	S4UL	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Indeno(1,2,3-cd)pyrene
Naphthalene	2.3	S4UL	16	0.1	0.1	0.1	0	Mean value below guideline	n	0				not normal	not normal	n	0.1	Naphthalene
Phenanthrene	95	S4UL	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Phenanthrene
Phenols	120	S4UL	16	0.3	0.3	0.3	0	Mean value below guideline	y	0				not normal	not normal	n	0.3	Phenols
Pyrene	620	S4UL	16	0.1	0.4	0.1	0	Mean value below guideline	[illegible]	0				not normal	not normal	n	0.2	Pyrene

Notes

S4UL	Suitable 4 Use Levels published by LQM and CIEH
SSV	Soil Screening Value as derived by Soiltechnics
ATK	Soil Screening Value derived by Atkins
NGV	No Guideline Value

Title: Analysis of test data in relation to concentrations of organic chemical contaminants.
Table number: 6

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Analysis of test data in relation to concentrations of organic chemical contaminants

Adopted model: Industrial/Commercial
Receptor: Construction operative and vegetation

Test procedure			Summary of test data					Initial Screening	Outlier test				Normality test			UCL	
Contaminant	Guideline source	Guideline value mg/kg	No. of tests	Min. mg/kg	Max. mg/kg	Mean mg/kg	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth	Concentration mg/kg	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean mg/kg	Contaminant
Acenaphthene	S4UL	84000	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Acenaphthene
Acenaphthylene	S4UL	83000	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Acenaphthylene
Anthracene	S4UL	520000	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Anthracene
Benzo(a)anthracene	S4UL	170	16	0.1	0.2	0.1	0	Mean value below guideline	n	0				not normal	not normal	n	0.1	Benzo(a)anthracene
Benzo(a)pyrene	S4UL	35	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Benzo(a)pyrene
Benzo(b)fluoranthene	S4UL	44	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Benzo(b)fluoranthene
Benzo(g,h,i)perylene	S4UL	3900	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Benzo(g,h,i)perylene
Benzo(k)fluoranthene	S4UL	1200	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Benzo(k)fluoranthene
Chrysene	S4UL	350	16	0.1	0.1	0.1	0	Mean value below guideline	n	0				not normal	not normal	n	0.1	Chrysene
Dibenzo(a,h)anthracene	S4UL	3.5	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Dibenzo(a,h)anthracene
Fluoranthene	S4UL	23000	16	0.1	0.5	0.2	0	Mean value below guideline	n	0				not normal	not normal	n	0.3	Fluoranthene
Fluorene	S4UL	63000	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Fluorene
Indeno(1,2,3-cd)pyrene	S4UL	500	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Indeno(1,2,3-cd)pyrene
Naphthalene	S4UL	190	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Naphthalene
Phenanthrene	S4UL	22000	16	0.1	0.1	0.1	0	Mean value below guideline	y	0				not normal	not normal	n	0.1	Phenanthrene
Phenols	S4UL	440	16	0.3	0.3	0.3	0	Mean value below guideline	y	0				not normal	not normal	n	0.3	Phenols
Pyrene	S4UL	54000	16	0.1	0.4	0.1	0	Mean value below guideline	n	0				not normal	not normal	n	0.2	Pyrene

Notes

S4UL	Suitable 4 Use Levels published by LQM and CIEH
SSV	Soil Screening Value as derived by Soiltechnics
ATK	Soil Screening Value derived by Atkins
NGV	No Guideline Value

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Summary of leachate test results

Receptor	**Groundwater**	
Water type	**Freshwater**	
Fish type	**Salmonid**	
Water hardness	**50-100**	**mg/l**

(Based on information presented on the Drinking Water Inspectorate website)

Contaminant	Guideline value (µg/l)	Guideline source	Location	TP03	TP08	TP11	TP16
			Depth (m)	0.1	0.1	0.1	0.1
Inorganics (µg/l)							
Arsenic	50	EQS (f)		2	< 1.0	1	3
Boron	2000	EQS (f)		< 20	< 20	< 20	< 20
Cadmium	5	EQS (f)		0.11	< 0.080	0.13	0.16
Chromium	10	EQS (f)		< 1.0	< 1.0	< 1.0	< 1.0
Copper	6	EQS (f)		14	5	12	18
Lead	10	EQS (f)		7	4	6	10
Mercury	1	EQS (f)		< 0.50	< 0.50	< 0.50	< 0.50
Nickel	100	EQS (f)		3	2	4	4
Selenium[1]	10	UKDWS		< 1.0	< 1.0	< 1.0	< 1.0
Vanadium[2]	20	EQS (f)		2	1	2	7
Zinc	50	EQS (f)		35	14	13	23
Free Cyanide[1]	50	UKDWS		<50	<50	<50	<50
Nitrate as N	50000	UKDWS		3000	2200	2900	880
Sulphate as SO4	400000	EQS(f)		4600	1400	1500	3100
PAH (µg/l)							
Benzo(a)pyrene[1,4]	0.01	UKDWS		< 0.10	< 0.10	< 0.10	< 0.10
Naphthalene[2]	10	EQS (f)		< 0.10	< 0.10	< 0.10	< 0.10
Sum of 4 PAH[1]	0.1	UKDWS		<0.1*	<0.1*	<0.1*	<0.1*

Notes

1 EQS values not available
2 UKDWS not available
3 Lower detectable limit above UKDWS. Concentrations below detectable limits are not considered further.
* Taken as lower detection limit
# Taken as lower detection limit of a single compound

UKDWS UK Drinking Water Standard Guideline taken from "The Water Supply (Water Quality) Regulations 2000"
EQS (f) Environmental Quality Standard for freshwater published by the Environment Agency
EQS (s) Environmental Quality Standard for saltwater published by the Environment Agency

Title	Table number
Comparison of measured concentrations with guideline values for water receptors	8

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Initial Conceptual Model

Current site use commercial/industrial
Proposed site use residential

Source	Pathway: Humans – Ingestion of air-borne dusts	Pathway: Humans – Ingestion of soil	Pathway: Humans – Ingestion of vegetables and soil attached to vegetables	Pathway: Humans – Inhalation of air-borne dusts	Pathway: Humans – Inhalation of vapours	Pathway: Humans – Dermal contact with soil and dust	Pathway: Vegetation – Root uptake, deposition to shoots and foliage contact	Pathway: Water – Percolation of water through contaminated soils	Pathway: Water – Near-surface water run-off through contaminated soils	Pathway: Water – Saturation of contaminated soils by flood waters	Receptor		Risk assessment to CIRIA C552: Consequence of risk occurring via most likely pathway	Risk
Soils														
Garage adjacent to south - TPHs, PAHs, VOCs/SVOCs	Likely	Likely	Unlikely	Likely	Likely	Likely	-	-	-	-	Current site users	Adult	Minor	Low
	Likely	Likely	Likely	Likely	Likely	Likely	-	-	-	-	Proposed site users	Child	Mild	Low/moderate
	Likely	Likely	Unlikely	Likely	Likely	Likely	-	-	-	-	Construction operatives	Adult	Minor	Low
	-	-	-	-	-	-	Likely	Unlikely	Likely	Unlikely	Vegetation (current and proposed)	-	Mild	Low/moderate
	-	-	-	-	-	-	-	-	-	-	Water (current and proposed)	-	Mild	Low/moderate
Mill, unclassified works, small gas works and iron and brass foundry adjacent to south and west - Metals, TPHs, PAHs, VOCs/SVOCs	Likely	Likely	Unlikely	Likely	Likely	Likely	-	-	-	-	Current site users	Adult	Minor	Low
	Likely	Likely	Likely	Likely	Likely	Likely	-	-	-	-	Proposed site users	Child	Mild	Low/moderate
	Likely	Likely	Unlikely	Likely	Likely	Likely	-	-	-	-	Construction operatives	Adult	Minor	Low
	-	-	-	-	-	-	Likely	Unlikely	Likely	Unlikely	Vegetation (current and proposed)	-	Mild	Low/moderate
	-	-	-	-	-	-	-	-	-	-	Water (current and proposed)	-	Mild	Low/moderate
Dairy adjacent to south - Organic contaminants	Likely	Likely	Unlikely	Likely	Likely	Likely	-	-	-	-	Current site users	Adult	Minor	Low
	Likely	Likely	Likely	Likely	Likely	Likely	-	-	-	-	Proposed site users	Child	Minor	Low
	Likely	Likely	Unlikely	Likely	Likely	Likely	-	-	-	-	Construction operatives	Adult	Minor	Low
	-	-	-	-	-	-	Likely	Unlikely	Likely	Unlikely	Vegetation (current and proposed)	-	Minor	Low
	-	-	-	-	-	-	-	-	-	-	Water (current and proposed)	-	Minor	Low

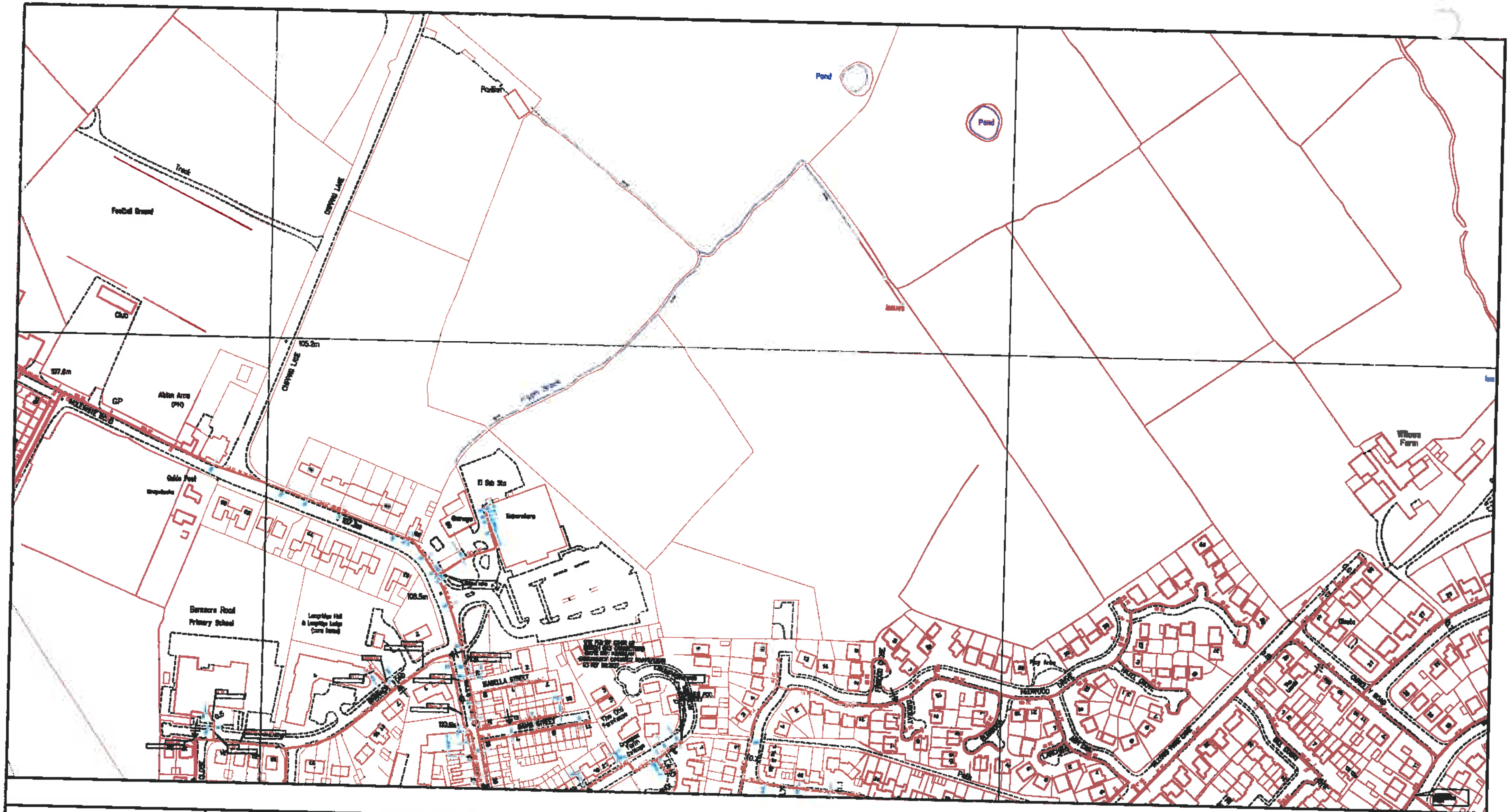
Final Conceptual Model

Current site use commercial/industrial
Proposed site use residential

Source	Pathway: Humans – Ingestion of air-borne dusts	Pathway: Humans – Ingestion of soil	Pathway: Humans – Ingestion of vegetables and soil attached to vegetables	Pathway: Humans – Inhalation of air-borne dusts	Pathway: Humans – Inhalation of vapours	Pathway: Humans – Dermal contact with soil and dust	Pathway: Vegetation – Root uptake, deposition to shoots and foliage contact	Pathway: Water – Percolation of water through contaminated soils	Pathway: Water – Near-surface water run-off through contaminated soils	Pathway: Water – Saturation of contaminated soils by flood waters	Receptor		Risk assessment to CIRIA C552: Consequence of risk occurring via most likely pathway	Risk
Soils														
No measured exceedances of inorganic or organic contaminants	Likely	Likely	Unlikely	Likely	Likely	Likely	-	-	-	-	Current site users	Adult	Minor	Low
	Likely	Likely	Likely	Likely	Likely	Likely	-	-	-	-	Proposed site users	Child	Minor	Low
	Likely	Likely	Unlikely	Likely	Likely	Likely	-	-	-	-	Construction operatives	Adult	Minor	Low
	-	-	-	-	-	-	Likely	Unlikely	Likely	Unlikely	Vegetation (current and proposed)	-	Minor	Low
	-	-	-	-	-	-	-	-	-	-	Water (current and proposed)	-	Minor	Low
Leachate														
Elevated leachable concentrations of copper in 3 of 4 samples of Topsoil	-	-	-	-	-	-	-	Unlikely	Likely	Unlikely	Water (current and proposed)	-	Mild	Low-moderate

Title: Conceptual Site Model

Table number: 1



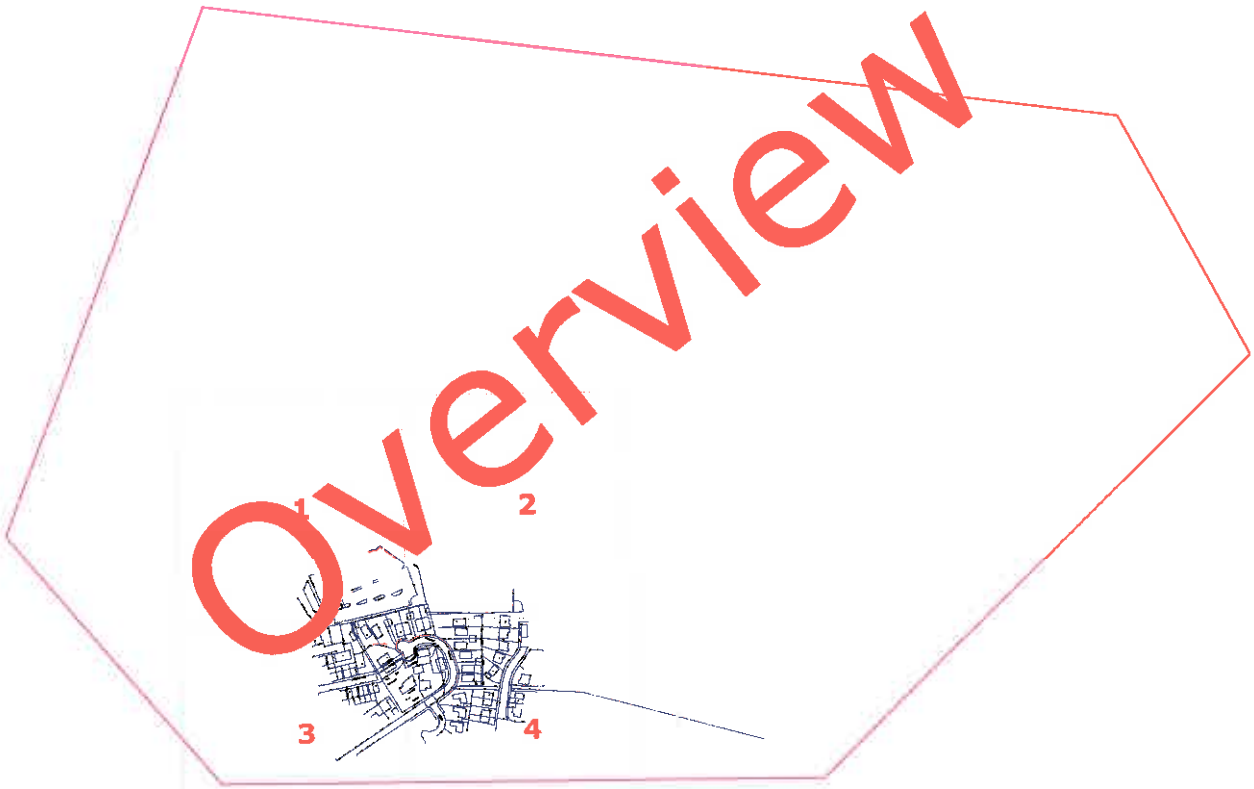
SCALE: Not to scale	LP MAINS
USER ID: wignalp	MP MAINS
DATE: 06/11/2015	IP MAINS
EXTRACT DATE: 15/06/2015	LHP MAINS
MAP REF: SD6037	NHP MAINS
CENTRE: 360328, 437960	

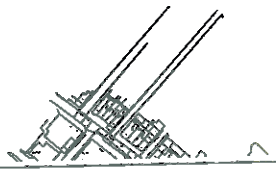
Valve · Decrease Valve · Syphon · Diameter Change · Material Change

This plan shows those pipes owned by National Grid Gas plc in their role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc. are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by National Grid Gas plc or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue. Further information on all DR4s can be determined by calling the DR4 hotline on 01455 892426 (9am-5pm) A DR4 is where a potential error has been identified within the asset record and a process is currently underway to investigate and resolve the error as appropriate.

MAPS Viewer Version 5.6.7.0

Local Machine





Date Requested: 09/11/2015
Requested by: Paul Wignall
Job Reference: 7631462

Company: Barratt Homes Manchester
Your Scheme/Reference: Chippings Lane

Key for Mains & Service Pipework

Existing LP mains or services operating up to 75 millibar gauge

Existing MP mains or services operating between 75 millibar and 2 bar gauge

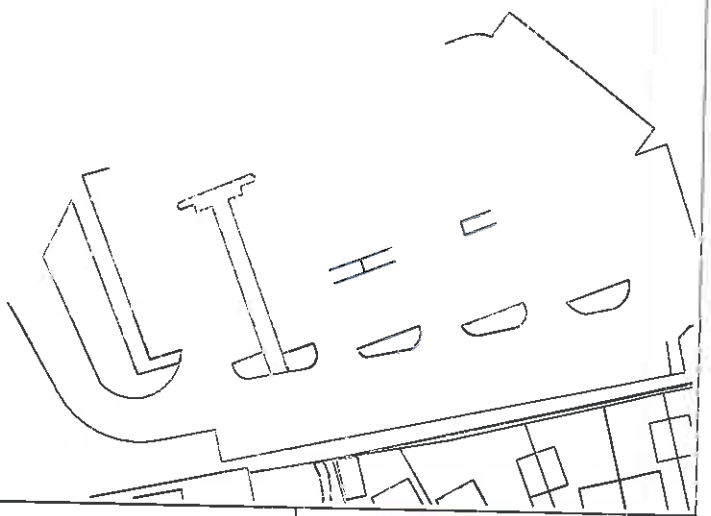
Existing IP mains or services operating between 2 bar and 7 bar gauge

ESP UTILITIES GROUP

ESP Utilities Group Ltd
Hazeldean, Station Road
Leatherhead,
Surrey, KT22 7AA
Phone: 01372 227560
Email: info@espipelines .com

Dig Sites:
Area Line

Approx scale on A4 paper: 1:1000 (excluding Overview map)



Date Requested: 09/11/2015
Requested by: Paul Wignall
Job Reference: 7631462

Company: Barratt Homes Manchester
Your Scheme/Reference: Chippings Lane

Key for Mains & Service Pipework

Existing LP mains or services operating up to 75 millibar gauge

Existing MP mains or services operating between 75 millibar and 2 bar gauge

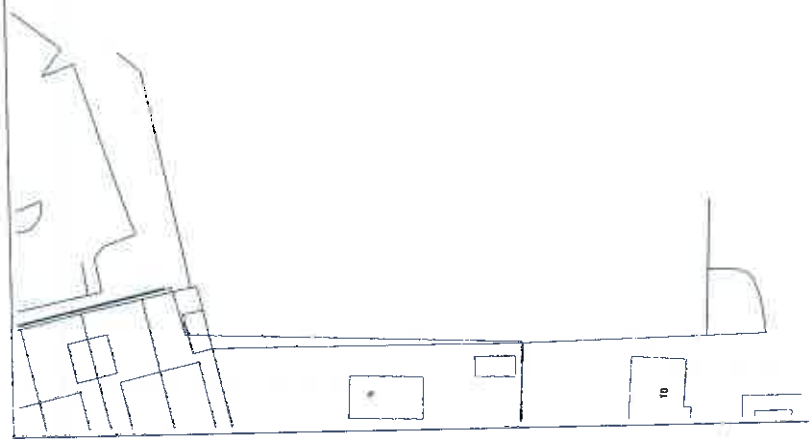
Existing IP mains or services operating between 2 bar and 7 bar gauge

ESP UTILITIES GROUP

ESP Utilities Group Ltd
Hazeldean, Station Road
Leatherhead,
Surrey, KT22 7AA
Phone: 01372 227560
Email: info@espipelines .com

Dig Sites:
Area Line
Approx scale on A4 paper: 1:1000 (excluding Overview map)

2



Date Requested: 09/11/2015
Requested by: Paul Wignall
Job Reference: 7631462

Company: Barratt Homes Manchester
Your Scheme/Reference: Chippings Lane

Key for Mains & Service Pipework

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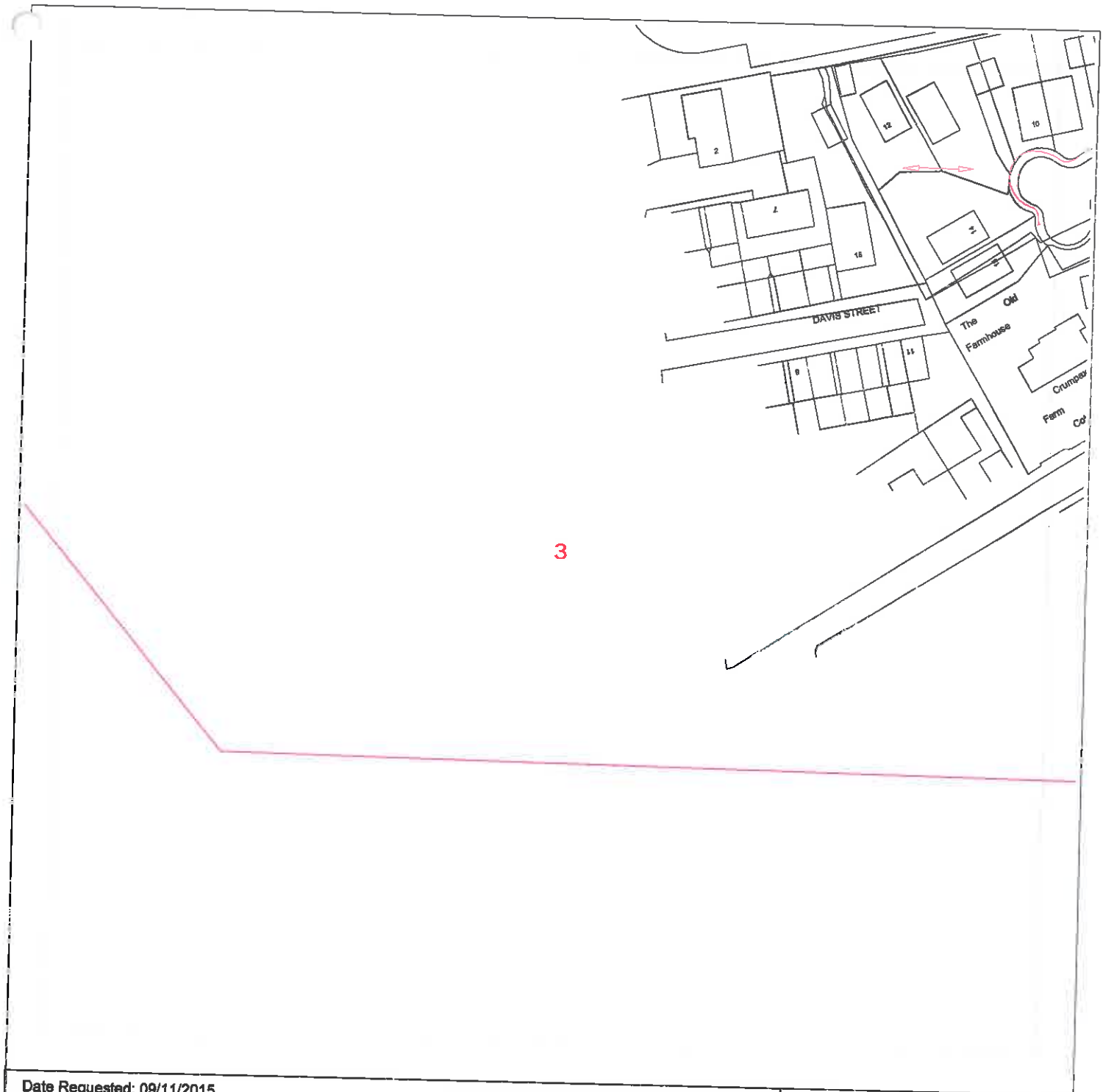

