



Campus West

Phase I Geo-Environmental Assessment

A115249

Welwyn Hatfield Borough Council

October 2019

Prepared on behalf of WYG Group Limited.

11th Floor, 1 Angel Court, London, EC2R 7HJ Tel: +44 (0)207 250 7500 Email: info@wyg.com Website: www.**wyg**.com

WYG Group Limited. Registered in England & Wales Number: 06595608 Registered Office:



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Executive Summary

Phase I Geo-Environmental Assessment



Site Location and Description	The site covers an area of approximate 2.30Ha near the centre of Welwyn Garden City, northwest of the Parkway and The Campus roads, and is centred on NGR TL 23630 13392 . It includes a hardstand Public carpark and the Welwyn Garden City Central Library surrounded by soft lanscaping and mature trees.		
	Published geological maps indicate the Lowestoft Formation (comprising variable superficial deposits) overlying the White Chalk .		
	No Made Ground has been recorded at the site although it is anticipated from historic development of the site.		
	Superficial deposits comprise the Lowestoft Formation diamicton , including chalky till, outwash sands and gravels, silts and clays.		
Geology	Solid geology consists of the Lewes Nodular and Seaford Chalk Formations (Undifferentiated) in the southwest and the Lambeth Group in the northeast.		
	Chalk mining identified 592m northeast of the site.		
	Natural Cavities identified around the site in several locations within 500m of the site, the nearest being 176m southeast.		
	Potential for Ground Dissolution Stability Hazards: High		
	Potential for Shrinking or Swelling Clay: Moderate		
	The superficial deposits have been classified as a Secondary Aquifer (Undifferentiated).		
Hydrogeology	The White Chalk has been classified as a Principal Aquifer .		
Hudrology	Unnamed streams running through an area of woodland 0.80km northwest of the site.		
Hydrology	Two lakes and the River Lea present in Stanborough Park, 2.40km south of the site.		
	19 th Century: Site occupied by woodland running adjacent to existing railway line.		
	1920-1940: Workmen's Camp, Laundry, Sawmills and a rail siding on site.		
Site History	1960-Present: The site was redeveloped into Campus West by 1972 and attained its current layout by 1993 with residential and business development to the west and east, Campus ground to the south and the former rail corridor to the north.		
UXO	Risk maps show the site to be at Low risk of UXO , potential industrial targets beyond northwest of the site deemed Moderate risk.		
	Discharge Consents: One within 500m of site. (475m E, revoked since March 1996)		
Licensing	Prosecutions Relating to Controlled Waters:		
Records	Pollution Prevention and Controls: Dry Cleaners 337m southeast dated November 2011.		
	Pollution Incidents: None within 500m of site.		
	Water Abstractions: One within 500m of site. (474m E , no expiry date)		
	BGS Recorded Mineral Site: None within 500m of site.		



Licensing Records Cont	 Landfill & Waste Management: Local authority records supplied landfill data for the site. Waste treatment or disposal site 403m east of site. Contemporary Trade Directory Entries & Fuel Stations (within 500m): Cleaning Services, Computer Manufacturers, Air Conditioning & Refrigeration, Building Services, Mechanic Services. 	
	Based on the review of desk study information and preliminary conceptual model of source, pathway and receptor linkages, the following risk levels established have been identified (Environment Protection Act 1994):	
Geo- Environmental Risk Assessment	 Current site users - Low / Moderate Future site users - Low / Moderate Adjacent site users - Low Construction Site Workers - Moderate Groundwater (underlying aquifers) - Moderate Surface water (watercourse on site) - Low / Moderate Future Buildings / Structures - Low 	
Geotechnical Risks	 Based on the anticipated geology key geotechnical risks are summarised as follows: Metastability (chalk solution features) – Moderate to High Variable soils (Made Ground/ Superficial Deposits – Moderate Remnant Substructures (hard spots and voids) - Low The above are likely to influence the type of foundation type and piled foundations may need to be considered. Groundwater – Low Chemical environment - Low 	
Recommendat ions	 Chemical environment - Low It is recommended that a preliminary ground investigation is undertaken to obtain both geoenvironmental and geotechnical parameters to further develop the risk assessment and provide information to develop design. The existing scope of works, defined within the Conisbee specification, is considered appropriate, and can be further tailored to emerging designs if required. It is also recommended that shallow investigation locations are sited to target the potential contamination sources identified (e.g electrical sub-station and the Fire Station), and that the laboratory test suites include determinants associated with these activities (e.g. PCBs and PFAS) 	



1.0 Instruction, Objectives and Scope

1.1 Instruction

As part of a broader Phase 1 to 3 assessment, WYG Environment (WYG) were commissioned by Welwyn Hatfield Borough Council (WHBC) to undertake a desk-based assessment of the Campus West site located near the centre of Welwyn Garden City.

Instructions to proceed were provided in a Purchase Order dated October 2019 (reference PO RSE2152595).

1.2 Objective

The objective of this assessment is to review ground conditions at the site in the context of Part 2A of the Environmental Protection Act 1990 to aid in the development of the site Master Plan by assessing the ground conditions and associated potential constraints to redevelopment.

The report will also provide a review of the scope of intrusive investigations in the context of the assessment findings and provide suggested amendments and adjustments to the scope where required.

1.3 Proposed Development

At the time of compilation of this report (during November 2019), there are no confirmed development proposals across the site. However, it is understood that conceptual schemes are being considered for further development.

1.4 Scope

The proposed scope of works detailed in the emailed revised fee proposal (dated 30th September 2019) is summarised as follows.

- A record of the site visit and visual inspection walkover.
- A discussion of the current site status and key associated environmental influences observable by general visual inspection around the site.

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- A historical site and area review based primarily on reference to past editions of Ordnance Survey Maps.
- A discussion of the general expected ground and groundwater conditions within the topographical and area context referring to available geological and hydrogeological data.
- Details of preliminary data search, including an Envirocheck data report, in addition to freely available information
- A ground contamination assessment discussing the results of the research above not only concerning potential on-site conditions and contamination but also an overview of the potential for migration onto or off-site with respect to the surrounding neighbouring sites.
- Appraise ground conditions in relation to potential geotechnical considerations and risks.
- Development of a Conceptual Site Model and Qualitative Assessment of Risk.
- Provide recommendations for further investigation and remediation if appropriate, and a brief discussion of possible mitigation as part of the redevelopment, if practically determinable without physical test data

1.1 Terms and Conditions

This report has been prepared for the client, Welwyn Garden City, in accordance with the terms and conditions of this contract, prepared in line with the proposal (ref rt 30Sept19 fplV5), and is subject to the report conditions included as Appendix A.

The recommendations and opinions expressed within this report are based on the information provided and other sources of readily available information. Where reference has been made to other reports or information provided by the client, or from other Third party sources, such data has been reviewed in good faith and it has been assumed that their contents are correct, as it is impractical to fully validate this data. WYG is unable to guarantee any Third-Party Information.



2.0 Site Information

2.1 Site Location

The site covers an area of approximately 2.3Ha near the centre of Welwyn Garden City, defined by Digswell Road to the east, a former rail corridor to the north, and the Campus (Road) to the south, and is centred on National Grid Reference TL 23630 13392. The nearest postcode is AL8 6BX.

A site location plan is indicated in Figure 1 of this report.

2.2 Site Description

The site is broadly rectangular in plan, with straight north, east and west boundaries, and a curved south boundary defined by The Campus.

At the time of the investigation (during October to November 2019) the east side of the site was occupied by the Campus West Arts & Conference Centre and the Welwyn Garden City Central Library. Hardstand parking for approximately 250 cars is located on the west side of the site adjoining the access road connecting to The Campus.

The perimeter of the site is defined by landscaped areas with mature trees, broken along the south boundary by the access road and pedestrian entrance into the Art Centre.

The Campus West Arts & Conference Centre and the Welwyn Garden City Central Library buildings are flat roofed brick, circa 1980 buildings up to five storeys high occupying approximately 1/3 of the site footprint.

2.3 Surrounding Area

Land use beyond the site boundary is summarised in Table 2.1.



Table 2.1 Surrounding Land Uses

	Description
North	The north boundary is defined by a former rail corridor (National Route 12) which is now a public footpath within the original rail cutting residing at approximately 3m below the site level. The corridor is densely vegetated with mature and semi-mature trees along the embankments and crest adjacent to the site.
	Predominantly residential areas of detached and semi-detached houses with associated gardens lie beyond the former rail corridor.
East	Digswell Road forms the east boundary with Welwyn Garden City Theatre and Oaklands College, and a car park further east.
South	The Campus forms the south boundary enclosing public park ground further south. Welwyn Garden City offices are situated further south on the south side of Bridge Road which forms the boundary of the southwest corner of the site.
West	The West side of the site is separated from four storey blocks of flats and associated landscaped areas by a hedgerow.



3.0 Environmental Setting

3.1 Geology

Information regarding the underlying geology has been obtained from the British Geological Survey (BGS) online GIS database which indicates the site to be underlain by the following geological sequence.

3.1.1 Made Ground

Although not indicated on published BGS maps, Made Ground is anticipated to be present, mainly from fill materials below hard stand areas, and owing to the site's development history which may have resulted in disturbance to shallow soils, or requirements for imported soils, and it is also considered possible that remnant substructures from former developments may exist in localised areas of the site.

3.1.2 Superficial Geology

BGS Maps indicate the site to be underlain by the superficial Lowestoft Formation diamicton, described by the BGS lexicon of named rock units as "an extensive sheet of chalky till, together with outwash sands and gravels, silts and clays".

3.1.3 Solid Geology

The Lewes Nodular and Seaford Chalk Formations (undifferentiated) are indicated to underlie the superficial deposits.

The Lewes Nodular Chalk Formation is described in the BGS lexicon as "hard to very hard chalk with interbedded soft to medium chalks and marls. Nodular chalks are typically lumpy and iron-stained."

The Seaford Chalk Formation is described as "firm white chalk with nodular and tabular flint seams".

Together these units form part of the White Chalk Sub-Group and are herein referred to as the White Chalk.

The overlie Lambeth Group is indicated immediately to the north and may encorach across the north boundary of the site. described in the BGS lexicon of named rock units as "vertically and laterally variable sequences mainly of clay,



some silty or sandy, with some sands and gravels, minor limestones and lignites and occasional sandstone and conglomerate".

3.1.4 BGS Borehole Records

BGS online database shows no boreholes located onsite. Boreholes located nearby the site have been reviewed and the encountered strata are summarised in Table 3.1.

BH Ref.	Distance From Site	Strata *	Depth (m bgl)	Description
Off-Site				
		London Clay Formation	5	No further description given
TL21/122	150m N	Seaford Chalk	36	No further description given
		Lewes Nodular Chalk	70	No further description given
	240m SE	Topsoil	0.46	No further description given
TL21SW/93		Lowestoft Formation	6.55	Firm brown sandy clay with stones at top, becoming gravel and sand further down and stiff brown clay with stones at base
TL21SW/15	290m E	Anthropogenic Ground**	0.50	Fill: Reinforced concrete (0.2m) resting on gravel and concrete rubble
		Lowestoft Formation	10.0	Orangish brown clays, sands and gravels, becoming silty with depth. Cobbles up to 125mm at base
		Undifferentiated Chalk	15.0	Clayey, friable and rubbly Chalk. Reworked at top with lenses of variable chalky brown clay with small fragments of stiff brown clay. Becomes rubbly and blocky with orange patches and flint with depth

Table 3.1 Summary of Historical Borehole Records

* WYG Interpretation based on description.

