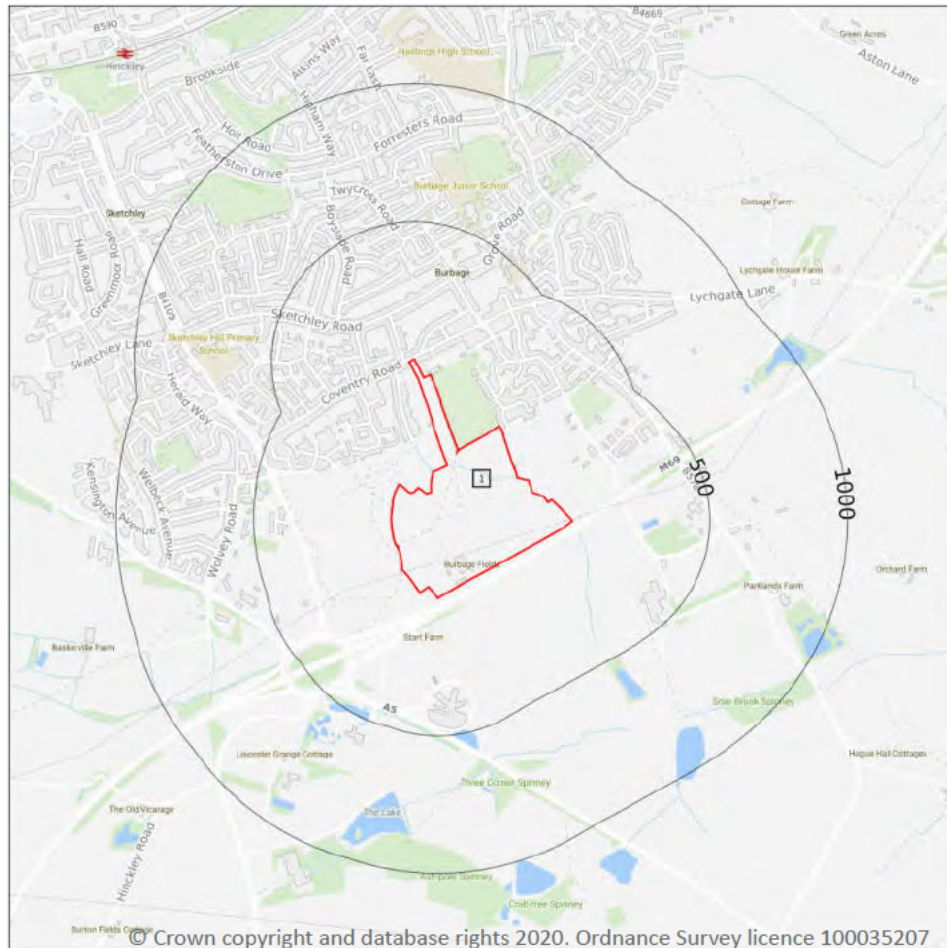


15 Geology 1:50,000 scale - Availability



— Site Outline
Search buffers in metres (m)

☐ Geological map tile

15.1 50k Availability

Records within 500m

1

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

Features are displayed on the Geology 1:50,000 scale - Availability map on page 81

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	EW169_coventry_v4

This data is sourced from the British Geological Survey.



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

15.2 Artificial and made ground (50k)

Records within 500m	0
---------------------	---

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

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

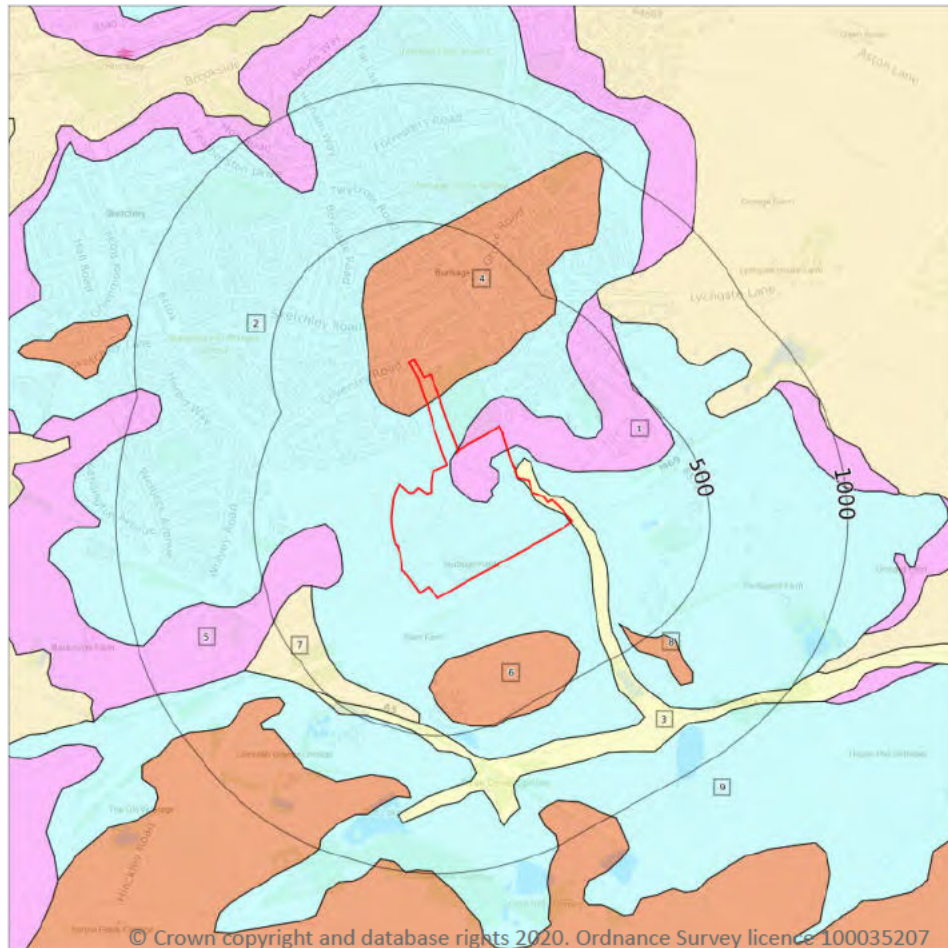
Records within 50m	0
--------------------	---

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



— Site Outline

Search buffers in metres (m)

 Landslip (50k)

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

15.4 Superficial geology (50k)

Records within 500m

9

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

Features are displayed on the Geology 1:50,000 scale - Superficial map on page 83

ID	Location	LEX Code	Description	Rock description
1	On site	WOSG-XSV	WOLSTON SAND AND GRAVEL	SAND AND GRAVEL
2	On site	ODT-DMTN	OADBY MEMBER	DIAMICTON
3	On site	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
4	On site	DMG-XSV	DUNSMORE GRAVEL	SAND AND GRAVEL



ID	Location	LEX Code	Description	Rock description
5	197m W	WOSG-XSV	WOLSTON SAND AND GRAVEL	SAND AND GRAVEL
6	222m S	DMG-XSV	DUNSMORE GRAVEL	SAND AND GRAVEL
7	333m W	BOSW-XCZ	BOSWORTH CLAY MEMBER	CLAY AND SILT
8	403m SE	DMG-XSV	DUNSMORE GRAVEL	SAND AND GRAVEL
9	483m S	ODT-DMTN	OADBY MEMBER	DIAMICTON

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m

4

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	Moderate	Low
On site	Intergranular	Very High	High
On site	Intergranular	Very High	High
On site	Intergranular	High	Very Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.



15.7 Landslip permeability (50k)

Records within 50m

0

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

..... Bedrock faults and other linear features (50k)

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

15.8 Bedrock geology (50k)

Records within 500m

1

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 86](#)

ID	Location	LEX Code	Description	Rock age
1	On site	MMG-MDST	MERCIA MUDSTONE GROUP - MUDSTONE	-

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m

1

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Low	Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

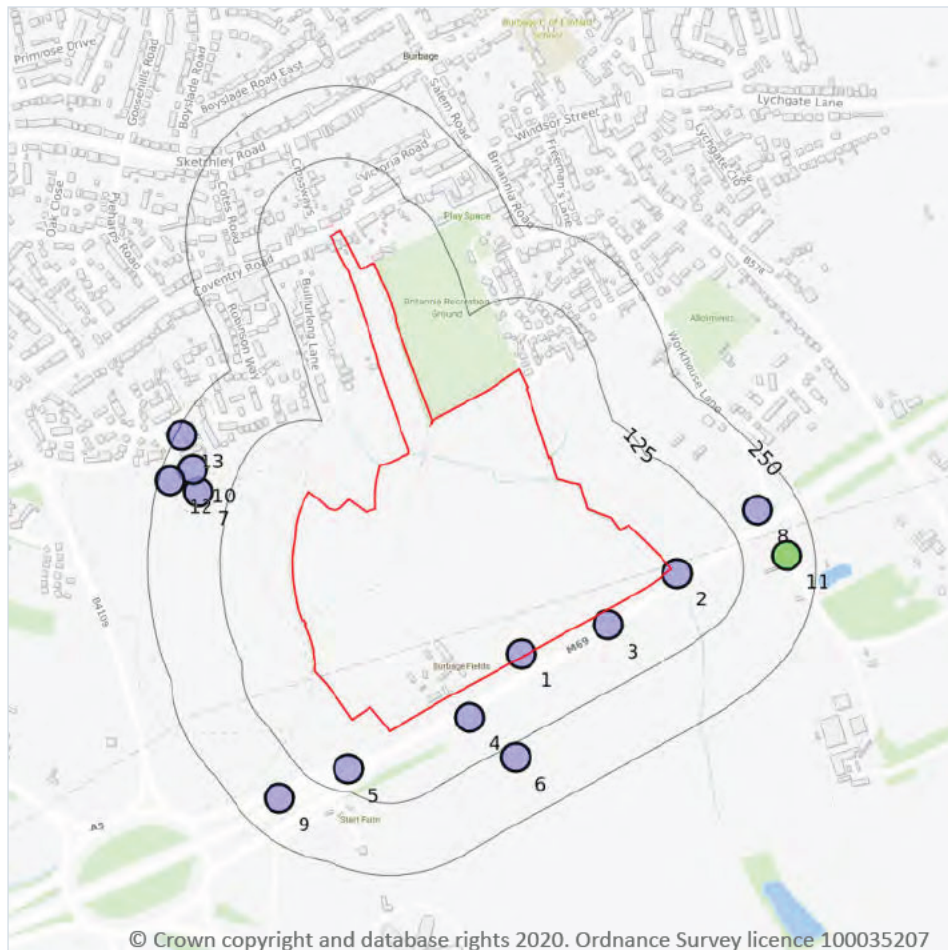
0

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

This data is sourced from the British Geological Survey.



16 Boreholes



— Site Outline
Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

16.1 BGS Boreholes

Records within 250m

13

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

Features are displayed on the Boreholes map on **page 88**

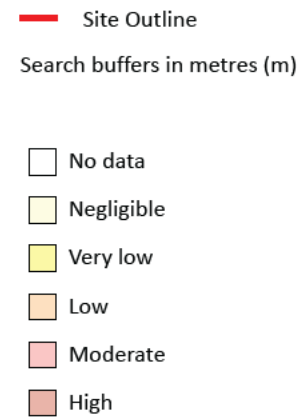
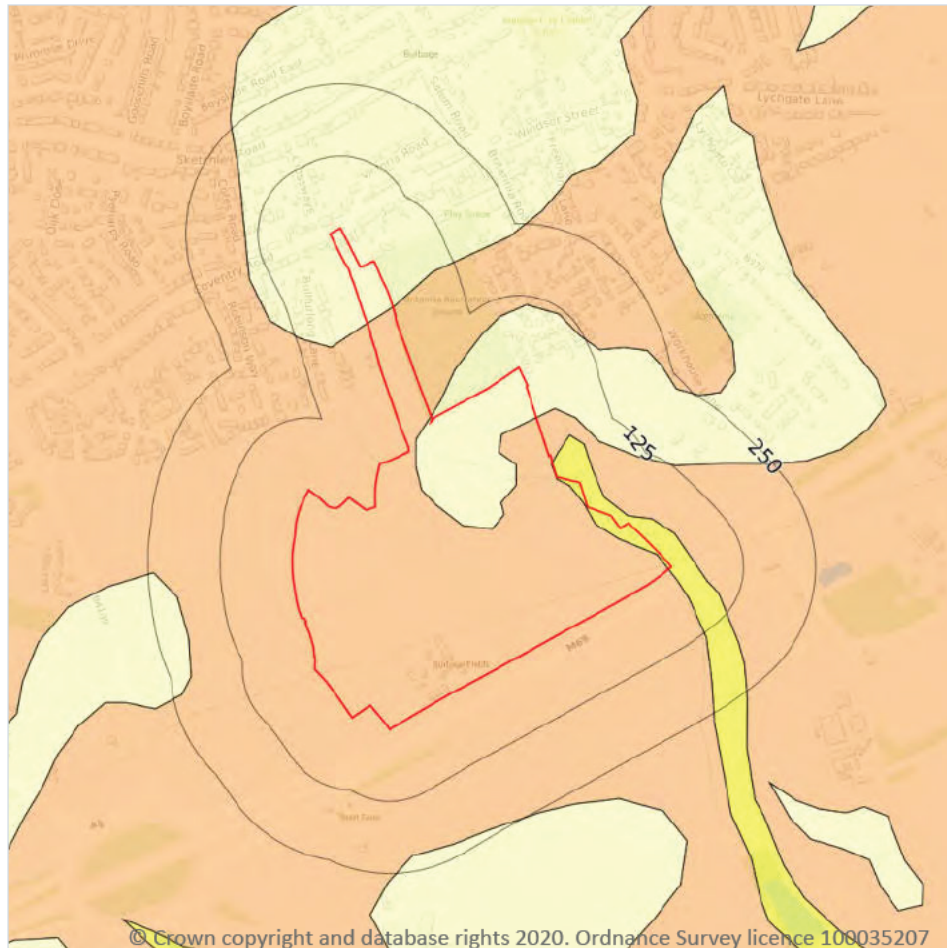
ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	444100 291370	COVENTRY-LEICESTER M69 BH214	9.0	N	334246
2	12m SE	444370 291510	COVENTRY-LEICESTER M69 TH H	2.0	N	334248
3	24m SE	444250 291420	COVENTRY-LEICESTER M69 BH215Z	4.0	N	334247