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Company: Barratt Homes Manchester
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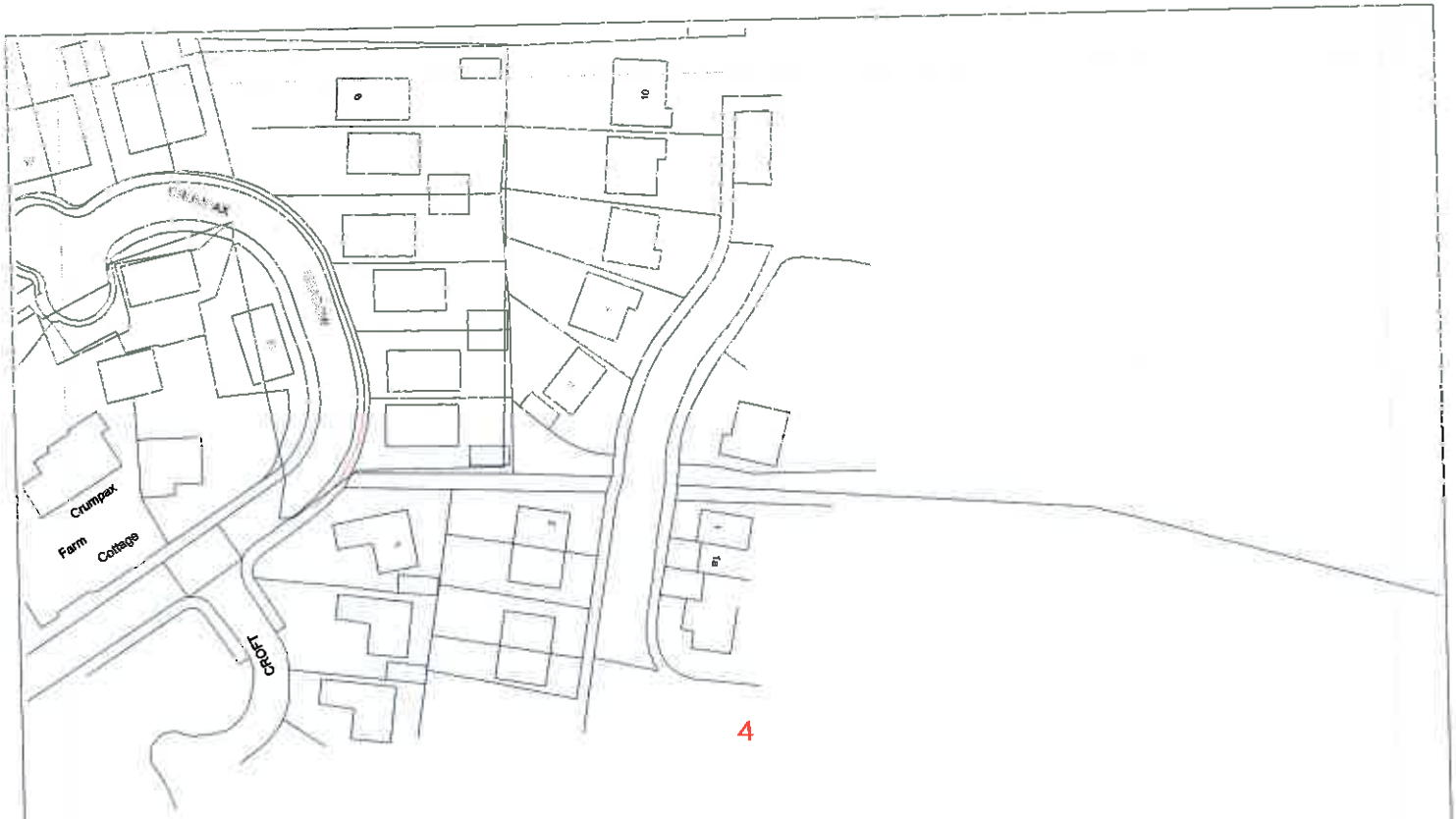

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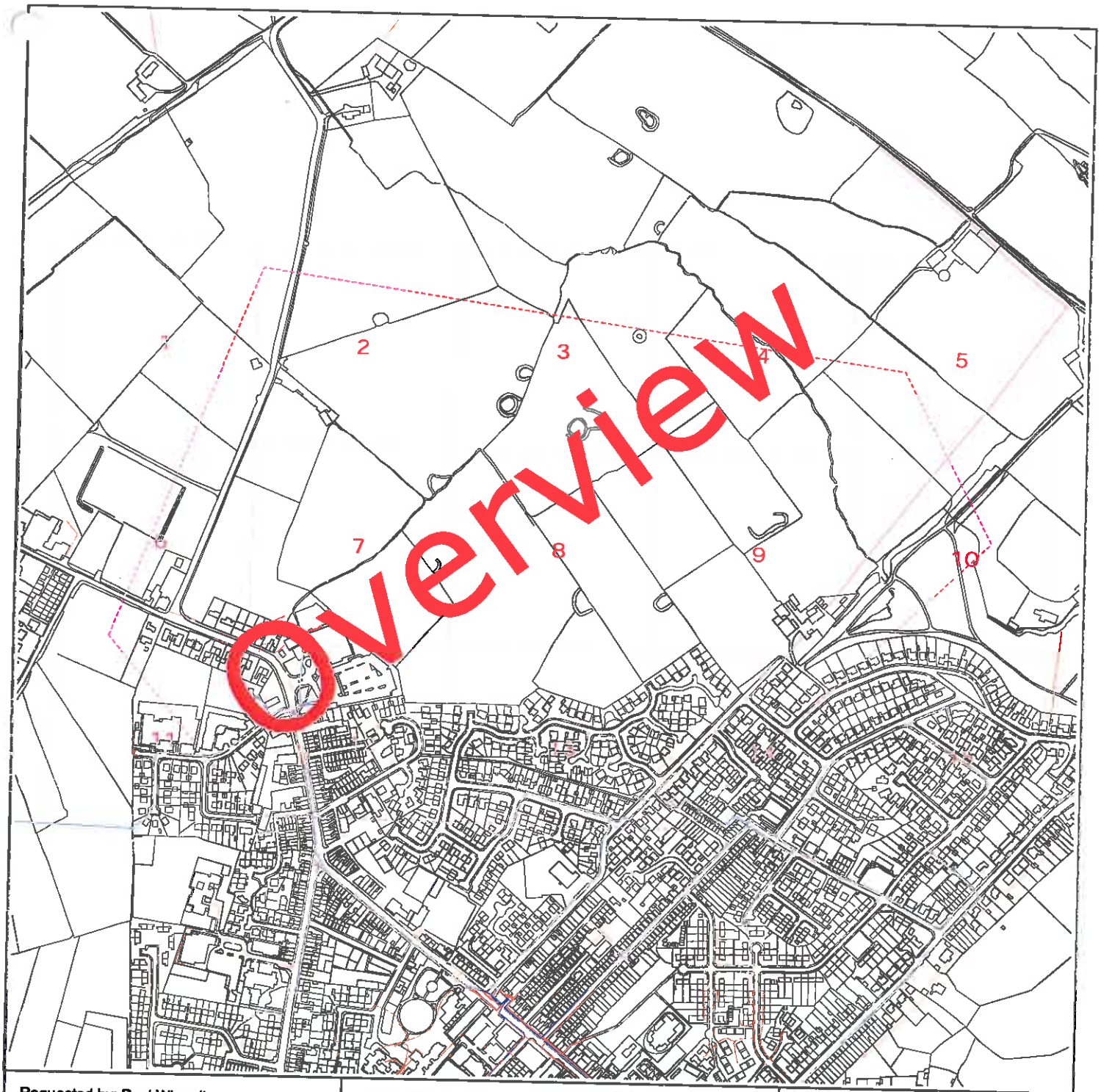

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Company: Barratt Homes Manchester
Date Requested: 09/11/2015
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Your Scheme/Reference: Chippings Lane

Dig Sites:

Area ▭ Line ----

Operating Voltage	Colour Code	Line Colour
132kV	Black	
33kV	Green	
22kV-25kV	Yellow	
11kV	Red	
6kV-6.6kV	Blue	
1kV-6kV	Violet	
LV	Orange	
Unknown Voltage	Brown	

electricity north west

Data Management
Electricity North West
Linley House
Dickinson Street
Manchester, M1 4LF
Phone: 0800 195 4141
Email: planrequest@enwl.co.uk

Scales on A4 paper:
1:1250 Area dig site
1:250 Line dig site

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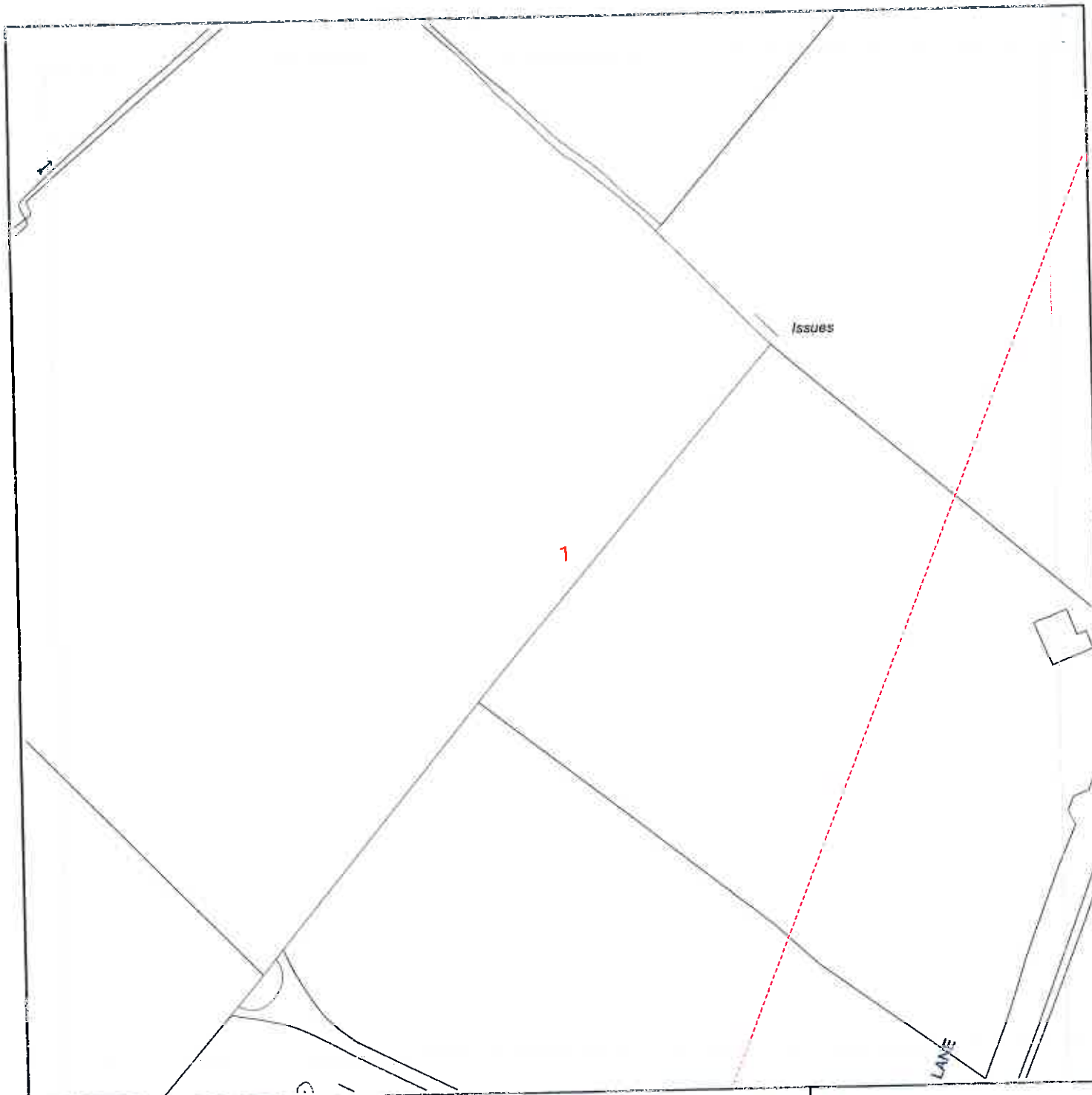

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Your Scheme/Reference: Chippings Lane

Dig Sites:

Area Line

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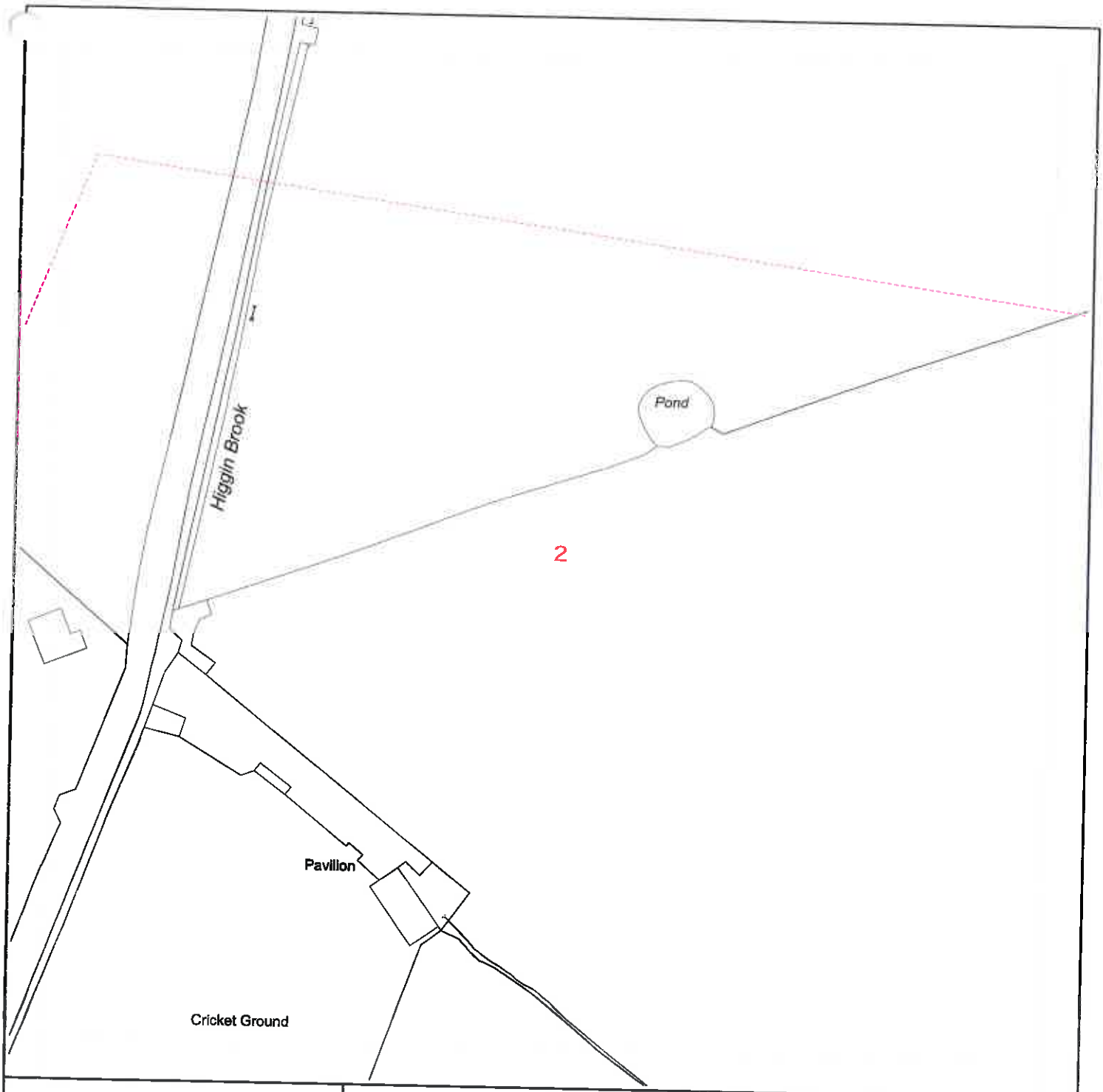

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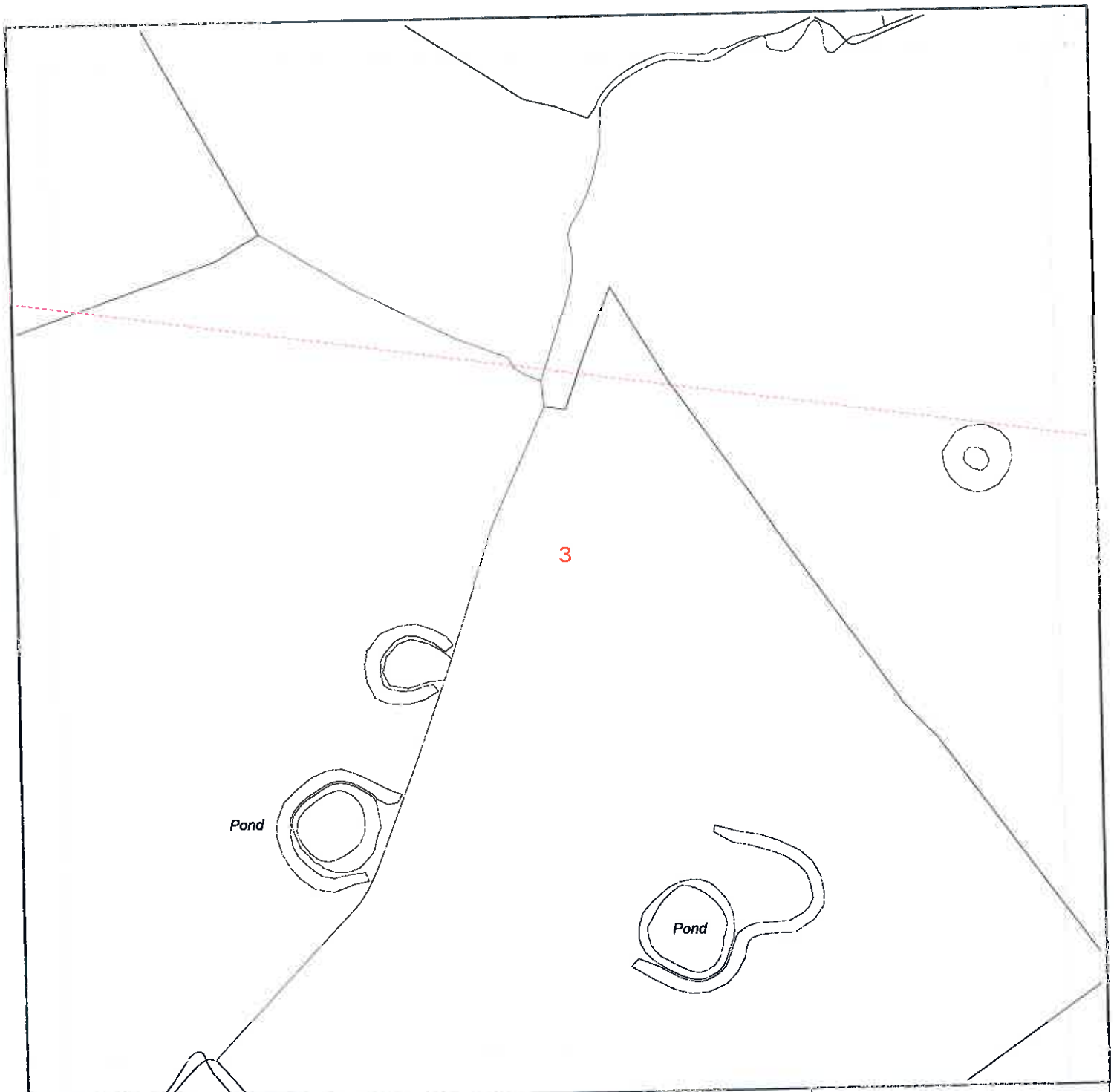

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Dig Sites:
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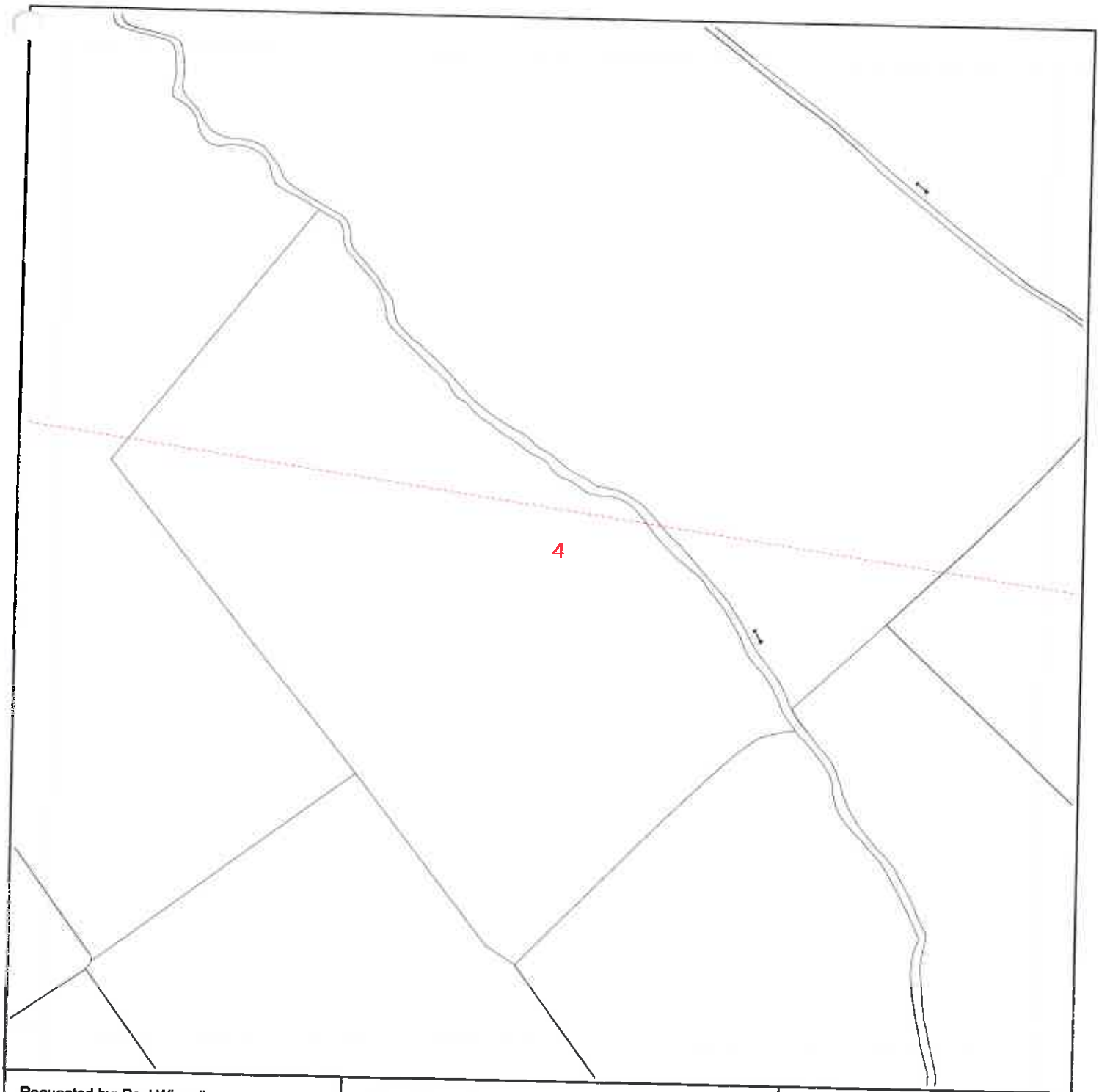