** Soil description extracted from the borehole record



3.2 Risk Assessment of Chalk

The susceptibility of the calcium carbonate in the chalk to dissolution by water can lead to the zones of differential and exaggerated weathering of the chalk surface, often presenting as a well-developed weathered horizon of 'Chalk Head'.

Weathering typically exploits zones of weakness within the chalk (e.g. well-developed joints and bedding plains), and therefore the Chalk Head can be variable both in-terms of its thickness and its geotechnical properties. In addition, zones of metastability associated with deep weathering, often described as dissolution features, can in some circumstances include deeply unstable soils and voids / roofed cavities.

The likelihood of the chalk to be affected by dissolution processes is influenced by several factors including the nature of the cover deposits, the depth of groundwater, and the local topography, and the likelihood of dissolution occurring can be qualitatively assessed following methods outlined by C.N. Edmunds (2001)¹.

Following this desk-based risk assessment method, the site is classified to have a **High Risk** associated with chalk subsidence. This is primarily driven by the presence of the overlying Lowestoft Formation diamicton and the potential encroachment of Tertiary Deposits (Lambeth Group) in the north of the site which can lower the pH and concentrate groundwater flows accelerating the dissolution of the underlying chalk. The risk assessment is presented in Appendix D and will be updated and discussed further with the findings of intrusive ground investigations.

3.3 Ground Stability Hazards

Table 3.2 provides a summary of ground stability hazards identified from the BGS database of Ground Stability Hazard risk ratings assigned to areas based on the local geology and soil type and reported within the Envirocheck. These risk assessments are

¹ C.N. Edmunds (2001) – Predicting natural cavities in chalk: in 'Land Surface Evaluation for Engineering Practice' British geological Society Special Publication 18.



based on regional geographic information systems, and do not necessarily consider hazards relating to localised topography and local variations in ground conditions.

Table 3.2	Ground	Stability	Hazards
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Ground Stability Hazard	Risk
Collapsible Ground	Very Low
Compressible Ground	No Hazard
Ground Dissolution	High
Landslide Ground Stability	Very Low
Running Sand Stability	Very Low
Shrinking or Swelling Clay	Moderate

The high risk for ground dissolution is associated with the White Chalk which is susceptible to dissolution, as discussed in detail in Section 3.2.

The Envirocheck report does not indicate the presence of any natural cavity within the site, however it lists the coordinates of three 'Sinkholes' within 500m from the centre of site. The nearest being 176m southeast of the site. However, it is possible for cavities to be present in the sub-surface that have not yet been identified.

Stantec (formerly) Peter Brett Associates are identified as the contact within the Envirocheck listing of these features and were contacted on the 22nd October 2019 to request further information.

The Envirocheck Report also identifies the possibility of mining and mineral sites around the area, possibly related to chalk mining, although none are recorded within 250m of the site, there is considered to be potential for historic deneholes (shallow small-scale mining features).

In summary, considering the confirmed presence on site and the conditions presented by anticipated ground model, a **Moderate to High** risk of metastability and voiding associated with chalk dissolution is identified.



3.4 Unexploded Ordnance Risk

Risk maps show that the site is located within an area considered to be at Low risk of having potential buried UXO, although it is noted that there were potential industrial targets adjacent to the northwest of the Town Centre site boundary (ZeticaUXO, 2019).

3.5 Radon

The site is noted as being in a Lower probability radon area, which is defined by less than 1% of homes being estimated to be at or above the Action Level, according to the British Geological Survey.

3.6 Nitrite Vulnerability

The Envirocheck Report (2019) identifies the site to be in a Nitrite Vulnerable zone, defined as areas of land that drain into nitrate polluted waters, or waters which could become polluted by nitrates.

3.7 Hydrogeology

3.7.1 Aquifer Classification

The Environment Agency has classified the superficial deposits of the Lowestoft Formation as a Secondary Undifferentiated Aquifer. This classification is given in cases where it has not been possible to attribute either category A or B to a rock type.

The bedrock geology of the White Chalk has been classified as a Principal Aquifer. This classification is defined as layers of rock or drift deposits that have high intergranular and/or fracture permeability – meaning they usually provide a high level of water storage. They may support water supply and/or base flow on a strategic scale.

3.7.2 Groundwater Source Protection Zone

The site is located within a Source Protection Zone III. This zone is defined as the area around a supply source within which all the groundwater ends up at the abstraction point. This is the point from where the water is taken and could extend some distance from the source point.



3.7.3 Licensed Groundwater Abstractions

No water abstraction permits have been identified within 250m of the site. The nearest water abstraction permit exists 474m east of the site, relating to Rank Xerox Ltd, allowing a daily rate of 2991m³ of groundwater to be abstracted daily. No expiry date has been given.

3.8 Hydrology

3.8.1 Surface Water Features

The nearest surface water feature is a stream located to the east of the site, running E-W, along the southern boundary of an area of residential properties.

The next nearest surface water features are unnamed streams running through an area of woodland located 0.50km northwest of the site.

Further to the south of the site, at a distance of approximately 2.40km from the site boundary, two lakes are located in Stanborough Park, which are in very close proximity to the River Lea.

3.8.2 Flood Risk

The site is indicated to be within an area designated as Flood Zone 1, which is defined as an area having a less than 1 in 1,000 annual probability of river or sea flooding.



4.0 Site History

4.1 Introduction

The historical development of the site and surrounding area has been assessed using information available from historical Ordnance Survey (OS) maps dating from 1884 to 2019 provided with the Envirocheck Report (Appendix C).

4.2 Summary

4.2.1 On-site

This site originated as Woodland (Sherrardspark Wood) to the south of the Dunstable Brnach railway which was cleared during the period from 1920 to 1940 when developments associated with saw milling and joinery are indicated. A rail siding feeds into the northern are of the site and workmens cottages are shown in the southeast, before the site was redeveloped to accommodate the library and Campus West buildings in the 1973.

Google Earth Satellite Images / Aerial Photography dating back to 2002 show that the site has remained largely unchanged through this period to the present date (2019).

4.2.2 Off-site

The areas around the site originated as fields and farmland. Some areas have been developed into residential dwellings, whilst other areas have been used for industry purposes, including factories, builders' yards and brick works. These have since been redeveloped, and now largely feature more commercial and residential uses. As a result, more variable ground conditions are likely to be expected, with potential Made Ground in the off-site areas.

4.3 Historical Site Uses

Table 4.1 provides a detailed account of the review of available OS mapping coverage for the site and general area dating back to 1884. The commentary is generally limited to locations within 500m of the site boundaries unless it is considered that activities beyond that range could potentially have an impact on the site.



Table 4.1 Historical Site Review

Map Date & Scale	Within Site Boundary	Surrounding Area
1878 (1:2,500) 1884 (1:10,560) 1898 (1:2,500) 1899 (1:10,560)	The earliest map from 1878 shows the site to be occupied almost entirely with woodland. The woodland is largely unbroken with some tracks marked running through it, and a larger track/road to the south. The northern edge of the site borders a railway line ('Dunstable Branch') constructed within a cutting. The 1884 and 1899 1:10 560 maps show that the woodland is part of the 'Sherrardspark Wood'.	The sites north boundary comprises the Dunstable Branch railway with a pedestrian crossing leading into woodland north of the railway. The area to the northeast and to the south is largely open fields with a few buildings in the southwest. Farms are shown to the northeast and south.
1923 (1:2,500) 1925 (1:10,560)	The woodland has mostly been cleared, 'Saw Mills' are indicated in the southwest, and a 'Workmen's Camp' and 'Laundry' is indicated in the southeast. A railway siding connecting with the Dunstable line to the west runs into the site from the west.	A 'Brick Works' is shown to the northwest, a 'Post Office' to the south and various 'Banks' and 'Council Offices' to the southeast. An 'Electric Power Station' is present to the southeast of the site along with 'Playing fields' and a tennis ground are shown. Residential development roads are shown to the southwest and west. An area of the original woodland to the west of the site is now labelled as the 'Reddings Plantation'. A reservoir is now indicated to the north.
1938 (1:2,500) 1939 (1:10,560) 1938 (1:2,500) 1939 (1:10,560) continue	The Saw Mill is now marked as a 'Joinery Works', with new buildings present in the west of the site.	Digwell Road is shown in its present-day location forming the east boundary of the site and continuing across the railway Dunstable Line (railway) on an overbridge. Further residential development, roads and a school are indicated to the north of the site. Several developments are shown to the south and southeast of the site, including one labelled as a 'Theatre'. Industrial development is shown in the wider areas around the site, including a 'Plastic Powder Works' and 'Sewage Works' to the northeast, an 'Iron Foundry' to the east, and a 'Pumping Station' to the southwest. The electric Power Station is no longer indicated.



Map Date & Scale	Within Site Boundary	Surrounding Area
1950 (1:10,560)	No changes indicated.	Further development comprising new streets of houses is shown to the southwest, southeast and north.
1960 (1:10,000) 1961-1985 (1:1,250) 1966 (1:10,000)	The buildings formerly associated with the Joinery Works are no longer shown. The 1961-1985 (1:1,250) map shows the "Campus West" development (built in 1973) in the east of the site.	The joinery works is now labelled as a 'Builder's Yard'. New developments are indicated to the east across from Digswell Road which is the Mid-Herts College of Further Education and a nearby library. 'Allotment Gardens' and tennis courts are indicated to the northeast. Further development is indicated to the southeast including roads, car parks, the theatre is now labelled as a 'Cinema'.
1969 (1:1,250)		Expansion of road running over the railway line to the southeast of the site. New road constructed by 1966, to the east of the railway line, running approximately N-S.
1972 (1:2,500) 1976 (1:10,000)	Campus West is not shown on the 1972 (1:2,500) map. The site is shown to be clear of development with wooded areas and footpaths. Campus West is shown on the 1976 (1:10,000) map with open car parking in the west and the site has more or less attained its present-day layout.	The 1976 (1:2,500) shows significant residential development of the open fields and farmland to the northeast. Further development and expansion of the local road and rail network together with further residential development is shown. Continued development has occurred to the southeast of the site, creating a higher density of buildings. The reservoirs to the northwest of the site appear to have been expanded.
1989 (1:10,000) 1992 (1:1,250) 1993 (1:1,250)	No changes indicated.	Much of the industrial development to the northeast is no longer shown. Further residential and commercial / retail development is shown in the wider area, with only minor changes to previously developed areas. Some changes to the buildings to the southeast of the site are shown, whilst a 'Dismantled Railway' is shown to the west.



Map Date & Scale	Within Site Boundary	Surrounding Area
1999 (1:10,000)	No changes indicated.	Further developments in the area formerly occupied by factories to the northeast us indicated.
2019 (1:10,000)	No changes indicated and the site is shown in its present-day layout.	No changes indicated and the surrounds are shown in their present-day layout.



5.0 Licensing Records

The Envirocheck Report, provided in full in Appendix B, provides a record of licences, consents, permits applicable to potentially contaminative activities in the site vicinity. The following summary is generally limited to locations within 500m of the Site boundaries unless it is considered that installations or activities beyond that range could potentially have an impact on the site or be affected by the redevelopment of the site.

5.1 Discharge Consents

A single discharge consents has been identified within 500m of the site. It relates to Cbx (making of computers and electronics) 475m east of the site, permitted in October 2991 and revoked in March 1996.

5.2 Prosecutions Relating to Controlled Waters

No records of any prosecutions relating to the pollution of controlled waters have been identified within 1km of the site.

5.3 Pollution Prevention and Controls

A single Local Authority Pollution Prevention and Control measures is in place within 500m of the site. It relates to Welwyn Dry Cleaners, 337m SE permitted from 1st November 2011.