ID	Location	Grid reference	Name	Length	Confidential	Web link
4	49m SE	444010 291260	COVENTRY-LEICESTER M69 BH212	8.5	N	334245
5	86m S	443800 291170	COVENTRY-LEICESTER M69 THG	1.0	N	334244
6	148m SE	444090 291190	COVENTRY-LEICESTER NEW ROUTE BH33	6.6	N	334220
7	177m W	443540 291650	RUGBY ROAD/COVENTRY ROAD BURBAGE	3.5	N	334575
8	182m NE	444510 291620	COVENTRY-LEICESTER M69 BH217	5.5	N	334249
9	186m SW	443680 291120	COVENTRY-LEICESTER M69 TH211Z	4.0	N	334243
10	199m W	443530 291690	RUGBY ROAD/COVENTRY ROAD BURBAGE	3.5	N	334574
11	201m E	444560 291540	COVENTRY-LEICESTER M69 BH218	17.0	N	334250
12	231m W	443490 291670	RUGBY ROAD/COVENTRY ROAD BURBAGE	3.5	N	334577
13	242m NW	443510 291750	RUGBY ROAD/COVENTRY ROAD BURBAGE	3.5	N	334573

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

Records within 50m

3

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

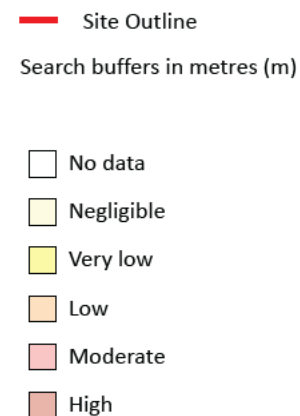
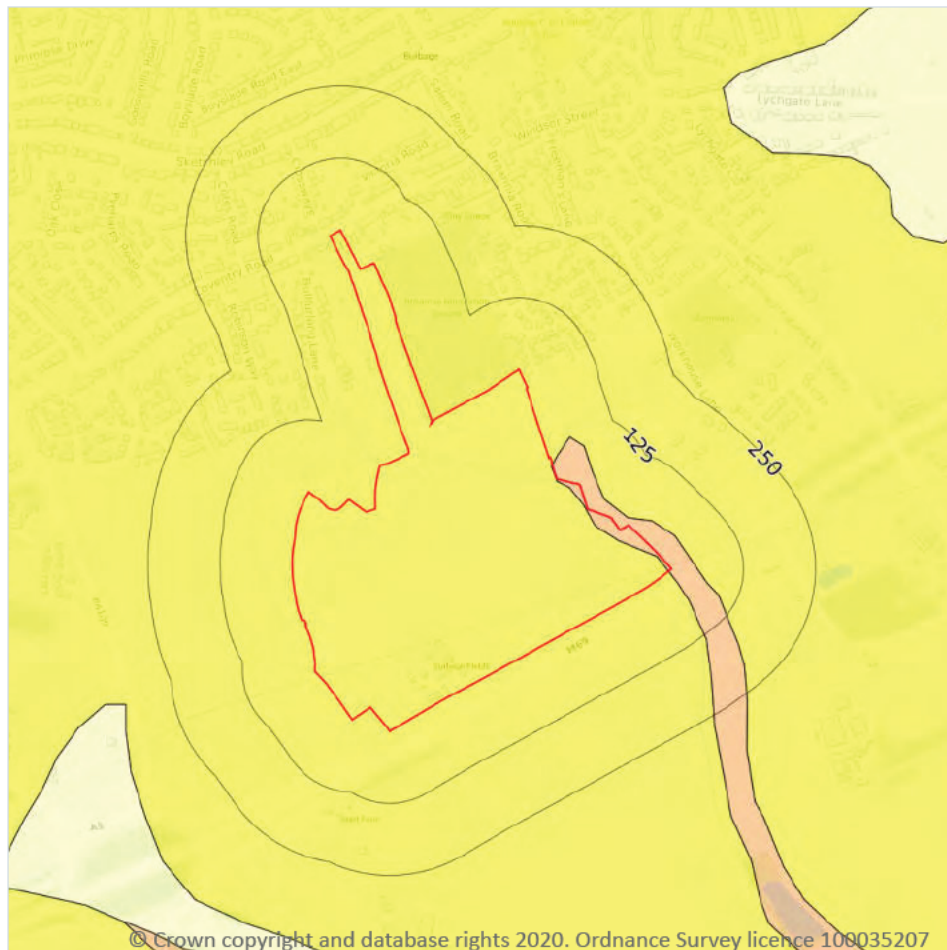
Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 90](#)

Location	Hazard rating	Details
On site	Negligible	Ground conditions predominantly non-plastic.
On site	Very low	Ground conditions predominantly low plasticity.
On site	Low	Ground conditions predominantly medium plasticity.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m

2

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

Features are displayed on the Natural ground subsidence - Running sands map on **page 92**

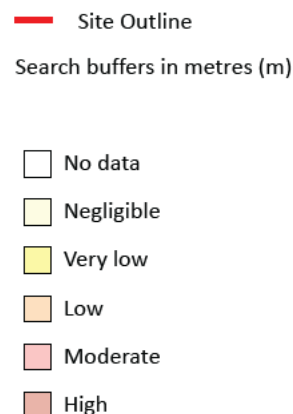
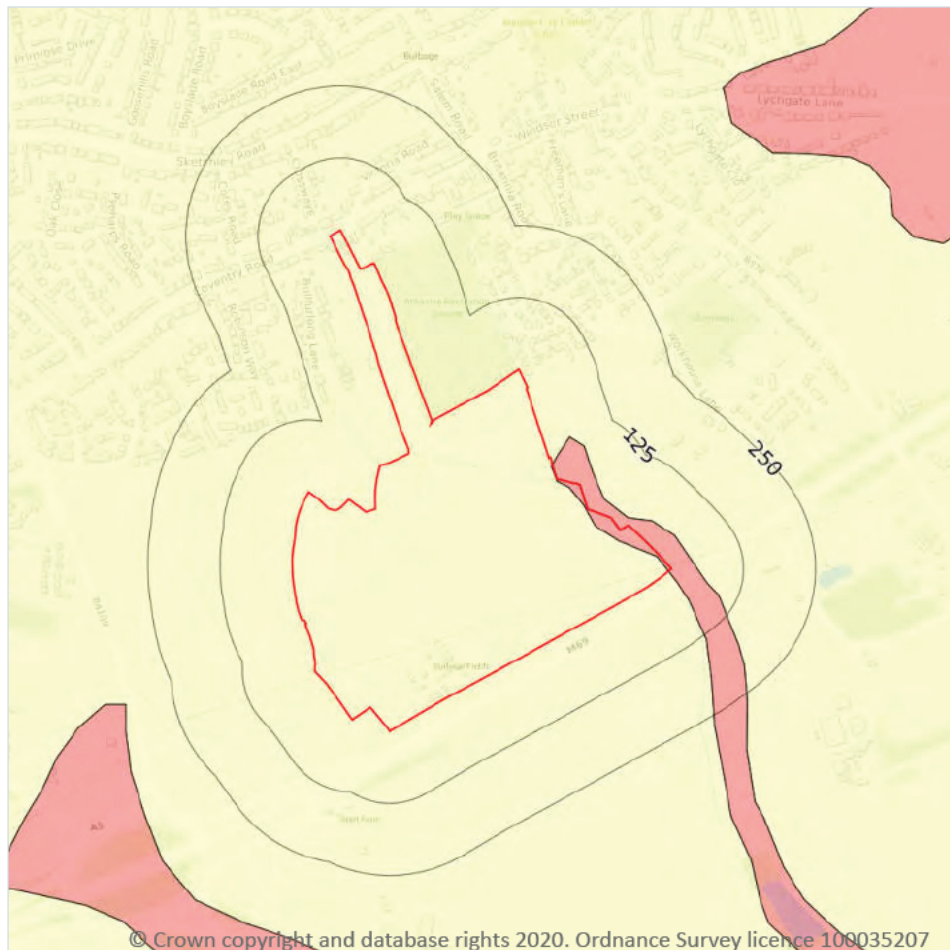
Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

Location	Hazard rating	Details
On site	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

2

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

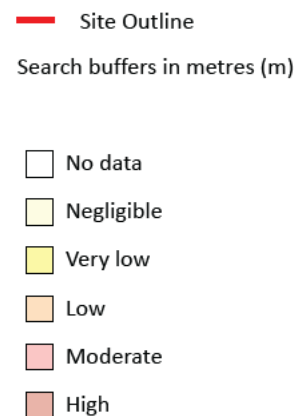
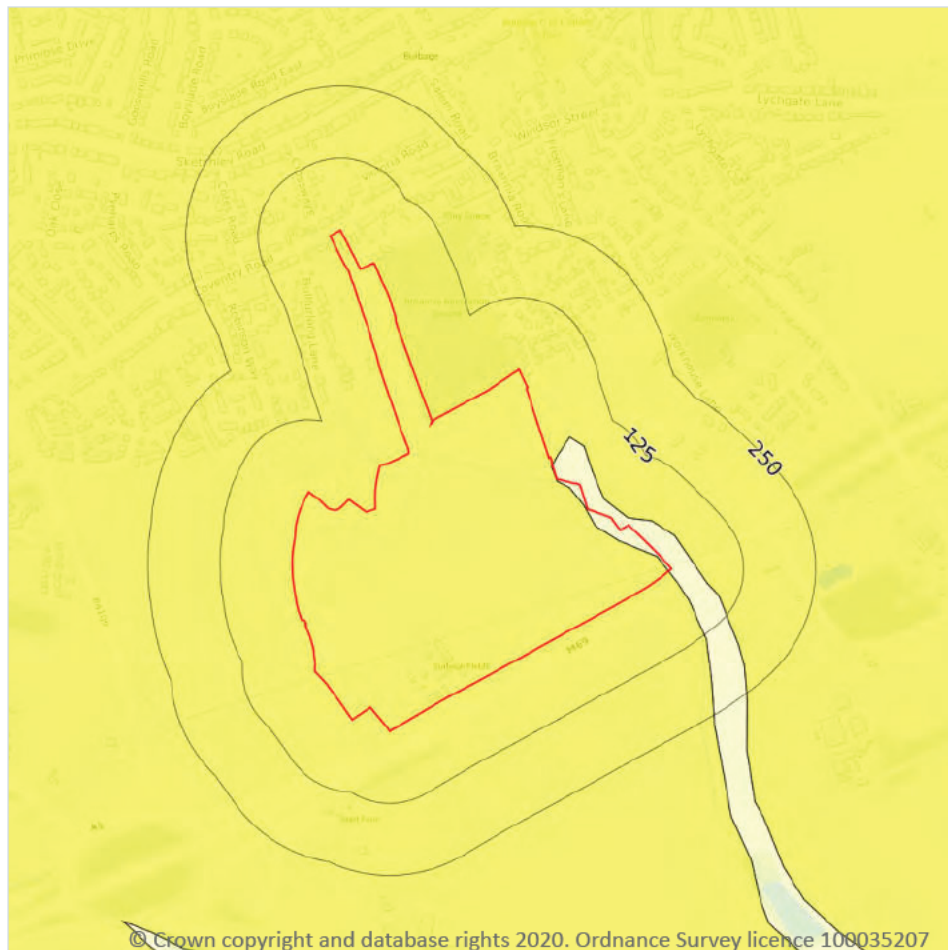
Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 94**

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.
On site	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



17.4 Collapsible deposits

Records within 50m

2

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

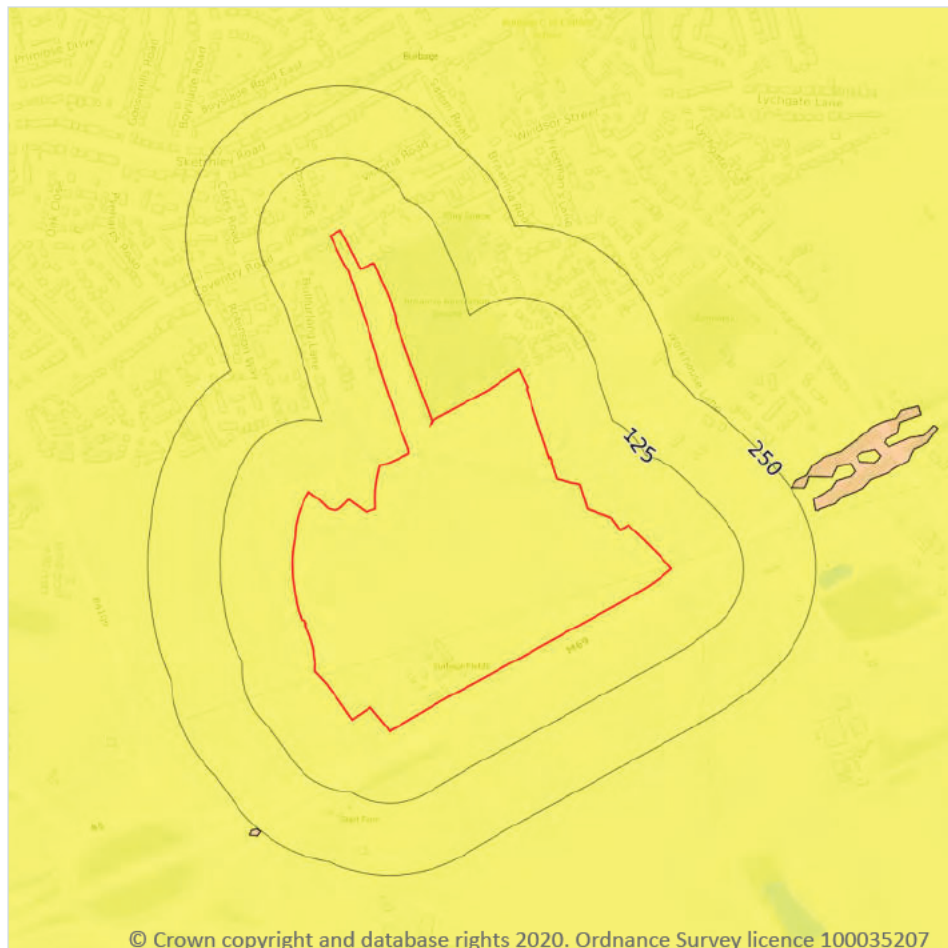
Features are displayed on the Natural ground subsidence - Collapsible deposits map on page 96

Location	Hazard rating	Details
On site	Negligible	Deposits with potential to collapse when loaded and saturated are believed not to be present.
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.5 Landslides