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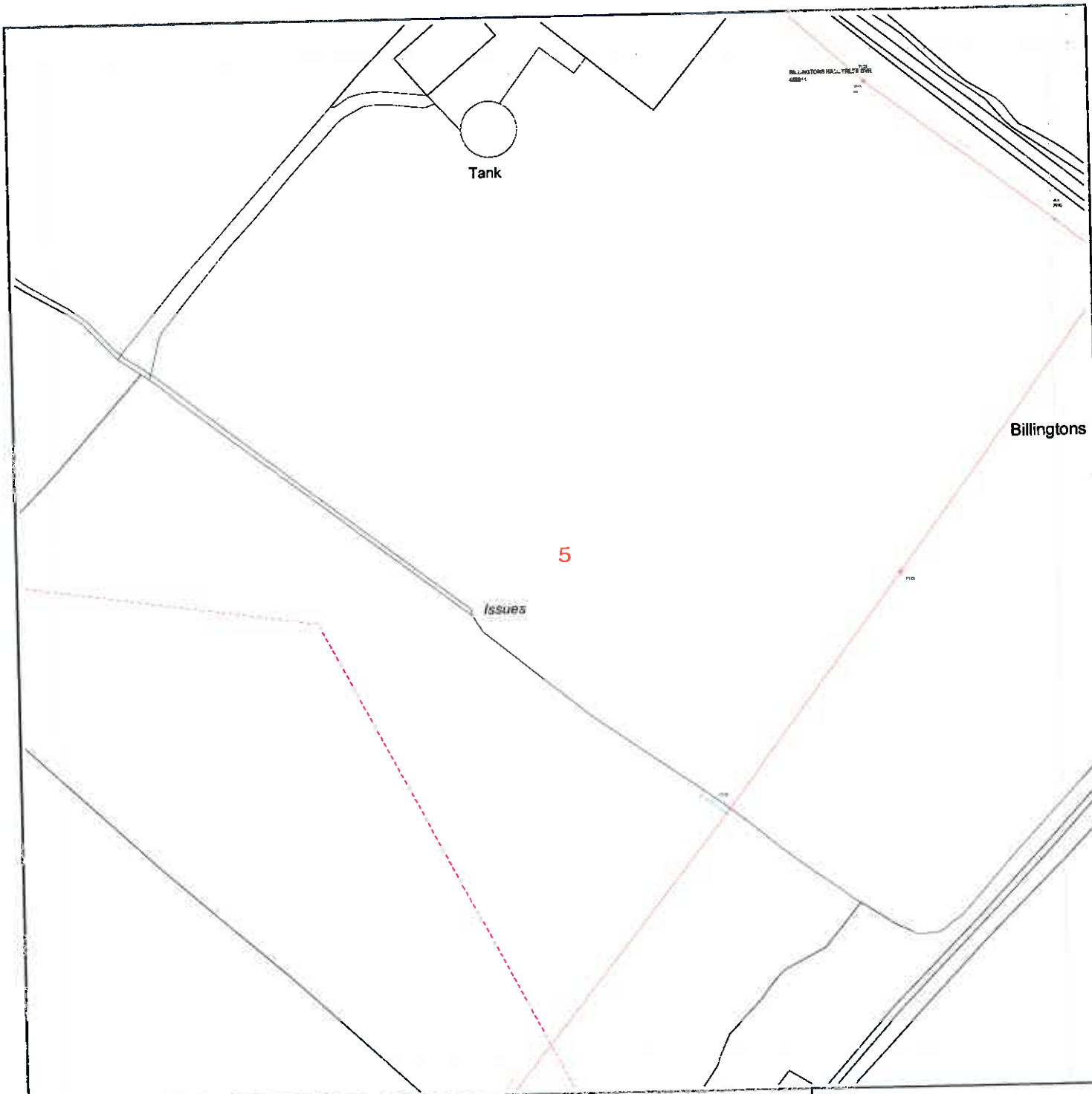

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electricity north west

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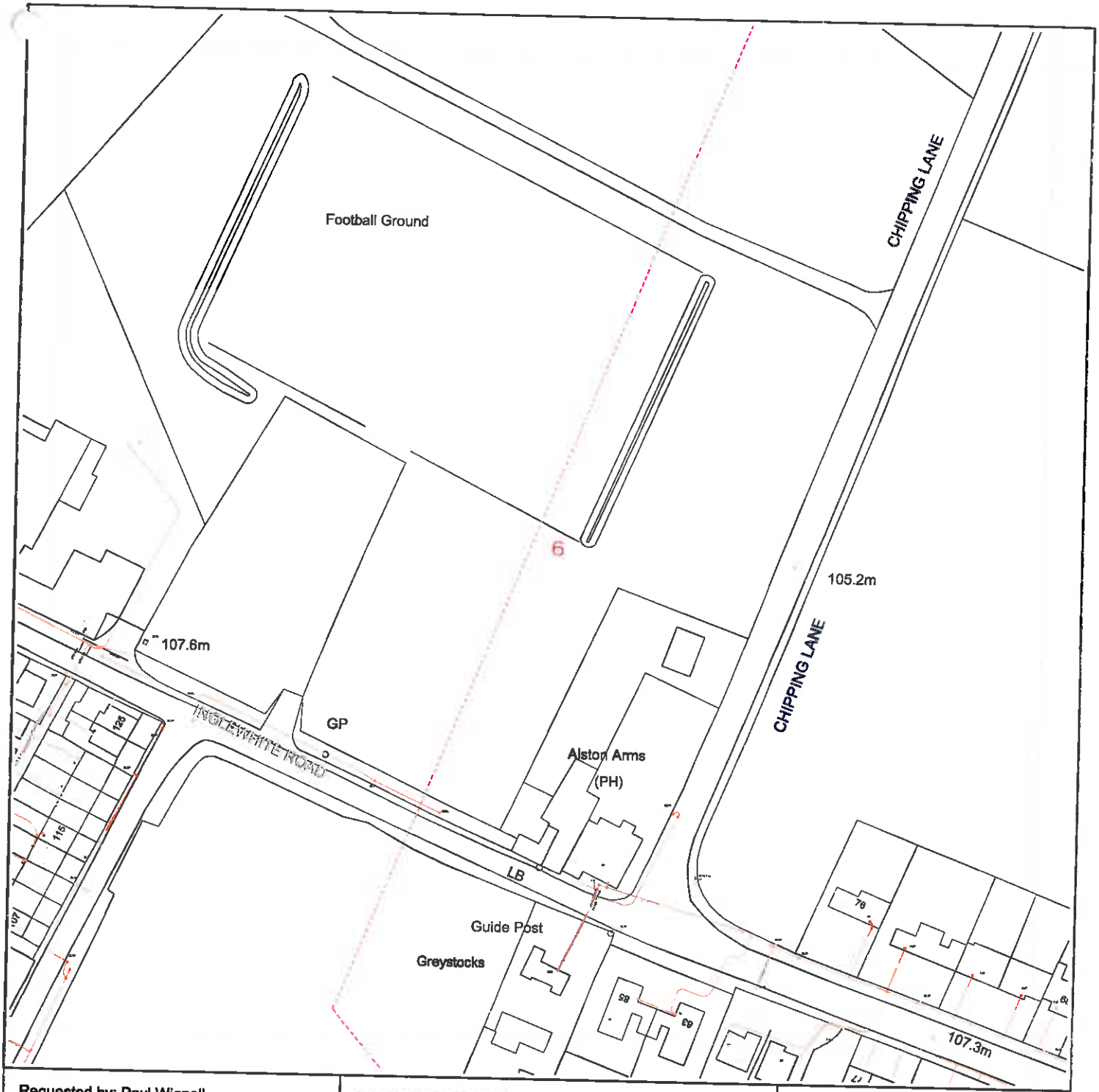

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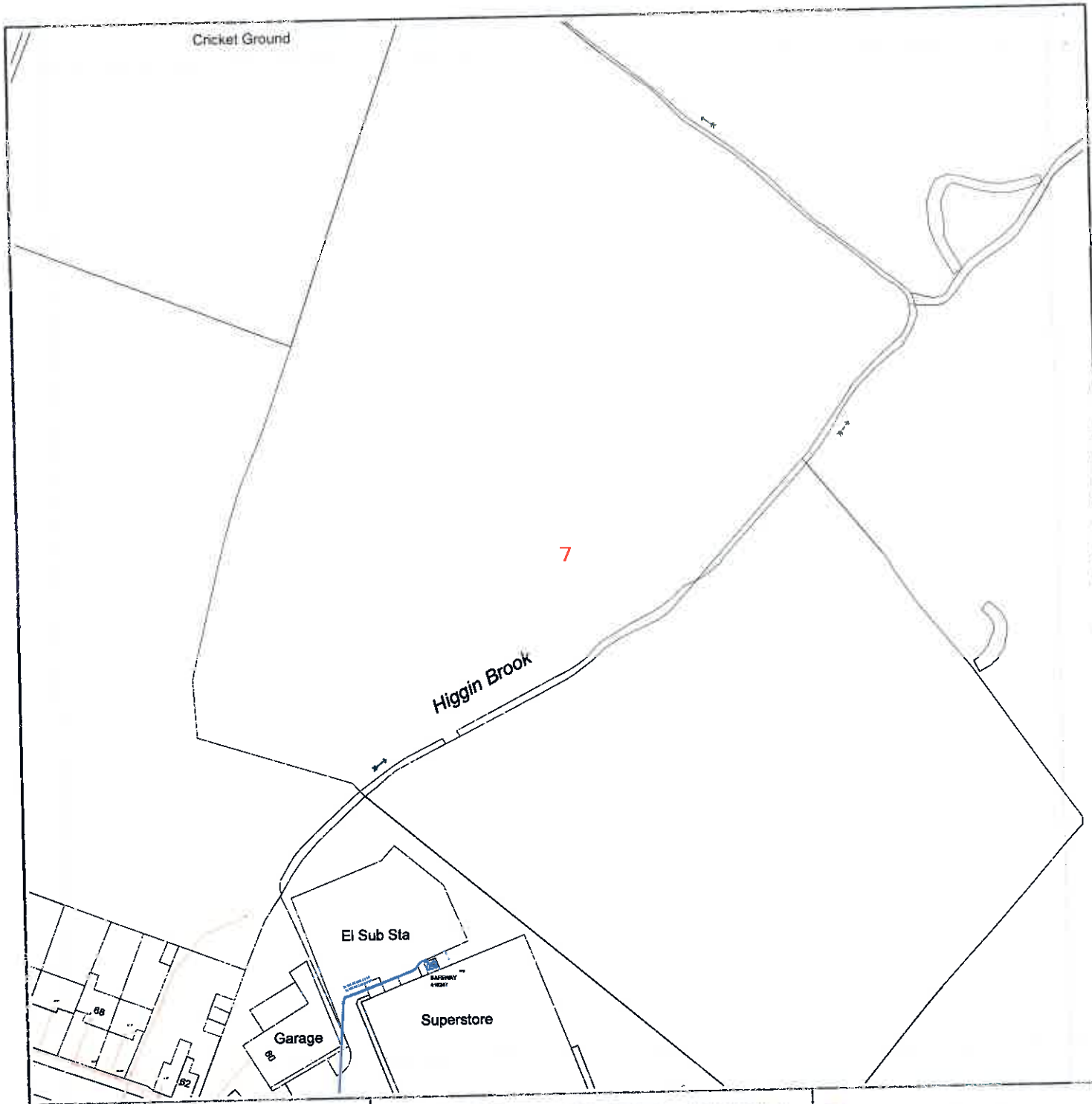

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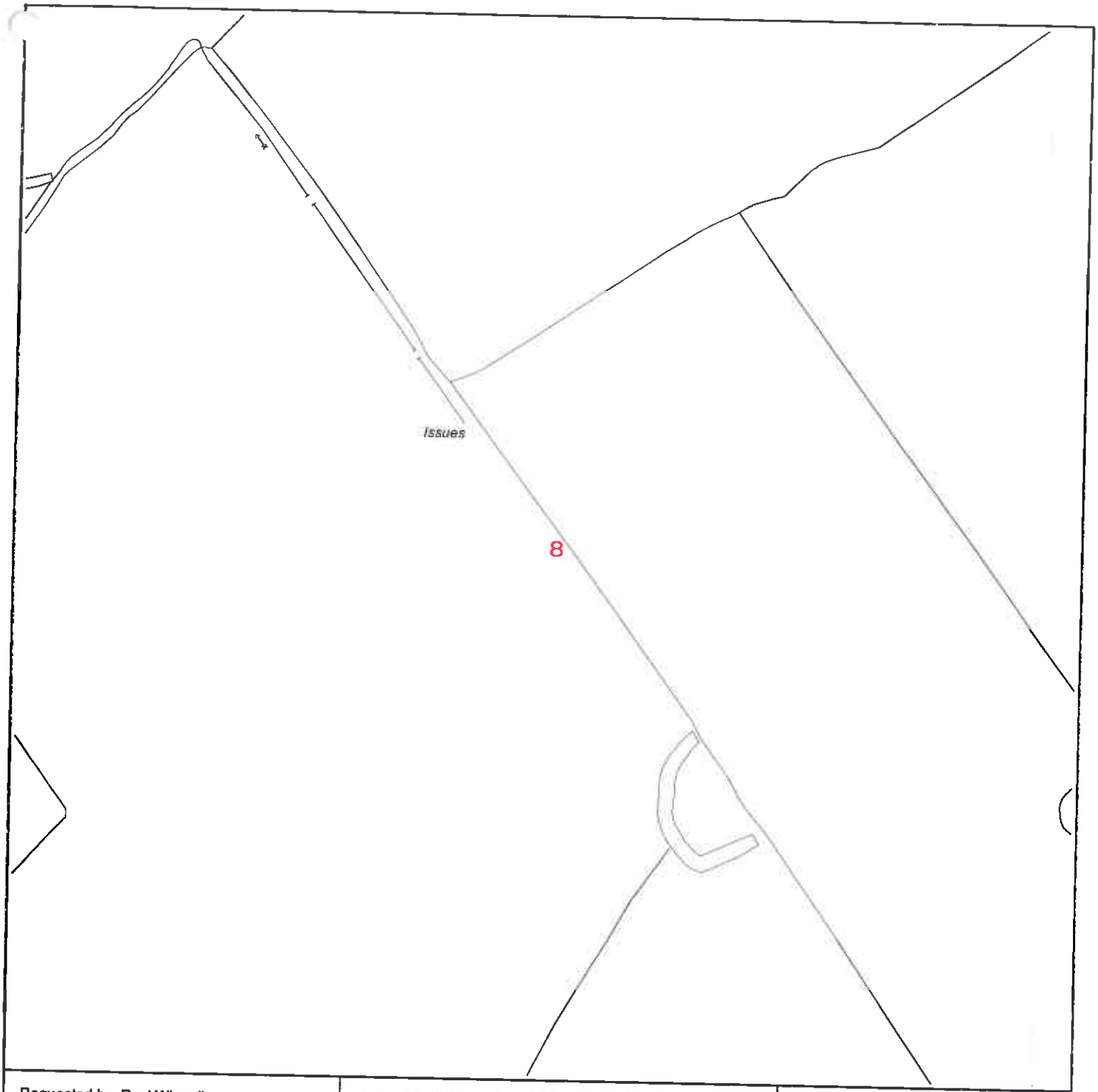

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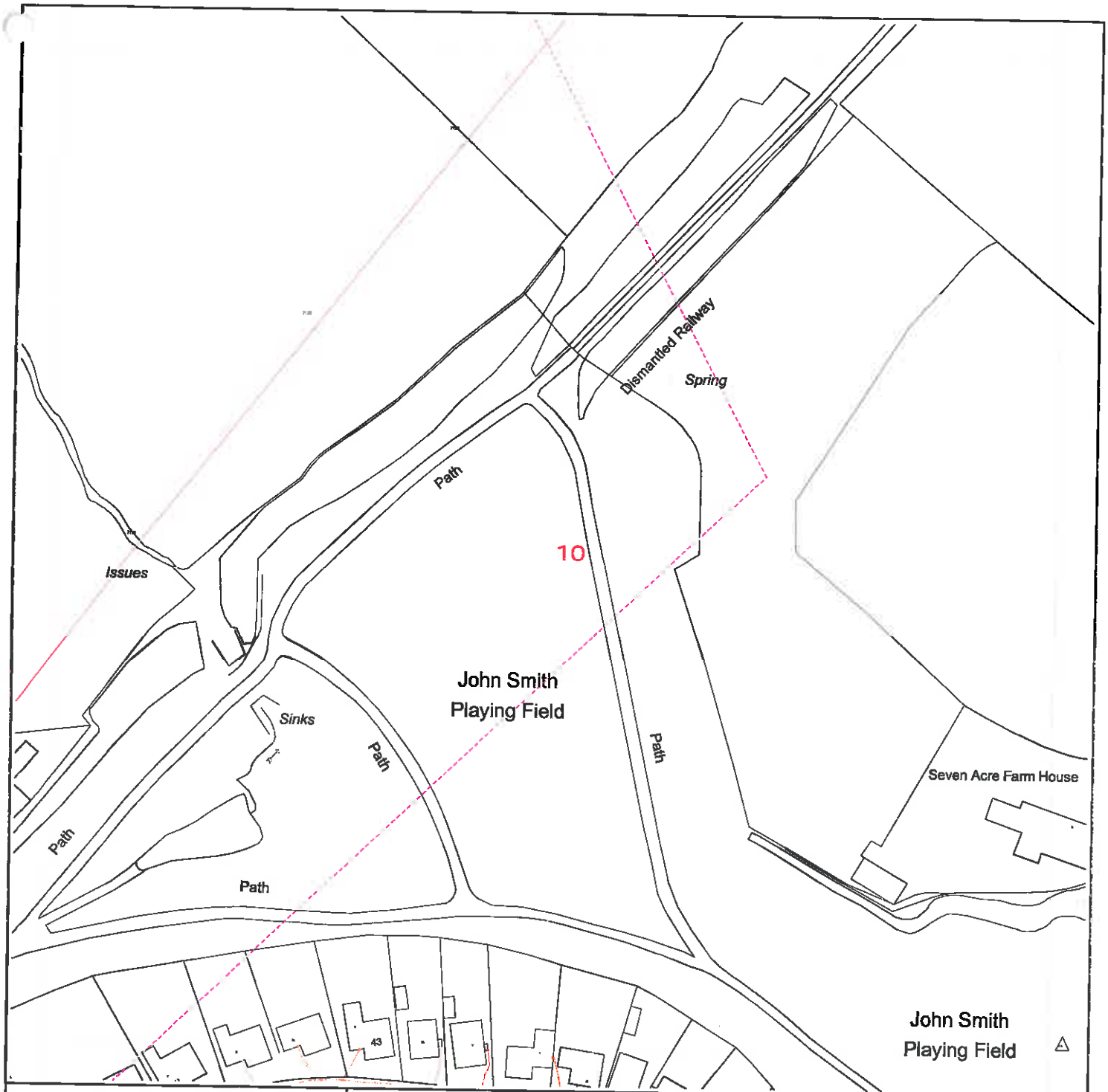

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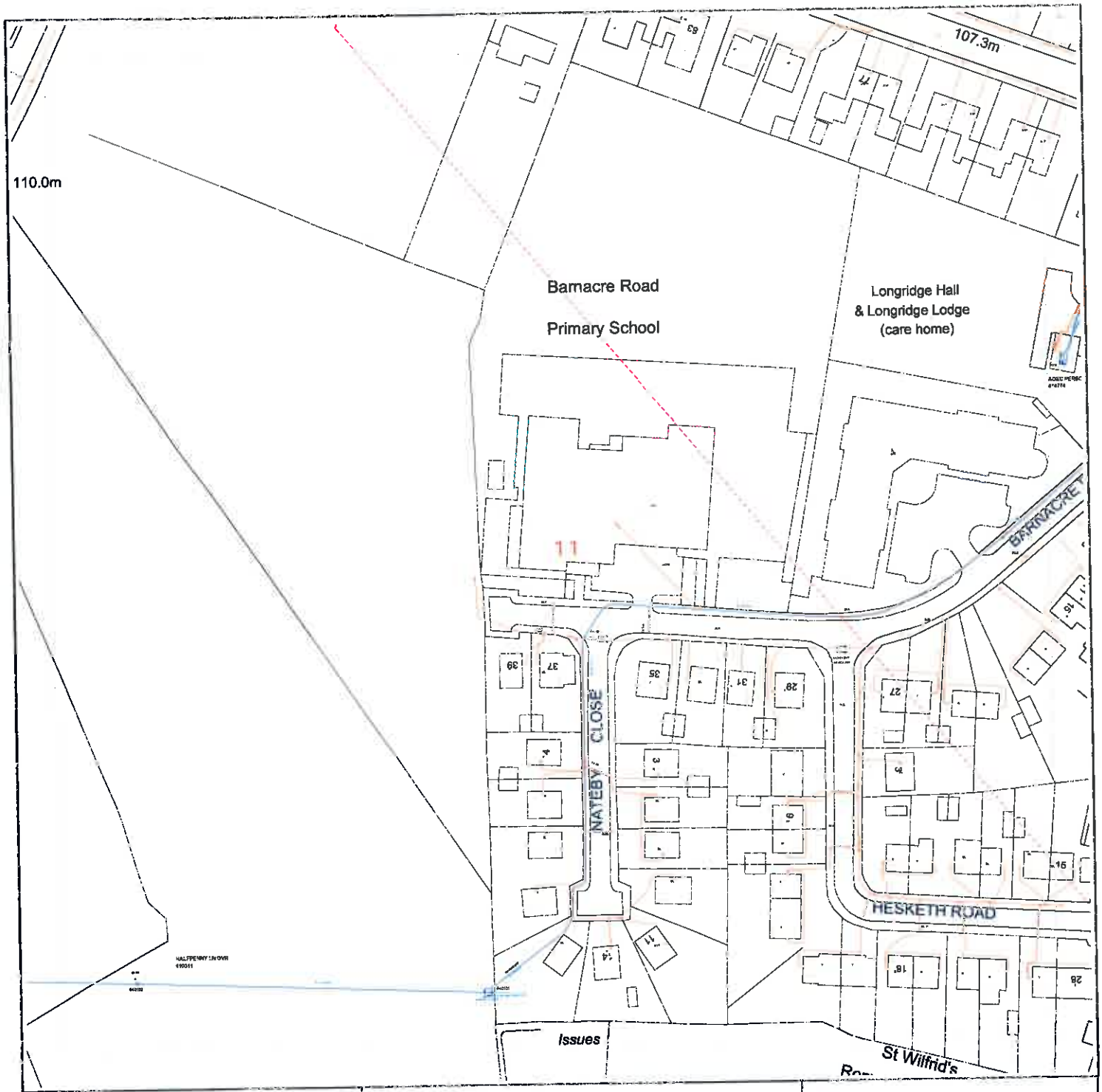