5.4 Pollution Incidents

No incidents of pollution into controlled waters or substantiated pollution incident register entries recorded within 500m of the site.

5.5 Water Abstractions

A single water abstraction permit has been identified within 500m of the site. This is operated by Rank Xerox Ltd at a distance of 474m east, under licence



29/38/02/0074. It is reported that 2991m³ of groundwater is extracted daily. Both the authorised start date and end date have not been supplied.

5.6 BGS Recorded Mineral Site

There are no recorded BGS Mineral Sites within 500m of the site.

5.7 Hazardous Substances

There are no Control of Major Accident Hazards Sites (COMAH) or Notification of Installations Handling Hazardous Substances (NIHHS) sites within 500m.

5.8 Landfill & Waste Management

Hertfordshire County Council has supplied landfill data for a location within the bounds of the site, although no further details have been provided. Welwyn Hatfield Council does not have any landfill data to supply.

There are two records of licenced waste management facilities within 1km of the site as summarised in Table 5.1.

Operator	Туре	Location	Permit No.	Issue Date	Expiry Date
WGC Metals Ltd	Vehicle depollution factory	850m E	102412	February 2011	Not supplied
Welwyn Hatfield District Council	Special waste transfer station	961m E	80190	May 1999	Not supplied



A registered landfill site is present within 1km of the site, as summarised in Table 5.2.

able 5.2 Summary of Registered Landfill Sites located within 1km of The Site
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Operator	Туре	Location	Permit No.	Issue Date	Expiry Date
Polycell Products Ltd	Landfilling (soakaway) of aqueous effluent and effluent treatment sludge – up to 10,000 tonnes per year	689m SE	79/078	June 1979	Not supplied

There are four records of recorded waste treatment or disposal sites within 1km of the site. Site details are as summarised in Table 5.3 below

Table 5.3 Registered Waste Treatment or Disposal Sites within 1km of th	e site
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Operator	Туре	Distance from site boundary	Permit No.	Issue Date	Expiry Date
Rank Xerox Ltd	Treatment of acids, alkalis, flammable solvents, industrial effluent sludge, metasilicate solution, oil/water mixtures, toxic/poisonous wastes, waste solvents and contaminated water at an input rate between 10,000 and 25,000 tonnes per year	403m E	82/134 (preceded by 78/042)	May 1984	Not supplied
Polycell Products Ltd	Storage of aqueous effluent waste	885m SE	79/078	June 1979	Not supplied
British Lead Mills	Lead scrapyard with allowed input rate between 25,000 and 75,000 tonnes/a	889m SE	92/302	January 1993	Not supplied
Roche Products Ltd	Drummed storage of chlorinated and unchlorinated solvents (A and B) – max input less than 10,000 tonnes/a	966m SE	86/203	June 1986	Not supplied



5.9 Contemporary Trade Directory Entries & Fuel Stations

The Envirocheck Report provides details of industrial and commercial land uses that are considered to be potentially contaminative within the vicinity of the site.

An abundance of records has been found, relating to historical retail, commercial and light industrial land use which also includes fuel stations. A selection of records considered most relevant, which may aid in giving an impression of typical historic and present-day land use within 500m of the site are presented in Table 5.4. No active directory entries were found within 100m of the site, although three active entries have been identified within 500m of the site are presented in Table 5.4.

Table 5.4 Contemporary Trade Directory Entries

Name	Distance from Site and Direction (m)	Classification	Status
Done and Dusted	73 NW	Cleaning Services - Domestic	Inactive
I B M (UK) Ltd	88 S	Computer Manufacturers	Inactive
Alpha Air Conditioning	296 NE	Air Conditioning /Refrigeration	Active
United Carpet Cleaning Masters	296 S	Carpet, Curtain and Upholstery Cleaners	Inactive
Mixamate Holdings Ltd	306 S	Concrete Ready Mixed	Inactive
R & R Cleaning Services	355 W	Commercial Cleaning Services	Active
Sketchley Retail Ltd	377 SE	Dry Cleaners	Inactive
Supasnaps	377 SE	Photographic Processors	Inactive
London Boys Scrap Yards	384 SE	Car Breakers & Dismantlers	Inactive
Scrap Car Now Today	396 SE	Car Breakers & Dismantlers	Inactive
Advanced Diagnostic	408 SE	Scientific Apparatus & Instruments - Manufacturers	Inactive
Amalgamated Chartered	408 SE	Commercial Cleaning Services	Inactive
Snappy Snaps	438 SE	Photographic Processors	Inactive
Welwyn Garden City Ltd	482 S	Car Body Repairs	Inactive
Mr Mop Office Cleaning	495 SW	Commercial Cleaning Services	Active

One fuel station has been recorded within 500m of the site. This relates to the now obsolete Central Garage, located 430m south of the site.

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Two further fuel stations have been identified within 1km of the site, one relating to the Tesco Head Office, 820m northeast and the open Mfg Eastbridge 917m southeast.



6.0 Preliminary Conceptual Site Model

6.1 General

Under the current UK environmental legislation (Environment Act 1995, Resources Act 1994, Environment Protection Act 1990 (as amended), Health and Safety at Work Act 1994, Town and Country Planning Act 1990 and Building Regulations 1985), land is defined as contaminated if there is a significant 'pollutant linkage'. This requires evidence of the presence of a contaminant "source", a "pathway" through which contaminants could travel, and a "receptor" that could be harmed by the contaminant. In addition, the type of receptor and any harm must meet the descriptions of significant harm given in the statutory guidance, A site where a contaminant is causing, or likely to cause, significant pollution of controlled waters also constitutes contaminated land.

This section of the report aims to define a preliminary Conceptual Site Model (CSM), which include a qualitative assessment f environmental risks associated with each of the pollutant linkages identified.

The qualitative assessment of environmental risks associated with each of the pollutant linkages identified.

The qualitative risk assessment is achieved by classifying the likely significance or severity of the risk and the probability of the risk actually occurring, to determine an overall risk for that particular pollutant linkage. The assessment has been undertaken with cognisance of:

- The nature, volume and extent of any identified contamination source;
- The potential pathways;
- Identified receptors; and
- Due regard to the current site status and proposed future site use

6.2 Summary of Potential Ground Contamination Risk

Based on the review of the available information, the following potential sources have been identified pertaining to the site.



6.2.1 On-site Sources

Potential sources of contamination identified at the site include the following:

- Made Ground associated with the site's development, including the construction of the railway siding (now removed) in the north of the site, the Saw Mill and Joinery in the west, and the establishment of hardstand areas to form the road and carpark surfaces. There is also considered to be limited potential for imported materials associated with unidentified disposal activities such as fly tipping.
- The car park provides potential sources of contamination via fuel/oil leaks and through airborne particulates Therefore, there may be influence on the ground conditions from metals, inorganics, hydrocarbons and asbestos among others.
- Various historical industrial site activities, notably the branch railway line along the Northern site boundary, which can be associated with incidents of contamination from hydrocarbon, heavy metal and asbestos, and the Sawmill and joinery which can also be associated with hydrocarbons (e.g creosotes and fuels), paints and solvents.

6.2.2 Off-site Sources

Offsite sources can influence onsite soil and groundwater quality in addition to ground gases affecting the site, *if a viable pathway is present*. Potential contaminative sources offsite include:

- The adjacent major roads which run next to the site have the potential to have impacted the ground through the introduction of imported soil, or for soils/waters to have been directly impacted from spills on the road.
- The adjacent railway line which historically used asbestos in buildings and infrastructure, imported soils, and fused ash removed from furnaces which can include heavy metals and hydrocarbons.
- Other off-site sources of contamination include the electric power station identified to the southeast of the site, the industrial units to the northeast,



the sewage works to the east, and the brick works to the northwest which are all associated with a wide range of contaminants.

• Numerous recorded waste facilities in the areas surrounding the site.

6.3 Risk Pathways

Key environmental pathways and exposure routes by which potentially contaminative substances can reach environmental and human health receptors are considered to be:

- Lateral and vertical transport of potentially mobile contaminants as dissolved phase (i.e. leaching through unsaturated strata or lateral transport through advective groundwater flow and/or diffusion which can be facilitated via service ducts and drainage infrastructure);
- Lateral/vertical transport of liquid products (i.e. under gravity via path of least resistance);
- Lateral and vertical migration of gases/vapours via advective flow or through diffusion;
- Atmospheric transport (and potential inhalation) of airborne dusts, vapours and fibres;
- Surface run-off;
- Chemical attack from aggressive contaminants;
- Dermal contact and ingestion of soil and soil derived dust; and
- Plant uptake.

6.4 Receptors

The following are considered to be sensitive receptors:

Human Health Receptors:

- Current & Future Site Users (including construction workers);
- Adjacent land Users (commercial, residential, industrial);

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- Groundwater (Principal and Secondary Aquifers);
- Surface waters (including on-site stream);
- Building materials (concrete foundations and potable water pipes); and
- Soft Landscaping (areas of planting trees and shrubs).

6.4.1 Current Site Users

The site currently comprises public and commercial buildings, roads, pavements, carparks with associated soft landscaped areas. Much of the site is covered with hardstanding providing a barrier to contact with any underlying source but which may itself present sources of contamination from oil spills and leaks in heavily trafficked areas. Pathways for direct contact with Made Ground also exist in the soft landscaped areas. Therefore, a **Low / Moderate risk** (Low Likelihood of medium consequence event) of harm to health has been identified due to the potential for contaminant sources to be present.

6.4.2 Future Site Users

Future site users could include construction workers, public and residents / workers or future development which may come into contact with contaminants within the sub-surface. Potential areas of Made Ground and historic contaminant sources have been identified, and no ground gas assessment has been conducted. Without making assumptions regarding risk management and mitigation efforts, a **Moderate** risk of harm to human health is identified in relation to potential contamination.

Following intrusive investigation of potential contamination sources, it should be possible to reduce this risk rating. Alternatively, if contamination sources are proven it should be possible to mitigate risk to future site users through risk assessment, appropriate design and if required, mitigation efforts (e.g. clean topsoil for landscaped area / localised remediation).

6.4.3 Adjacent Land Users

Immediately adjacent land use is primarily residential (north and west) and commercial (east). Based on the limited potential for transportation pathways to be



present, the risk to adjacent land users is considered to be **Low** (unlikely probability of medium consequence event).

Note that potential risk of harm to health is perceived as rising to **Moderate** during any future groundworks undertaken as part of site redevelopment due to the potential for dust generation and transport of contaminants as windblown dusts / fibres particularly if extensive groundworks are required. It should be possible however to mitigate against these risks by development and implementation of appropriate working strategies and employing relatively basic mitigation measures (dust suppression, stockpile management, boundary monitoring).

6.4.4 Construction Site Workers

Potential contamination sources associated with Made Ground and historic industrial activity have been identified on site, and during groundworks, contractors have the potential to be exposed to contaminated soils (including potential asbestos). Potential exposure to contamination could occur through dermal contact, inhalation and ingestion of soil / dust / fibres. Construction workers (including groundworks contractors) are also potentially at risk of exposure to ground gases, and the potential for hazardous accumulation of gases within excavations should be considered. Without any further assessment, remediation, or controls risks, of harm to health to groundworkers should be assumed to be **Moderate** (Low probability of severe consequence event).

Any potential exposure to contamination by groundworkers at the site is likely to be of relatively short duration and exposure can be mitigated through implementation of controls, e.g. the implementation of a Construction Environmental Management Plan, including Personal Protective Equipment if required. Further assessment of contamination sources is also recommended and if contamination is encountered a degree of remediation may be required prior to or during redevelopment. Assuming that appropriate levels of assessment, remediation and risk management measures are employed it is expected that risks to groundworkers can be reduced to acceptable levels (e.g. **Low**).