Records within 50m

1

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

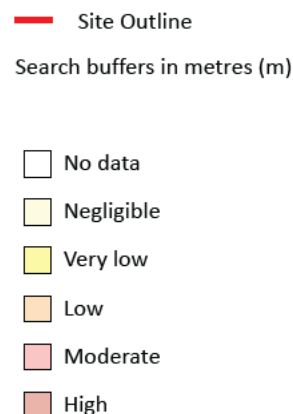
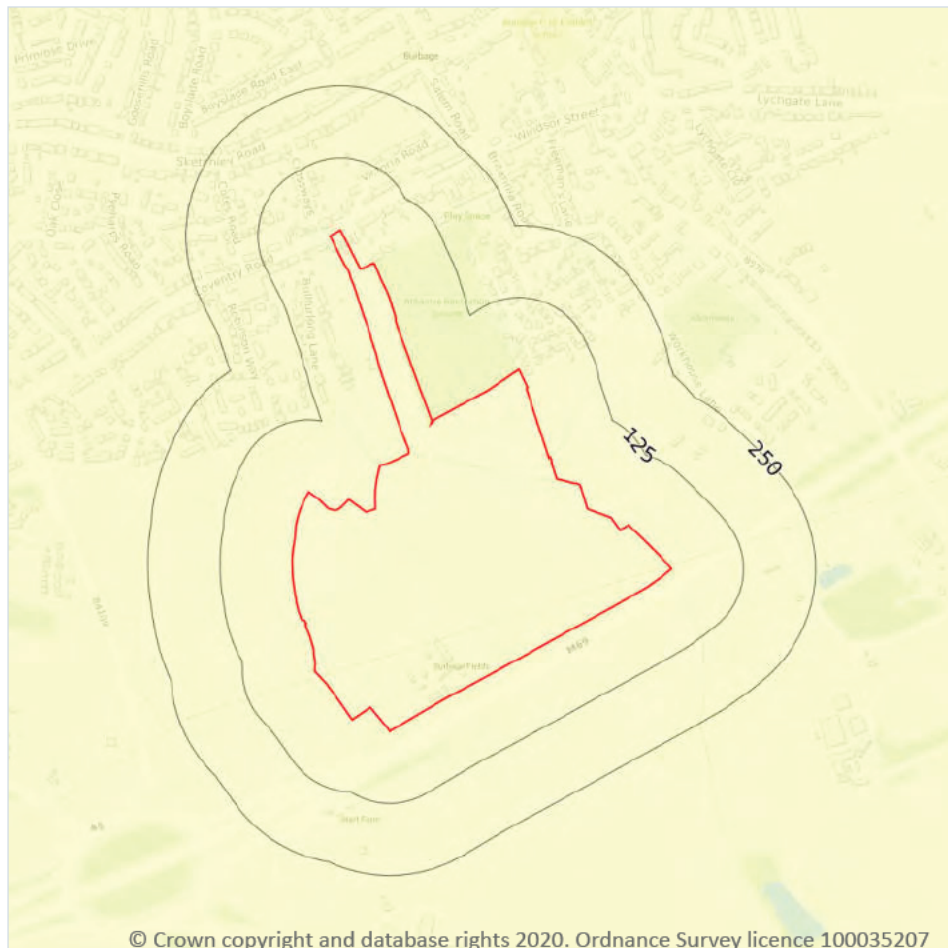
Features are displayed on the Natural ground subsidence - Landslides map on **page 97**

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

1

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

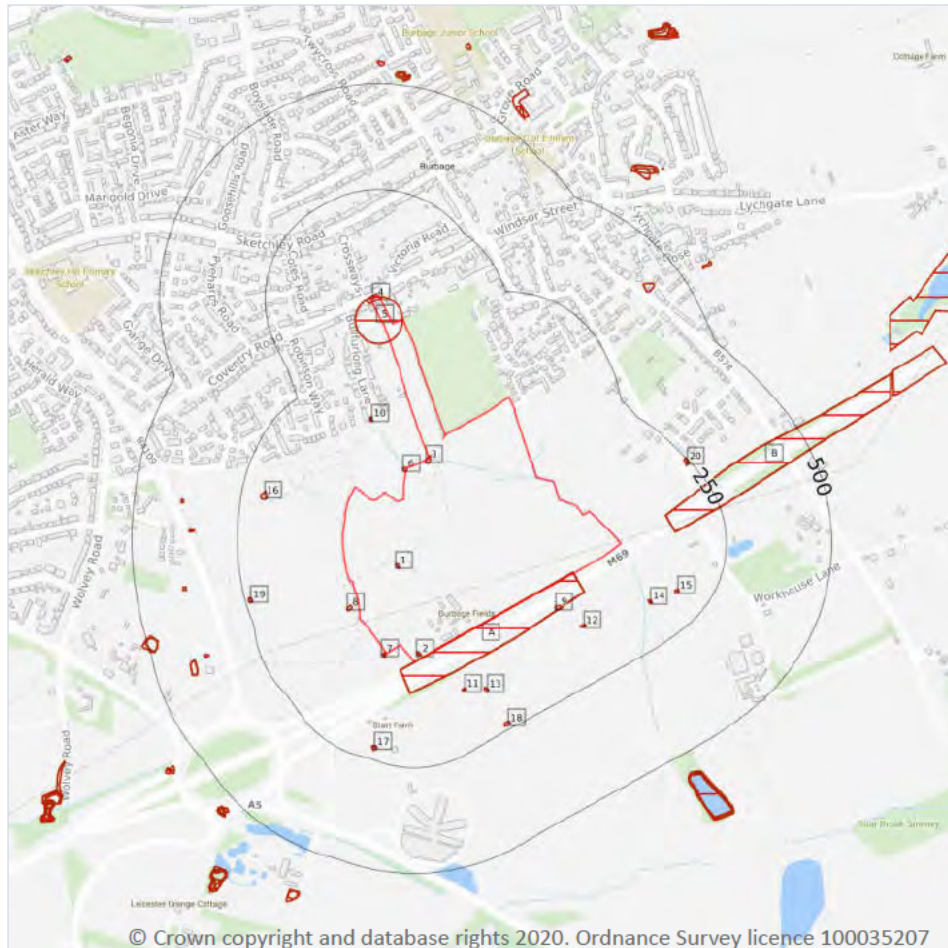
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 98**

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

This data is sourced from the British Geological Survey.



18 Mining, ground workings and natural cavities



- Site Outline
- Search buffers in metres (m)
- Natural cavities (Area)
- Natural cavities (Point)
- BritPits
- Surface ground workings
- Underground workings
- Historical Mineral Planning Areas
- Mining Cavities
- Non Coal Mining
 - Sporadic underground mining of restricted extent possible
 - Localised small scale underground mining possible
 - Small scale mining possible
 - Underground mining known or likely within or in close proximity
 - Underground mining known within or in very close proximity

18.1 Natural cavities

Records within 500m

0

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

This data is sourced from Peter Brett Associates (PBA).

18.2 BritPits

Records within 500m

0

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

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m

24

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

Features are displayed on the Mining, ground workings and natural cavities map on page 99

ID	Location	Land Use	Year of mapping	Mapping scale
1	On site	Pond	1938	1:10560
2	On site	Pond	1938	1:10560
3	On site	Pond	1938	1:10560
4	On site	Unspecified Pits	1886	1:10560
5	On site	Unspecified Pit	1901	1:10560
6	On site	Pond	1938	1:10560
A	On site	Cuttings	1977	1:10000
A	On site	Cuttings	1983	1:10000
7	2m SW	Pond	1938	1:10560
8	17m W	Pond	1938	1:10560
9	48m SE	Pond	1938	1:10560
10	94m W	Pond	1938	1:10560
11	113m SE	Pond	1938	1:10560
12	117m SE	Pond	1938	1:10560
B	126m NE	Cuttings	1977	1:10000
B	126m NE	Cuttings	1983	1:10000
13	136m SE	Pond	1938	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
14	147m SE	Pond	1938	1:10560
15	170m SE	Pond	1938	1:10560
16	190m W	Ponds	1938	1:10560
17	218m SW	Pond	1938	1:10560
18	233m SE	Pond	1938	1:10560
19	234m W	Pond	1938	1:10560
20	238m NE	Pond	1938	1:10560

This data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m

0

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

This data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m

0

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

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m

0

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

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m	0
----------------------	---

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

This data is sourced from Peter Brett Associates (PBA).

18.8 JPB mining areas

Records on site	0
-----------------	---

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

This data is sourced from Johnson Poole and Bloomer.

18.9 Coal mining

Records on site	0
-----------------	---

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

This data is sourced from the Coal Authority.

18.10 Brine areas

Records on site	0
-----------------	---

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

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

18.11 Gypsum areas

Records on site	0
-----------------	---

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0
-----------------	---

Generalised areas that may be affected by historical tin mining.

This data is sourced from Mining Searches UK.

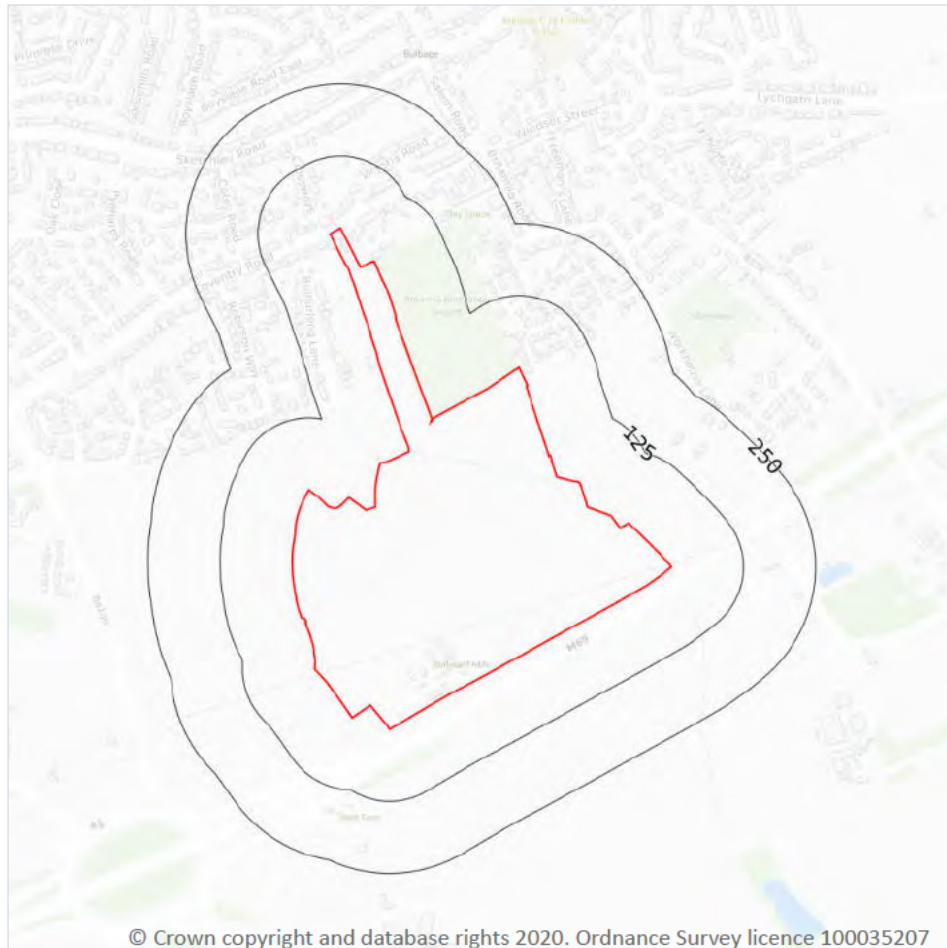
18.13 Clay mining

Records on site	0
-----------------	---

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

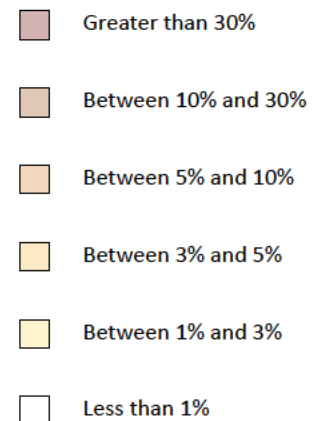
This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Radon



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— Site Outline
Search buffers in metres (m)



19.1 Radon

Records on site

1

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

Features are displayed on the Radon map on [page 104](#)

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

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



20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m

16

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
17m SE	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
44m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
44m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.



20.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

This data is sourced from the British Geological Survey.

20.3 BGS Measured Urban Soil Chemistry

Records within 50m

0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km².

This data is sourced from the British Geological Survey.

21 Railway infrastructure and projects



- Site Outline
- Search buffers in metres (m)**
- C1 Crossrail 1 Stations
- C1 Crossrail 1 Route
- C1 Crossrail 1 Worksites
- C2 Crossrail 2 Stations
- C2 Crossrail 2 Route
- C2 Crossrail 2 Worksites
- C2 Crossrail 2 Safeguarding
- C2 Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

21.1 Underground railways (London)

Records within 250m

0

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

This data is sourced from publicly available information by Groundsure.

21.2 Underground railways (Non-London)

Records within 250m

0

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



This data is sourced from publicly available information by Groundsure.

21.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m

3

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

Features are displayed on the Railway infrastructure and projects map on [page 107](#)

Location	Land Use	Year of mapping	Mapping scale
92m NE	Tunnel	1904	2500
92m NE	Tunnel	1918	2500
92m NE	Tunnel	1938	2500

This data is sourced from Ordnance Survey/Groundsure.

21.5 Royal Mail tunnels

Records within 250m

0

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

This data is sourced from Groundsure/the Postal Museum.

21.6 Historical railways

Records within 250m

0

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

This data is sourced from OpenStreetMap.



21.7 Railways

Records within 250m

0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m

0

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

This data is sourced from publicly available information by Groundsure.

21.9 Crossrail 2

Records within 500m

0

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

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m

0

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

This data is sourced from HS2 Ltd.

Data providers

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

Terms and conditions

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



Appendix E: BGS Borehole Records

soil mechanics department

BOREHOLE No.

214

CONTRACT Coventry-Leicester Motorway Stage II.

REPORT No. 8640/JD.

Client Midland R.C.U.

Ground Level 112.61 m.O.D.

Site Address Ansty to Enderby.

Boring Commenced 29.6.71
Boring Completed 29.6.71

Type and Dia. of Boring Shell and Auger 0.2 m. diameter.