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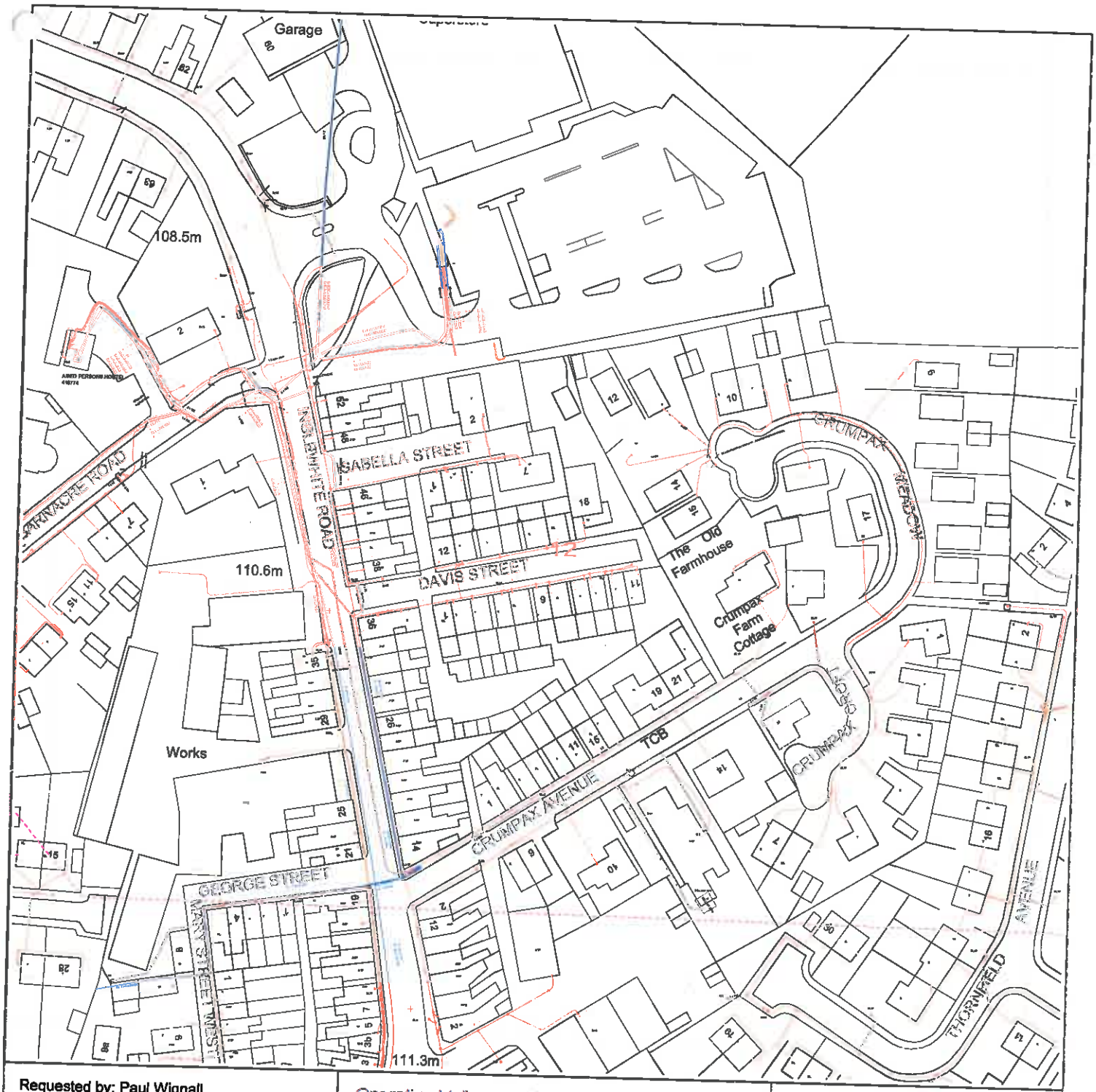

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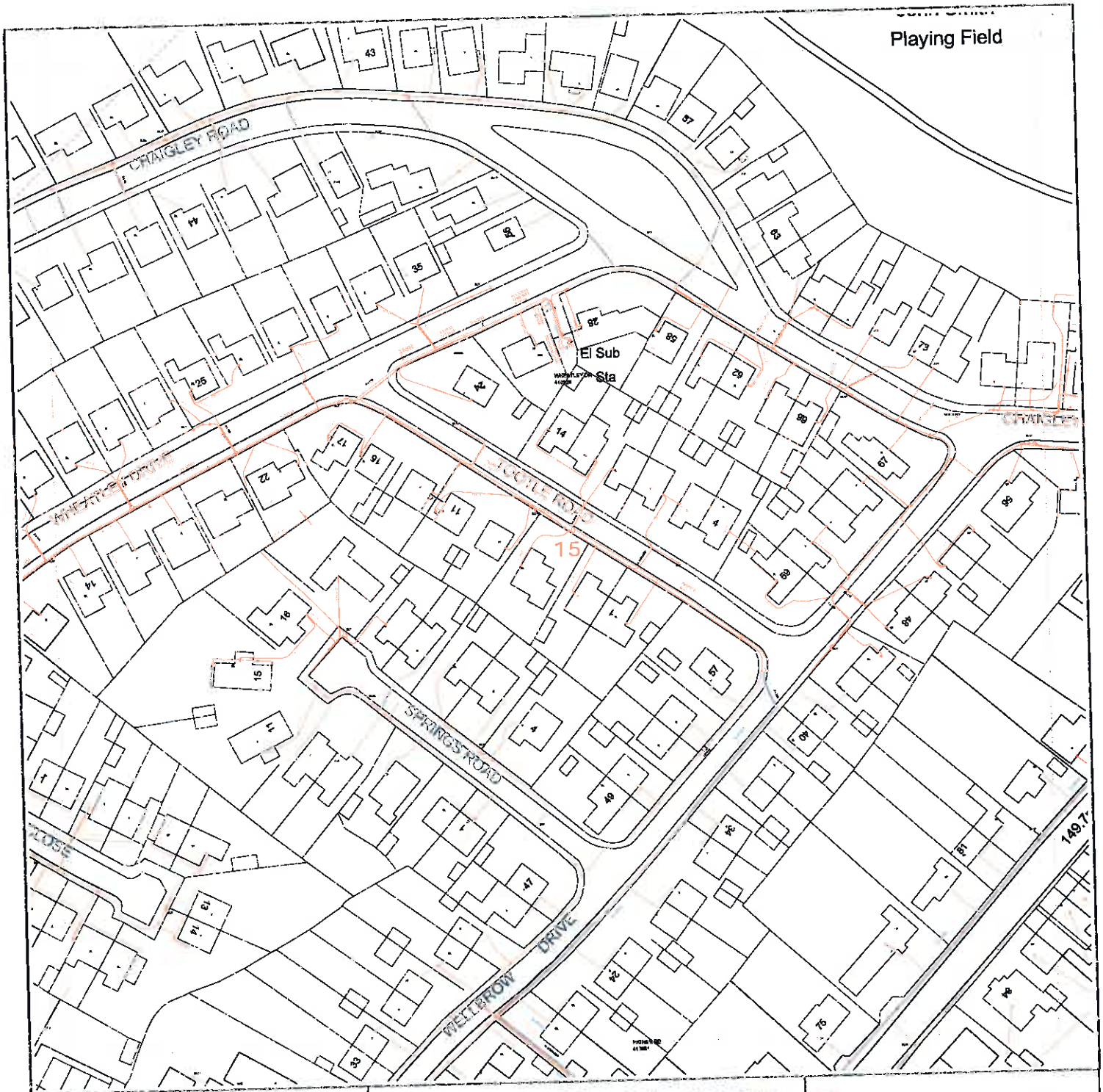
1:250 Line dig site

Unless otherwise indicated the depth of Electricity North West Limited cables are in accordance with NJUG (450mm for Low Voltage & 600mm for 11kV cables) 33kV and 132kV cables are laid at depths as marked. The depth and positions of Electricity North West Limited equipment was accurate as shown when the equipment was installed. However third parties may have altered the level & other reference data. Therefore Electricity North West Limited accept no responsibility for the position of Electricity North West Limited equipment being different from shown. No person, body or company, shall be relieved from liability for damage caused to Electricity North West Limited equipment by reason of being located differently to the indications on this drawing. Service cables are not necessarily shown but must be assumed to exist to all premises, streetlights and signs. There may be other Electricity North West Limited apparatus in the vicinity which is not indicated on the cable records. Other apparatus may also be present which is owned by a third party other than Electricity North West Limited.

Reference should be made to HSE Guidance, HS(G)47 "Avoiding Danger from Underground Services" and GS6 "Avoidance of Danger from Overhead Power Lines".

Electricity North West Limited 304 Bridgewater Place, Birchwood Park, Warrington WA3 6XG. Registered in England and Wales. Registered No 02366949



Requested by: Paul Wignall

Company: Barratt Homes Manchester

Date Requested: 09/11/2015

Job Reference: 7631462

Your Scheme/Reference: Chippings Lane

Operating Voltage	Colour Code	Line Colour
132kV	Black	
33kV	Green	
22kV-25kV	Yellow	
11kV	Red	
6kV-6.6kV	Blue	
1kV-6kV	Violet	
LV	Orange	
Unknown Voltage	Brown	

Dig Sites:

Area Line

Data Management
Electricity North West
Linley House
Dickinson Street
Manchester, M1 4LF
Phone: 0800 195 4141
Email: planrequest@enwl.co.uk

Scales on A4 paper:
1:1250 Area dig site
1:250 Line dig site

Unless otherwise indicated the depth of Electricity North West Limited cables are in accordance with NRSG (450mm for Low Voltage & 600mm for 11kV cables) 33kV and 132kV cables are laid at depths as marked. The depth and positions of Electricity North West Limited equipment was accurate as shown when the equipment was installed. However third parties may have altered the level & other reference data. Therefore Electricity North West Limited accept no responsibility for the position of Electricity North West Limited equipment being different from shown. No person, body or company, shall be relieved from liability for damage caused to Electricity North West Limited equipment by reason of being located differently to the indications on this drawing. Service cables are not necessarily shown but must be assumed to exist to all premises, streetlights and signs. There may be other Electricity North West Limited apparatus in the vicinity which is not indicated on the cable records. Other apparatus may also be present which is owned by a third party other than Electricity North West Limited.

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United Utilities

United Utilites Water Limited
Property Searches
Ground Floor Grasmere House
Lingley Mere Business Park
Great Sankey
Warrington
WA5 3LP
DX 715568 Warrington
Telephone 0370 751 0101

Property.searches@uuplc.co.uk

Your Ref: LONGRIDGE - FREDDIE
Our Ref: 14/ 1154581
Date: 10/11/2015

Barratt Manchester

4 Brindley Road, City Park
Manchester

M16 9HQ

FAO:

Dear Sirs

Location: LONGRIDGE CRICKET CLUB CHIPPING LANE LONGRIDGE PRESTON PR3 2NA

I acknowledge with thanks your request dated 09/11/15 for information on the location of our services.

Please find enclosed plans showing the approximate position of our apparatus known to be in the vicinity of this site. The enclosed plans are being provided to you subject to the United Utilities Terms and Conditions - Wastewater & Water Distribution Plans which are shown overleaf.

I also attach United Utilities' General Condition and Information sheets regarding United Utilities wastewater network and water distribution apparatus, which details contact numbers for additional services (i.e. new supplies, connections, diversions) which we are unable to deal with at this office. You should ensure that the Condition and Information sheets are made available to anyone carrying out any works which may affect our apparatus.

I trust the above meets with you requirements and look forward to hearing from you should you need anything further.

If you have any queries regarding this matter please telephone us on 0370 7510101.

Yours Faithfully,

S McManus.

Sue McManus
Operations Manager
Property Searches

United Utilities Water Limited
Registered in England & Wales No. 2366678
Registered Office: Haweswater House,
Lingley Mere Business Park, Lingley Green Avenue,
Great Sankey, Warrington, WA6 3LP

TERMS AND CONDITIONS - WASTERWATER & WATER DISTRIBUTION PLANS

These provisions apply to the public sewerage, water distribution and telemetry systems (including sewers which are the subject of an agreement under Section 104 of the Water Industry Act 1991 and mains installed in accordance with the agreement for the self construction of water mains) (UUWL apparatus) of United Utilities Water Limited "(UUWL)".

TERMS AND CONDITIONS:

1. This Map and any information supplied with it is issued subject to the provisions contained below, to the exclusion of all others and no party relies upon any representation, warranty, collateral contract or other assurance of any person (whether party to this agreement or not) that is not set out in this agreement or the documents referred to in it.

2. This Map and any information supplied with it is provided for general guidance only and no representation, undertaking or warranty as to its accuracy, completeness or being up to date is given or implied.

3. In particular, the position and depth of any UUWL apparatus shown on the Map are approximate only. UUWL strongly recommends that a comprehensive survey is undertaken in addition to reviewing this Map to determine and ensure the precise location of any UUWL apparatus. The exact location, positions and depths should be obtained by excavation trial holes.

4. The location and position of private drains, private sewers and service pipes to properties are not normally shown on this Map but their presence must be anticipated and accounted for and you are strongly advised to carry out your own further enquiries and investigations in order to locate the same.

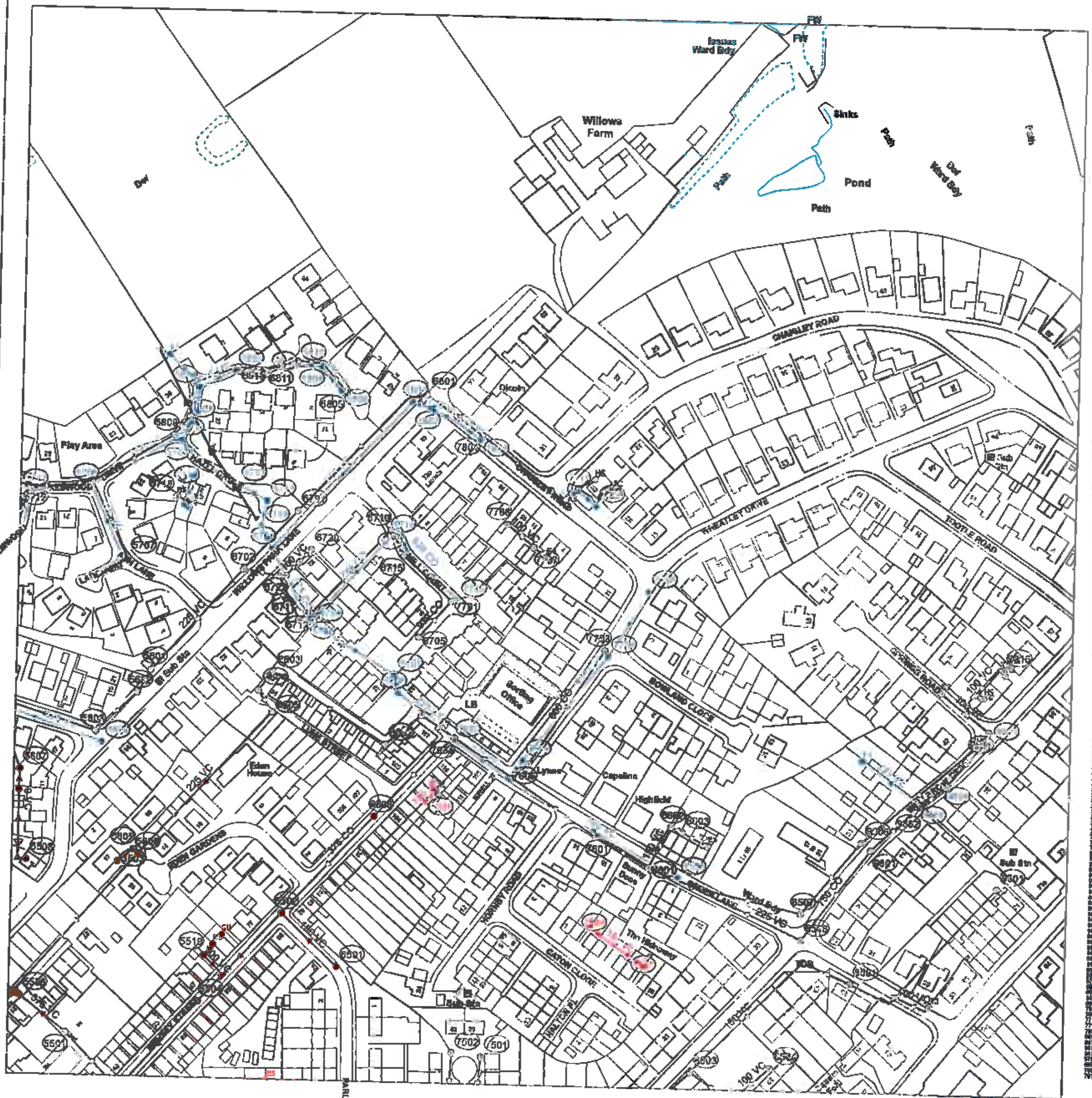
5. The position and depth of UUWL apparatus is subject to change and therefore this Map is issued subject to any removal or change in location of the same. The onus is entirely upon you to confirm whether any changes to the Map have been made subsequent to issue and prior to any works being carried out.

6. This Map and any information shown on it or provided with it must not be relied upon in the event of any development, construction or other works (including but not limited to any excavations) in the vicinity of UUWL apparatus or for the purpose of determining the suitability of a point of connection to the sewerage or other distribution systems.

7. No person or legal entity, including any company shall be relieved from any liability howsoever and whensoever arising for any damage caused to UUWL apparatus by reason of the actual position and/or depths of UUWL apparatus being different from those shown on the Map and any information supplied with it.

8. If any provision contained herein is or becomes legally invalid or unenforceable, it will be taken to be severed from the remaining provisions which shall be unaffected and continue in full force and affect.

9. This agreement shall be governed by English law and all parties submit to the exclusive jurisdiction of the English courts, save that nothing will prevent UUWL from bringing proceedings in any other competent jurisdiction, whether concurrently or otherwise.



Printed By: Property Searches

OS Sheet No: SD6037NE

Scale: 1: 1250 Date: 10/11/2015

LEGEND

WASTE WATER SYMBOLOGY

OS Sheet No: SD6037NE

Scale: 1: 1250 Date: 10/11/2015

158 Nodes

Sheet 1 of 1

United Utilities

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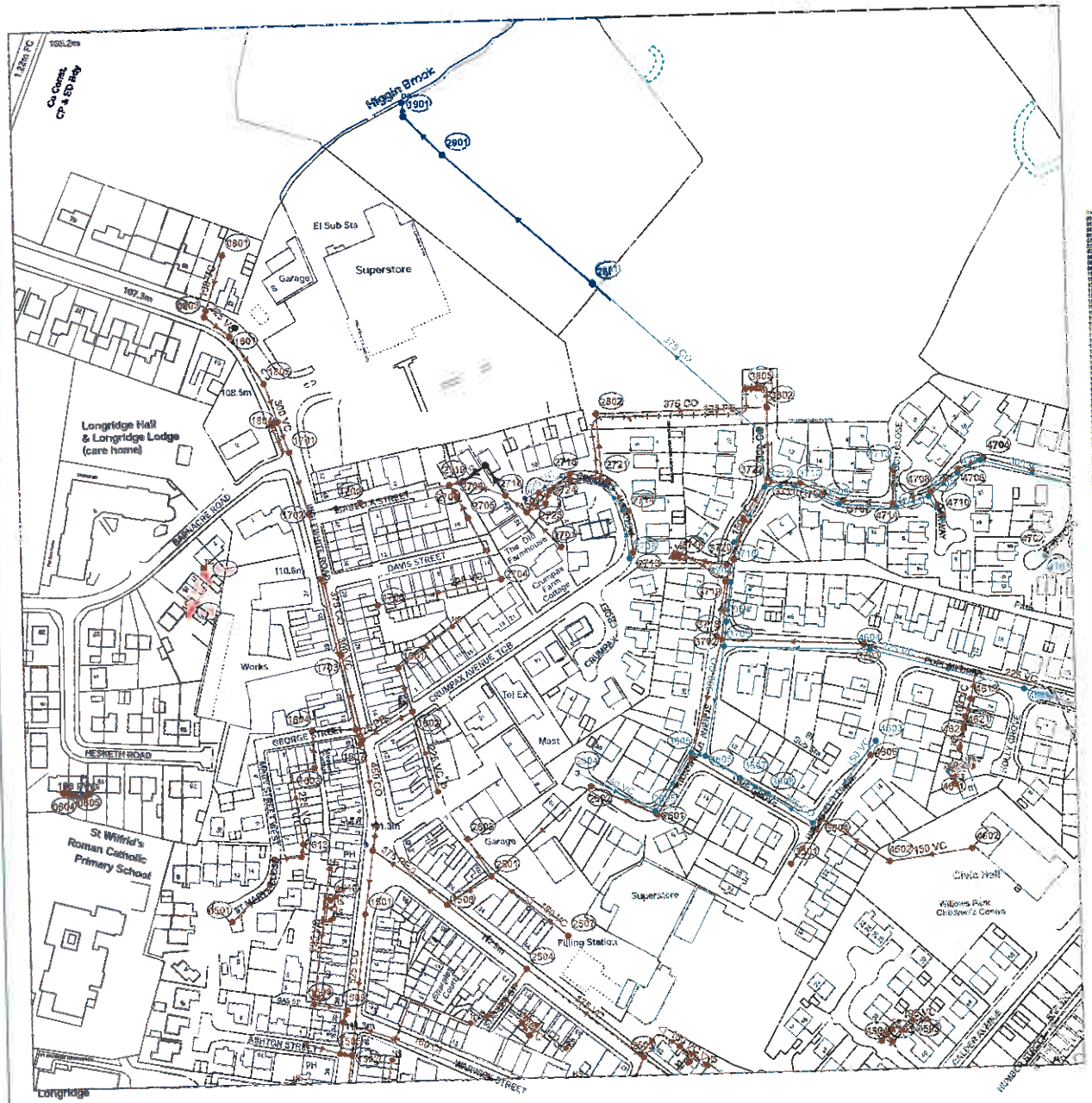
SEWER RECORDS



OS Sheet No: SD6037NW

Scale: 1: 1250 Date: 10/11/2015

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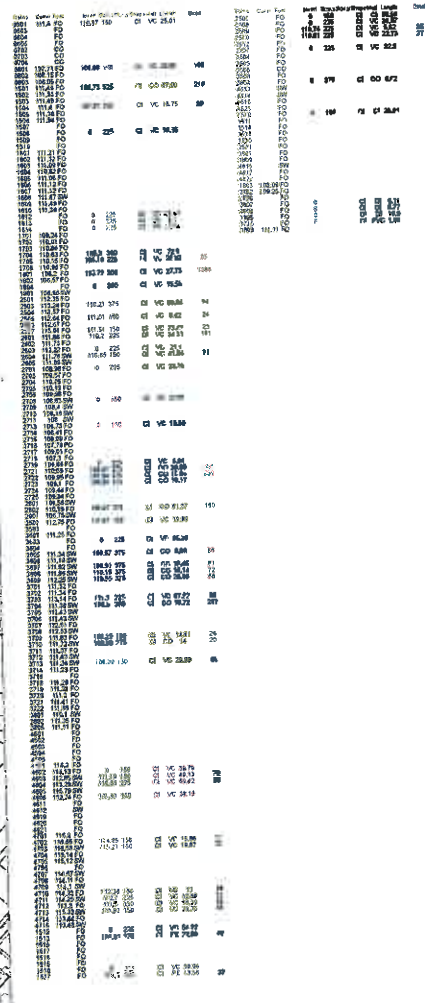


WASTE WATER SYMBOLOGY

ABANDONED PIPE

Main Sewer

Rising Main

Highway Drain

Sludge Main

LEGEND

OS Sheet No: SD6037NW

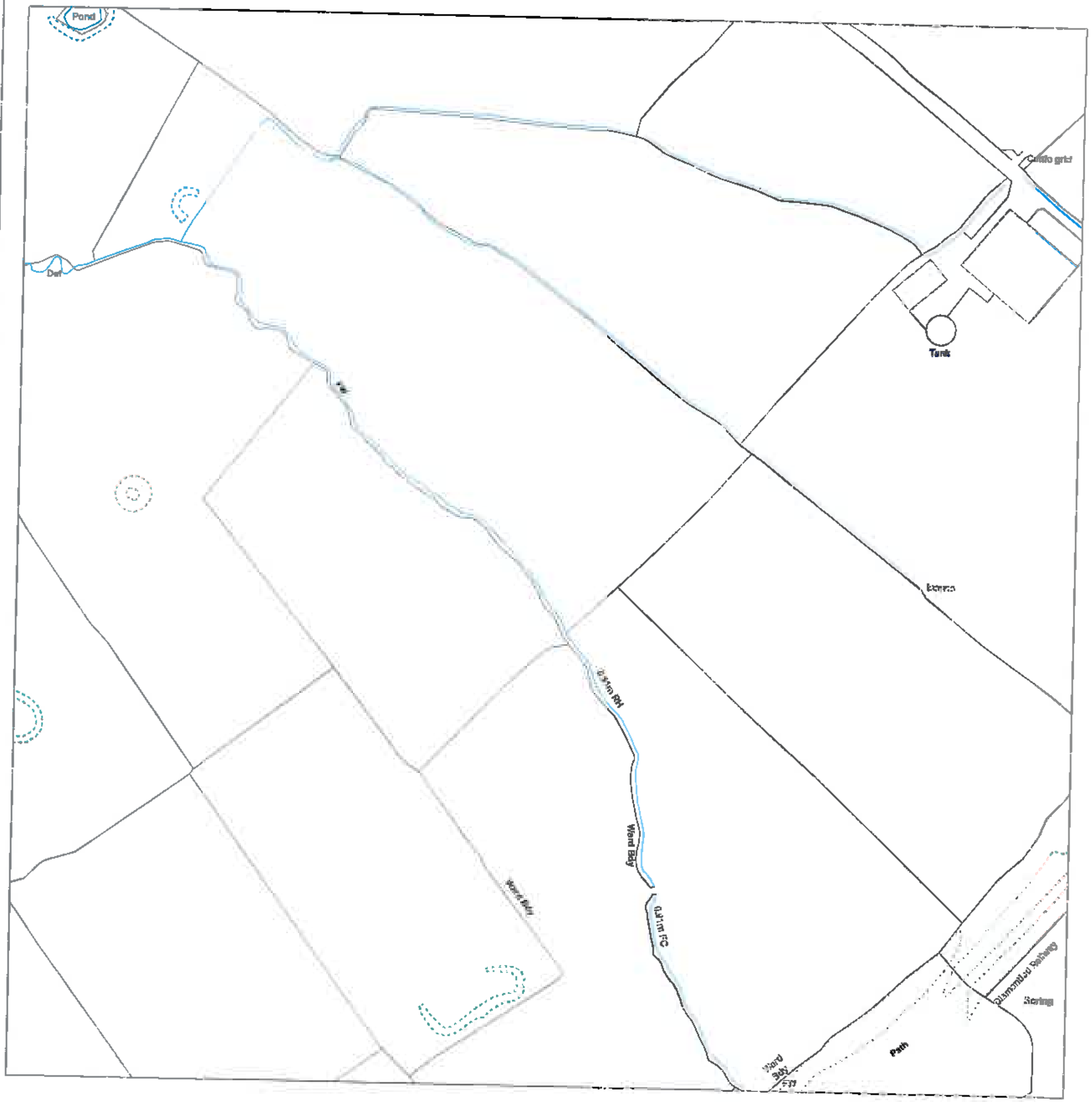
Scale: 1:1250 Date: 10/11/2015

154 Nodes

Sheet 1 of 1

United Utilities

SEWER RECORDS



OS Sheet No: SD6038SE

Scale: 1: 1250 Date: 10/11/2015

Printed By: Property Searches

WASTE WATER SYMBOLOGY

LEGEND

The position of underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. The actual positions may be different from those shown on the plan and private pipes, sewers or drains may not be recorded. United Utilities will not accept any liability for any damage caused by the actual positions being different from those shown.