6.4.5 Groundwater

The site overlies a Secondary A and Principal aquifer and is located within a Source Protection Zone. Potential contamination sources, principally within the Made Ground have been identified on site, and to date there are no on-site records of any characterisation of concentration levels having been undertaken. Similarly, the chemical quality of groundwater has not been assessed and the potential for groundwater contamination remains unproven. The risk to groundwater is thereforeconsidered to be **Moderate** (Likely and of a medium consequence event), however, in the absence of groundwater monitoring data a relatively high level of uncertainty is associated with this classification.

6.4.6 Surface Water

A surface watercourse identified as a stream in the Envirocheck report flowing east, adjacent to the north-eastern corner of the site. However, it has not been confirmed whether this feature is covered, i.e. within a culvert or remains an open watercourse. Either way the risk to surface waters is considered to be **Low/Moderate** (Low Likelihood / medium consequence event), due to the potential connectivity of the site drainage infrastructure, which provides potential migration pathways, to the watercourse.

6.4.7 Building Materials and Services

Building materials in the form of concrete, such as foundations, and services such as potable water pipes may be subject to chemical attack and degradation from contaminants within near surface soils (aggressive ground), although this is considered unlikely. It is also considered unlikely that groundwater (expected to be >5m bgl) will come into contact with such building materials. The risk to building materials is considered to be **Low** (low likelihood of a mild consequence event).

6.4.8 Soft Landscaping

Trees and shrubs may be affected by phytotoxic contaminants within near surface soils, however there is considered to be relatively limited potential for contaminant sources to be present at the site. The risk to soft landscaping across most of the site is considered to be **Low** (low probability of a mild consequence event), however further assessment and characterisation of contaminant levels in Made Ground should



be undertaken to confirm the suitability and potential for phytotoxic harm of these soils.



7.0 Conclusions

7.1 Risk Assessment Summary

Based on the conceptual site model and qualitative assessment of pollutant linkages discussed in Section 6 the following risk levels have been assigned. These risks relate to future long-term use of the site and also temporary risks during redevelopment activities. The risk levels have been assigned without consideration of remediation / risk management activities:

- Current Site Users Low / Moderate
- Future Users Low / Moderate
- Adjacent Site Users Low (Moderate during ground works)
- Construction Site Workers **Moderate** (Low on implementation of CDM)
- Groundwater **Moderate**
- Surface Waters Low / Moderate
- On-site buildings and services Low
- Off-site workers and residents Low

It should be noted that where a range of risks where identified in relation to a receptor, a worst-case scenario has been adopted. In summary, the overall risk to the human health of present and future site users and environmental receptors in terms of ground contamination present by this site is considered to be Low / Moderate as a result of the wide range of potential contaminant sources, both on and off the defined site

7.2 Geotechnical Risk Summary

Development proposals are at an early stage and therefore the following summary of geotechnical risks presents an overview based on the anticipated ground conditions:

 Chalk Dissolution – Developments will need to consider the potential for metastability and possible voiding of soils associated with dissolution of the



chalk. This could impact on the capacity and stability of both shallow (spread foundations) and deep foundations (piles).

Shallow Foundations – There is also potential for shallow soils to have variable geotechnical characteristics related to the anticipated presence of Made Ground and natural soils disturbed during the site's historical development. The superficial deposits can also comprise variable soils, particularly where they overlie karstic bedrock. Conventional shallow foundations (e.g. pads and strips) may therefore need to pass through these soils to transfer loads to the more consistent underlying natural soils (if present at practical / viable depths).

Piled foundations may need to be considered where variable soils extend to deeper levels rendering the use of shallow foundations as impractical / commercial unviable.

- Remnant Substructures Remnant substructures from historical development, including the railway siding, could present localised 'hard spots' or voided ground. These sub structures may need to be removed or prebored, or grouted prior to the installation of new structures to remove the associated risks of differential settlement or collapse of ground below ground bearing structures.
- Piled Foundations Karstic environments are known to have potentially variable geotechnical characteristics associated with zones of metastability which can extend to deeper levels. In such circumstances piled foundations may be required to transfer loads to more competent materials below zones of metastability. There is also a risk of new pathways for the migration of contaminants from shallow soils into the underlying Principal Aquifer within the chalk being created during piling

7.3 Recommendations

Based on the findings of this Phase 1 Geo-environmental Assessment, there is now a clear understanding of the potential sources of contamination and geotechnical risks at the site and the risks they posed to identified receptors. The anticipated geoenvironmental status of the site is not considered, in our opinion, to be prohibitive to the redevelopment of the site. However, the risk ratings identified



should be verified and could possibly be reduced by the implementation of the following recommendations.

A Phase 2 Site Investigation is proposed which aims to assess the geological profile, chemical composition of the soils and groundwater and any impact from contamination.

It is recommended that a site investigation be undertaken to develop a ground model and provide parameters to inform design and confirm (or otherwise) the environmental risk assessment identified above. Dependent on the final development proposals, it is anticipated that a combination of shallow windowless sampler boreholes, and deeper cable percussive boreholes will be required. An environmental site investigation can be paired with a geotechnical investigation to inform earthworks and foundation design if required.

To address these objectives it is confirmed that the proposed scope of ground investigations is considered appropriate to further define and assess the risks identified, providing that flexibility is retained to address locally identified risks circumstances and focus on potentially problematic areas. High risk areas are summarised as follows:

- Former railway sidings additional investigations are recommended along this route to achieve denser sampling for geotechnical and geoenvironmental characterisation.
- Solution features the current proposed sampling density is considered adequate to provide a preliminary assessment and allow a broad appraisal of the variability of the shallow soils and deeper weathering profile of the chalk. It is noted that quantitative survey techniques, such as Cone Penetration Testing (CPTs), or geophysical surveys can also be effective in establishing the depth of unweathered chalk, however these techniques are best used in tandem with intrusive surveys

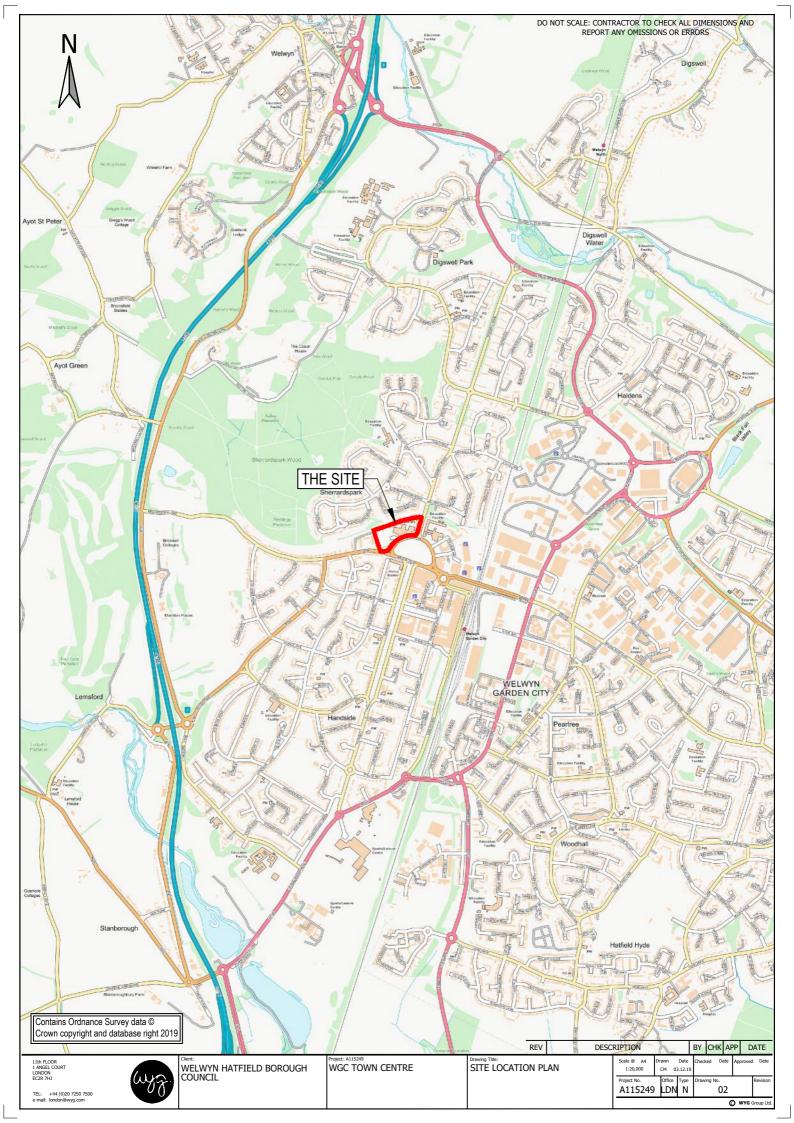


Figures



Figure 1 – Site Location Plan

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Appendices



Appendix A - Report Conditions

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APPENDIX A - REPORT CONDITIONS

GROUND INVESTIGATION

This report is produced solely for the benefit of Welwyn Garden City and no liability is accepted for any reliance placed on it by any other party unless specifically agreed in writing otherwise.

This report refers, within the limitations stated, to the condition of the site at the time of the inspections. No warranty is given as to the possibility of future changes in the condition of the site.

This report is based on a visual site inspection, reference to accessible referenced historical records, information supplied by those parties referenced in the text and preliminary discussions with local and Statutory Authorities. Some of the opinions are based on unconfirmed data and information and are presented as the best that can be obtained without further extensive research. Where ground contamination is suspected but no physical site test results are available to confirm this, the report must be regarded as initial advice only, and further assessment should be undertaken prior to activities related to the site. Where test results undertaken by others have been made available these can only be regarded as a limited sample. The possibility of the presence of contaminants, perhaps in higher concentrations, elsewhere on the site cannot be discounted.

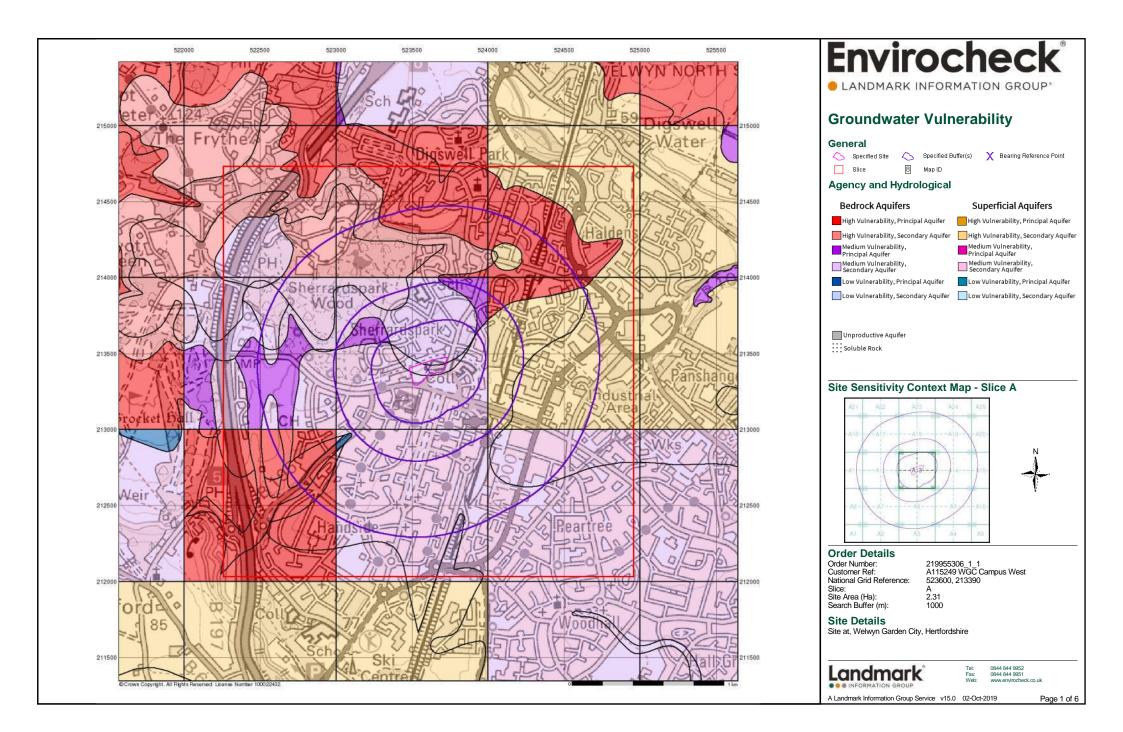
Whilst confident in the findings detailed within this report because there are no exact UK definitions of these matters, being subject to risk analysis, we are unable to give categoric assurances that they will be accepted by Authorities or Funds etc. without question as such bodies often have unpublished, more stringent objectives. This report is prepared for the proposed uses stated in the report and should not be used in a different context without reference to WYG. In time improved practices or amended legislation may necessitate a reassessment.