Water Strikes

Water Levels Recorded During Boring

1. 2.4
2. 6.0
3. seepage

Hole Depth	4.7	9.0
Casing Depth	4.7	9.0
Water Level	None	8.5

Remarks

Description	Scale 20mm = 1 m.		Samples		Depth	S.P.T. N blows/ft
	Depth	Legend	Ref. No.	Type		
Topsoil.	0.35		6472	J	0.20	
Brown silty clayey sand and sandy clay with stones. (sf)			6473	U	0.50- 0.95	
			6474	J	1.30	
			6475	U	2.00- 2.45	
Gravel and brown silty clayey sand. (sf)	2.40		6476	D	2.80	12
			6477	J	3.30	
			6478	D	4.30	13
Soft grey sandy boulder clay with traces of marl and chalk. (ci)	4.60		6479	U	4.70- 5.15	
			6480	J	5.40	
Firm grey sandy very silty clay with bands of silty calcareous sand, small stones and traces of chalk. (CL)	6.00		6481	U	6.00- 6.45	
			6482	J	6.80	
			6483	U	7.50- 7.95	
			6484	J	8.20	
			6485	U	8.55- 9.00	
			6486	J	9.00	
	9.00		6487	W	(2.40)	

Code: H—Undisturbed Sample

D—Large Disturbed Sample

J—Jar Sample

W—Water Sample

CONTRACT Coventry - Leicester Motorway Stage II

REPORT No. 8640/JD

Client Midland R.C.U.

Ground Level 105.17 m.O.D.

Site Address Ansty to Enderby.

Boring Commenced 21.7.71
Boring Completed 21.7.71

Type and Dis. of Boring Mechanical Excavator

Water Strikes

Water Levels Recorded During Boring

1. None

2.

3.

Hole Depth

Casing Depth

Water Level

Remarks

Test Pit. Density at 1.00 m. Pit extended to 2.00 m. and logged.

Description	Scale 20mm = 1 m.		Samples		Depth	S.P.T. N blows/ft
	Depth	Legend	Ref. No.	Type		
Topsoil.						
Soft brown mottled silty sandy clay with occasional root fibres and carbonaceous traces. (cl)	0.40		7012	J	0.30	
Brown sandy clay with stones and occasional root fibres. (cl)	0.90		7013	J	1.10	
Soft grey silty sandy clay with grey veins. (cl)	1.20		7014	J	1.40	
	2.00					

Codo: U—Undisturbed Sample

D—Large Disturbed Sample

J—Jar Sample

W—Water Sample

soil mechanics department

TEST & TRIAL PIT
215%

CONTRACT Coventry - Leicester Motorway Stage II

REPORT No. 8640/JD

Client Midland R.C.U.

Ground Level 108.12 m.O.D.

Site Address Ansty to Enderby.

Boring Commenced 21.7.71
Boring Completed 21.7.71

Type and Dia. of Boring Mechanical Excavator

Water Strikes

Water Levels Recorded During Boring

1. None

2.

3.

Hole Depth

Casing Depth

Water Level

Remarks

Test & Trial Pit. C.B.R. and Density at 1.00 m.
Pit extended to 4.00 m. and logged.

Description

Scales 20mm = 1 m.

Samples

Depth

S.P.T.

Depth

Legend

Ref. No.

Type

Depth

N
blows/ft

Topsoil.

Stiff brown clay with occasional
stones, root fibres and pockets
of sand. (cl)

0.20

1.50

Stiff brown boulder clay with
chalk fragments. (ci)

4.00

7010

D

1.00

7026

J

1.20

7027

J

1.90

Code: U—Undisturbed Sample

D—Large Disturbed Sample

J—Jar Sample

W—Water Sample

soil mechanics department

BOREHOLE No.

212

CONTRACT Coventry-Leicester Motorway Stage II.

REPORT No. 8640/JD

Client

Midland R.C.U.

Ground Level

114.431 m.O.D.

Site Address

Ans to Enderby.

Boring Commenced 29.6.71

Boring Completed 29.6.71

Type and Dia. of Boring Shell and Auger 0.2 m. diameter.

44016 91234

Water Strikes

Water Levels Recorded During Boring

1. 2.8

Hole Depth

3.0

3.8

2. 3.45

Casing Depth

3.0

3.6

3. seepage

Water Level

None

None

Remarks

Installed 2 piezometers - one at each water strike.

Description

Scale 20mm = 1 m.

Samples

S.P.T.

Depth

Legend

Ref. No. Type

Depth

N blows/ft

Topsoil.

0.45

Stiff brown/grey mottled calcareous boulder clay. (CI)

6488

J

0.30

6489

U

0.50- 0.95

6490

J

1.30

6491

U

2.00- 2.45

6492

J

2.60

2.80

Stiff brown calcareous boulder clay with traces of marl and occasional bands of silty sand. Low stone content at some levels. (ci)

6493

U

3.00- 3.45

6494

J

3.80

5.20

Stiff brown marly boulder clay. (ch)

6496

U

5.20- 5.65

6497

J

5.90

6498

U

6.50- 6.95

6499

J

7.30

8.50

6500

U

8.05- 8.50

5282

J

8.50

5283

W

(2.80)

Code: U--Undisturbed Sample

D--Large Disturbed Sample

J--Jar Sample

W--Water Sample

soil mechanics department

BOREHOLE No.
TEST PIT
G

CONTRACT Coventry - Leicester Motorway Stage II

REPORT No. 8640/JD

Client Midland Road Construction Unit

Ground Level 112.06m. O.D.

Site Address Ansty - Enderby

SP 49 SW/30
4380.9117

Boring Commenced 28.7.71
Boring Completed 28.7.71

Type and Dia. of Boring Mechanical Excavator

1" 169

43790 91169

Water Strikes

Water Levels Recorded During Boring

1. NONE
- 2.
- 3.

Hole Depth
Casing Depth
Water Level

Remarks

Description

Scale 20mm = 1m.

Samples

Depth

S.P.T.

Depth

Legend

Ref. No.

Type

Depth

blows/ft

Topsoil
Brown weakly cemented sand. (SU).

0.30

0.40

Stiff brown sandy clay with
occasional stones. (cl).

1.00

7339 J

0.30

7340 J

1.00

Code: U—Undisturbed Sample

D—Large Disturbed Sample

J—Jar Sample

W—Water Sample

Appendix F: CLR 11 Terminology

The likelihood of an event can be classified on a four-point system using the following terms and definitions based on CIRIA C552:

- **Highly likely:** the event appears very likely in the short term and almost inevitable over the long term or there is evidence at the receptor of harm or pollution;
- **Likely:** it is probable that an event will occur or circumstances are such that the event is not inevitable, but possible in the short term and likely over the long term;
- **Low likelihood:** circumstances are possible under which an event could occur, but it is not certain even in the long term that an event would occur and it is less likely that in the short term; and
- **Unlikely:** circumstances are such that it is improbable the event would occur even in the long term

The severity can be classified using a similar system also based on CIRIA C552. The terms and definitions relating to severity are:

- **Severe:** short term (acute) risk to human health likely to result in 'significant harm' as defined by the Environment Protection Act 1990, Part 11A. Short term risk of pollution of sensitive water resources. Catastrophic damage to buildings or property. Short-term risk to an ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land' DETR 2000);
- **Medium:** chronic damage to human health ('significant harm' as defined in Draft Circular on Contaminated Land', DETR 2000), pollution of sensitive water resources, significant change in an ecosystem or organism forming part of that ecosystem (note definition of ecosystem in Draft Circular on Contaminated Land', DETR 2000);
- **Mild:** pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ('significant harm' as defined in 'Draft Circular on Contaminated Land', DETR 2000). Damage to sensitive buildings, structures or the environment; and
- **Minor:** harm, not necessarily significant, but that could result in financial loss or expenditure to resolve. Non-permanent human health effects easily prevented by use of personal protective clothing. Easily repairable damage to buildings, structures and services.

Once the likelihood of an event occurring and its severity have been classified, a risk category can be assigned from the table below:

		Consequences			
		Severe	Medium	Mild	Minor
Probability	Highly likely	Very high	high	Moderate	Moderate / low
	Likely	High	Moderate	Moderate / low	Low
	Low likelihood	Moderate	Moderate / low	Low	Very low
	Unlikely	Moderate / low	Low	Very low	Very low

Definitions of these risk categories are as shown below with an assessment of the further work that might be required:

- Very high: there is a high probability that severe harm could occur or there is evidence harm is currently happening. This risk, if realised, could result in substantial liability and urgent investigation and remediation are likely to be required;
- High: harm is likely to occur. Realisation of the risk is likely to present a substantial liability and urgent investigation is required and remedial works may be necessary in the short term and are likely over the long term;
- Moderate: it is possible that harm could arise, but it is unlikely that the harm would be severe and it is more likely that harm would be relatively mild. Investigation is normally required to clarify the risk and determine the liability. Some remedial works may be required in the longer term;
- Low: it is possible that harm could occur, but it is likely that if realised this harm would at worst normally be mild; and
- Very Low: there is a low possibility that harm could occur and if realised the harm is likely to be sever.



Rodgers Leask Limited & Rodgers Leask Environmental Limited
01332 285000 • rllderby@rodgersleask.co.uk • rodgersleask.co.uk
St James House, St Mary's Wharf, Mansfield Road, Derby DE1 3TQ
Seven House, 18 High Street, Langbridge, Birmingham B31 2UQ

APPENDIX F – SEVERN TRENT WATER SEWER RECORDS

WONDERFUL ON TAP



Severn Trent Water Ltd
Oxley Moor Road
Wolverhampton
WV9 5HN

Tel: 07976 449091

www.stwater.co.uk

network.solutions@severntrent.co.uk

Contact: Pierce Meguer

Reference: 1068193

15th December 2022

Redrow Homes
Redrow House
Kinsall Green
Wilnecote
Tamworth
B77 5PX

FAO: jen.towers@redrow.co.uk

Dear Jen,

Proposed development: 430 domestic properties at Burbage Fields Farm, off Bullfurlong Lane, Hinckley, Leicestershire

X: 444038 / Y: 291558

I refer to your 'Development Enquiry Request' in respect of the above site. Please find enclosed the sewer records that are included in the fee together with the Supplementary Guidance Notes which refer to surface water disposal from development sites.

Public Sewers in Site – Required Protection

Having viewed our statutory sewer records, they demonstrate the following sewers passing through the site, with associated protection/no build zones:

- The 300mm combined rising main within the site boundary requires a 10-metre easement across it, 5 metres each side from the centreline of the pipe.

Please consider, due to a change in legislation on 1 October 2011, there may be former private sewers on the site which have transferred to the responsibility of Severn Trent Water Ltd, which are not shown on the statutory sewer records but are located in your client's land. These sewers would also have protective strips that we will not allow to be built over. If such sewers are identified to be present on the site, please contact us for further guidance.

Foul Water Drainage

The topography of the site suggests that a pumping station will be required to establish a connection to the public network. Severn Trent Water anticipate that there is insufficient capacity within the network to accommodate the additional 7l/s (at 2 x DWF) from the development. Hydraulic modelling will be required to determine the impact on the network and whether upgrade works are required in the public network.

The closest point of connection from the site would be the 450mm combined sewer to the Northwest. This network has limited capacity and an offline wastewater storage tank has had to be installed to limit the surcharging and flooding occurrences within the network.

Whilst the flooding events have been reduced the network is still known to flood at the 1 in 20-year storm period, as such a connection upstream of manhole SP43915701 should not be considered.

Severn Trent Water would prefer that a connection into the 450mm combined network at manhole SP43914701 is explored as the primary point of connection.

To connect to this sewer work will be required in 3rd party land, the developer will need to obtain permission from the landowner. If terms cannot be agreed, then you may want to consider approaching Severn Trent Water to lay a sewer on your behalf via Section 98 Water Industry Act 1991, guidance on the process can be found here:

https://www.stwater.co.uk/content/dam/stw/stw_buildinganddeveloping/Guidance-notes-for-developers-adoption-of-sewers_1.pdf

In a change to our previous process, we no longer charge developers for the hydraulic modelling service. We will liaise with you over time with regards to the outcome of our investigations and any impact that may have on the planning status, occupation, or phasing of the site. However, while we can provide a brief summary of our findings if you need us to, we will no longer provide the full external capacity assessment report.

From the application you have submitted, I am assuming that the development has not been granted planning approval. Please inform us as and when planning has progressed as this will help determine how quick we carry out the modelling exercise. In the meantime, the site will be added to our modelling tracker and

reviewed regularly until the site can be progressed for sewer modelling. I would therefore be grateful if you would forward as soon as possible the following details:

- Proposed submission of your Planning Application
- Confirmation whether a pumped solution is required.
- Proposed planned start and completion date.
- Any phasing details of the proposed development.
- Confirm how many properties will discharge into each of the connections to the public sewer.
- Planned occupation date.

Surface Water Drainage

Under the terms of Section H of the Building Regulations 2000, the disposal of surface water by means of soakaways should be considered as the primary method. If these are found to be unsuitable, satisfactory evidence will need to be submitted. The evidence should percolation test results carried out to the BRE365 standard. Previous developments in the area have suggested that soakaways are viable around this location.

Subject to above Severn Trent Water expects all surface water from the development to be drained in a sustainable way to the nearest watercourse or land drainage channel, subject to the developer discussing all aspects of the developments surface water drainage with the Local Lead Flood Authority (LLFA). Any discharge rate to a watercourse or drainage ditch will be determined by the LLFA / EA.

The OS maps show that the multiple land drainage networks exist with the site. This network of drains appears to travel Southwards from the site, under the M69 motorway before discharging into Soar Brook. These drains should be explored as the secondary option should soakaways prove not to be viable.

New Connections

For any new connections (including the re-use of existing connections) to the public sewerage system, the developer will need to submit Section 106 application forms. Our New Connections department are responsible for handling all such enquiries and applications. To contact them for an application form and associated guidance notes please call 0800 707 6600 or download from www.stwater.co.uk.