United Utilities Water Limited 2014. The plan is based upon the Ordnance Survey Map with the sanction of the Controller of H.M. Stationery Office. Crown and United Utilities copyrights are reserved. Unauthorised reproduction will infringe these copyrights.

OS Sheet No: SD6038SE

Scale: 1: 1250 Date: 10/11/2015

0 Nodes

Sheet 1 of 1

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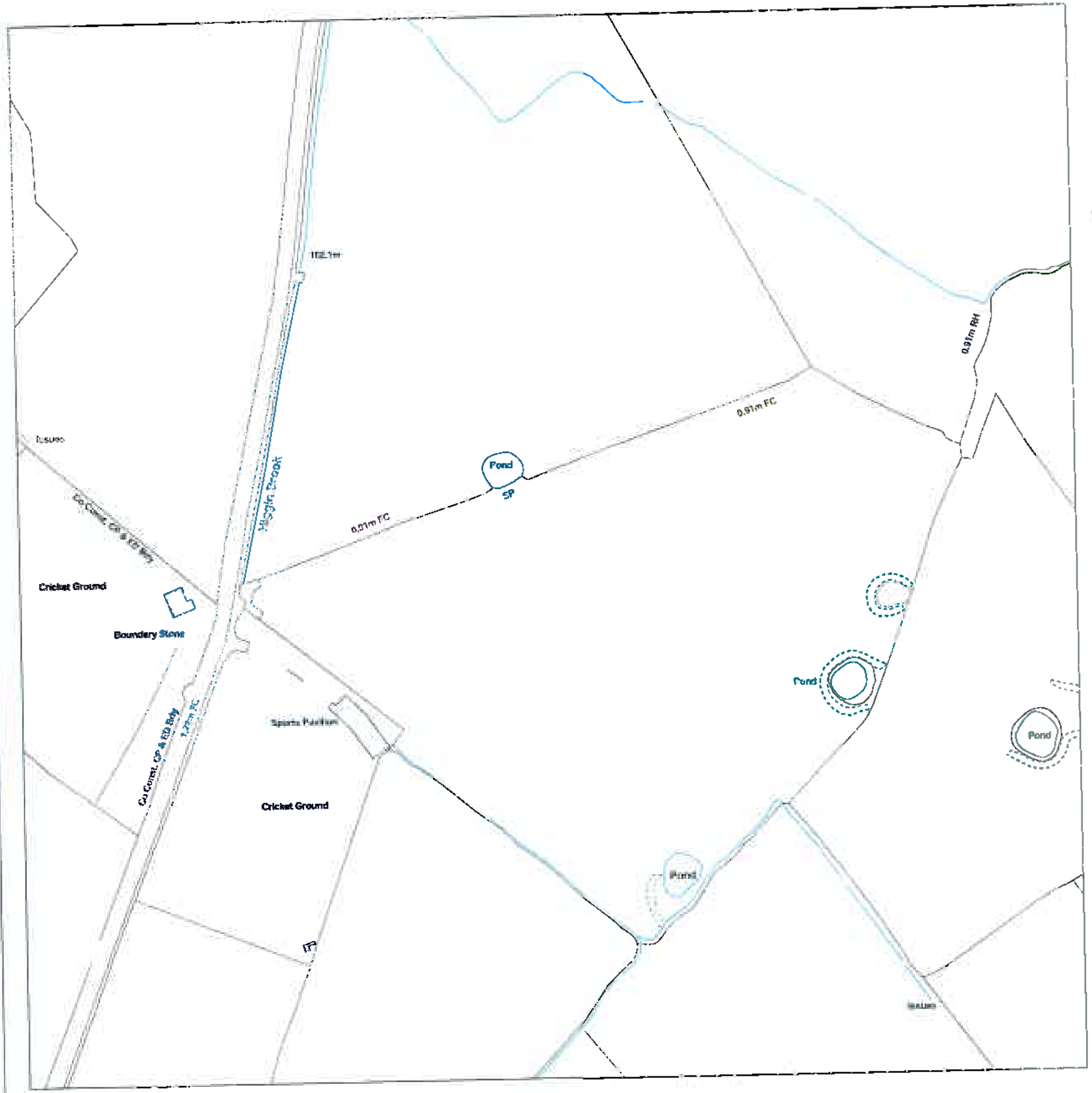
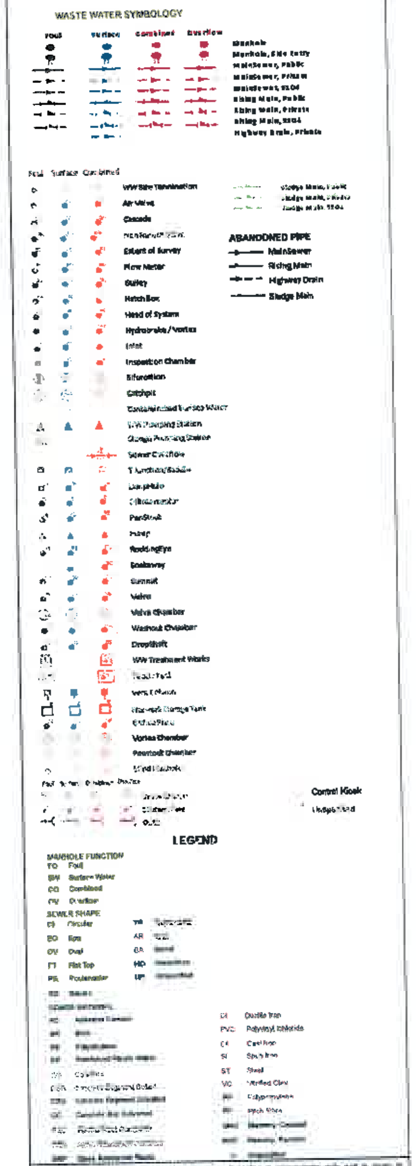
SEWER RECORDS





OS Sheet No: SD6038SW
Scale: 1: 1250 Date: 10/11/2015
0 Nodes
Sheet 1 of 1

United Utilities

SEWER RECORDS

OS Sheet No: SD6038SW

Scale: 1: 1250 Date: 10/11/2015

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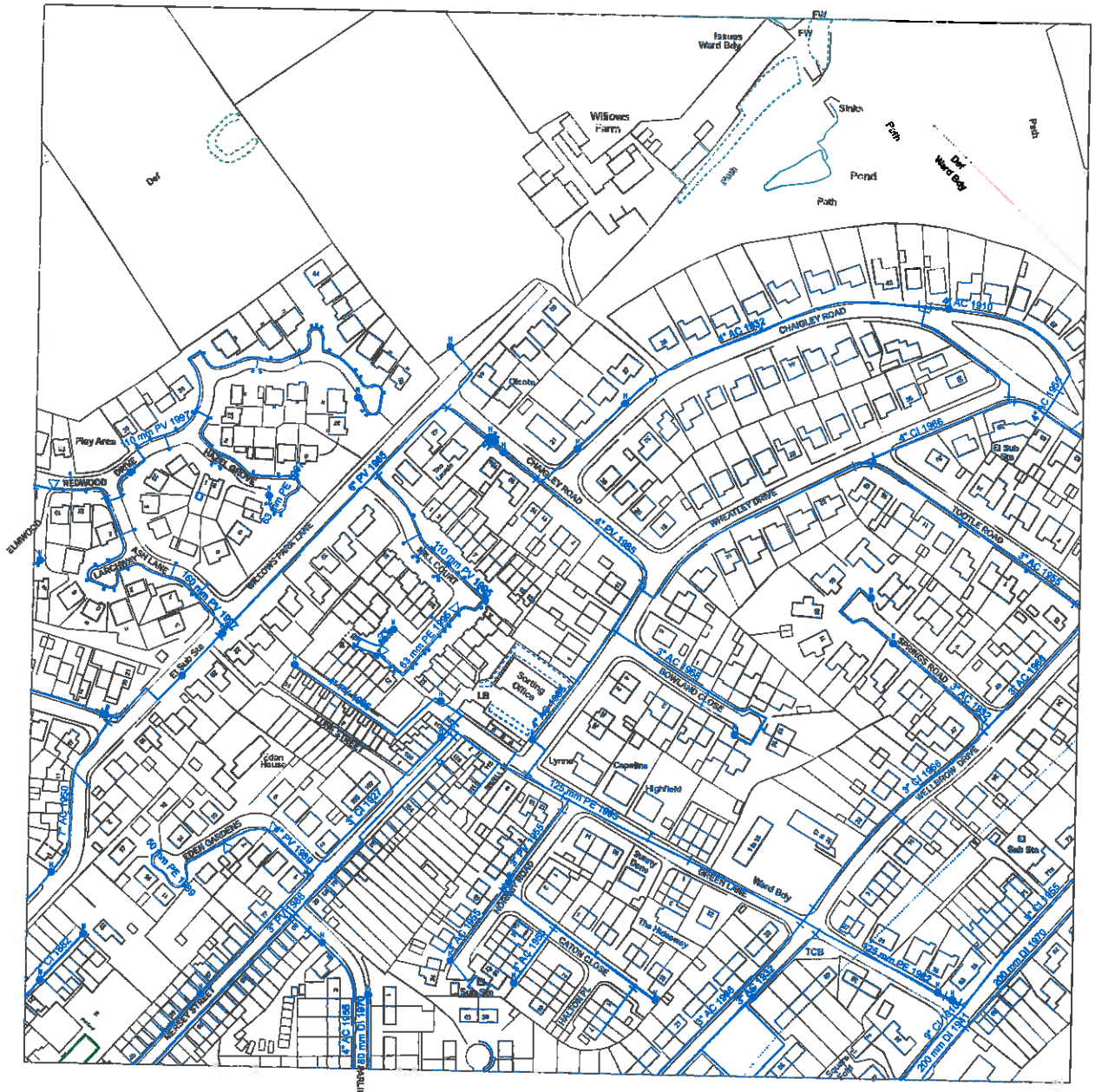

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OS Sheet No: SD6037NE

Scale: 1: 1250 Date: 10/11/2015

Legend

PIPE WORK

Live	Proposed	
		Trunk Main - PressurisedMain
		Raw Water Aqueduct - PressurisedMain
		Raw Water Aqueduct - GravityMain
		LDTM Raw Water Distribution - PressurisedMain
		LDTM Raw Water Distribution - GravityMain
		LDTM Treated Water Distribution - PressurisedMain
		LDTM Treated Water Distribution - GravityMain
		Private Pipe - LateralLine
		Distribution Main - PressurisedMain
		Comms Pipe - LateralLine
		Concessionary Service - LateralLine

ABANDONED PIPE

- Trunk Main
- Raw Water Aqueduct
- LDTM Raw Water Distribution
- LDTM Treated Water Distribution
- Private Pipe
- Distribution Main
- Comms Pipe
- Concessionary Service

NODES/ FURNITURE

Live	Proposed	
		End Cap
		CC Valve
		AC Valve
		Air Valve
		Sluice Valve
		Non Return Valve
		Pressure Management Valve
		Change of Char
		Anode
		Chlorination Point
		De Chlorination Point
		Bore Hole
		Inlet Point
		Bulk Supply Point
		Fire Hydrant
		Hydrant
		Private Fire Hydrant
		Pump
		Site Termination
		Service Start
		Service End
		Process Meter
		Stop Tap
		Monitor Location
		Strainer Point
		Access Point
		Hatch Box
		IP Point
		Route Marker
SPT		Sampling Station
LB		Logger Box

Property Types

Live	Proposed	
		Condition Report
		Pipe Bridges
		Tunnels (non carrier)
		Pumping Station
		Water Treatment Works
		Private Treatment Works
		Valve House
		Water Tower
		Service Reservoir
		Supply Reservoir
		Abstraction Point
		Domestic meter
		Commercial meter
		Telemetry Outstation

Material Types

AC ASBESTOS CEMENT	OT OTHERS
CI CAST IRON	PB LEAD
CU COPPER	PV uPVC
CO CONCRETE	SI SPUN IRON
DI DUCTILE IRON	ST STEEL
GI GALVANISED IRON	UN UNKNOWN
GR GREY IRON	PE POLYETHYLENE

Lining Types

CL CEMENT LINING	ERL EPOXY RESIN
TB TAR OR BITUMEN	

Insertion Types

DD DIE DRAWN	MO MOLING
DR DIRECTIONAL DRILLING	PI PIPELINE
	SL SLIP LINED

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OS Sheet No: SD6037NE

Scale: 1: 1250 Date: 10/11/2015

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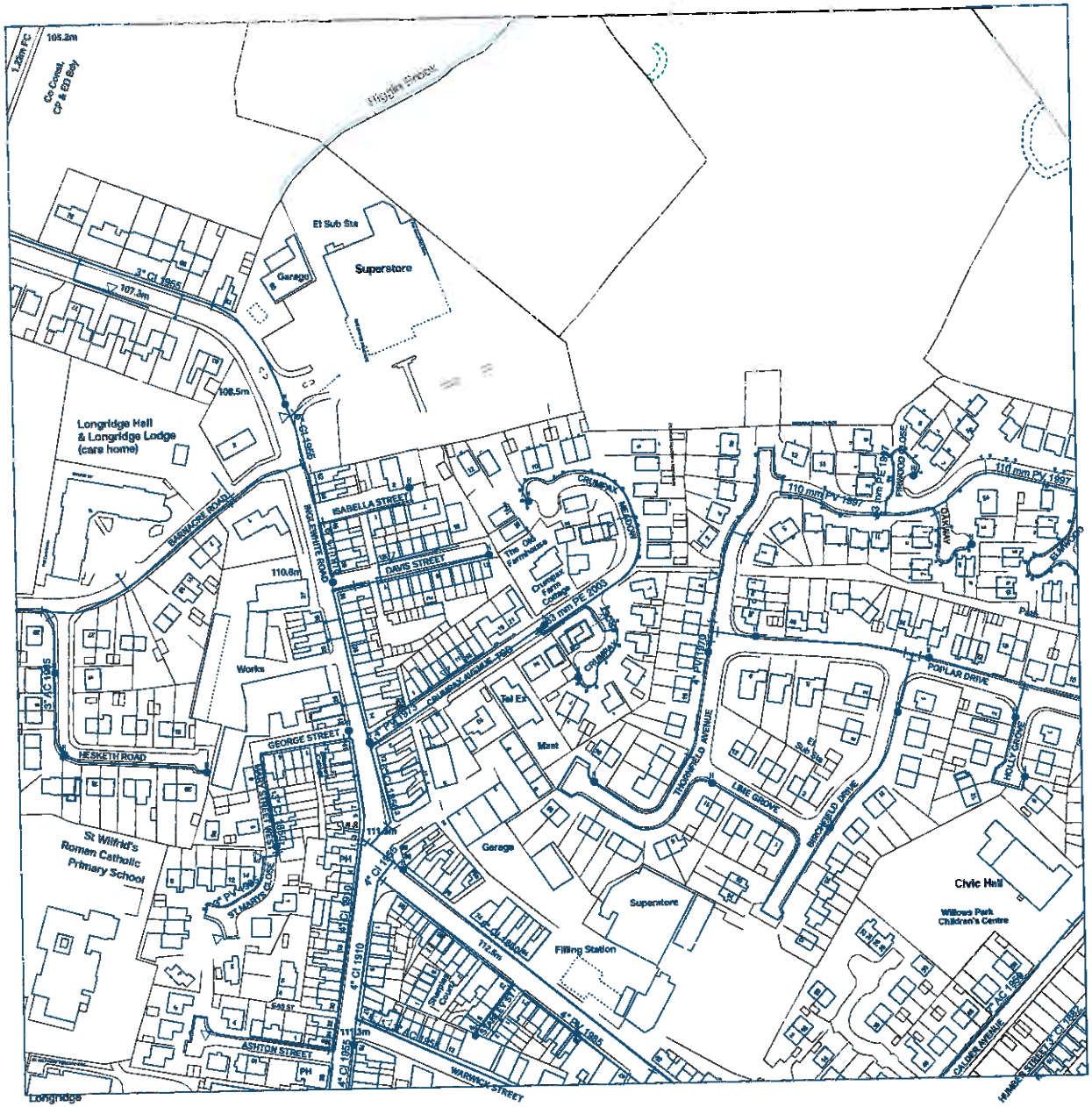
WATER MAIN RECORDS



Legend

PIPE WORK

Live	Proposed	
		Trunk Main - Pressurised Main
		Raw Water Aqueduct - PressurisedMain
		Raw Water Aqueduct - GravityMain
		UDM Raw Water Distribution - PressurisedMain
		UDM Raw Water Distribution - GravityMain
		UDM Treated Water Distribution - PressurisedMain
		UDM Treated Water Distribution - GravityMain
		Private Pipe - LateralLine
		Distribution Main - PressurisedMain
		Comms Pipe - LateralLine
		Concessionary Service - LateralLine

ABANDONED PIPE

- Trunk Main
- Raw Water Aqueduct
- UDM Raw Water Distribution
- UDM Treated Water Distribution
- Private Pipe
- Distribution Main
- Comms Pipe
- Concessionary Service

NODES/ FURNITURE

Live	Proposed	
		End Cap
		CC Valve
		AC Valve
		Air Valve
		Sluice Valve
		Non Return Valve
		Pressure Management Valve
		Change of Char
		Anode
		Chlorination Point
		De Chlorination Point
		Bore Hole
		Inlet Point
		Bulk Supply Point
		Fire Hydrant
		Hydrant
		Private Fire Hydrant
		Pump
		Site Termination
		Service Start
		Service End
		Process Meter
		Stop Tap
		Monitor Location
		Strainer Point
		Access Point
		Hatch Box
		IP Point
		Source Meter
SPT		Sampling Station
LS		Logger Site

Property Types

Live	Proposed	
		Condition Report
		Pipe Bridges
		Tunnels (non carrier)
		Pumping Station
		Water Treatment Works
		Private Treatment Works
		Valve House
		Water Tower
		Service Reservoir
		Supply Reservoir
		Abstraction Point
		Domestic meter
		Commercial meter
		Telemetry Outstation

Material Types

AC ASBESTOS CEMENT	QT QTHERS
CI CAST IRON	PB LEAD
CU COPPER	PV uPVC
CO CONCRETE	SI SPUN IRON
DI DUCTILE IRON	ST STEEL
GI GALVANISED IRON	UN UNKNOWN
GR GREY IRON	PE POLYETHYLENE

Lining Types

CL CEMENT LINING	ERL EPOXY RESIN
TB TAR OR BITUMEN	

Insertion Types

OD DIE DRAWN	MO MOLING
DR DIRECTIONAL DRILLING	PI PIPELINE
	SL SLIP LINED

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OS Sheet No: SD6037NW

Scale: 1: 1250 Date: 10/11/2015

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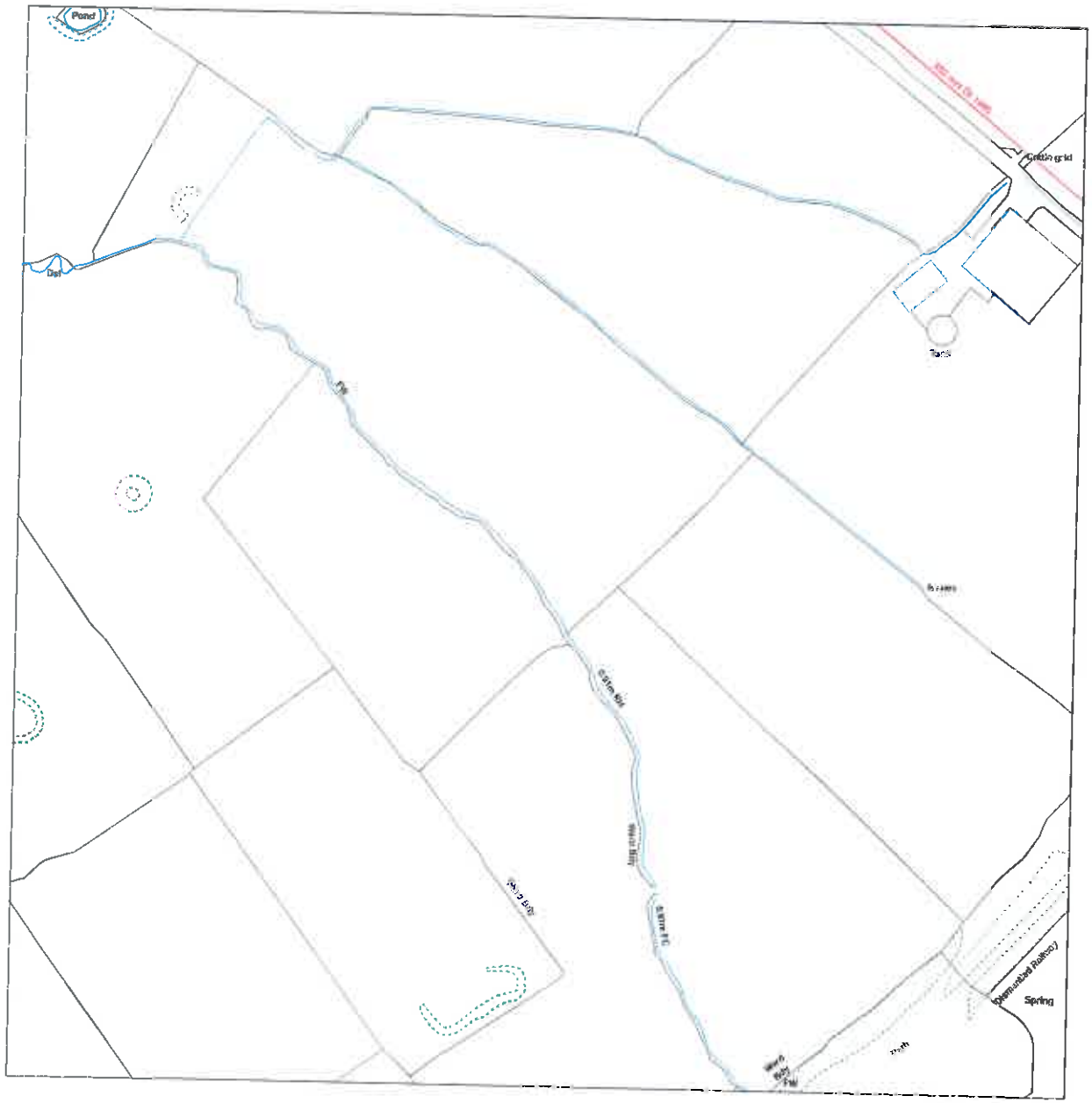
WATER MAIN RECORDS