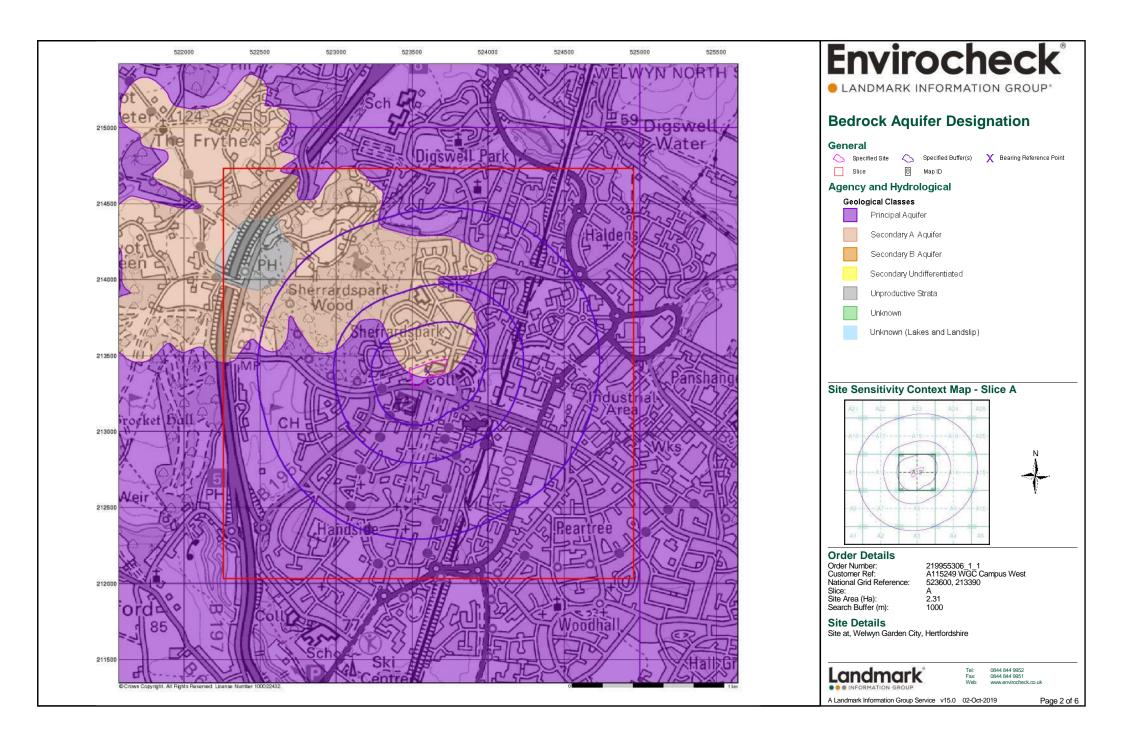
The assessment of ground conditions within this report is based upon the findings of the study undertaken. We have interpreted the ground conditions in between locations on the assumption that conditions do not vary significantly. However, no investigation can inspect each and every part of the site and therefore changes or variances in the physical and chemical site conditions as described in this report cannot be discounted.

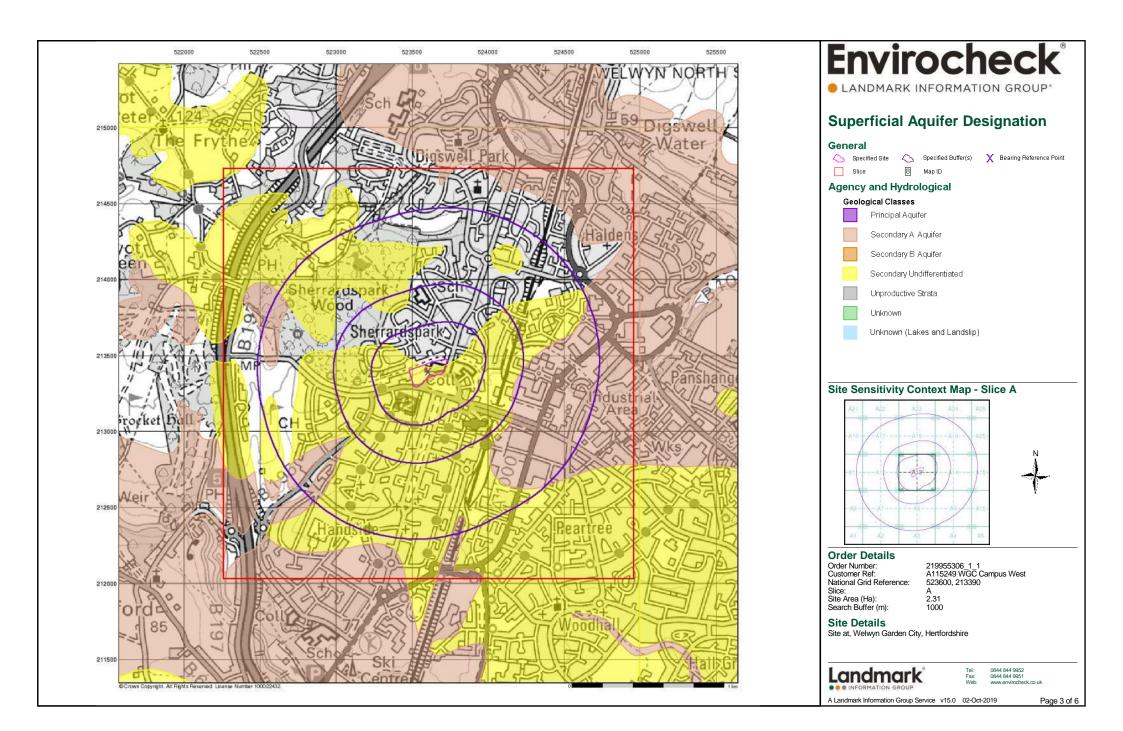
The report is limited to those aspects of land contamination specifically reported on and is necessarily restricted and no liability is accepted for any other aspect especially concerning gradual or sudden pollution incidents. The opinions expressed cannot be absolute due to the limitations of time and resources imposed by the agreed brief and the possibility of unrecorded previous use and abuse of the site and adjacent sites. The report concentrates on the site as defined in the report and provides an opinion on surrounding sites. If migrating pollution or contamination (past or present) exists further extensive research will be required before the effects can be better determined.