WONDERFUL ON TAP

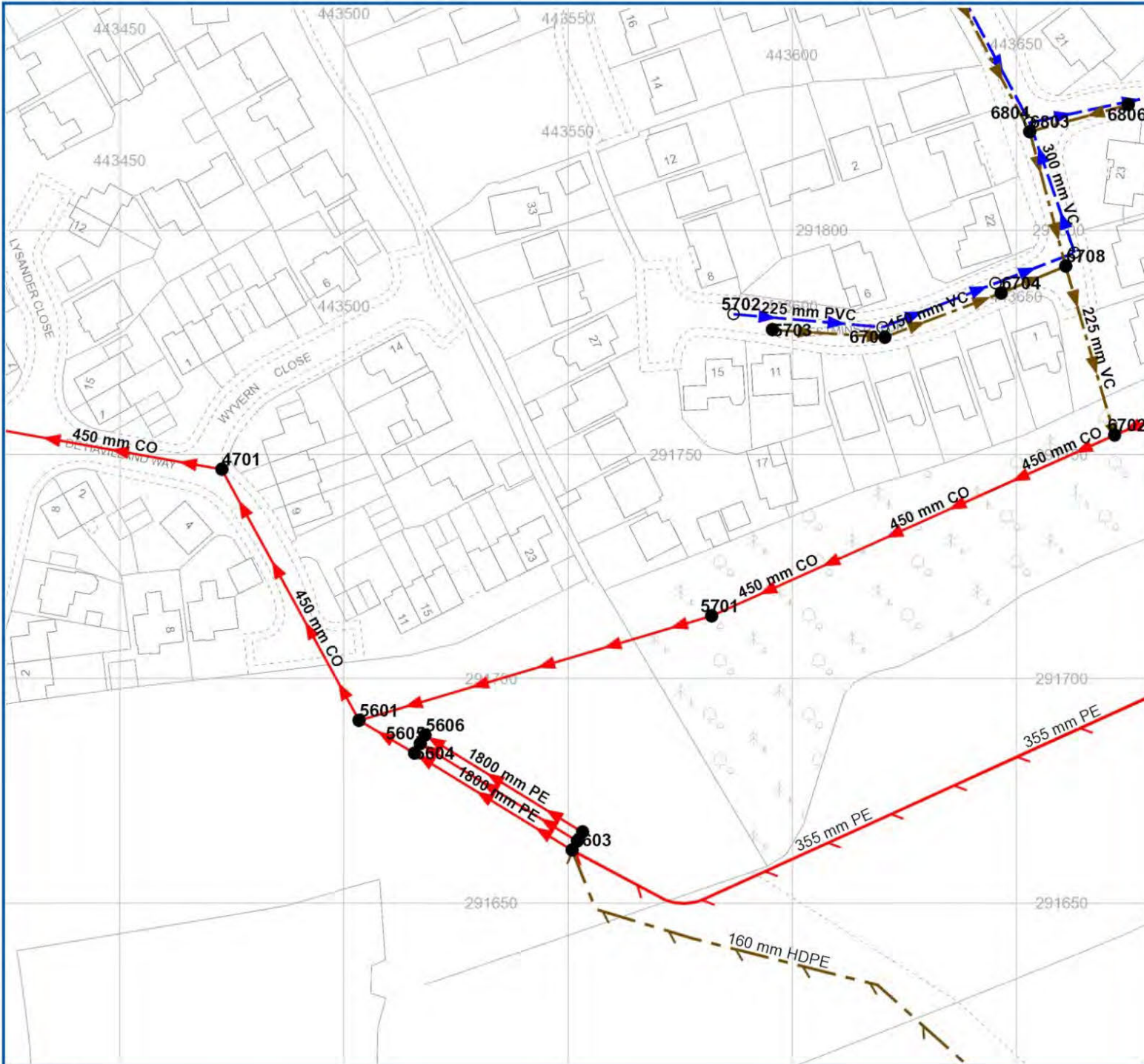


Please quote is 1068193 in any future correspondence (including e-mails) with STW Limited. Please note that 'Development Enquiry' responses are only valid for 6 months from the date of this letter.

Yours sincerely,



Pierce Meguer
Senior Evaluation Technician
Network Solutions



Reference	Cover Level	Invert Level Upstream	Invert Level Downstream	Purpose	Material	Pipe Shape	Max Size	Min Size	Gradient	Year Laid
SP43915701	<UNK>	<UNK>	117.12	C	<UNK>	<UNK>	<UNK>	<UNK>	0	31/12/1899 00:00:00
SP43916706	121.384	119.09	118.62	F	VC	C	150	<UNK>	58.91	31/12/1899 00:00:00
SP43916707	120.844	119.54	119.18	S	VC	C	300	<UNK>	85.22	31/12/1899 00:00:00
SP43916703	120.985	119.62	119.55	S	VC	C	300	<UNK>	269.57	31/12/1899 00:00:00
SP43915601	121.26	117.11	117.03	C	CO	C	450	<UNK>	833.13	31/12/1899 00:00:00
SP43915702	121.9079	120.19	119.87	S	PVC	C	225	<UNK>	104.47	31/12/1899 00:00:00
SP43916702	115.98	112.79	<UNK>	C	CO	C	<UNK>	<UNK>	0	31/12/1899 00:00:00
SP43916708	120.83	118.25	113.04	F	VC	C	225	<UNK>	7.53	31/12/1899 00:00:00
SP43916804	121.372	118.99	118.77	S	CO	C	450	<UNK>	218.41	31/12/1899 00:00:00
SP43916806	120.9169	119.37	118.69	F	VC	C	150	<UNK>	33.53	31/12/1899 00:00:00
SP43915703	121.705	119.59	119.14	F	VC	C	150	<UNK>	55.89	31/12/1899 00:00:00
SP43916705	121.4039	119.86	119.66	S	PVC	C	225	<UNK>	135.2	31/12/1899 00:00:00
SP43916803	121.3949	118.6	118.37	F	VC	C	225	<UNK>	135	31/12/1899 00:00:00
SP43914701	122.08	117.01	115.97	C	CO	C	450	<UNK>	107.58	31/12/1899 00:00:00
SP43916704	120.9629	118.56	118.33	F	VC	C	225	<UNK>	67.83	31/12/1899 00:00:00
SP43915600	119.92	116.69	116.475	C	PE	C	1800	<UNK>	<UNK>	25/01/2017 00:00:00
SP43915602	119.97	116.645	116.43	C	PE	C	1800	<UNK>	<UNK>	25/01/2017 00:00:00
SP43915602	119.97	<UNK>	<UNK>	C	PE	C	1800	<UNK>	<UNK>	25/01/2017 00:00:00
SP43915603	119.86	116.6	116.385	C	PE	C	1800	<UNK>	<UNK>	25/01/2017 00:00:00
SP43915603	119.86	<UNK>	<UNK>	C	PE	C	1800	<UNK>	<UNK>	25/01/2017 00:00:00
SP43915604	120.508	116.385	116.23	C	PP	C	450	<UNK>	<UNK>	25/01/2017 00:00:00
SP43915605	120.493	<UNK>	<UNK>	C	PE	C	1800	<UNK>	<UNK>	25/01/2017 00:00:00
SP43915606	120.574	<UNK>	<UNK>	C	PE	C	1800	<UNK>	<UNK>	25/01/2017 00:00:00

LEGEND

Ancillary

- Balancing Lagoon
- Grease Trap
- Interceptor
- Screen
- Chamber
- Flushing Chamber
- Scalaway
- Overflow
- Connector
- Sewer Junctions
- Sewer Line Connection Node
- Fitting
- Blind Shaft
- Facility Connector
- Head Node
- Lamphole
- Sewerage Air Valve
- Sewerage Chemical Injection Point
- Sewerage Hatch Box
- Sewerage Pressure Washout
- Vent Column
- Waste Water Outfall

Control Valve

- Hydroblock
- Penstock
- Sewerage Isolation Valve
- Sewerage Non Return Valve
- Manhole
- Foul Bifurcation Manhole
- Combined Bifurcation Manhole
- Surface Water Bifurcation Manhole
- Dual Manhole
- Foul Single Manhole
- Combined Single Manhole
- Surface Water Single Manhole
- Twin Manhole
- Foul Adopted Manhole
- Combined Adopted Manhole
- Surface Adopted Manhole
- Transferred Manhole
- Unsurveyed Manhole

Storage

- Disposal Site
- Off-Line Waste Water Storage
- On-Line Waste Water Storage
- Wet Well
- Waste Water Process Structure
- Sewage Treatment Point
- Sewage Treatment Structure
- Sludge Treatment Point
- Sludge Treatment Structure
- Gravity Sewer Pipe
- Foul Gravity Sewer
- Combined Gravity Sewer
- Surface Water Gravity Sewer
- S104 Surface Water Gravity Sewer
- S104 Combined Gravity Sewer

Pressure Sewer Pipe

- Private Surface Water Pressure Sewer
- Private Combined Pressure Sewer
- Private Foul Pressure Sewer
- Surface Water Vacuum Sewer
- Foul Vacuum Sewer
- Combined Vacuum Sewer
- S104 Surface Water Vacuum Sewer
- S104 Combined Vacuum Sewer
- S104 Foul Vacuum Sewer
- Private Surface Water Vacuum Sewer
- Private Combined Vacuum Sewer
- Private Foul Vacuum Sewer
- Surface Water Siphon
- Combined Siphon
- Foul Siphon
- S104 Surface Water Siphon
- S104 Combined Siphon
- S104 Foul Siphon
- Surface Water Unserved Pipe
- Combined Unserved Pipe

Landline Symbol

- Culvert Symbol
- Direction Of Flow Symbol
- Boundary Half Meaning Symbol
- Bench Mark Symbol
- Railway Switch Symbol
- Road Related Flow Symbol
- Print50mLine

MATERIALS

- NONE
- AC - ASBESTOS CEME
- BR - BRICK
- CC - CONCRETE BOX CULVERT
- CI - CAST IRON
- CO - CONCRETE
- CSB - CONCRETE SEGMENTS (BOLTED)
- CSU - CONCRETE SEGMENTS (UNBOLTED)
- DI - DUCTILE IRON
- GRP - GLASS REINFORCED PLASTIC
- MAC - MASONRY IN REGULAR COURSES
- MAR - MASONRY RANDOMLY COURSED
- PE - POLYETHYLENE
- PF - PITCH
- PP - POLYPROPYLENE
- PSC - PLASTIC STEEL COMPOSITE
- PVC - POLYVINYL CHLORIDE
- RPM - REINFORCED PLASTIC MATRIX
- SI - SPUN (GREY) IRON
- ST - STEEL
- U - UNKNOWN
- VC - VITRIFIED CLAY
- XXX - OTHER

CATEGORIES

- W - WEIR
- C - CASCADE
- DB - DAMBOARD
- SE - SIDE ENTRY
- FV - FLAP VALVE
- BD - BACK DROP
- S - SIPHON
- D - HIGHWAY DRAIN
- S104 - SECTION 104

SHAPE

- C - CIRCULAR
- E - EGG SHAPED
- O - OTHER
- R - RECTANGLE
- S - SQUARE
- T - TRAPEZOIDAL
- U - UNKNOWN

PURPOSE

- C - COMBINED
- E - FINAL EFFLUENT
- F - FOUL
- L - SLUDGE
- S - SURFACE WATER



Severn Trent Water Limited
Asset Data Management
PO Box 5344
Coventry
CV3 9FT
Telephone: 0345 601 6616

SEWER RECORD (Tabular)

O/S Map Scale: 1:1,250
Date of Issue: 15-12-22
This map is centred upon:
X: 443551.79 Y: 291731.81

Disclaimer Statement

1 Do not scale off this Map.

2 This plan and any information supplied with it is furnished as a general guide, is only valid at the date of issue and no warranty as to its correctness is given or implied. In particular this plan and any information shown on it must not be relied upon in the event of any development or works (including but not limited to excavations) in the vicinity of SEVERN TRENT WATER assets or for the purposes of determining the suitability of a point of connection to the sewerage or distribution systems.

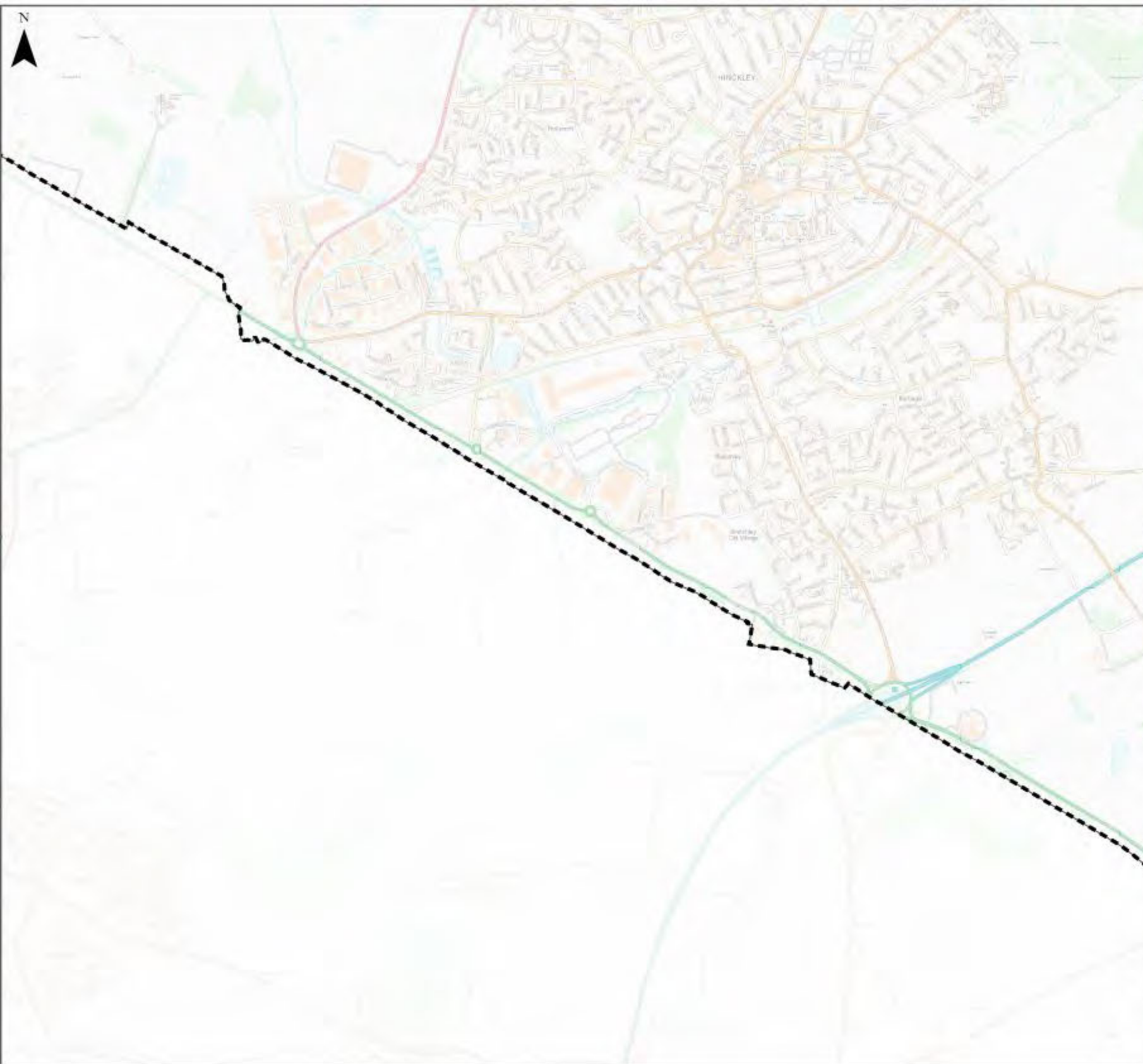
3 On 1 October 2011 most private sewers and private lateral drains in Severn Trent Water's sewerage area, which were connected to a public sewer as at 1 July 2011, transferred to the ownership of Severn Trent Water and became public sewers and public lateral drains. A further transfer takes place on 1 October 2012. Private pumping stations, which form part of these sewers or lateral drains, will transfer to ownership of Severn Trent Water on or before 1 October 2016. Severn Trent Water does not possess complete records of these assets. These assets may not be displayed on the map.