Printed By: Property Searches

OS Sheet No: SD6038SE

Scale: 1: 1250 Date: 10/11/2015

Legend

PIPE WORK

Live	Proposed	
		Trunk Main - PressurisedMain
		Raw Water Aqueduct - PressurisedMain
		Raw Water Aqueduct - GravityMain
		LDTM Raw Water Distribution - PressurisedMain
		LDTM Raw Water Distribution - GravityMain
		LDTM Treated Water Distribution - PressurisedMain
		LDTM Treated Water Distribution - GravityMain
		Private Pipe - LateralLine
		Distribution Main - PressurisedMain
		Comms Pipe - LateralLine
		Concessionary Service - LateralLine

ABANDONED PIPE

- Trunk Main
- Raw Water Aqueduct
- LDTM Raw Water Distribution
- LDTM Treated Water Distribution
- Private Pipe
- Distribution Main
- Comms Pipe
- Concessionary Service

NODES/ FURNITURE

Live	Proposed	
		End Cap
		CC Valve
		AC Valve
		Air Valve
		Sluice Valve
		Non Return Valve
		Pressure Management Valve
		Change of Char
		Anode
		Chlorination Point
		De Chlorination Point
		Bore Hole
		Inlet Point
		Bulk Supply Point
		Fire Hydrant
		Hydrant
		Private Fire Hydrant
		Pump
		Site Termination
		Service Start
		Service End
		Process Meter
		Stop Tap
		Monitor Location
		Strainer Point
		Access Point
		Hatch Box
		IP Point
RV		Route Marker
SPT		Sampling Station
LB		Logger Box

Property Types

Live	Proposed	
		Condition Report
		Pipe Bridges
		Tunnels (non carrier)
		Pumping Station
		Water Treatment Works
		Private Treatment Works
VH		Valve House
		Water Tower
		Service Reservoir
		Supply Reservoir
		Abstraction Point
M		Domestic meter
		Commercial meter
		Telemetry Outstation

Material Types

AC ASBESTOS CEMENT	OT OTHERS
CI CAST IRON	PB LEAD
CU COPPER	PV uPVC
CO CONCRETE	SI SPUN IRON
DI DUCTILE IRON	ST STEEL
GI GALVANISED IRON	UN UNKNOWN
GR GREY IRON	PE POLYETHYLENE

Lining Types

CL CEMENT LINING	ERL EPOXY RESIN
TB TAR OR BITUMEN	

Insertion Types

DD DIE DRAWN	MO MOLING
DR DIRECTIONAL DRILLING	PI PIPELINE
	SL SLIP LINED

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OS Sheet No: SD6038SE

Scale: 1: 1250 Date: 10/11/2015

United Utilities
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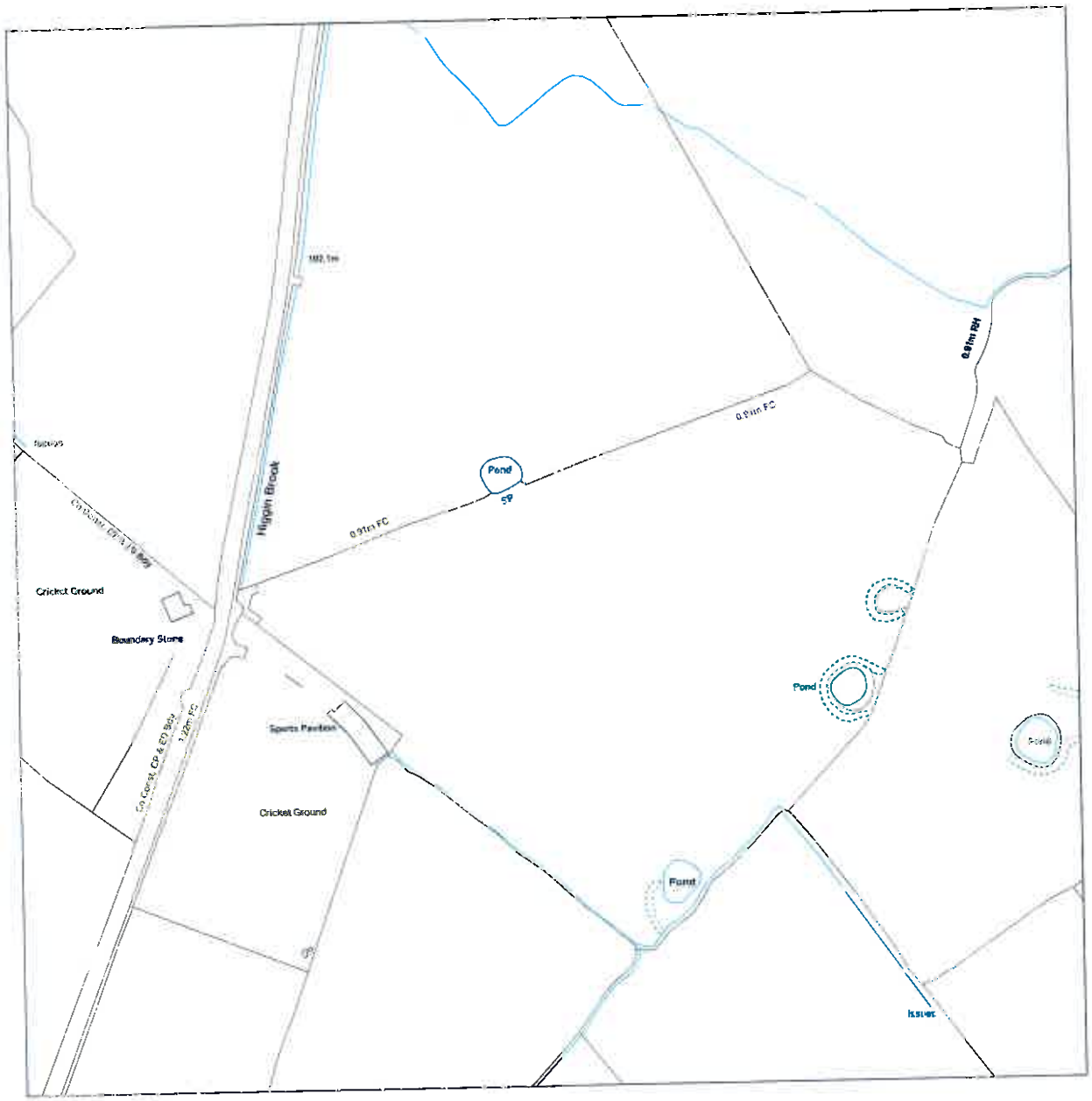
WATER MAIN RECORDS



Legend

PIPE WORK

Live	Proposed	
		Trunk Main - PressurisedMain
		Raw Water Aqueduct - PressurisedMain
		Raw Water Aqueduct - GravityMain
		LDTM Raw Water Distribution - PressurisedMain
		LDTM Raw Water Distribution - GravityMain
		LDTM Treated Water Distribution - PressurisedMain
		LDTM Treated Water Distribution - GravityMain
		Private Pipe - LateralLine
		Distribution Main - PressurisedMain
		Comms Pipe - LateralLine
		Concessionary Service - LateralLine

ABANDONED PIPE

	Trunk Main
	Raw Water Aqueduct
	LDTM Raw Water Distribution
	LDTM Treated Water Distribution
	Private Pipe
	Distribution Main
	Comms Pipe
	Concessionary Service

NODES/ FURNITURE

Live	Proposed	
		End Cap
		CC Valve
		AC Valve
		Air Valve
		Sluice Valve
		Non Return Valve
		Pressure Management Valve
		Change of Char
		Anode
		Chloronsiden Point
		Re-Chlorination Point
		Bore Holes
		Inlet Point
		Bulk Supply Point
		Fire Hydrant
		Hydrant
		Private Fire Hydrant
		Pump
		Site Termination
		Service Start
		Service End
		Process Meter
		Stop Tap
		Monitor Location
		Strainer Point
		Access Point
		Hatch Box
		IP Point
RV		Route Marker
SPT		Sampling Station
LS		Logger Set

Property Types

Live	Proposed	
		Condition Report
		Pipe Bridges
		Tunnels (non carrier)
		Pumping Station
		Water Treatment Works
		Private Treatment Works
		Valve House
		Water Tower
		Service Reservoir
		Supply Reservoir
		Abstraction Point
		Domestic meter
		Commercial meter
		Telemetry Outstation

Material Types

AC ASBESTOS CEMENT	OT OTHERS
CI CAST IRON	PB LEAD
CU COPPER	PV uPVC
CO CONCRETE	SI SPUN IRON
DI DUCTILE IRON	ST STEEL
GI GALVANISED IRON	UN UNKNOWN
GR GREY IRON	PE POLYETHYLENE

Lining Types

CL CEMENT LINING	ERL EPOXY RESIN
TB TAR OR BITUMEN	

Insertion Types

DD DIE DRAWN	MO MOLING
DR DIRECTIONAL DRILLING	PI PIPELINE
	SL SLIP LINED

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OS Sheet No: SD6038SW

Scale: 1: 1250 Date: 10/11/2015

United Utilities
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WATER MAIN RECORDS

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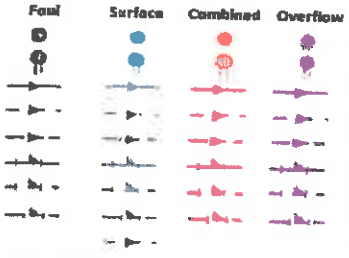
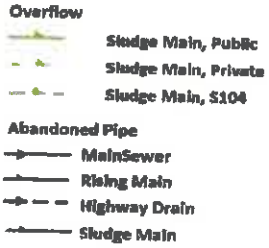
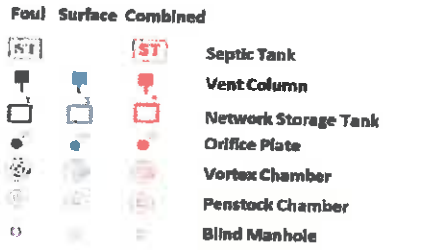
OS Sheet No: SD6038SW

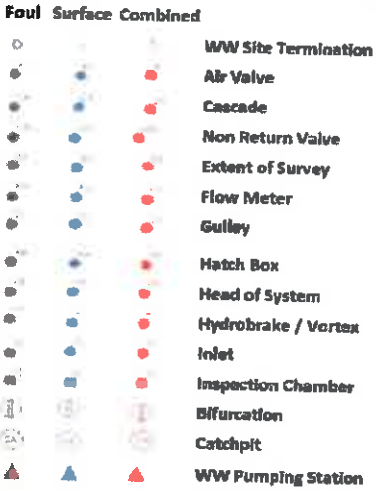
Scale: 1: 1250 Date: 10/11/2015

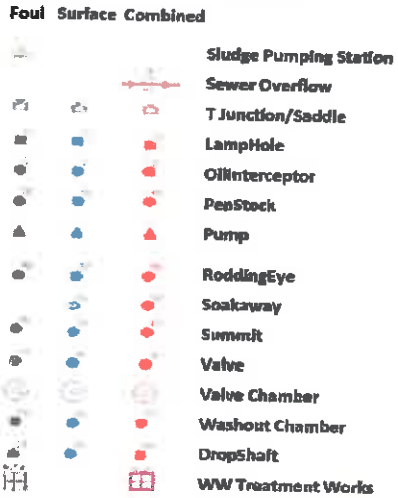
WASTE WATER SYMBOLOGY











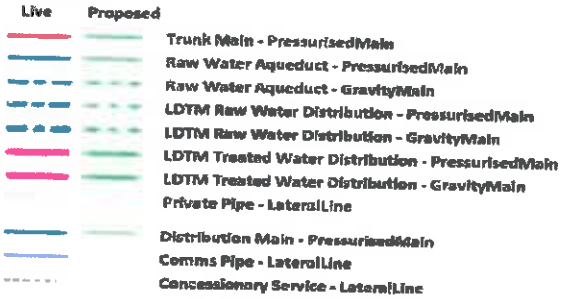
Legend

MANHOLE FUNCTION		SEWER SHAPE			
FO	Foul	CI	Circular	TR	Trapezoidal
SW	Surface Water	EG	Egg	AR	Arch
CO	Combined	OV	Oval	BA	Barrel
OV	Overflow	FT	Flat Top	HO	Horseshoe
		RE	Rectangular	UN	Unspecified
		SQ	Square		

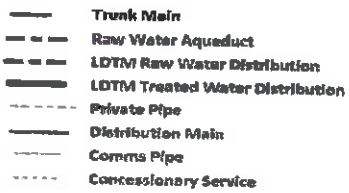
SEWER MATERIAL			
AC	Asbestos Cement	DI	Ductile Iron
BR	Brick	VC	Vitrified Clay
CO	Concrete	PP	Polypropylene
CBS	Concrete Segment	PF	Plastic Pipe
CBM	Concrete Segment	MA	Masonry, Coursed
CC	Concrete Box Culverted	MA	Masonry, Random
PBG	Plastic / Steel	RP	Reinforced Plastic
GR	Glass Reinforced	CI	Cast Iron
GRP	Glass Reinforced	SI	Spun Iron
PVC	Polyvinyl Chloride	ST	Steel
PE	Polyethylene	U	Unspecified

CLEAN WATER SYMBOLOGY

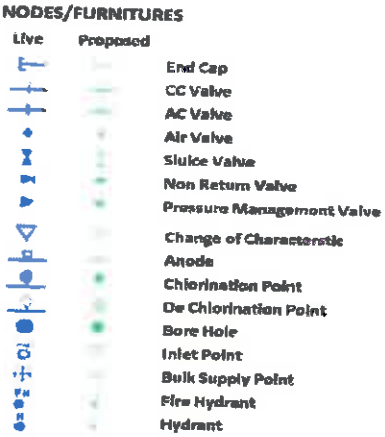
PIPE WORK

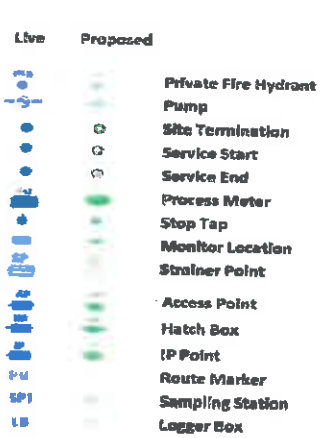


ABANDONED PIPE

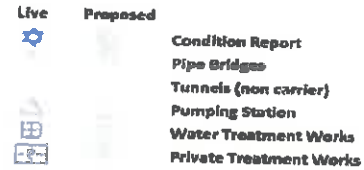


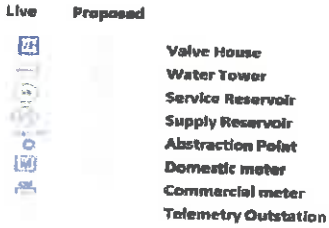
NODES/FURNITURES





PROPERTY TYPES

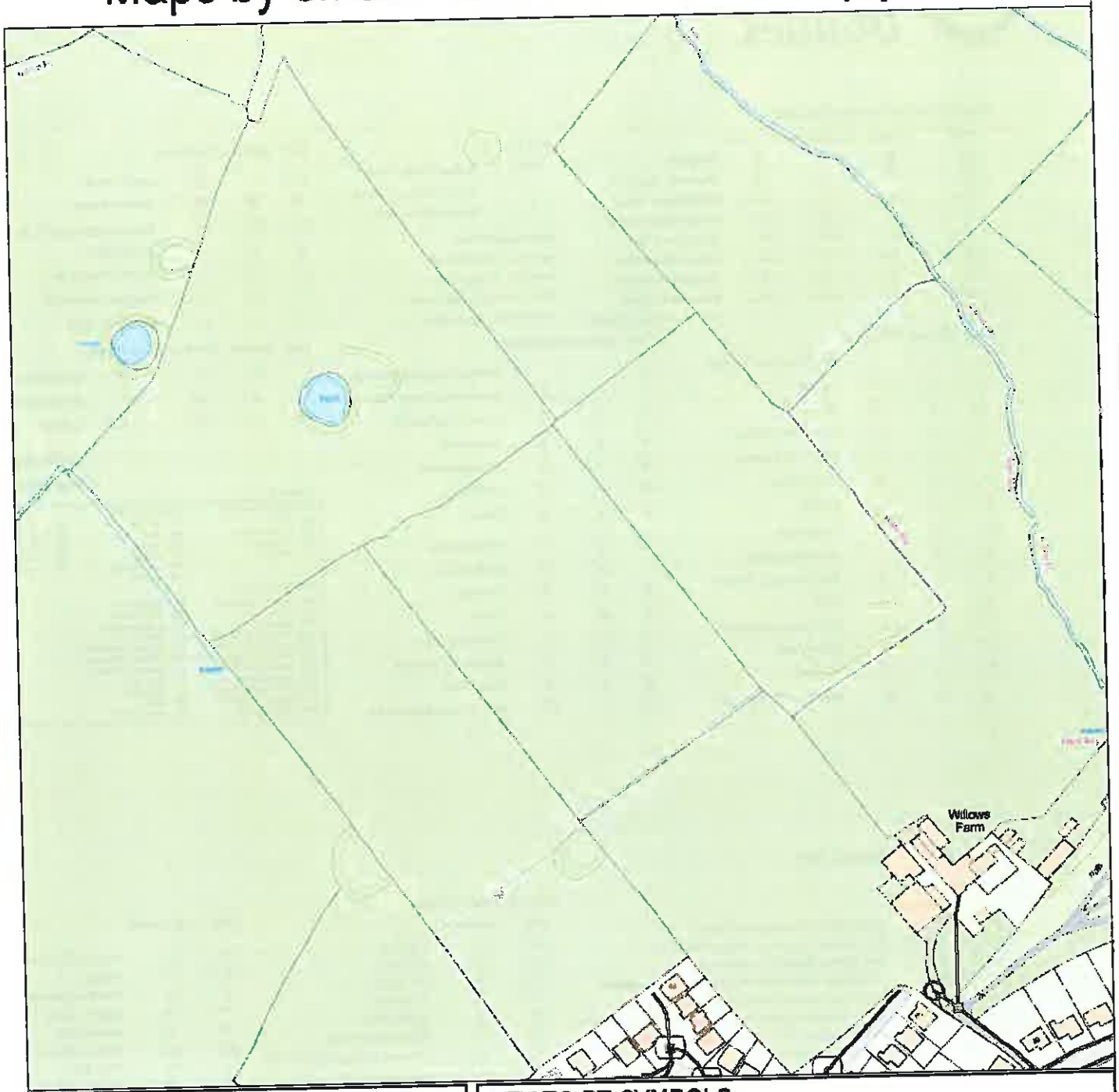




Legend

MATERIAL TYPES		LINING TYPES	
AC	ASBESTOS CEMENT	CL	CEMENT LINING
CI	CAST IRON	TB	TAR OR BITUMEN
CU	COPPER	EPL	EPOXY RESIN
CO	CONCRETE		
DI	DUCTILE IRON	INSERTION TYPES	
GI	GALVANISED IRON		
GR	GREY IRON	CO	CIRCULAR
OT	OTHERS	DR	DIRECTIONAL DRILLING
PB	LEAD	MO	MOLING
PV	uPVC	PI	PIPELINE
SI	SPUN IRON	SL	SLIP LINED
ST	STEEL		
UN	UNKNOWN		
PE	POLYETHYLENE		

Maps by email Plant Information Reply



IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.

DIAL BEFORE YOU DIG

FOR PROFESSIONAL ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS

ADVANCE NOTICE REQUIRED
(Office hours: Monday-Friday 08.00 to 17.00)

Tel: 0800 9173993
E-mail: dbyd@openreach.co.uk
Website: www.dialbeforeyoudig.com

KEY TO BT SYMBOLS

- UNDERGROUND PLANT
- OVERHEAD PLANT (A/C, D/W or W)
- JOINT BOX
- DISTRIBUTION POINT (456 OR 457)
- MANHOLE (OR 72)
- DP BOUNDARY
- OTHER BT BOUNDARY (OR)
- POLE
- CABINET
- BURIED JOINT
- JOINTING POST (J)
- PROPOSED U/G
- PROPOSED O/H (A/C, D/W or W)
- PROPOSED BOX

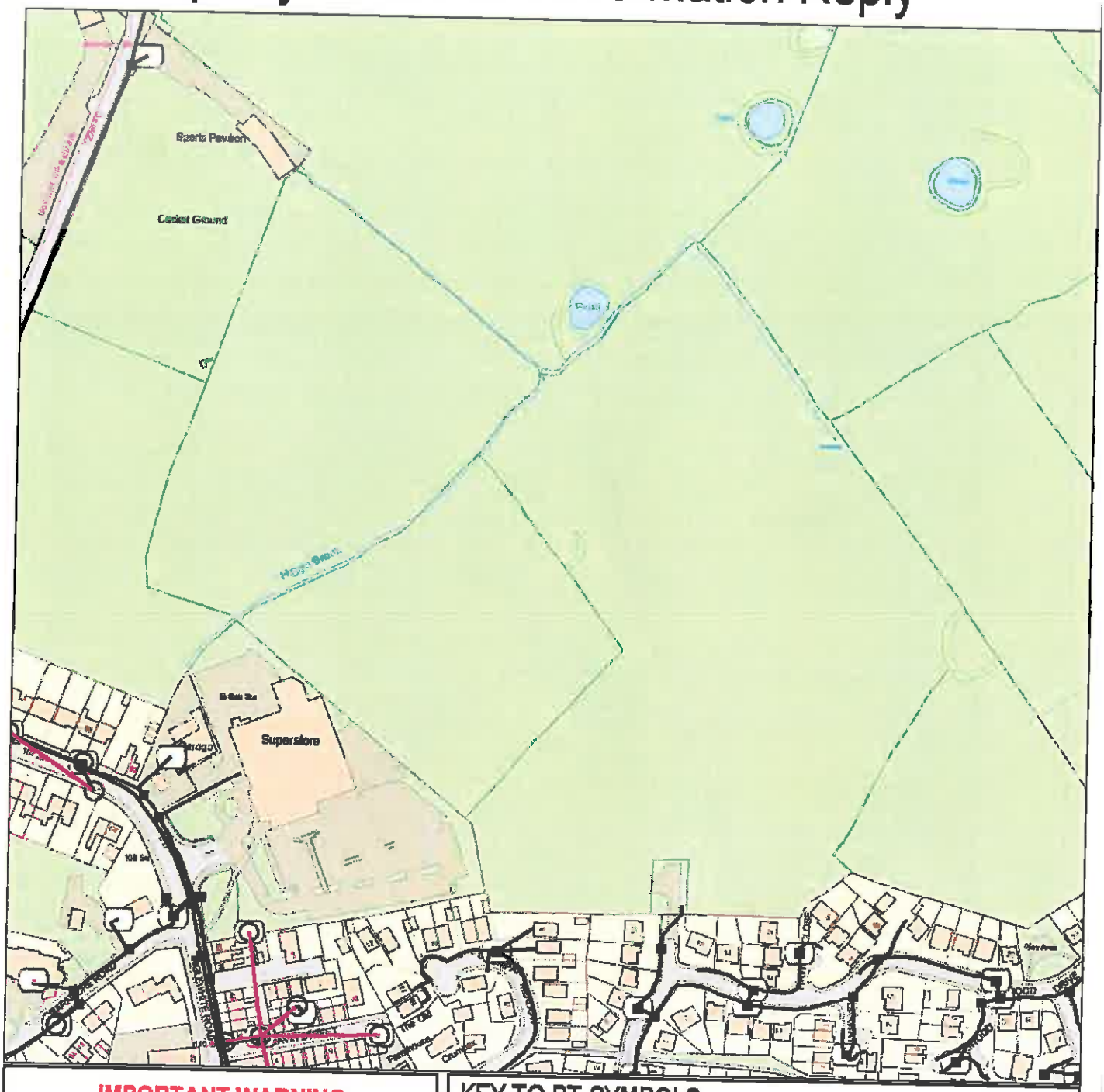
Other proposed plant is shown using dashed lines. BT symbols not listed above may be disregarded. Existing BT plant may not be recorded. Information valid at the time of preparation.