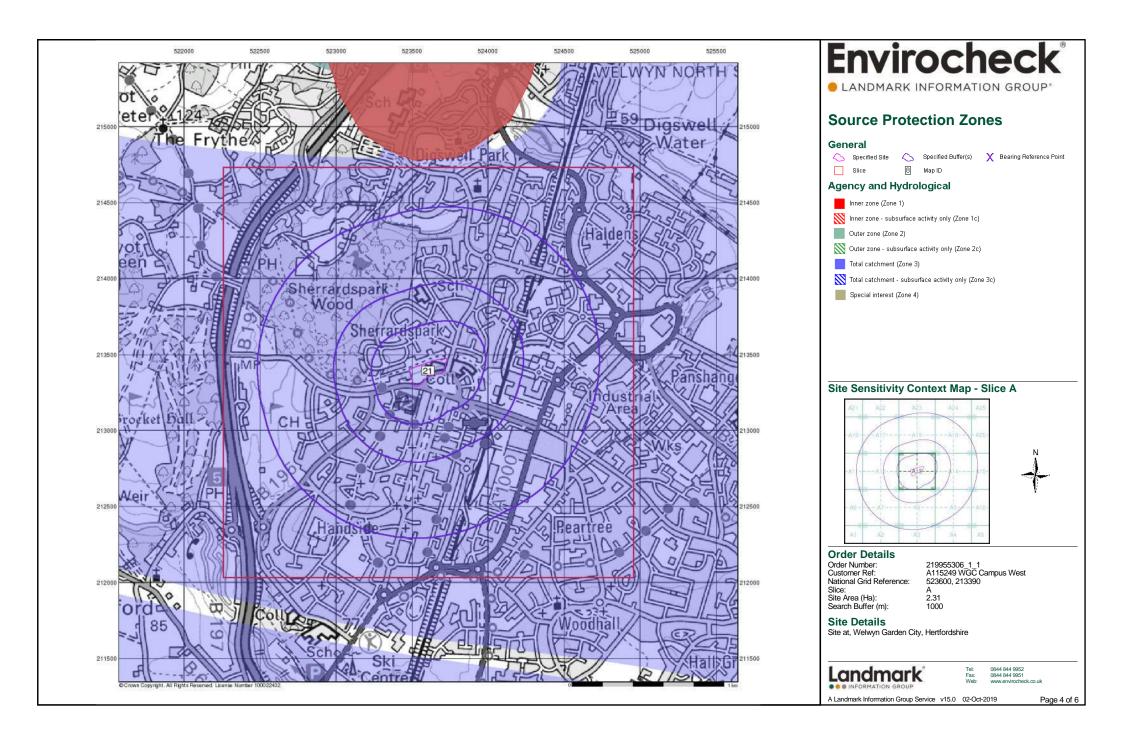


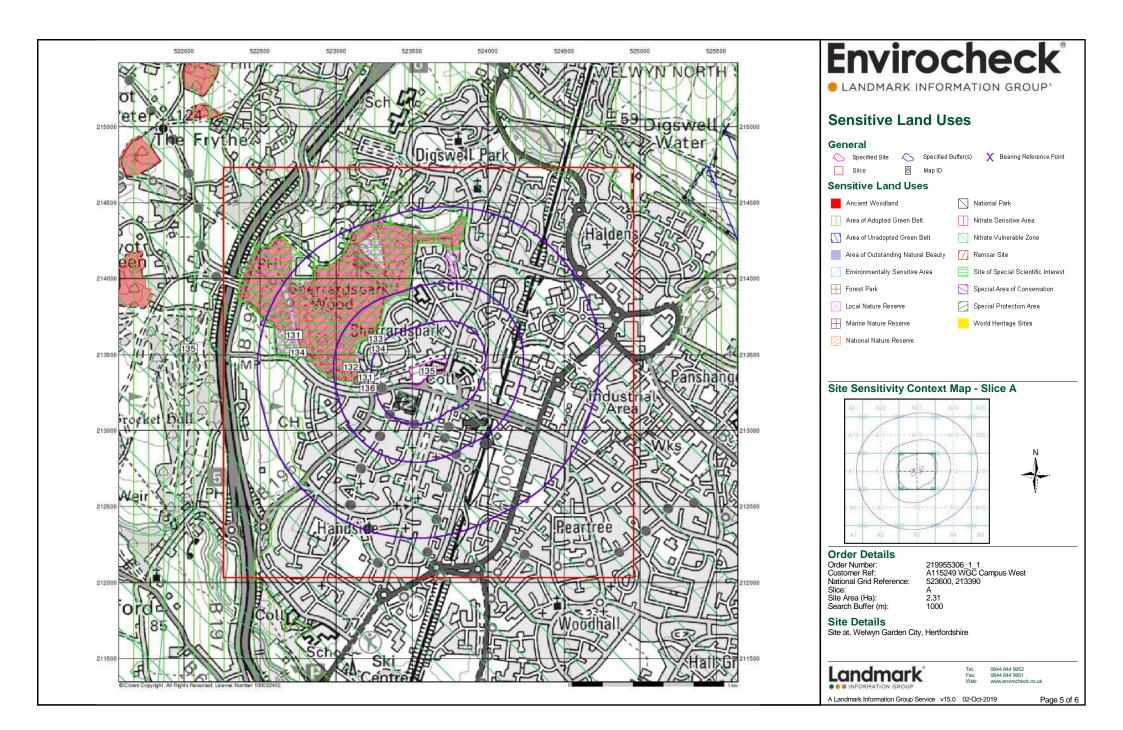
Appendix B – Envirocheck Report

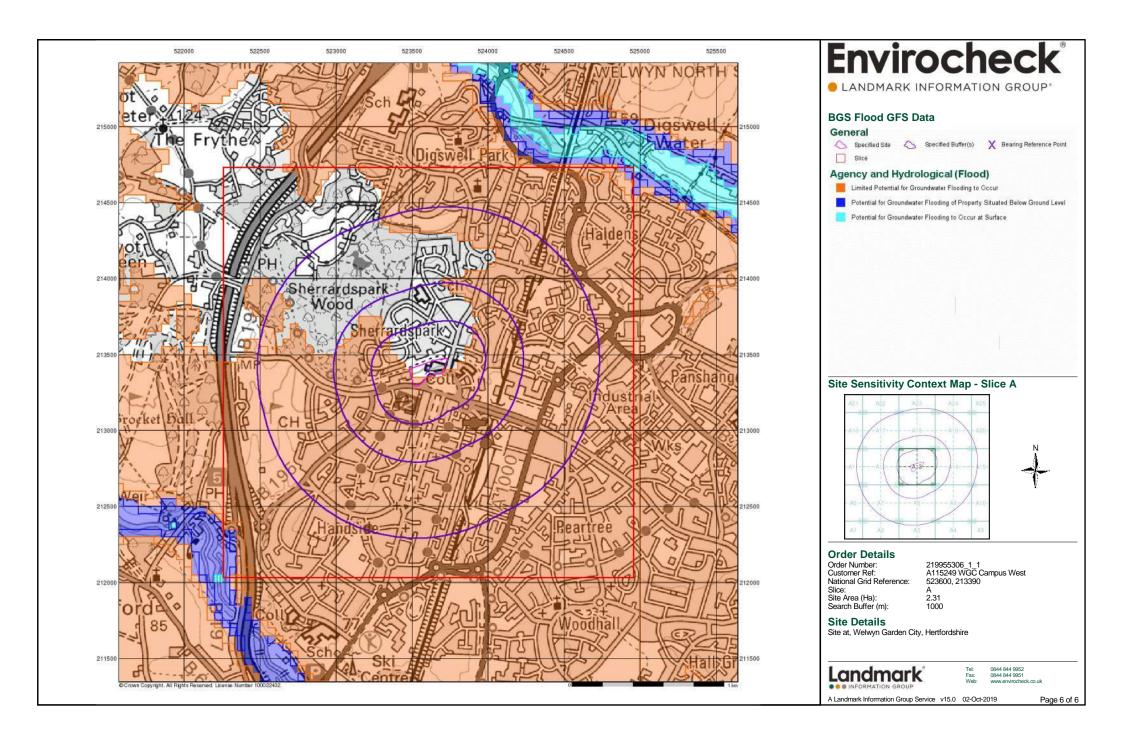














Envirocheck[®] Report:

Datasheet

Order Details:

Order Number: 219955306_1_1

Customer Reference: A115249 WGC Campus West

National Grid Reference: 523600, 213390

Slice:

A Site Area (Ha): 2.31

Search Buffer (m): 1000

Site Details:

Site at Welwyn Garden City Hertfordshire

Client Details:

Mr D Perera WYG Environment Planning Transport Ltd 1 Angel Court London EC2R 7HJ



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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.

Tor this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales 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 this 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					
BGS Groundwater Flooding Susceptibility	pg 1	Yes			n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 1			1	
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls	pg 1				7
Integrated Pollution Prevention And Control	pg 2				8
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 4			1	4
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 4		Yes		
Pollution Incidents to Controlled Waters	pg 4				3
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances	pg 5				20
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 8			1	7 (*9)
Water Industry Act Referrals	pg 13				2
Groundwater Vulnerability Map	pg 13	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk	pg 13	1	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 13	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 14	Yes	n/a	n/a	n/a
Source Protection Zones	pg 14	1			
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
OS Water Network Lines	pg 14		3	5	19

Summary

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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)					
Licensed Waste Management Facilities (Locations)	pg 18				2
Local Authority Landfill Coverage	pg 18	2	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Registered Landfill Sites	pg 18				1
Registered Waste Transfer Sites	pg 19				1
Registered Waste Treatment or Disposal Sites	pg 19			2	3
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)	pg 22				2
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)	pg 22				1
Planning Hazardous Substance Consents	pg 22				1
Planning Hazardous Substance Enforcements					
Geological					
BGS 1:625,000 Solid Geology	pg 23	Yes	n/a	n/a	n/a
BGS Recorded Mineral Sites	pg 23				3
CBSCB Compensation District			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	pg 23				1
Natural Cavities	pg 23		1	2	20
Non Coal Mining Areas of Great Britain	pg 27	Yes		n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 27	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards	pg 27	Yes	Yes	n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 27	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 27	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 27	Yes		n/a	n/a
Radon Potential - Radon Affected Areas			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 29		2	21	121
Fuel Station Entries	pg 42			1	2
Gas Pipelines					
Underground Electrical Cables					
Sensitive Land Use					
Ancient Woodland	pg 43			2	
Areas of Adopted Green Belt	pg 43			1	
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves	pg 43		1		
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones	pg 43	1			
Ramsar Sites					
Sites of Special Scientific Interest	pg 43			1	
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Envirocheck LANDMARK INFORMATION GROUP*

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater F Flooding Type:	Flooding Susceptibility Limited Potential for Groundwater Flooding to Occur	A13SW (S)	0	1	523605 213350
1	Discharge Consents Operator: Property Type: Location: Authority: Catchment Area: Reference: Permit Version: Effective Date: Issued Date: Revocation Date: Discharge Type: Discharge Type: Discharge Environment: Receiving Water: Status: Positional Accuracy:	S Cbx MAKING OF COMPUTERS/ELECTRONICS/OPTICAL PRODUCTS Rank Xerox Ltd, Bessemer Road, Welwyn Garden City, Hertfordshire Environment Agency, Thames Region Not Given CNTW.1270 1 30th October 1991 30th October 1991 30th October 1991 31st March 1996 Miscellaneous Discharges - Mine / Groundwater As Raised Land/Soakaway Chalk Consent expired Located by supplier to within 100m	A14NW (E)	475	2	524200 213395
2	Integrated Pollution Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	Controls British Lead Mills Ltd Peartree Lane, WELWYN GARDEN CITY, Hertfordshire, AL7 3UB Environment Agency, Thames Region BD1601 24th November 1998 IPC minor (non-substantial) variation to previous variation 2.2 A (E) Non-ferrous Metal processes within the Metal Industry Authorisation superseded by a substantial or non substantial variation Automatically positioned to the address	A9NE (SE)	890	2	524458 212910
2	Integrated Pollution Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	Controls British Lead Mills Ltd Peartree Lane, WELWYN GARDEN CITY, Hertfordshire, AL7 3UB Environment Agency, Thames Region AR7009 15th September 1995 IPC application for process that was regulated by HMIP for air releases under previous legislation 2.2 A (E) Non-ferrous Metal processes within the Metal Industry Authorisation superseded by a substantial or non substantial variation Automatically positioned to the address	A9NE (SE)	890	2	524458 212910
2	Integrated Pollution Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status:		A9NE (SE)	897	2	524463 212905
3	Integrated Pollution Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	Controls Roche Products Ltd 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AX Environment Agency, Thames Region AJ9776 14th February 1994 IPC new application 4.2 A (D) Manufacture and use of Organic Chemicals within the Chemical Industry Authorisation superseded by a substantial or non substantial variation Manually positioned to the road within the address or location	A9SW (SE)	920	2	524068 212536
3	Integrated Pollution Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	Controls Roche Products Ltd 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AX Environment Agency, Thames Region BG4844 29th February 2000 IPC major (substantial) variation 4.2 A (D) Manufacture and use of Organic Chemicals within the Chemical Industry Authorisation revoked Manually positioned to the road within the address or location	A9SW (SE)	922	2	524073 212536

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Integrated Pollution	o Controls				
3	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status:	Roche Products Ltd 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY Environment Agency, Thames Region AX5668 17th December 1996 IPC minor (non-substantial) variation to previous variation 4.2 A (D) Manufacture and use of Organic Chemicals within the Chemical Industry Application has met the requirements for authorisation (but not yet authorised) Manually positioned to the road within the address or location	A9SW (SE)	924	2	524068 212531
	Integrated Pollution					
3	Name: Location: Authority: Permit Reference: Dated: Process Type: Description:	Roche Products Ltd 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3SP Environment Agency, Thames Region BC6241 24th November 1998 IPC minor (non-substantial) variation to previous variation 4.2 A (D) Manufacture and use of Organic Chemicals within the Chemical Industry	A9SW (SE)	927	2	524073 212531
	Status: Positional Accuracy:	Authorisation superseded by a substantial or non substantial variation Manually positioned to the road within the address or location				
	Integrated Pollution	Prevention And Control				
4	Name: Location: Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code: Activity Description: Primary Activity: Integrated Pollution Name: Location: Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	H J Enthoven Limited British Lead Mills Epr/Bl8317ik, Peartree Lane, WELWYN GARDEN CITY, Hertfordshire, AL7 3UB Environment Agency - South East Region, North East Thames Area XP3235JX Bl8317ik 29th January 2018 Effective Variation Standard Automatically positioned to the address 2.2 A(1) (B) (I) Non-Ferrous Metals; Melting With Capacity Greater Than 4T/D Lead/Cadmium Or 20T/D Others Y Prevention And Control British Lead Mills Ltd Wgc Lead Recovery Process, Peartree Lane, WELWYN GARDEN CITY, Hertfordshire, AL7 3UB Environment Agency - South East Region, North East Thames Area PP3138CR	A9NE (SE) A9NE (SE)	890	2	524458 212910 524458 212910
		Lead/Cadmium Or 20T/D Others				
	Primary Activity:	Y				
4	Integrated Pollution	n Prevention And Control British Lead Mills Ltd	A9NE	890	2	524458
-	Location: Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	Wgc Lead Recovery Process, Peartree Lane, WELWYN GARDEN CITY, Hertfordshire, AL7 3UB Environment Agency - South East Region, North East Thames Area SP3034UX	(SE)	000	Z	212910