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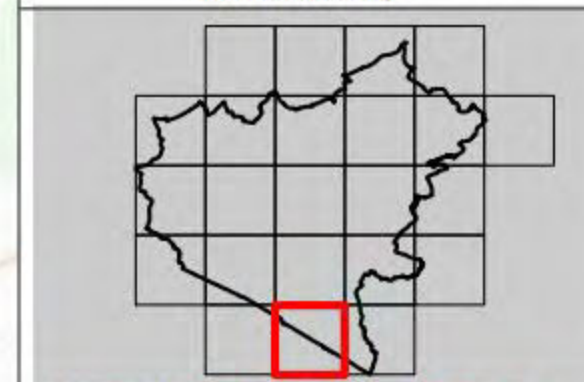
6 Document users other than SEVERN TRENT WATER business users are advised that this document is provided for reference purpose only and is subject to copyright, therefore, no further copies should be made from it.

APPENDIX G – SFRA FLOOD RISK MAPPING [EXTRACTED JANUARY 2023]



HINKLEY AND BOSWORTH BOROUGH LEVEL 1 STRATEGIC FLOOD RISK ASSESSMENT

APPENDIX A: GEOPDF FLOOD RISK MAPPINGINDEX GRID: E3



**Note: All layers are turned off by default.
Click the box next to the layer of interest to**

Authority Information

☒ Council Boundary

☒ Main Rivers

☒ Detailed River Network

Flood Zones

☒ Flood Zone 3b

☒ Indicative Flood Zone 3b

☒ Flood Zone 3a

☒ Flood Zone 2

Surface Water

☒ RoFfSW 3.3% AEP

☒ RoFfSW 1% AEP

☒ RoFfSW 0.1% AEP

Emergency Planning

☒ Flood Warning Areas

☒ Flood Alert Areas

Climate Change

☒ Climate Change Central

☒ Climate Change Higher Central

☒ Climate Change Upper

☒ Indicative Flood Zone 2

Areas Susceptible to Groundwater Flooding

☒ $\geq 75\%$

$\geq 50\% < 75\%$

$\geq 25\% < 50\%$

$< 25\%$

Historical Flooding

☒ Historic Flooding

Defences

☒ demountable defence

embankment

wall

0 0.35 0.7 1.4 Km

Contains Environment Agency information © Environment Agency and/or database right

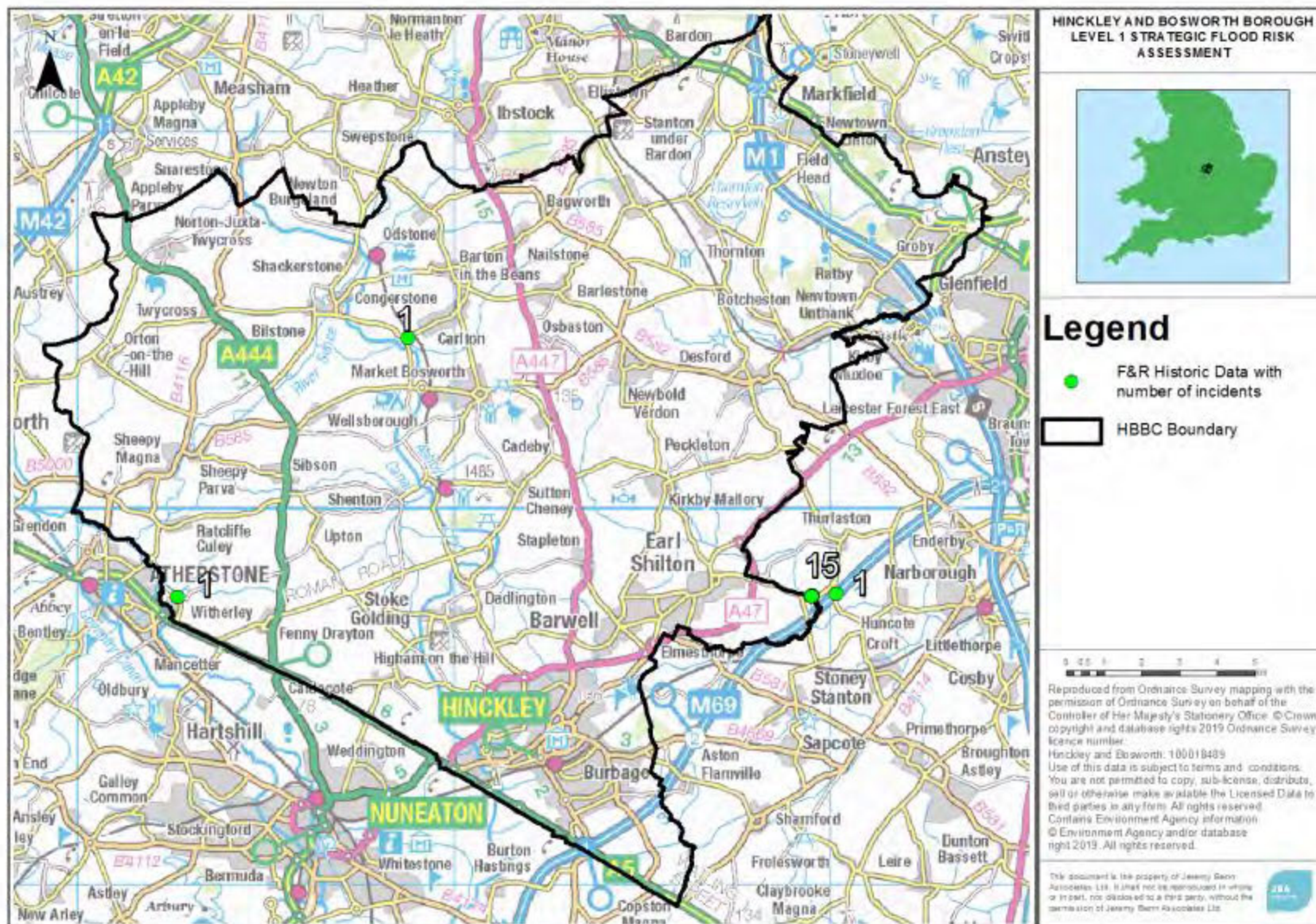
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APPENDIX H – SFRA FLOOD INCIDENT DATA [EXTRACTED JANUARY 2023]

Figure 5-1: Map of Leicestershire Fire and Rescue Service's flooding incident data for Hinckley and Bosworth borough



APPENDIX I – GREENFIELD RUNOFF RATE CALCULATIONS

[Print](#)[Close Report](#)

Greenfield runoff rate estimation for sites

www.ukstds.com | Greenfield runoff tool

Calculated by:

Site name:

Site location:

Site Details

Latitude:

Longitude:

Reference:

Date:

This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance "Rainfall runoff management for developments", SC030219 (2013), the SuDS Manual C753 (Ciria, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Runoff estimation approach

Site characteristics

Total site area (ha):

Methodology

Q_{BAR} estimation method:

SPR estimation method:

Soil characteristics

Default

Edited

SOIL type:

HOST class:

SPR/SPRHOST:

Hydrological characteristics

Default

Edited

SAAR (mm):

Hydrological region:

Growth curve factor 1 year:

Growth curve factor 30 years:

Growth curve factor 100 years:

Growth curve factor 200 years:

Notes

(1) Is Q_{BAR} < 2.0 l/s/ha?

When Q_{BAR} is < 2.0 l/s/ha then limiting discharge rates are set at 2.0 l/s/ha.

(2) Are flow rates < 5.0 l/s?

Where flow rates are less than 5.0 l/s consent for discharge is usually set at 5.0 l/s if blockage from vegetation and other materials is possible. Lower consent flow rates may be set where the blockage risk is addressed by using appropriate drainage elements.

(3) Is SPR/SPRHOST ≤ 0.3?

Where groundwater levels are low enough the use of soakaways to avoid discharge offsite would normally be preferred for disposal of surface water runoff.

Greenfield runoff rates

Default

Edited

Q_{BAR} (l/s):

1 in 1 year (l/s):

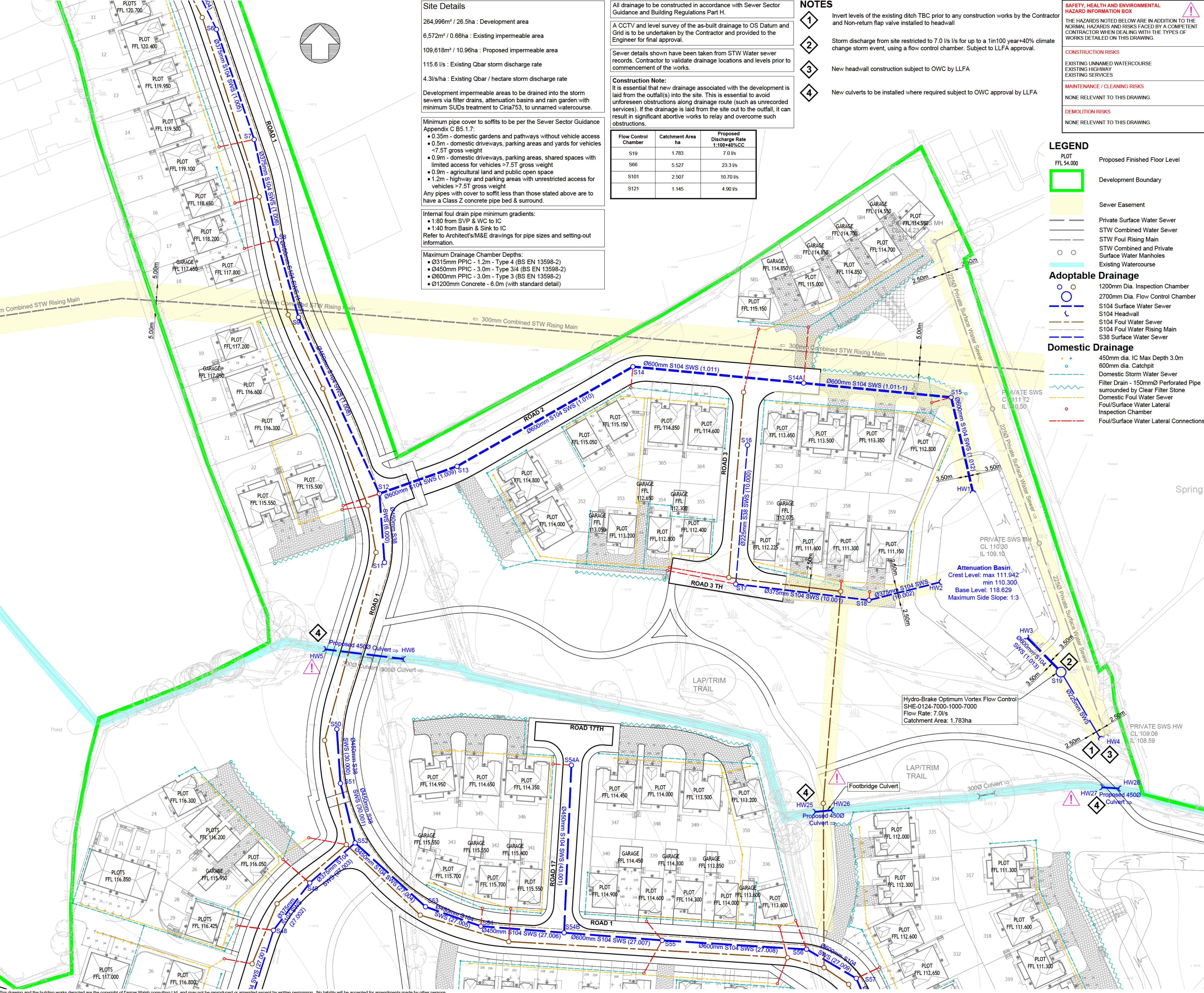
1 in 30 years (l/s):

1 in 100 year (l/s):

1 in 200 years (l/s):

This report was produced using the greenfield runoff tool developed by HR Wallingford and available at www.uksuds.com. The use of this tool is subject to the UK SuDS terms and conditions and licence agreement , which can both be found at www.uksuds.com/terms-and-conditions.htm. The outputs from this tool are estimates of greenfield runoff rates. The use of these results is the responsibility of the users of this tool. No liability will be accepted by HR Wallingford, the Environment Agency, CEH, Hydrosolutions or any other organisation for the use of this data in the design or operational characteristics of any drainage scheme.

APPENDIX J – ENGINEERING DRAWINGS



Site Details

264,996m² / 26.5ha : Development area
6,572m² / 0.66ha : Existing impermeable area
109,618m² / 10.96ha : Proposed impermeable area
115.6 l/s : Existing Qbar storm discharge rate
4.3l/s/ha : Existing Qbar / hectare storm discharge rate

Development impermeable areas to be drained into the storm sewers via filter drains, attenuation basins and rain garden with minimum SUDs treatment to Ciri753, to unnamed watercourse.

Minimum pipe cover to soffits to be per the Sewer Sector Guidance Appendix C B5.1.7:

- 0.35m - domestic gardens and pathways without vehicle access
- 0.5m - domestic driveways, parking areas and yards for vehicles <7.5T gross weight
- 0.9m - domestic driveways, parking areas, shared spaces with limited access for vehicles >7.5T gross weight
- 0.9m - agricultural land and public open space
- 1.2m - highway and parking areas with unrestricted access for vehicles >7.5T gross weight

Any pipes with cover to soffit less than those stated above are to have a Class Z concrete pipe bed & surround.

Internal foul drain pipe minimum gradients:

- 1:80 from SVP & WC to IC
- 1:40 from Basin & Sink to IC

Refer to Architect's/M&E drawings for pipe sizes and setting-out information.

Maximum Drainage Chamber Depths:

- Ø315mm PPIC - 1.2m - Type 4 (BS EN 13598-2)
- Ø450mm PPIC - 3.0m - Type 3/4 (BS EN 13598-2)
- Ø600mm PPIC - 3.0m - Type 3 (BS EN 13598-2)
- Ø1200mm Concrete - 6.0m (with standard detail)

All drainage to be constructed in accordance with Sewer Sector Guidance and Building Regulations Part H.