openreach
a BT Group business

BT Ref : SFE10281D
Map Reference : (centre) SD6058538084
Easting/Northing : (centre) 360585,4380
Issued : 09/11/2015 10:29:12

FOOTNOTE: WARNING IT IS ESSENTIAL THAT YOU CONTACT NATIONAL NETWORK HANDLING CENTRE BY EMAIL nnhc@openreach.co.uk BEFORE PROCEEDING WITH ANY WORK IN THE HATCHED AREA

Maps by email Plant Information Reply



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(Office hours: Monday-Friday 08.00 to 17.00)

Tel: 0800 9173993
E-mail: dbyd@openreach.co.uk
Website: www.dialbeforeyoudig.com

KEY TO BT SYMBOLS

- UNDERGROUND PLANT
- OVERHEAD PLANT (A/C, D/W or W)
- JOINT BOX
- DISTRIBUTION POINT (OR)
- MANHOLE (OR 72)
- DP BOUNDARY
- OTHER BT BOUNDARY (OR)
- POLE
- CABINET
- BURIED JOINT
- JOINTING POST (J)
- PROPOSED U/G
- PROPOSED O/H (A/C, D/W or W)
- PROPOSED BOX

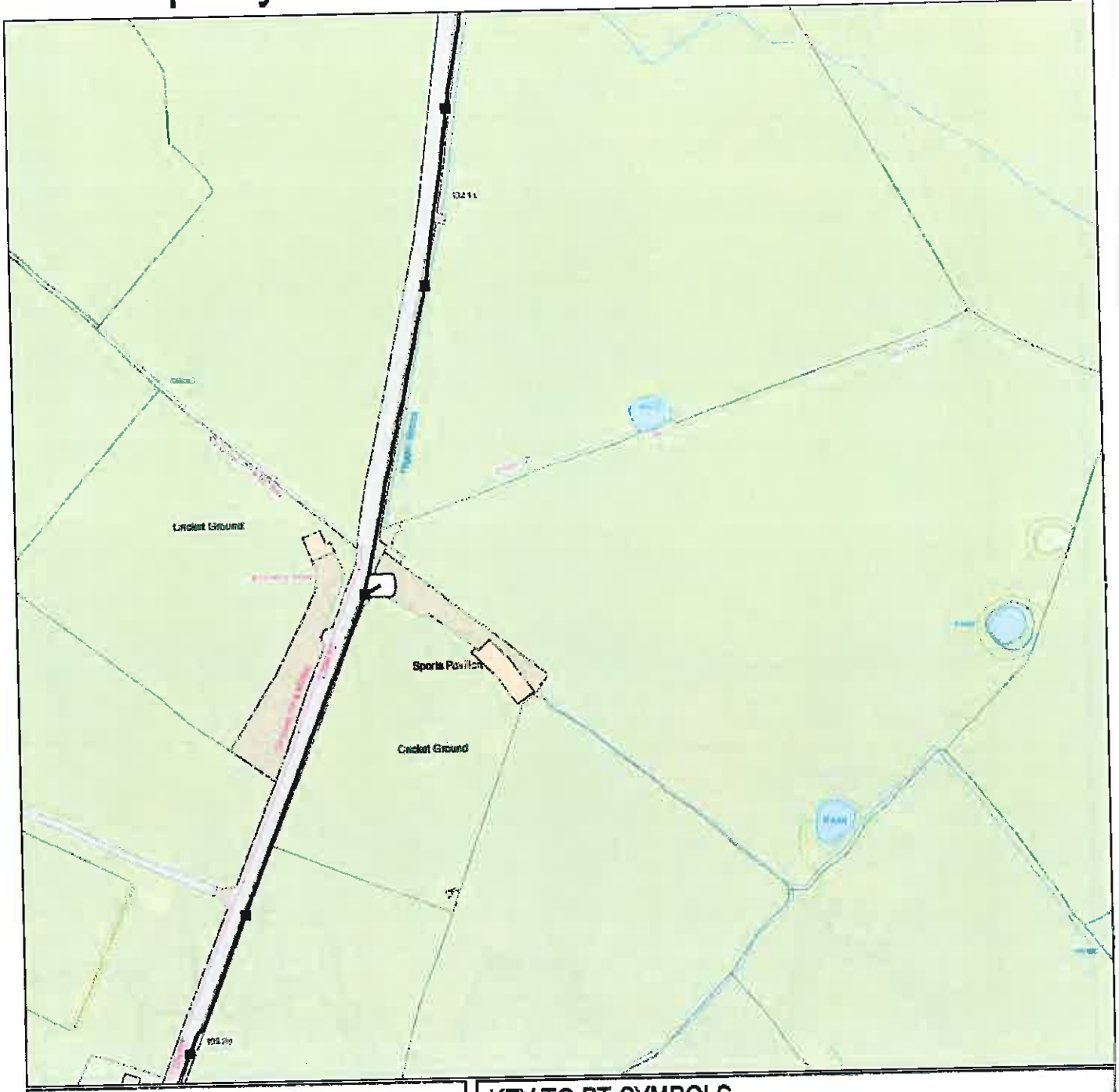
Other proposed plant is shown using dashed lines. BT symbols not listed above may be disregarded. Existing BT plant may not be recorded. Information valid at the time of preparation.

openreach
a BT Group business

BT Ref : WEU102831
Map Reference : (centre) SD6029637980
Easting/Northing : (centre) 360296,437980
Issued : 09/11/2015 10:28:47

FOOTNOTE: WARNING IT IS ESSENTIAL THAT YOU CONTACT NATIONAL NETWORK HANDLING CENTRE BY EMAIL nnhc@openreach.co.uk BEFORE PROCEEDING WITH ANY WORK IN THE HATCHED AREA

Maps by email Plant Information Reply



IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.

DIAL BEFORE YOU DIG

FOR PROFESSIONAL ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS

ADVANCE NOTICE REQUIRED
(Office hours: Monday-Friday 08.00 to 17.00)

Tel: 0800 9173993
E-mail: dbyd@openreach.co.uk
Website: www.dialbeforeyoudig.com

KEY TO BT SYMBOLS

- UNDERGROUND PLANT
- OVERHEAD PLANT (A/C, D/W or W)
- JOINT BOX
- DISTRIBUTION POINT (48 or 96)
- MANHOLE (72)
- DP BOUNDARY
- OTHER BT BOUNDARY (OR)
- POLE
- CABINET
- BURIED JOINT
- JOINTING POST (J)
- PROPOSED U/G
- PROPOSED O/H (A/C, D/W or W)
- PROPOSED BOX

Other proposed plant is shown using dashed lines. BT symbols not listed above may be disregarded. Existing BT plant may not be recorded. Information valid at the time of preparation.

openreach
a BT Group business

BT Ref : WRN10294F
Map Reference : (centre) SD6018638227
Easting/Northing : (centre) 360186,4382
Issued : 09/11/2015 10:29:32

FOOTNOTE: WARNING IT IS ESSENTIAL THAT YOU CONTACT NATIONAL NETWORK HANDLING CENTRE BY EMAIL nnhc@openreach.co.uk BEFORE PROCEEDING WITH ANY WORK IN THE HATCHED AREA

Sam Dean

From: Daniel Sutcliffe <Daniel.Sutcliffe@ribblevalley.gov.uk>
Sent: 15 February 2016 10:53
To: Sam Dean; Linden Richardson
Cc: Stephen Kilmartin
Subject: RE: STN3505NM: Gas monitoring at Longridge Preston

Follow Up Flag: Follow up
Flag Status: Flagged

Good Morning,

Apologies for the delay in responding but I have been off sick recently and I'm still catching up. I am happy for you to forego the gas monitoring on this site as I agree the likelihood/risk is relatively minimal. Please report on the intrusive ground investigations that you carry out and ensure that your findings (and details of any remediation work carried out) are submitted with your verification statement.

I've copied in the relevant planning officer for your site so that he is kept up to date and can make any necessary comment.

Kind Regards

Daniel Sutcliffe
Engineering Assistant
Ribble Valley Borough Council

From: Sam Dean [mailto:Sam.Dean@soiltechnics.net]
Sent: 11 February 2016 12:21
To: Sam Dean; Daniel Sutcliffe; Linden Richardson
Subject: RE: STN3505NM: Gas monitoring at Longridge Preston

Afternoon Daniel

have you had a chance to review our comments as per below?

Any queries please give me a call

Kind regards

Sam Dean
B.Sc. (Hons)., MIEnvSc., FGS
Associate Director

m 07917 602346 t 0161 9470270
e sam.dean@soiltechnics.net
w www.soiltechnics.net

Head Office
Cedar Barn, White Lodge, Walgrave, Northamptonshire NN6 9PY t 01604 781877

Manchester Office
Ivy Mill Business Centre, Crown Street, Failsworth, Manchester M35 9BG t 0161 9470270

From: Sam Dean
Sent: 04 February 2016 12:37
To: Daniel Sutcliffe; Linden Richardson
Subject: RE: STN3505NM: Gas monitoring at Longridge Preston

Daniel

Ref is Application 3/2014/0764

Any queries please give me a call

Kind regards

Sam Dean
B.Sc. (Hons)., MIEnvSc., FGS
Associate Director

m 07917 602346 t 0161 9470270
e sam.dean@soiltechnics.net
w www.soiltechnics.net

soiltechnics
environmental and geotechnical consultants

Head Office
Cedar Barn, White Lodge, Walgrave, Northamptonshire NN6 9PY t 01604 781877

Manchester Office
Ivy Mill Business Centre, Crown Street, Failsworth, Manchester M35 9BG t 0161 9470270

From: Daniel Sutcliffe [mailto:Daniel.Sutcliffe@ribblevalley.gov.uk]
Sent: 04 February 2016 10:34
To: Sam Dean <Sam.Dean@soiltechnics.net>; Linden Richardson <Linden.Richardson@soiltechnics.net>
Subject: RE: STN3505NM: Gas monitoring at Longridge Preston

Morning,

Could you please send me the relevant planning application reference for this site so that I can look it up?

Regards

Daniel Sutcliffe
Engineering Assistant
Ribble Valley Borough Council

From: Sam Dean [mailto:Sam.Dean@soiltechnics.net]
Sent: 02 February 2016 13:43
To: Linden Richardson
Cc: Daniel Sutcliffe
Subject: Re: STN3505NM: Gas monitoring at Longridge Preston

Daniel

Just to add to what Linden outlined, the site has outline planning (phase 1 and phase 2 approx 350 dwellings) and I believe you would have been in receipt of a phase 1 desk study report for the site already undertaken by a third party. They have outlined that gas is a source of concern based on the presence of potential Made Ground offsite.

The site is greenfield and geology is glacial till (clays). Landfill sources and historic pits are limited and distant. In our opinion even if there was a source of gas in Made Ground soils offsite, there is no preferential migration pathway to the site and the source, unless it contained significant concentrations of degradable and putrescible material of significant thickness, is considered low risk.

As you can appreciate, this may cause some conflict and delays later in the planning process if the LA are expecting to see some gas monitoring based on he recommendations of the desk study report and we do not undertake based on our assessment. If the LA recommend that such monitoring is undertaken as a matter course on all sites within their remit the we would obviously have no objection to this.

We would appreciate any feedback at your earliest convenience, we are programmed to undertake intrusive ground investigations at the site Weds and Thursday this week in the phase 1 area, with phase 2 following next week.

Regards

Sam Dean
(Associate Director for Soiltechnics Ltd)

Sent from my iPhone

On 2 Feb 2016, at 12:50, Linden Richardson <Linden.Richardson@soiltechnics.net> wrote:

> Dear Mr Sutcliffe
>
> I am working on the ground investigation for a proposed residential development at the above address (postcode PR3 2NA, it is the land north of the village and east of Chipping Lane) and will shortly be undertaking the site investigation.
>
> It has been suggested to me that I get in touch with you to get your position on the requirements for gas monitoring at the site. Our desk study has revealed no clear sources of ground gas and we are of the opinion that gas monitoring is not required at the site. If you agree with this position it would be useful to receive confirmation of this so that gas monitoring can be discounted. This would allow the planning application to be completed more promptly and at lower expense. However, should you need more time to deliberate, or not be able to respond before the works are undertaken then we will happily proceed with installations and monitoring.
>
> Many thanks for any input you can provide.
>
> Regards

Linden Richardson
B.Eng. (Hons)., MSc., AIEMA
Geo-environmental Engineer

t 0161 9470270
m 0777 9417287
e linden.richardson@soiltechnics.net
www.soiltechnics.net

<image001.png>
Head Office
Cedar Barn, White Lodge, Walgrave, Northamptonshire NN6 9PY t 01604 781877

Manchester Office
Ivy Mill Business Centre, Crown Street, Failsworth, Manchester M35 9BG t 0161 9470270

Bowland Meadows, Land East of Chipping Lane, Longridge

Phase 1 Detailed Desk Top Study

Curtin's Ref: EB1355/GL/3692

Revision: A

Issue Date: 14 April 2014

Client Name: Barratt Homes

Client Address: 4 Brindley Road, City Park, Manchester, M16 9HQ

Site Address: Bowland Meadow, Land East of Chipping Lane, Longridge

Curtins
10 Oxford Court, Bishopsgate,
Manchester, M2 3WQ
Tel: 0161 238 2394
www.curtins.com

Client:	Barratt Homes
Project:	Residential Development
Report Type:	Geo-Environmental Site Appraisal, Phase 1 – Detailed Desk Top Study
Report Reference:	EB1355/GL/3692
Revision:	A
Report Status:	Issue 01
Date:	14 April 2014

Report Author(s)	Signature	Date
G Lownsbrough BSc (Hons)		14 April 2014

Checked	Signature	Date
A Ward MGeoscience		14 April 2014

Authorised	Signature	Date
P D Winterburn BSc (Hons) CEng MICE MIStructE MCIWEM C.WEM **Technical Director**		14 April 2014

For and on behalf of **Curtins**

Planning Guidance: Contamination Statement
Does the site described herein involve any of the following: a. Land which is known to be contaminated? **No** b. Land where contamination is suspected for all or part of the site? **Yes** c. A proposed use that would be particularly vulnerable to the presence of contamination? **Yes**

Table of contents

Appendices

Appendix A1 – Site Location Plan

Appendix A2 – Envirocheck Report

Appendix A3 – Diagrammatic Conceptual Model

Appendix A4 – Qualitative Risk Assessment Rationale

1.0 Introduction

In April 2014 Curtins were instructed by Barratt Homes to undertake a Phase 1 Geo-Environmental Detailed Desk Top Study, of a site located on Bowland Meadow, Land East of Chipping Lane, Longridge.

The site is centred on national grid reference 360130, 438020 with an area of 7.22ha. A location plan can be found in Appendix A1.

It is understood that proposals are for new residential development. The site is currently occupied open fields and farmland.

Scope of Phase 1 Investigation – Detailed Desk Top Study

The desk top study is to be undertaken, principally, to provide an overview of the geo-environmental setting of the site of interest with a brief assessment of any risks that could be presented to site users and the wider environment.

Additionally the desk top study should provide information that could be used to ascertain the extent of any in-situ geo-environmental investigation required to confirm the site conceptual model developed in the desk top study. The desk top study provides an initial view in respect of the status of the site with regard to:

- The potential impact on the site of interest from surrounding land uses and other environmental factors.
- Potential contamination of the site strata by historical and or current use.
- The potential impact on the wider environment by historical and or current use of the site of interest.
- Potential problems associated with geological features such as faulting, mineral extraction, mining and land instability.
- The location of apparent sub-surface structures that may affect the proposed redevelopment.
- The location of above-surface features that may affect the proposed redevelopment.

2.0 Phase 1 – Detailed Desk Top Study

In accordance with the scope identified in Section 1.1, this desk top study has been undertaken using the following data sources and involves no intrusive investigations or testing.

- Envirocheck Report.
- British Geological Society 1:50,000 map.
- British Geological Society website.
- Environment Agency website.
- Local Authority records.
- Radon Atlas for England and Wales.

2.1 Previous Site Use

Since the earliest historical map dated 1893 the site has been occupied by open fields and farmland. To the north and north east of the site boundary approximately 50-100m are a number of small ponds bounded by embankments. The historical maps illustrate no existing buildings or developments and have remained unchanged up until the most recent historical map dated 2013.

2.2 Surrounding Land Use

Since 1893 the surrounding area adjacent to the site is bound by Chipping Lane to the east and Higher Lane to the south. Pit street mill is illustrated to the south east of the site approximately 20m away and a cluster of residential housing and farm houses including Berry Farm and Crumpax Farm are located approximately 50-60m from the site. Additionally illustrated on the map is a drinking fountain/trough suspected to be associated with the surrounding farms. Adjacent south west of the site are several buildings labelled Alston Arms and west of the site boundary approximately 50m is an iron and brass foundry.

During 1895 the surrounding area illustrates the development of a number of works, mills and factories, including a gas works and a foundry circa 50m south west of the site. South Longridge is continuing to be developed. Another significant development to the area was a railway line running approximately 500m from site, and several mills and a quarry to the east.

From 1913 onwards steady urban expansion continued, and by 1932 this had slowed. A brook is now shown running adjacent to the western boundary.

From 1961 to 1967 the surrounding area expanded significantly, with the closest developments occurring approximately 10-30m from the site (Frey Stocks) and a garage south east of the site.

By 1970 the railway running adjacent to the mills and factories towards the south east was dismantled

The pattern of redevelopment to the surrounding area continues, however not within close proximity of the site.

The site remains predominantly unchanged up to the most recent historical map dated 2013.

2.3 Mapping Data Recorded In the Envirocheck Report

The Envirocheck report contains historical ordnance survey maps (Lancashire and Furness) as identified below.

- 1:2,500 scale maps provided for the survey publication of 1893, 1912, 1932, 1967, 1975, 1975-1992, 1978-1987, 1981-1982, 1992, 1994, 1995, 1996,
- 1:10,000 scale maps for the survey publication of 1956, 1968, 1970, 1976, 1994, 2001, 2006 and 2013.
- 1:10,560 scale maps for the survey publication of 1847, 1895, 1913-1914 and 1932,

A summary of the map records is provided on the following pages; a copy of all maps obtained can be referred to in Appendix A2.

Date	Scale	Description
1:1,250 and 1:2,500 Scale Mapping		
1893	1:2,500	The site is occupied by open fields with occasional woodland. The far north eastern corner illustrates a small pond surrounded by sparse woodland. The sites surrounding area adjacent bounding the site is Chipping Lane to the east and Higher Lane to the south. Pit street mill is illustrated to the south east of the site approximately 20m and a cluster of residential housing and farm houses including Berry Farm and Crumpax Farm approximately 50-60m from the site, also illustrated is a drinking fountain/trough suspected to be associated with the surrounding farms. To the south west of the site approximately 50m is Iron and Brass Foundry. Adjacent south west of the site are a few buildings labelled Alston Arms. West of the site boundary approximately 50m in iron and brass foundry. Surrounding the site towards the east and north east are a number of small ponds between 50-100m from the site boundary.
1912	1:2,500	The site and surrounding are remains the same as the previous historical map.
1932	1:2,500	The site remains the same as the previous historical map with a small potential spring towards the south eastern boundary of the site. The surrounding area remains predominantly unchanged apart from Bobbin Works which is now illustrated. Higgin Brook runs adjacent to site on the western boundary.

1961-1967	1:2,500	The site remains undeveloped. Higgin Brook is now labelled on the eastern site if the site. The surrounding area illustrates significant residential housing developments south and south east adjacent to and approximately 50-100m from the site boundary. Further south (100m) of the residential buildings is a large building labelled Fell View. There is a large building illustrated and labelled as Ashley Dairy, which is likely to be associated with the surrounding farm land. To the south western corner of the site boundary approximately 10-30m are a few small buildings labelled as Frey Stocks. To the south east of the site adjacent is a number of small buildings labelled as a garage. To the north and north east of the site boundary approximately 50-100m are a number of small ponds bounded by embankments.
1975	1:2,500	South east tiles illustrated only. No significant changes to the site or surrounding area, apart from Ashley Dairy building appears to have been demolished and rebuilt and to the south approximately 50-100m from the site are a number of residential homes with associated gardens.
1975-1992	1:2,500	South and Western tiles illustrated only. No significant changes made to the site. Surrounding area remains predominantly the same apart from a newly established Longridge County Primary School.
1978-1987	1:2,500	Southern tiles illustrated only. No significant changes have been made. The surrounding area illustrates no significant changes, apart from residential developments 100m from the site boundary in the south east.
1981-1992	1:2,500	The site and surrounding area remains predominantly the same with no significant changes made.
1992	1:2,500	South east tiles not illustrated, no significant changes the site or surrounding area.
1994	1:2,500	The site remains the same as the previous historical map. The surrounding area remains unchanged from the previous historical map.
1995	1:2,500	South east tiles illustrated only. There are no significant changes made to the site or surrounding area.
1996	1:1,250	South east tiles illustrated only. There are no significant changes made to the site or surrounding area.
1:10,560 & 1:10,000 Scale Mapping		
1847	1:10,560	The site is open fields and occasional woodland. The surrounding are illustrates no infrastructure only occasional small ponds and farmland with woodland.

1895	1:10,560	The site remains the same as the previous historical map. The surrounding area illustrates a number of works, mills and factories approximately 100-150m south east including a gas works and a foundry approximately 50m south west of the site boundary. South east 250-500m illustrates the small town of Longridge being developed. There are a number of schools and churches. There is a police station south west, bobbin works and stone bridge mill adjacent to a railway line running south east approximately 500m from site. Towards the east approximately 500m is Victoria Mill and 700-800m is Lords Quarry.
1913-1914	1:10,560	The site remains the same as the previous historical map. The surrounding are towards the west of the site boundary approximately 100m is Poplar Foundry (Iron and Brass) and Belmont Foundry approximately 500m. Towards the southern edge of the site 100m is Pitt Street Mill. The surrounding area illustrates minor changes showing slight development of residential dwellings in the nearby town of Longridge. 500m South east illustrates two small reservoir adjacent to Victoria Cotton Mill.
1932	1:10,560	The site remains the same as the previous historical map. The surrounding area remains predominantly unchanged illustrating increasing density of Longridge town and residential dwelling towards the south of the site.
1956	1:10,000	The site and surrounding area remain predominantly unchanged.
1968	1:10,000	Western tiles illustrated only. No significant changes to the site or surrounding are.
1970	1:10,000	Eastern tiles illustrated only. No significant changes made to site. The surrounding area illustrates increase in residential buildings and Longridge town is now expanding. The railway running adjacent to the mills and factories towards the south east has now been dismantled.
1976	1:10,000	No tiles illustrated on map.
1994	1:10,000	The site remains the same as the previous historical map. The brass and iron foundries towards the west of the site boundary approximately 500m have now been demolished and there are now a number of farmhouses, cottages and a home for the aged. Towards the south west approximately 500m is a large pond with a number of small buildings bounding the southern side adjacent to Halfpenny Lane labelled as a substation. The gas works and mills to the south of the site approximately 500m appear to have been demolished. There are now a number of schools around the area and residential housing. However there are still a number of works surround the site approximately 800m south and 500m towards the east side of the site boundary.

2001	1:10,000	The site remains the same as the previous historical map. The surrounding area illustrates little changes. Adjacent to the site on the eastern boundary is a large superstore. Adjacent to the north east corner of the site is a cricket ground and associated Pavilion building.
2006	1:10,000	The site and surrounding area remain predominantly unchanged from the previous historical map.
2013	1:10,000	The site and surrounding area remains the same as the previous historical map.