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	Name: Location: Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Description:	27th March 2008 Effective Variation Simple Standard Variation Automatically positioned to the address 2.2 A(1) (B) (I) Non-Ferrous Metals; Melting With Capacity Greater Than 4T/D Lead/Cadmium Or 20T/D Others	A9NE (SE)	890	2	524458 212910
	Primary Activity:	Y				
4	Name: Location: Authority: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	Prevention And Control British Lead Mills Ltd Wgc Lead Recovery Process, Peartree Lane, WELWYN GARDEN CITY, Hertfordshire, AL7 3UB Environment Agency - South East Region, North East Thames Area BX4739IA BI8317ik 23rd June 2004 Superseded By Variation Variation Standard Automatically positioned to the address 2.2 A(1) (B) (I) Non-Ferrous Metals; Melting With Capacity Greater Than 4T/D Lead/Cadmium Or 20T/D Others Y	A9NE (SE)	890	2	524458 212910
	Integrated Pollution	Prevention And Control				
4	Activity Code:	British Lead Mills Ltd Wgc Lead Recovery Process, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UB Environment Agency, Thames Region Bx4739ia Bl8317ik 23rd June 2004 Superseded By Variation Variation Standard Automatically positioned to the address 2.2 A(1) (B) (I) Non-Ferrous Metals; Melting With Capacity Greater Than 4T/D Lead/Cadmium Or 20T/D Others Y	A9NE (SE)	890	2	524458 212910
	Integrated Pollution	Prevention And Control				
4	Name: Location: Permit Reference: Original Permit Ref: Effective Date: Status: Application Type: App. Sub Type: Positional Accuracy: Activity Code:	British Lead Mills Ltd Wgc Lead Recovery Process, Peartree Lane, WELWYN GARDEN CITY, Hertfordshire, AL7 3UB Environment Agency - South East Region, North East Thames Area BL8317IK	A9NE (SE)	890	2	524458 212910
	Integrated Pollution	Prevention And Control				
4	Activity Code:	British Lead Mills Ltd Wgc Lead Recovery Process, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UB Environment Agency, Thames Region Bl8317ik Bl8317ik 20th December 2002 Superseded By Variation Application New Automatically positioned to the address 2.2 A(1) (D) (I) Non-Ferrous Metals; Producing Etc Lead And Alloys With Release To Air Y	A9NE (SE)	890	2	524458 212910

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Local Authority Pol	Iution Prevention and Controls				
5	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	Welwyn Dry Cleaners 37 Wigmores North, Welwyn Garden City, Al10 9rq Welwyn Hatfield District Council, Environmental Health Department Not Supplied 1st November 2011 Local Authority Pollution Prevention and Control PG6/46 Dry cleaning Permitted Manually positioned to the address or location	A8NE (SE)	337	3	523766 213041
	Local Authority Pol	Iution Prevention and Controls				
6	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	Johnson The Cleaners 43 Fretherne Road, Welwyn Garden City, Al8 6ny Welwyn Hatfield District Council, Environmental Health Department Not Supplied Not Supplied Local Authority Pollution Prevention and Control PG6/46 Dry cleaning Permitted Manually positioned to the address or location	A8NE (S)	526	3	523820 212849
	Local Authority Pol	Iution Prevention and Controls				
7	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	Tesco Stores Ltd Cirrus Building, Shire Park, Welwyn Garden City, Hertfordshire, AL7 1AB Welwyn Hatfield District Council, Environmental Health Department LN000315 1st June 2001 Local Authority Air Pollution Control PG1/14 Petrol filling station Authorised Manually positioned to the address or location	A19SE (E)	729	3	524415 213727
	Local Authority Pol	lution Prevention and Controls				
8	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	Mark Tempest Autocentre Unit 1 Garden Court, Welwyn Garden City, Al7 1bh Welwyn Hatfield District Council, Environmental Health Department Not Supplied 1st January 2012 Local Authority Pollution Prevention and Control PG1/1Waste oil burners, less than 0.4MW net rated thermal input Permitted Manually positioned to the address or location	A9NE (SE)	912	3	524516 212966
	Local Authority Pol	Iution Prevention and Controls				
8	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	Eastbridge Service Station Bridge Road East, Welwyn Garden City, Herts, AL7 1LE Welwyn Hatfield District Council, Environmental Health Department LN000311 1st December 1998 Local Authority Pollution Prevention and Control PG1/14 Petrol filling station Permitted Manually positioned to the address or location	A9NE (SE)	917	3	524513 212950
	Nearest Surface Wa	ater Feature				
			A13NE (E)	183	-	523910 213429
		to Controlled Waters				
9	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity: Positional Accuracy:	Not Given WELWYN GARDEN CITY Environment Agency, Thames Region Chemicals - Unknown Confirmed As A Pollution Incident 7th April 1992 NE920175 Not Given Not Given Not Given Not Given Category 3 - Minor Incident Located by supplier to within 100m	A14NE (E)	769	2	524500 213500

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
10	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	to Controlled Waters Not Given WELWYN GARDEN CITY Environment Agency, Thames Region Chemicals - Unknown Confirmed As A Pollution Incident 5th January 1991 NE910004 Not Given Not Given Not Given Category 3 - Minor Incident Located by supplier to within 100m	A14SE (E)	843	2	524500 213100
11	Property Type: Location: Authority: Pollutant: Note: Incident Date: Incident Reference: Catchment Area: Receiving Water: Cause of Incident: Incident Severity:	to Controlled Waters Not Given WELWYN GARDEN CITY Environment Agency, Thames Region Miscellaneous - Unknown Confirmed As A Pollution Incident 19th April 1989 NE890176 Not Given Not Given Not Given Category 2 - Significant Incident Located by supplier to within 100m	A14SE (E)	885	2	524600 213300
12	Registered Radioad Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	tive Substances University Of Hertfordshire Biopark Hertfordshire Limited, University Of Hertfordshire, Broadwater Road, Welwyn Garden City, AI7 3ax Environment Agency, Thames Region TB3130DM Not Supplied Not Supplied Not Supplied Application has been determined by the EA Automatically positioned to the address	A9SW (S)	882	2	523949 212514
12	Registered Radioac Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	tive Substances Antisoma Research Ltd Biopark Hertfordshire,Broadwater Road,, WELWYN GARDEN CITY, Hertfordshire, AL7 3AX Environment Agency, Thames Region CE3230 10th May 2010 Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Authorisation under RSA Authorisation either revoked or cancelled Automatically positioned to the address	A9SW (S)	896	2	523946 212497
12	-	Heptares Therapeutics Ltd Biopark Hertfordshire,Broadwater Road,, WELWYN GARDEN CITY, Hertfordshire, AL7 3AX Environment Agency, Thames Region CD6683 3rd June 2009 Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Substantial variation to a registration under the Act of an open source which is also the subject of an authorisation Authorisation either revoked or cancelled Automatically positioned to the address	A9SW (S)	896	2	523946 212497
12	Registered Radioad Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	tive Substances Heptares Therapeutics Ltd Biopark Hertfordshire, Broadwater Road,, WELWYN GARDEN CITY, Hertfordshire, AL7 3AX Environment Agency, Thames Region CD1550 24th November 2008 Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Authorisation under RSA Authorisation either revoked or cancelled Automatically positioned to the address	A9SW (S)	896	2	523946 212497

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Registered Radioad	tive Substances				
12	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	Heptares Therapeutics Ltd Biopark Hertfordshire,Broadwater Road,, WELWYN GARDEN CITY, Hertfordshire, AL7 3AX Environment Agency, Thames Region CD1568 24th November 2008 Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Registration under the Act of an open source which is also the subject of an authorisation Authorisation superseded by a substantial or non substantial variation Automatically positioned to the address	A9SW (S)	896	2	523946 212497
	Registered Radioad	tive Substances				
13	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status:	Roche Products Ltd 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY Environment Agency, Thames Region BG2558 20th April 2000 Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Substantial variation to authorisation under RSA Authorisation superseded by a substantial or non substantial variation Manually positioned to the address or location	A9SW (SE)	902	2	524168 212610
	Registered Radioad	tive Substances				
13	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	Roche Products Ltd 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY Environment Agency, Thames Region BG2507 20th April 2000 Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Substantial variation to a registration under the Act of an open source which is also the subject of an authorisation Authorisation superseded by a substantial or non substantial variation Manually positioned to the address or location	A9SW (SE)	906	2	524168 212605
	Registered Radioad	tive Substances				
14	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	Roche Products Ltd Unit 6, Falcon Way, Shire Park, Welwyn Garden City, Hertfordshire, AL7 1TW Environment Agency, Thames Region CA4285 28th November 2006 Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Authorisation under RSA Authorisation either revoked or cancelled Automatically positioned to the address	A15NW (E)	926	2	524646 213622
	Registered Radioad	tive Substances				
14	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	Roche Products Ltd Unit 6, Falcon Way, Shire Park, Welwyn Garden City, Hertfordshire, AL7 1TW Environment Agency, Thames Region CA4293 28th November 2006 Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Registration under the Act of an open source which is also the subject of an authorisation Authorisation either revoked or cancelled Automatically positioned to the address	A15NW (E)	926	2	524646 213622
	Registered Radioad					
15	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	Roche Products Ltd 40 Broadwater Road ,,, Welwyn Garden City, Hertfordshire, Al7 3ay Environment Agency, Thames Region Bq2081 14th February 2002 Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Minor variation to authorisation under RSA Authorisation superseded by a substantial or non substantial variation Manually positioned to the road within the address or location	A9SW (SE)	956	2	524170 212548