A CCTV and level survey of the as-built drainage to OS Datum and Grid is to be undertaken by the Contractor and provided to the Engineer for final approval.

Sewer details shown have been taken from STW Water sewer records. Contractor to validate drainage locations and levels prior to commencement of the works.

Construction Note:
It is essential that new drainage associated with the development is laid from the outfall(s) into the site. This is essential to avoid unforeseen obstructions along drainage route (such as unrecorded services). If the drainage is laid from the site out to the outfall, it can result in significant abortive works to relay and overcome such obstructions.

Flow Control Chamber	Catchment Area ha	Proposed Discharge Rate l/s
S19	1.783	7.0 l/s
S66	5.527	23.3 l/s
S101	2.507	10.70 l/s
S121	1.145	4.90 l/s

- NOTES**
- 1 Invert levels of the existing ditch TBC prior to any construction works by the Contractor and Non-return flap valve installed to headwall
 - 2 Storm discharge from site restricted to 7.0 l/s l/s for up to a 1in100 year+40% climate change storm event, using a flow control chamber. Subject to LLFA approval.
 - 3 New headwall construction subject to OWC by LLFA
 - 4 New culverts to be installed where required subject to OWC approval by LLFA

SAFETY, HEALTH AND ENVIRONMENTAL HAZARD INFORMATION BOX

THE HAZARDS NOTED BELOW ARE IN ADDITION TO THE NORMAL HAZARDS AND RISKS FACED BY A COMPETENT CONTRACTOR WHEN DEALING WITH THE TYPES OF WORKS DETAILED ON THIS DRAWING.

CONSTRUCTION RISKS
EXISTING UNNAMED WATERCOURSE
EXISTING HIGHWAY
EXISTING SERVICES

MAINTENANCE / CLEANING RISKS
NONE RELEVANT TO THIS DRAWING.

DEMOLITION RISKS
NONE RELEVANT TO THIS DRAWING.

- LEGEND**
- PLOT FFL 54.000
- Proposed Finished Floor Level
- Development Boundary
- Sewer Easement
- Private Surface Water Sewer
- STW Combined Water Sewer
- STW Foul Rising Main
- STW Combined and Private Surface Water Manholes
- Existing Watercourse
- Adoptable Drainage**
- 1200mm Dia. Inspection Chamber
- 2700mm Dia. Flow Control Chamber
- S104 Surface Water Sewer
- S104 Headwall
- S104 Foul Water Sewer
- S104 Foul Water Rising Main
- S38 Surface Water Sewer
- Domestic Drainage**
- 450mm dia. IC Max Depth 3.0m
- 600mm dia. Catchpit
- Domestic Storm Water Sewer
- Filter Drain - 150mmØ Perforated Pipe surrounded by Clear Filter Stone
- Domestic Foul Water Sewer
- Foul/Surface Water Lateral Inspection Chamber
- Foul/Surface Water Lateral Connections

- General Notes**
1. DO NOT SCALE.
 2. This drawing is to be read in conjunction with all other relevant drawings and details.
 3. Should there be any conflict between the details indicated on this drawing and those on other drawings the Engineer should be informed PRIOR to construction on site.
 4. Until technical approval has been obtained from the relevant Authority, it should be understood that all drawings issued are Preliminary and NOT for construction. Should the Contractor commence site work prior to such approval being given it is entirely at their own risk.
 5. Sketch proposals are for illustrative purposes only and as such are subject to detailed site investigation including ground conditions / contaminants, drainage, design and planning / density negotiations.
 6. All dimensions are in millimetres unless otherwise stated.
 7. The Farrow Walsh Consulting Designers Risk Assessments for this project must be reviewed PRIOR to the commencement of any works on site.

- NOTES**
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 7. All workmanship and materials are to be to current British Standards.
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- General Drainage Notes**
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 3. All work is to be carried out in accordance with the current British Standards, codes of practice and building regulations.
 4. The exact position, level, size and use of existing sewers to be confirmed on site. Any discrepancies to be reported to the Engineer prior to commencement of works.
 5. All uncovered and shallow pipework to be protected against construction traffic as part of the Contractors temporary works requirements.
 6. Proposed drainage passing through new foundations to be sleeved with cast-in oversized pipework.
 7. Exact location line and level of existing stubs to existing manholes in the road to be confirmed on site prior to construction.
 8. See Architect's details for all setting out dimensions to buildings and boundaries etc.
 9. All connections to road gullies and channels shall be 150mm nominal bore pipework. Connections to RWP's to be 100mm nominal bore pipework subject to confirmation of RWP sizes and/or design flow. No pipe work to be downsized in the direction of flow.
 10. Connections to foul terminal fittings to be 100mm nominal bore pipework subject to confirmation of above ground pipe diameters and/or design flow. No pipe work to be downsized in the direction of flow.
 11. All un-noted pipework to be 100mm dia. Unless subject to the notes above.
 12. All pipework to be U-PVC type in accordance with WIS 4-35-01 unless otherwise noted.
 13. All pipes connecting to adopted manholes up to and including 300mm dia. to be U-PVC.
 14. All pipes connecting to adopted manholes greater than 300mm dia. to be Concrete.
 15. All pipes under buildings without suspended floors shall have Class S bedding.
 16. All pipework entering and exiting manholes to be connected with pipe soffits level.
 17. Pre-formed channels to be used at all manholes.
 18. High strength concrete benching to be steel trowelled to a dense smooth face neatly shaped and finished to all branch connections and laid in accordance with the specification.

NOTE: DRAWING IS FOR APPROVAL AND SUBJECT TO DETAILED DESIGN

A3	Plan has been updated to suit the latest development layout.	JR	EC	DM	10.11.23
A2	Rising main outfall has been updated as per client instruction	JR	JD	JD	22.05.23
A1	Issued for Approval.	JR	OP	JD	15.03.23
Rev	Description of updates	Drawn	Checked	App'd	Date
Revision Schedule					

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321 Bradford Street, Birmingham B5 6ET
0330 100 0363
www.farrowwalsh.com

FOR APPROVAL

Client: Redrow Homes Limited

Project: Burbage Field Farm, Bullfurlong Lane, Hinckley

Title: Drainage Strategy Sheet 2 of 7

Drawn: JR	Checked: OP	Approved: JD	Date: March 2023	Scale: 1:500 @ A1
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Drawing No: **FW2285-D-400-02** Revision: **A3**

Site Details

264,996m² / 26.5ha : Development area

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Minimum pipe cover to soffits to be per the Sewer Sector Guidance Appendix C B5.1.7:

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- 0.9m - agricultural land and public open space
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Internal foul drain pipe minimum gradients:

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Refer to Architect's/M&E drawings for pipe sizes and setting-out information.

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- Ø600mm PPIC - 3.0m - Type 3 (BS EN 13598-2)
- Ø1200mm Concrete - 6.0m (with standard detail)

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A CCTV and level survey of the as-built drainage to OS Datum and Grid is to be undertaken by the Contractor and provided to the Engineer for final approval.

Sewer details shown have been taken from STW Water sewer records. Contractor to validate drainage locations and levels prior to commencement of the works.

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NOTES

1

Invert levels of the existing ditch TBC prior to any construction works by the Contractor and Non-return flap valve installed to headwall

2

New headwall construction subject to OWC by LLFA

3

New culverts to be installed where required subject to OWC approval by LLFA

4

Adoptable foul pumping station. Location and discharge rates to be agreed with STW

5

New filter drain at the base of the noise bund to replace the existing. Discharge into the existing watercourse subject to LLFA approval

6

Existing levels do be locally lowered by 150mm, to provide flooding compensation

7

Invert levels of the existing sewer TBC by Contractor prior any works

8

Foul rising main route subject to agreement with STW and third party land owners.

9

Proposed foul connection to discharge into Existing Sewers subject to an agreement with third party land owners

10

Mesh screen to be placed over the outlet pipe of chambers during site construction works and removed immediately prior to the first occupancy of the dwellings served by the sewers.

11

Private foul rising main route subject to agreement with STW and third party land owners.

Flow Control Chamber	Catchment Area ha	Proposed Discharge Rate l:100+40%CC
S19	1.783	7.0 l/s
S66	5.527	23.3 l/s
S101	2.507	10.70 l/s
S121	1.145	4.90 l/s

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CONSTRUCTION RISKS

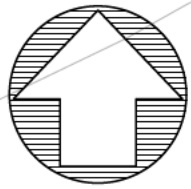
EXISTING UNNAMED WATERCOURSE
EXISTING HIGHWAY
EXISTING SERVICES

MAINTENANCE / CLEANING RISKS

NONE RELEVANT TO THIS DRAWING.

DEMOLITION RISKS

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General Notes

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- All connections to road gullies and channels shall be 150mm nominal bore pipework. Connections to RW/VPs to be 100mm nominal bore pipework subject to confirmation of RW/VP sizes and/or design flow. No pipe work to be downsized in the direction of flow.
- Connections to foul terminal fittings to be 100mm nominal bore pipework subject to confirmation of above ground pipe diameters and/or design flow. No pipe work to be downsized in the direction of flow.
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- All pipes connecting to adopted manholes greater than 300mm dia. to be Concrete.
- All pipes under buildings without suspended floors shall have Class S bedding.
- All pipework entering and exiting manholes to be connected with pipe soffits level.
- Pre-formed channels to be used at all manholes.
- High strength concrete benching to be steel trowelled to a dense smooth face neatly shaped and finished to all branch connections and laid in accordance with the specification.

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Flow Control Chamber	Catchment Area ha	Proposed Discharge Rate 1:100+40%/CC
S19	1.783	7.0 l/s
S66	5.527	23.3 l/s
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Rev	Description of updates	Drawn	Checked	App'd	Date
Revision Schedule					



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0330 100 0363
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FOR APPROVAL

Client:
Redrow Homes Limited

Project:
**Burbage Field Farm,
Bullfurlong Lane, Hinckley**

Title:
**Drainage Strategy
Sheet 4 of 7**

Drawn: JR
Checked: OP
Approved: JD
Date: March 2023

Scale:
1:500 @ A1

Drawing No:
FW2285-D-400-04

Revision:

A3

LEGEND

- PLOT FFL 54.000
- Proposed Finished Floor Level
- Development Boundary
- Sewer Easement
- Private Surface Water Sewer
- STW Combined Water Sewer
- STW Foul Rising Main
- Surface Water Manholes
- STW Combined and Private Surface Water Manholes
- Existing Watercourse

Adoptable Drainage

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- 2700mm Dia. Flow Control Chamber
- S104 Surface Water Sewer
- S104 Headwall
- S104 Foul Water Sewer
- S104 Foul Water Rising Main
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Domestic Drainage

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- Foul/Surface Water Lateral
- Inspection Chamber
- Foul/Surface Water Lateral Connections

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EXISTING UNNAMED WATERCOURSE
EXISTING HIGHWAY
EXISTING SERVICES

MAINTENANCE / CLEANING RISKS

NONE RELEVANT TO THIS DRAWING.

DEMOLITION RISKS

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Site Details

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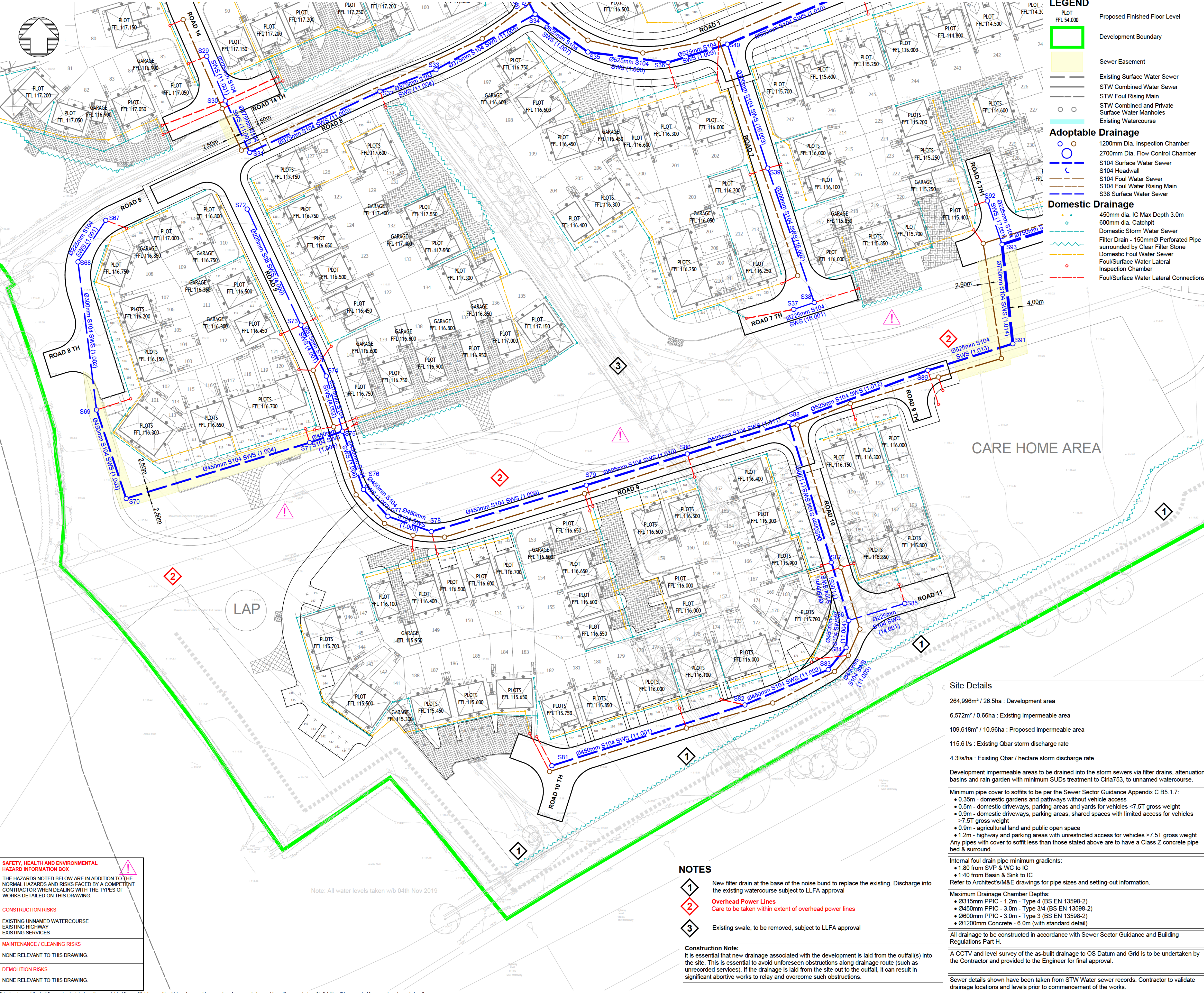
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- Revision:
A3



LEGEND

PLOT
FFL 54.000

Proposed Finished Floor Level

Development Boundary

Sewer Easement

Existing Surface Water Sewer

STW Combined Water Sewer

STW Foul Rising Main

STW Combined and Private Surface Water Manholes

Existing Watercourse

Adoptable Drainage

1200mm Dia. Inspection Chamber

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Domestic Drainage

450mm dia. IC Max Depth 3.0m

600mm dia. Catchpit

Domestic Storm Water Sewer

Filter Drain - 150mmØ Perforated Pipe surrounded by Clear Filter Stone

Domestic Foul Water Sewer

Foul/Surface Water Lateral

Inspection Chamber

Foul/Surface Water Lateral Connections

- General Notes
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7. Exact location line and level of existing stubs to existing manholes in the road to be confirmed on site prior to construction.