2.4 Geographical and Special Features

No geographical and/or special features are recorded that could potentially affect redevelopment.

2.5 Geology

A study of the Envirocheck records and British Geological Survey (BGS) 1:50,000 mapping records (Bedrock and Superficial Editions) for Garstang (Sheet 067) indicates the following geological succession underlying the site.

Rock Name	Rock Type	Geological Age
Till, Devensian	Diamicton	Devensian - Devensian
Bowland Shale Formation	Mudstone and Siltstone	Yeadonian - Yeadonian

There are three fault lines within 1000m of the site.

There are no BGS boreholes located within close proximity to the site.

The Envirocheck Report confirms that there is a low risk to no hazard from the following ground stability hazards on and around the site; running sands, shrinking or swelling clay, collapsible ground, landslides and ground dissolution, however, there is a high risk potential for compressible ground stability hazards.

Both the Radon Atlas for England and Wales, and the Envirocheck Report confirm that the site is in an intermediate probability radon area, as between 1 and 3% of homes are above the action level, however no radon protective measures are deemed necessary in the construction of new dwellings or extensions.

2.5.1 Mining

There are five BGS Recorded Mineral Sites located within 1000m of the site of interest. The closest is located 403m North West.

The Envirocheck report confirms that the site is within an area which is highly unlikely to be affected by coal mining activity. The site lies outside a coal mining referral area, and as such, a Coal Authority report has not been obtained.

2.6 Hydrogeology and Hydrology

The 1:100,000 Sheet 10 Central Lancashire Vulnerability Map indicates that the site, corresponding with the underlying superficial deposits are comprised of Devensian till which is an unproductive Strata and the northern corner of the site is underlain by a Secondary A Aquifer. The underlying solid geology comprises of Mudstones and Siltstones acting as a Secondary A Aquifer.

Unproductive strata are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow.

Secondary A Aquifer - 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.

Soils present on the site are of Low Leaching Potential - Soils in which pollutants are unlikely to penetrate the soil layer because water movement is largely horizontal or they have large ability to attenuate diffuse pollutants. Lateral flow from these soils contribute to groundwater recharge elsewhere in the catchment.

The site is not situated within a Source Protection Zone (SPZ).

The nearest surface water feature is a tertiary river (Higgin Brook) located on the south side of the site boundary.

There is one surface water abstractions within 1000m of the site located 445m south east which is a field drain located in Lyndhurst, Longridge.

There are no potable water abstractions within 1000m of the site.

There are two groundwater abstractions within 1000m of the site, the nearest is located at Mill Farm borehole located 889m north west of the site.

There are no Pollution incidents, Discharge Consents, Local Authority Pollution Prevention and Controls permits arising from the site.

The site lies in Flood Zone 1 and is therefore at no risk from flooding.

2.7 Landfill

The Envirocheck report confirms that there are no BGS Recorded Landfill within 1000m of the site boundary.

There are no historical landfill recorded within 1000m of the site.

There are two recorded Registered Landfill site within 1000m of the site. The nearest is located 843m north west, the licence holder was William Pye Ltd at Lords Quarry, Longridge, the site is still in operation.

2.8 Public Utility Records

Public utility information has been obtained as a part of this report.

2.9 Preliminary Unexploded Ordnance (UXO) Risk Assessment

The site of interest is located in Longridge, Preston, Lancashire.

Risk mapping for UXOs has placed the site within a Low risk area.

Low-risk regions are those with a bombing density of up to 10 bombs per 1000 acres.

These areas are considered to have a significant but low UXB risk. In general, further action to mitigate the risk is considered prudent, although not essential. Care is required when assessing the risk for specific sites where the risk may be higher because of local wartime activity. Historical maps for the site and surrounding area do not show any evidence of bomb damage post WWII. There are no primary Luftwaffe target within 1000m of the site.

The site has been redeveloped since the end of WW2, increasing the likelihood of detecting any UXO items that may be present on-site.

In light of these findings and in accordance with CIRIA's publication on managing UXO risks, it is recommended that no further action is warranted to address the level of UXO risk at the Site.

2.10 Other Significant Features Potentially Affecting Re-Development

No other significant features are noted that could potentially affect re-development.

3.0 Conclusions

3.1 Conceptual Model

The following sub-sections present a non-exhaustive list of the possible sources, pathways and receptors that exist within the site conceptual model for the site.

Potential source-pathway-receptor linkages that may arise are discussed in the following section, the Qualitative Risk Assessment.

A Diagrammatic Conceptual Model is provided in Appendix A3.

3.1.1 Potential Sources

Potential Source (S1): Made ground Soils On Site
Low Likelihood due to historical evidence of no developments on the site. The nature and type of contamination may include, amongst others; ash and fill, hydrocarbons (e.g. fuel oils), heavy metals, herbicides / pesticides and asbestos.

Potential Source (S2): Made ground Soils Off Site
Off-site soils have been exposed to patterns of development and demolition so there is potential for contamination to be present in made ground around the site. Taking into account the close proximity of the railway to the west of the site. Potential contaminants could arise due to geological origin, construction activities, atmospheric deposition and land management. The nature and type of general contamination may include, amongst others; ash and fill, hydrocarbons (e.g. fuel oils), heavy metals and asbestos.

Potential Source (S3): Natural Soils both On and Off Site
Regionally elevated levels of metals may be present within the shallow soils, however the superficial and bedrock deposits beneath the site and within the immediate surrounding area are not considered to present significant sources of natural contamination.

Potential Source (S4): Ground Gas Generating Sources
May be present due to made ground deposits surrounding the site from historical developments and land use. There are no records of organic rich drift deposits (e.g. peat) or coal measures.

Potential Source (S5): Geological Deposits with Potential to Generate Radon
Both the Radon Atlas for England and Wales, and the Envirocheck Report confirm that the site is in an intermediate probability radon area, as between 1 and 3% of homes are above the action level, however no radon protective measures are deemed necessary in the construction of new dwellings or extensions.

Potential Source (S6): Unexploded Ordnance
Risk mapping for UXOs has placed the site within a Low risk area. The historical maps for the site and surrounding area show no bomb damage post WWII and there were no primary targets located within 1000m of the site. It should be taken into consideration that the site and surrounding area has undergone several stages of redevelopment since this time, lowering the risk of UXO on site.

Potential Source (S7): Mining Workings
No mining works are considered to affect the site.

3.1.2 Potential Pathways

Potential Pathway (P1): Direct Contact, Ingestion and Inhalation (dust and Vapours)
May occur where the end user is exposed to; solid, dust or volatile components of made-ground soils on site.

Potential Pathway (P2): Vertical Migration
May occur within the made-ground deposits on-site both upwards, due to processes including; capillary action, burrowing animals inducing soil mixing, and downwards into the natural deposits due to processes including; infiltration and burrowing animals. Includes ground gas migration. Soils of negligible leaching potential are found onsite.

Potential Pathway (P3): Horizontal Migration
May occur within the made-ground or natural deposits due to processes including; the influence of perched or natural groundwater flow patterns and natural or man-made high permeability zones, e.g. sand lenses or drainage runs or pores/voids within natural and made-ground soils for ground gases.

Potential Pathway (P4): Collapse
Unlikely on this site.

3.1.3 Potential Receptors

Potential Receptor (R1): End Users
Residents, visitors, site maintenance staff and the general public.

Potential Receptor (R2): Controlled Waters (Groundwater)
Corresponding with the underlying solid geology, the site is underlain by a Secondary A Aquifer. The site is not situated within a Source Protection Zone (SPZ). There is one groundwater abstraction within 1000m of the site, which is Mill Farm borehole located 917m north east of the site.

Potential Receptor (R3): Controlled Waters (Surface Waters)
The nearest surface water feature is Higgin brook (Tertiary River) located on site towards the eastern boundary. There is one surface water abstractions within 1000m of the site located 446m south east which is a field drain located in Lyndhurst, Longridge. There are no potable water abstractions within 1000m of the site.

Potential Receptor (R4): Construction Workers
Whilst unlikely, during the development of the site, construction workers may come into contact with any contamination that is on site. However, wearing the correct personal protective equipment will reduce the risk.

Potential Receptor (R5): Construction Materials
Buried concrete and water supply pipes.

Potential Receptor (R6): Local Ecology
Protected species and local habitats; e.g. hedgerow, grassland and water.

3.2 Qualitative Risk Assessment

The qualitative risk assessment details both the source-pathway-receptor linkages and associate level of risk that have been identified for the site.

The rationale for the qualitative risk assessment is described within Appendix A4 and a tabulated summary provided in Table A4.1.

The term 'risk' in this instance refers to the risk that the source, pathway, receptor linkage for a given source of contamination is complete. Unless specifically noted it does not necessarily refer to an immediate risk to individuals or features present on the site from potential contaminants and is intended to be used as a tool to assess the necessity of further investigation.

3.2.1 End User

Assessment of Risk to End Users from Made Ground Soils On-Site	
Potential Source	**S1: Made-ground soils on site**
Likelihood of Occurrence	*Low Likelihood, due to no historical evidence of development on the site.*
Potential Pathway	**P1: Direct contact, ingestion and inhalation**
Details	*Recreational grounds, landscaped areas and internal airspaces.*
Potential Receptor	**R1: End users**
Consequence (Potential Severity)	*Medium due to human health effects (chronic and acute) for a sensitive receptor (Residents, visitors, site management staff and general public).*
Risk	**Moderate/Low**
Recommendation	*Environmental sampling of site shallow soils to confirm quality and composition.*

Assessment of Risk to End Users from Made Ground Soils Off-Site	
Potential Source	**S2: Made-ground soils off site**
Likelihood of Occurrence	*Likely, due to historical evidence of development and demolition off-site, and given the age of the developments, it is possible that some asbestos may have been present on the site, but it should only remain if demolition activity was poorly managed.* *Potential contaminants could arise due to geological origin, construction activities, atmospheric deposition and land management. The nature and type of general contamination may include, amongst others; ash and fill, hydrocarbons (e.g. fuel oils), heavy metals and asbestos.*
Potential Pathway	**P3 & P1: Horizontal migration then direct contact, ingestion and/or inhalation**
Details	*Recreational grounds, landscaped areas and internal airspaces.*
Potential Receptor	**R1: End users**
Consequence (Potential Severity)	*Medium due to human health effects (chronic and acute) for a sensitive receptor (Residents, visitors, site management staff and general public).*
Risk	**Moderate**
Recommendation	*Environmental sampling of site shallow soils to confirm quality.*

Assessment of Risk to End Users from Natural Soils On and Off Site	
Potential Source	**S3: Natural soils on and off site**
Likelihood of Occurrence	*Low likelihood, due to the nature of the site geology but accounting for contamination of natural soils by on-site and surrounding sources.*
Potential Pathway	**P1 & P3: Direct contact, ingestion and inhalation and horizontal migration**
Details	*Either horizontal migration from off site or on-site presence; private gardens, home-grown produce, landscaped areas and internal airspaces.*
Potential Receptor	**R1: End users**
Consequence (Potential Severity)	*Medium due to human health effects (chronic and acute) for a sensitive receptor (Residents, visitors, site management staff and general public).*
Risk	**Moderate/Low**
Recommendation	*Environmental sampling of site natural soils to confirm quality.*

Assessment of Risk to End Users from Ground Gas Generating Sources	
Potential Source	**S4: Ground gas generation sources (e.g. landfills or made-ground)**
Likelihood of Occurrence	*Low Likelihood, however taking into account made ground deposits across the site from historical developments and land use.* *There are four BGS Recorded Landfill within 1000m of the site boundary.* *There are no historical landfill recorded within 1000m of the site.* *There are two recorded Registered Landfill site within 1000m of the site.* *There are no records of organic rich drift deposits (e.g. peat) or coal measures.*
Potential Pathway	**P2 & P3: Vertical and horizontal migration**
Details	*Direct gassing of on-site soils or migration along natural low permeability horizons within superficial or bedrock deposits.*
Potential Receptor	**R1: End users**
Consequence (Potential Severity)	*Severe due to human health effects (explosive, toxic and asphyxiate gases) for all receptors.*
Risk	**High/Moderate**
Recommendation	*Ground gas monitoring*

Assessment of Risk to End Users from Radon	
Potential Source	**S5: Geological deposits with potential to generate radon**
Likelihood of Occurrence	*Unlikely as both the Radon Atlas for England and Wales, and the Envirocheck Report confirm that the site is in an intermediate probability radon area, as between 1 and 3% of homes are above the action level, however no radon protective measures are deemed necessary in the construction of new dwellings or extensions.* *No radon protective measures are necessary in the construction of new dwellings or extensions.*
Potential Pathway	**P2 & P3: Vertical and horizontal migration**
Details	*Direct gassing of on-site soils or migration along natural low permeability horizons within superficial or bedrock deposits.*
Potential Receptor	**R1: End users**
Consequence *(Potential Severity)*	*Medium due to human health effects (chronic and acute) for a sensitive receptor (Residents, visitors, site management staff and general public).*
Risk	**Low**
Recommendation	*No action required*

Assessment of Risk to End Users from Unexploded Ordnance (UXO)	
Potential Source	**S6: Unexploded Ordnance**
Likelihood of Occurrence	*Unlikely as the historical maps for the sites show no primary targets within close proximity of the site and no ruins within close proximity of the site.* *The surrounding area shows no bomb damage post WWII, taking into consideration that the site and surrounding area has undergone several stages of redevelopment since this time, lowering the risk of UXO on site, as the likelihood of the bombs already being exploded would increase with this kind of activity.*
Potential Pathway	**P1: Direct contact**
Details	*All groundwork activities.*
Potential Receptor	**R1: End Users**
Consequence *(Potential Severity)*	*Severe due to human health effects (explosive) for receptor.*

Risk	**Moderate / Low**
Recommendation	*No Detailed UXO Report required for the site.*

3.2.2 Groundwater

Assessment of Risk to Groundwater from Made Ground Soils On Site	
Potential Source	**S1: Made-ground soils on site**
Likelihood of Occurrence	*Likely, due to historical evidence of development on both sites.*
Potential Pathway	**P2: Vertical migration**
Details	*Leaching or percolation of potential contaminants.*
Potential Receptor	**R2: Controlled waters (Groundwater)**
Consequence (Potential Severity)	*Medium as the site is underlain by a Secondary A Aquifer.* *There is one groundwater abstraction within 1000m of the site, which is Mill Farm borehole located 917m north east of the site.* *The site is not situated within a Source Protection Zone (SPZ).*
Risk	**Moderate**
Recommendation	*Environmental sampling of site shallow soils and groundwater to confirm quality.*

3.2.3 Surface Water

Assessment of Risk to Surface Water from Made Ground Soils On Site	
Potential Source	**S1: Made-ground soils on site**
Likelihood of Occurrence	*Low Likelihood, due to historical evidence of no development on the site.* *The nearest surface water feature is Higgin brook (Tertiary River) located on site towards the eastern boundary.* *There is one surface water abstractions within 1000m of the site located 446m south east which is a field drain located in Lyndhurst, Longridge.*
Potential Pathway	**P3: Horizontal migration**
Details	*Leaching or percolation of potential contaminants.*
Potential Receptor	**R3: Controlled waters (Surface Waters)**
Consequence (Potential Severity)	*Medium due to anticipated sensitivity/grade of the closest surface water feature.*
Risk	**Moderate**

Recommendation	*Environmental sampling of site shallow soils to confirm quality.*

3.2.4 Construction Workers

Assessment of Risk to Construction Workers from Made Ground & Natural Soils On and Off Site	
Potential Source	**S1 & S2 & S3: Made-ground & natural soils on and off site**
Likelihood of Occurrence	*Made Ground* *On-site: Low Likelihood as discussed previously.* *Off-site: Likely as discussed previously.* *Natural* *On-site: Unlikely as discussed previously.* *Off-site: Unlikely as discussed previously.*
Potential Pathway	**P1: Direct contact, ingestion and inhalation**
Details	*Groundwork and landscaping activities.*
Potential Receptor	**R4: Construction workers**
Consequence (Potential Severity)	*Minor due to correct use of personal protective equipment (PPE).*
Risk	**Negligible**
Recommendation	*Environmental sampling of site shallow soils and groundwater to confirm quality.*

Assessment of Risk to Construction Workers from Unexploded Ordnance (UXO)	
Potential Source	**S6: Unexploded Ordnance**
Likelihood of Occurrence	*Unlikely of being present on-site due to lack of primary targets within close proximity of the site and no ruins within close proximity of the site.*
Potential Pathway	**P1: Direct contact**
Details	*All groundwork activities.*
Potential Receptor	**R4: End Users**
Consequence (Potential Severity)	*Severe due to human health effects (explosive) for receptor.*
Risk	**Moderate / Low**
Recommendation	*No Detailed UXO Report required for this site.*

3.2.5 Construction Materials

Assessment of Risk to Construction Materials from Made-Ground Soils On Site	
Potential Source	**S1: Made-ground soils on site**
Likelihood of Occurrence	*Low Likelihood, due to no historical evidence of development the site.*
Potential Pathway	**P1: Direct contact**
Details	*Soil pore water chemistry inducing chemical degradation/fouling.*
Potential Receptor	**R5: Construction materials**
Consequence (Potential Severity)	*Mild due to reduced performance of construction materials and human health affects (water supply contamination).*
Risk	**Low**
Recommendation	*Environmental sampling of site shallow soils to confirm quality.*

3.2.6 Local Ecology

Assessment of Risk to Local Ecology from Made-Ground Soils On Site	
Potential Source	**S1: Made-ground soils on site**
Likelihood of Occurrence	*Lowe Likelihood, due to the historic evidence of development on both sites, and industry within close proximity to the site boundary.*
Potential Pathway	**P1 & P3: Direct contact, ingestion and inhalation & horizontal migration**
Details	*Protected species within on-site and local habitats; e.g. woodland, hedgerow, grassland and water.*
Potential Receptor	**R6: Local ecology**
Consequence (Potential Severity)	*Minor (no known sensitive ecology on site).*
Risk	**Negligible**
Recommendation	*Advice of an ecologist obtained with respect to any requirements.*

3.2.7 Recommendations

The qualitative risk assessment determined an overall **Negligible** to **Moderate** level of risk from potential contaminants. The risk to the end user from ground gases is determined to be **High/Moderate**.

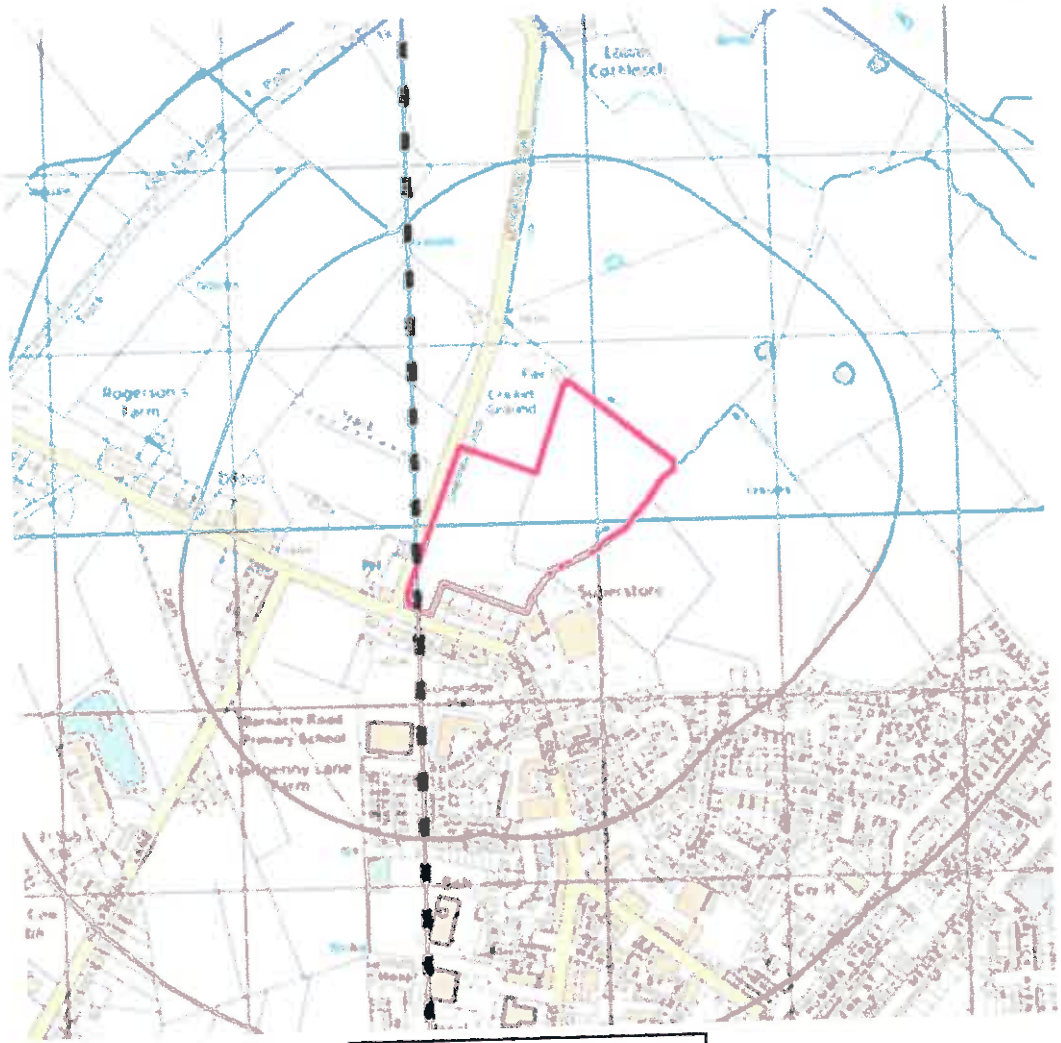
Consequently it is recommended that an intrusive investigation is undertaken to confirm the conceptual model or otherwise.

Environmental soil samples for chemical analysis should be obtained to determine if any contamination of the shallow soils and natural ground is present on site. Geotechnical samples should also be obtained in support of the design of foundations and roads.

In addition, the intrusive investigation will allow for the monitoring and sampling of groundwater / gas at the borehole locations.

Appendix A1 – Site Location Plan

Site Location Plan



Key

Approximate site boundary

Project	Job Reference	Author
Boland Meadow, Higgin Brook	EB1355	GL
Drawing Title	**Date**	**Checked**
Site Location Plan	28.03.2014	AW

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10 Oxford Court,
Bishopsgate,
Manchester
M2 3WQ

Tel: 0161 236 2394

Appendix A2 – Envirocheck Report

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Envirocheck® Report:

Datasheet

Order Details:

Order Number:
55312619_1_1

Customer Reference:
EB1355

National Grid Reference:
360190, 438070

Slice:
A

Site Area (Ha):
7.22

Search Buffer (m):
1000

Site Details:

Site at 360130, 438020

Client Details:

Ms G Lownsbrough
Curtins Consulting Ltd
10 Oxford Court
Bishopsgate
Manchester
M2 3WQ

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Contents

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination. For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.

In the attached datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1			6	10
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control	pg 5				1
Local Authority Pollution Prevention and Controls	pg 5			3	3
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 5	Yes			
Pollution Incidents to Controlled Waters	pg 6	2	3	5	13
Prosecutions Relating to Authorised Processes					
Prosecutions Relating to Controlled Waters					
Registered Radioactive Substances					
River Quality	pg 9			1	
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 10				1
Water Abstractions	pg 10			1	2
Water Industry Act Referrals					
Groundwater Vulnerability	pg 10	Yes	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 10	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 11	Yes	n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
Detailed River Network Lines	pg 11	Yes	Yes	Yes	n/a
Detailed River Network Offline Drainage	pg 14		Yes		n/a

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)	pg 15				2
Licensed Waste Management Facilities (Locations)	pg 15				1
Local Authority Recorded Landfill Sites					
Registered Landfill Sites	pg 15				4
Registered Waste Transfer Sites	pg 17				1
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					
Geological					
BGS 1:625,000 Solid Geology	pg 18	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 18	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 37			1	4
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
Brine Compensation Area			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 38	Yes		n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 38	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 39	Yes	Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards	pg 39	Yes	Yes	n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 39	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 40	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 40	Yes		n/a	n/a
Radon Potential - Radon Affected Areas	pg 40	Yes	n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Industrial Land Use					
Contemporary Trade Directory Entries	pg 41		6	20	26
Fuel Station Entries	pg 45		1	1	1
Sensitive Land Use					
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones	pg 46		1		
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					