8. See Architect's details for all setting out dimensions to buildings and boundaries etc.

9. All connections to road gullies and channels shall be 150mm nominal bore pipework. Connections to RVPs to be 100mm nominal bore pipework subject to confirmation of RVP sizes and/or design flow. No pipe work to be downsized in the direction of flow.

10. Connections to foul terminal fittings to be 100mm nominal bore pipework subject to confirmation of above ground pipe diameters and/or design flow. No pipe work to be downsized in the direction of flow.

11. All un-noted pipework to be 100mm dia. Unless subject to the notes above.

12. All pipework to be U-PVC type in accordance with WIS 4-35-01 unless otherwise noted.

13. All pipes connecting to adopted manholes up to and including 300mm dia. to be U-PVC.

14. All pipes connecting to adopted manholes greater than 300mm dia. to be Concrete.

15. All pipes under buildings without suspended floors shall have Class S bedding.

16. All pipework entering and exiting manholes to be connected with pipe soffits level.

17. Pre-formed channels to be used at all manholes.

18. High strength concrete benching to be steel trowelled to a dense smooth face neatly shaped and finished to all branch connections and laid in accordance with the specification.

NOTE: DRAWING IS FOR APPROVAL AND SUBJECT TO DETAILED DESIGN

Flow Control Chamber	Catchment Area ha	Proposed Discharge Rate 1:100+40%CC
S19	1.783	7.0 l/s
S66	5.527	23.3 l/s
S101	2.507	10.70 l/s
S121	1.145	4.90 l/s

Site Details

264,996m² / 26.5ha : Development area
6,572m² / 0.66ha : Existing impermeable area
109,618m² / 10.96ha : Proposed impermeable area
115.6 l/s : Existing Qbar storm discharge rate
4.3l/s/ha : Existing Qbar / hectare storm discharge rate

- Minimum pipe cover to soffits to be per the Sever Sector Guidance Appendix C B5.1.7:
- 0.35m - domestic gardens and pathways without vehicle access
 - 0.5m - domestic driveways, parking areas and yards for vehicles <7.5T gross weight
 - 0.9m - domestic driveways, parking areas, shared spaces with limited access for vehicles >7.5T gross weight
 - 0.9m - agricultural land and public open space
 - 1.2m - highway and parking areas with unrestricted access for vehicles >7.5T gross weight
- Any pipes with cover to soffit less than those stated above are to have a Class Z concrete pipe bed & surround.

Internal foul drain pipe minimum gradients:

- 1:80 from SVP & WC to IC
- 1:40 from Basin & Sink to IC

Refer to Architect's M&E drawings for pipe sizes and setting-out information.

- Maximum Drainage Chamber Depths:
- Ø315mm PPIC - 1.2m - Type 4 (BS EN 13598-2)
 - Ø450mm PPIC - 3.0m - Type 3/4 (BS EN 13598-2)
 - Ø600mm PPIC - 3.0m - Type 3 (BS EN 13598-2)
 - Ø1200mm Concrete - 6.0m (with standard detail)

All drainage to be constructed in accordance with Sewer Sector Guidance and Building Regulations Part H.

A CCTV and level survey of the as-built drainage to OS Datum and Grid is to be undertaken by the Contractor and provided to the Engineer for final approval.

Sewer details shown have been taken from STW Water sewer records. Contractor to validate drainage locations and levels prior to commencement of the works.

SAFETY, HEALTH AND ENVIRONMENTAL HAZARD INFORMATION BOX

THE HAZARDS NOTED BELOW ARE IN ADDITION TO THE NORMAL HAZARDS AND RISKS FACED BY A COMPETENT CONTRACTOR WHEN DEALING WITH THE TYPES OF WORKS DETAILED ON THIS DRAWING.

CONSTRUCTION RISKS

EXISTING UNNAMED WATERCOURSE
EXISTING HIGHWAY
EXISTING SERVICES

MAINTENANCE / CLEANING RISKS

NONE RELEVANT TO THIS DRAWING.

DEMOLITION RISKS

NONE RELEVANT TO THIS DRAWING.

NOTES

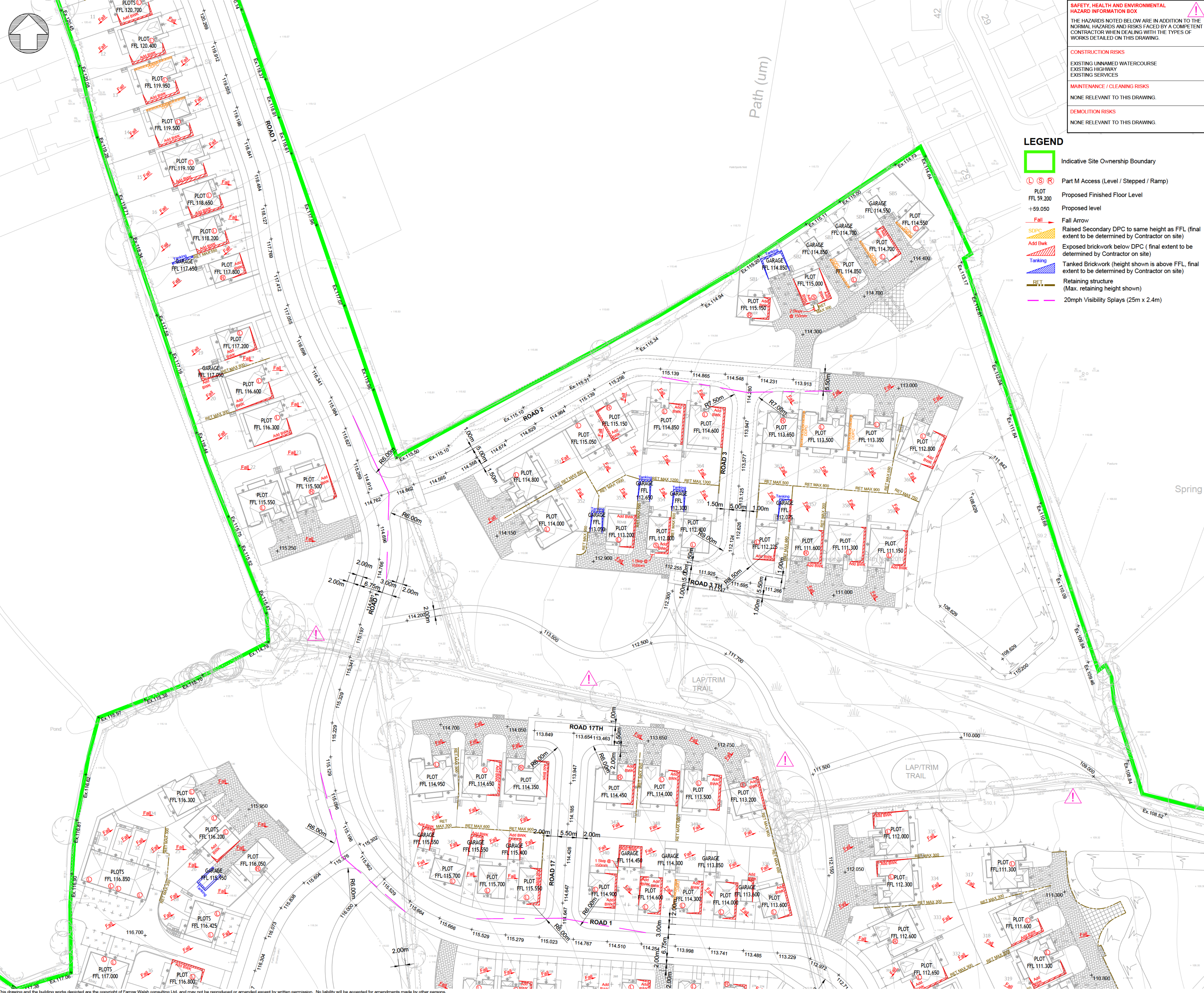
- 1

New filter drain at the base of the noise bund to replace the existing. Discharge into the existing watercourse subject to LLFA approval
- 2

Overhead Power Lines
Care to be taken within extent of overhead power lines
- 3

Existing swale, to be removed, subject to LLFA approval

Construction Note:
It is essential that new drainage associated with the development is laid from the outfall(s) into the site. This is essential to avoid unforeseen obstructions along drainage route (such as unrecorded services). If the drainage is laid from the site out to the outfall, it can result in significant abortive works to relay and overcome such obstructions.



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CONSTRUCTION RISKS
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MAINTENANCE / CLEANING RISKS
NONE RELEVANT TO THIS DRAWING.
DEMOLITION RISKS
NONE RELEVANT TO THIS DRAWING.

LEGEND

- Indicative Site Ownership Boundary
- Part M Access (Level / Stepped / Ramp)
- PLOT FFL 59.200
- Proposed Finished Floor Level
- Proposed level
- Fall Arrow
- Raised Secondary DPC to same height as FFL (final extent to be determined by Contractor on site)
- Exposed brickwork below DPC (final extent to be determined by Contractor on site)
- Tanked Brickwork (height shown is above FFL, final extent to be determined by Contractor on site)
- Retaining structure (Max. retaining height shown)
- 20mph Visibility Splays (25m x 2.4m)

- General Notes
- DO NOT SCALE.
 - This drawing is to be read in conjunction with all other relevant drawings and details.
 - Should there be any conflict between the details indicated on this drawing and those on other drawings the Engineer should be informed PRIOR to construction on site.
 - Until technical approval has been obtained from the relevant Authority, it should be understood that all drawings issued are Preliminary and NOT for construction. Should the Contractor commence site work prior to such approval being given it is entirely at their own risk.
 - Sketch proposals are for illustrative purposes only and as such are subject to detailed site investigation including ground conditions / contaminants, drainage, design and planning / density negotiations.
 - All dimensions are in millimetres unless otherwise stated.
 - The Farrow Walsh Consulting Designers Risk Assessments for this project must be reviewed PRIOR to the commencement of any works on site.

NOTES

- This drawing to be read in conjunction with all other relevant Engineers and Architects details.
- All work is to be carried out in accordance with the current British Standards, codes of practice and building regulations.
- The design of any temporary works required shall be the responsibility of the Contractor.
- Do not scale this drawing. All dimensions are in millimetres unless noted otherwise. Any discrepancies are to be recorded and reported to the Engineers immediately.
- All work is to be to the satisfaction of the Engineer.
- The Contractor is responsible for and must take all necessary precautions to ensure the stability of the works at all times during construction.
- All workmanship and materials are to be to current British Standards.
- All services are to be located and protected as necessary by the Contractor prior to the commencement of the works.
- Any existing details which are shown on this drawing are for guidance only and are to be checked on site by the Contractor. Any variations are to be recorded and reported to the Engineer immediately.

General Road Notes
This drawing is to be read in conjunction with the local Highway Authority design guide and the general specification for roadworks current at the time of construction.

All works shall be in accordance with the local Highway Authority's approved documents and satisfaction. Any reference to the specification shall mean the general specification for roadworks.

- Prior to any works being carried out within or immediately adjacent to the public highway, a scheme for the safe control of traffic and pedestrians is to be agreed with the highway authority and implemented.
- Working areas within the vicinity of existing trees are to be agreed with the engineer and chestnut fencing erected as directed.
- Special care is to be taken when excavating in the vicinity of existing trees, it is not intended that any tree roots should be severed or damaged and specialist advice should be sought when major roots present a problem. Care is to be taken to avoid damage to branches and foliage.
- It is the Contractor's responsibility to trace and indicate the precise location and nature of all services.
- The Contractor is to provide a CCTV survey of any highway sewers on completion of the 12-month maintenance period. This is to be provided in accordance with the requirements of the local water and highways authorities.
- Safe passage for pedestrians across the site is to be ensured at all times by means of approved fencing to both sides of any footpath route.
- The Health and Safety at Work Act 1981 is to be complied with at all times. Attention is drawn to the wearing of hard hats, reflectorised clothing, and the use of any other required safety equipment.
- The Contractor is to take account of the soils report.
- No completion works will be authorised until a formal certificate of conformance to relevant specification is received from the relevant water authority.
- Compaction control shall be achieved by air void testing for both roadbase and basecourse (maximum air void ratio 5%).
- Any recycled material to be used for highway construction purposes will be allowed subject to it satisfying relevant tests as instructed by this authority.
- The Contractor is to take CBR tests at road formation level, capping layer level, and sub-base level and the highway engineer informed before any construction works carried out on that level.
- All levels and dimensions are to be checked on site before any work commences.
- All private drives which fall towards a public highway and exceed two parking bays in area are to be provided with a suitable gully or drainage channel to prevent water discharging onto the highway.
- Where a driveway falls towards a dwelling it shall be provided with a suitable gully or drainage channel to prevent water damaging the building.

All FFLs and external levels are indicative only and subject to detailed design

All vertical speed calming features to be provided in accordance with Leicestershire Highways design guide

A3	Plan has been updated to suit the latest development layout.	JR	EC	DM	10.11.23
A2	Levels added to shared drives, dimensions added to retaining walls and underbuild added to plots 79, 81, 150, 320 and 343	JR	JD	JD	22.05.23
A1	Issued for Approval.	JR	OP	JD	15.03.23
Rev	Description of updates	Drawn	Checkd	App'd	Date
Revision Schedule					

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FOR APPROVAL

Client: Redrow Homes Limited

Project: Burbage Field Farm, Bullfurlong Lane, Hinckley

Title: Engineering Layout Sheet 2 of 6

Drawn: JR, Checked: OP, Approved: JD, Date: March 2023, Scale: 1:500 @ A1

Drawing No: FW2285-E-500-02, Revision: A3