		(Compass Direction)	Distance From Site	Contact	NGR
Registered Radioac	tive Substances				
Name: Location: Authority: Permit Reference: Dated: Process Type: Description:	Roche Products Ltd 40 Broadwater Road ,,, Welwyn Garden City, Hertfordshire, Al7 3ay Environment Agency, Thames Region Bm9149 14th February 2002 Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Minor variation to a registration under the Act of an open source which is also the subject of an authorisation	A9SW (SE)	960	2	524167 212541
Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status:	Roche Products Ltd 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY Environment Agency, Thames Region Bs5924 19th September 2002 Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Substantial variation to a registration under the Act of an open source which is also the subject of an authorisation Authorisation either revoked or cancelled	A9SW (SE)	981	2	524158 212512
Registered Radioac	tive Substances				
Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status:	Roche Products Ltd 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY Environment Agency, Thames Region Bs5908 19th September 2002 Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Initial variation to an authorisation under RSA Authorisation either revoked or cancelled	A9SW (SE)	981	2	524158 212512
Registered Radioac	tive Substances				
Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status:	Roche Products Ltd 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AX Environment Agency, Thames Region AU2123 9th January 1996 Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Minor variation to authorisation under RSA Authorisation superseded by a substantial or non substantial variation	A9SW (SE)	959	2	524095 212505
Registered Radioac	tive Substances				
Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	Roche Products Ltd 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY Environment Agency, Thames Region BA4841 26th March 1998 Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Minor variation to authorisation under RSA Authorisation superseded by a substantial or non substantial variation Manually positioned to the address or location	A9SW (SE)	961	2	524100 212505
Registered Radioac	tive Substances				
Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Pagitianel Aggurgary	Roche Products Ltd P O Box 8, 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY Environment Agency, Thames Region AE5217 31st March 1991 Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Registration under the Act of an open source which is also the subject of an authorisation Authorisation superseded by a substantial or non substantial variation	A9SW (SE)	966	2	524100 212500
	Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy: Registered Radioact Name: Location: Authority: Permit Reference: Dated: Process Type: Description:	Name: Roche Products Lid Authority: Environment Agency., Thames Region Permit Reference: Tath February 2002 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Minor variation to a registration under the Act of an open source which is also the subject of an authorisation under stregistration under stregistration ander stregistregistration ander stregistregistregistregistregistregistregistregistregistregistreg	Name: Roche Products Lid A95W Location: 40 Bradwater Read, Welwyn Gardan City, Hertfordshire, AI7 3ay (SE) Parmit Reference: Environment Agency, Thames Region (SE) Process Type: Registration loar 57 RAS for the keeping and use of Radioactive materials (was RSA60 S1) (SE) Description: Minor variation loar sejastration under the Act of an open source which is also the subject of an authorisation (SE) Registered Radioactive Substances Minor variation loar sejastration are sejance of the road within the address or location (SE) Name: Roche Products Lid (SE) (SE) Location: 40 Bradwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY A95W Location: 19h September 202 (SE) Authority: Environment Agency, Thames Region Parmit Reference: Bas524 Registered Radioactive Substances (SE) Authority: Postional Accuracy: Manostant Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY A95W Location: A0 Bradwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY A95W Location: A0 Bradwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY A95W	Name: Roche Products Lid ABSW 960 Location: 40 Broadwater Road, "Weyn Garden City, Hentfordshire, AI7 3ay (SE) (SE) Parmit Reference: Bmid 14 Environment Agency, Thamas Region (SE) (SE) Date: 141 February 2002 Process Type: (SE) (SE) Description: More Variation to a registration under the Act of an open source which is also the subject of an authorisation Authorization Approximate Accuracy Postional Accuracy: Manor Variation to apergistration under the Act of an open source which is also the subject of an authorisation Approximate Accuracy Approximate Acocuracy Approximate Accuracy	Nume: Location: Location: Location: Location: Additional control of the seging and use of Radioactive materials (SE)AGSW (SE)9602Partit: Persons: Type: Persons:

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Registered Radioac	tive Substances				
16	Name: Location:	Roche Products Ltd P O Box 8, 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY	A9SW (SE)	968	2	524105 212500
	Authority: Permit Reference: Dated:	Environment Agency, Thames Region AE5209 31st March 1991				
	Process Type: Description:	Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Authorisation under RSA				
	Status: Positional Accuracy:	Authorisation superseded by a substantial or non substantial variation Unknown				
	Registered Radioac	tive Substances				
16	Name: Location:	Roche Products Ltd P O Box 8, 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY	A9SW (SE)	971	2	524100 212495
	Authority: Permit Reference: Dated:	Environment Agency, Thames Region AM8628 18th July 1994				
	Process Type: Description:	Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Substantial variation to authorisation under RSA				
	Status: Positional Accuracy:	Authorisation superseded by a substantial or non substantial variation Unknown				
	Registered Radioac	tive Substances				
16	Name: Location:	Roche Products Ltd P O Box 8, 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY	A9SW (SE)	973	2	524105 212495
	Authority: Permit Reference: Dated:	Environment Agency, Thames Region AA5762 29th June 1992				
	Process Type: Description:	Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Substantial variation to authorisation under RSA				
	Status: Positional Accuracy:	Authorisation superseded by a substantial or non substantial variation				
	Registered Radioac	tive Substances				
16	Name: Location:	Roche Products Ltd P O Box 8, 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY	A9SW (SE)	975	2	524100 212490
	Authority: Permit Reference: Dated:	Environment Agency, Thames Region BB8729 28th October 1998				
	Process Type:	Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7)				
	Description: Status: Positional Accuracy:	Substantial variation to authorisation under RSA Authorisation superseded by a substantial or non substantial variation				
	Water Abstractions					
17	Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3):	Rank Xerox Ltd 29/38/02/0074 Not Supplied Bessemer Road Environment Agency, Thames Region Industrial Processing (Miscellaneous) Not Supplied Groundwater 2991	A14NW (E)	474	2	524200 213400
	Yearly Rate (m3): Details: Authorised Start: Authorised End: Permit Start Date: Permit End Date:	0 Chalk (Undifferentiated); Status: Revoked; Lapsed Or Cancelled Not Supplied Not Supplied Not Supplied Not Supplied Located by supplier to within 100m				

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
18	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Welwyn Garden City Golf Club Ltd 29/38/01/0107 1 Welwyn Garden City Gc - Borehole Environment Agency, Thames Region Golf Courses: Spray Irrigation - Direct Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Welwyn Garden City Golf Club, Hertfordshire 01 April 31 October 1st January 2009 Not Supplied Located by supplier to within 10m	A12NW (W)	762	2	522720 213430
18	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Welwyn Garden City Golf Club Ltd 29/38/01/0101 1 Welwyn Garden City Gc Borehole Environment Agency, Thames Region Golf Courses: Spray Irrigation - Direct Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Welwyn Garden City Golf Club 01 April 31 October 1st December 2003 Not Supplied Located by supplier to within 10m	A12NW (W)	762	2	522720 213430
18	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Welwyn Garden City Golf Club Ltd 29/38/01/0093 100 Welwyn Garden City Gc Borehole Environment Agency, Thames Region Golf Courses: Spray Irrigation - Direct Water may be abstracted from a single point Groundwater 118 9895 Welwyn Garden City Golf Club 01 April 31 October 16th October 1998 Not Supplied Located by supplier to within 100m	A12NW (W)	762	2	522720 213430
19	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Positional Accuracy:	George Wimpey Uk Limited 29/38/02/0007 102 Broadwater Road, Welwyn Garden City - 2 Boreholes Grouped Environment Agency, Thames Region Chemicals: Process Water Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Broadwater Road, Welwyn Garden City, Herts 01 January 31 December 7th February 2007 Not Supplied Located by supplier to within 100m	A9SW (SE)	918	2	524000 212500

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
19	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Roche Products Limited 29/38/02/0007 101 Broadwater Road, Welwyn Garden City - 2 Boreholes Grouped Environment Agency, Thames Region Chemicals: Process Water Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Broadwater Road, Welwyn Garden City, Herts 01 January 31 December 26th August 2005 Not Supplied Located by supplier to within 100m	A9SW (SE)	918	2	524000 212500
19	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Roche Products Limited 29/38/02/0007 100 Broadwater Road, Welwyn Garden City - 2 Boreholes Grouped Environment Agency, Thames Region Chemicals: Process Water Water may be abstracted from a single point Groundwater 1364 318220 Broadwater Road, Welwyn Garden City, Herts 01 January 31 December 9th August 1996 Not Supplied Located by supplier to within 100m	A9SW (SE)	918	2	524000 212500
19	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Roche Products Ltd 29/38/02/0001 Not Supplied Broadwater Road - No 2 Borehole Environment Agency, Thames Region Cooling Not Supplied Groundwater Not Supplied 340950 Chalk (Undifferentiated); Licence Status: Revoked; Lapsed Or Cancelled Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Located by supplier to within 100m	A9SW (SE)	922	2	524000 212495
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Three Valleys Water Plc 29/38/02/0084 1 Digswell Pumping Station At Point C (6 Boreholes) Environment Agency, Thames Region Public Water Supply: Potable Water Supply - Direct Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Not Supplied 01 January 31 December 1st January 2007 Not Supplied Located by supplier to within 10m	(N)	1836	2	523900 215300

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions					
	Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date:	Three Valleys Water Plc 29/38/02/0073 100 Digswell Pumping Station 'C' Environment Agency, Thames Region Public Water Supply: Potable Water Supply - Direct Water may be abstracted from a single point Groundwater 20457 6196198 Chalk (Undifferentiated) 01 January 31 December 22nd July 1991 Not Supplied Located by supplier to within 10m	(N)	1836	2	523900 215300
	-					
	Water Abstractions Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised Start: Authorised Start: Permit Start Date: Permit End Date: Positional Accuracy:	Finesse Leisure Partnership 29/38/01/0065 101 River Lee-Tributary-Watercress Beds, Lemsford Nature Reserve Environment Agency, Thames Region Amenity: Lake And Pond Throughflow Water may be abstracted from a single point Surface Not Supplied Not Supplied Not Supplied North Lake At Stanborough Park, Wgc 01 January 31 December 19th January 2004 Not Supplied Located by supplier to within 10m	A1SE (SW)	1857	2	522310 211880
	Water Abstractions					
		Affinity Water Limited 29/38/02/0046 102 Digswell Pumping Station - Point 'C' Environment Agency, Thames Region Public Water Supply: Potable Water Supply - Direct Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Not Supplied 01 January 31 December 14th November 2012 Not Supplied Located by supplier to within 10m	(N)	1902	2	523960 215360
	Water Abstractions			4000	0	500000
	Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Positional Accuracy:	Affinity Water Limited 29/38/02/0089 3 Digswell Pumping Station - Point 'C' Environment Agency, Thames Region Public Water Supply: Potable Water Supply - Direct Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Not Supplied O1 April 31 March 14th November 2012 Not Supplied Located by supplier to within 10m	(N)	1902	2	523960 215360

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Licence Number:	Veolia Water Central Limited 29/38/02/0046	(N)	1902	2	523960 215360
	Permit Version: Location: Authority: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date:	101 Digswell Pumping Station - Point 'C' Environment Agency, Thames Region Public Water Supply: Potable Water Supply - Direct Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Not Supplied 01 January 31 December 20th July 2009 Not Supplied				215360
	-	Located by supplier to within 10m				
	-	Veolia Water Central Limited 29/38/02/0089 2 Digswell Pumping Station - Point 'C' Environment Agency, Thames Region Public Water Supply: Potable Water Supply - Direct Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Not Supplied 01 April 31 March 20th July 2009 Not Supplied Located by supplier to within 10m	(N)	1902	2	523960 215360
	Water Abstractions Operator: Licence Number: Permit Version:	Three Valleys Water Plc 29/38/02/0089 1	(N)	1902	2	523960 215360
	Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Permit End Date: Positional Accuracy:	Digswell Pumping Station - Point 'C' Environment Agency, Thames Region Public Water Supply: Potable Water Supply - Direct Water may be abstracted from a single point Groundwater Not Supplied Not Supplied Not Supplied 01 April 31 March 20th May 2008 Not Supplied Located by supplier to within 10m				
	Water Abstractions					
	Operator: Licence Number: Permit Version: Location: Authority: Abstraction: Abstraction Type: Source: Daily Rate (m3): Yearly Rate (m3): Details: Authorised Start: Authorised Start: Authorised End: Permit Start Date: Positional Accuracy:	Three Valleys Water PIc 29/38/02/0046 100 Digswell Pumping Station - Point 'C' Environment Agency, Thames Region Public Water Supply: Potable Water Supply - Direct Water may be abstracted from a single point Groundwater 11365 Not Supplied Annual Abstraction Total Aggregated To Another Licence For Quantity Purposes. Chalk (Undifferentiate 01 January 31 December 20th September 1966 Not Supplied Located by supplier to within 10m	(N)	1902	2	523960 215360

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Agency & Hydrological

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
20	Water Industry Act Name: Location: Authority: Permit Reference: Dated: Process Type: Description: Status: Positional Accuracy:	Referrals Allen Coding Systems ALLEN CODING SYSTEMS, 5-6 LITTLE MUNDELLS, 5-6 LITTLE MUNDELLS, WELWYN GARDEN CITY, HERTFORDSHIRE, AL7 1LD Environment Agency, Thames Region CB1338 1st February 2007 Permissions or amendments to discharge under the Water Industry Act 1991 Processes which result in the discharge of Special Category effluents under The Trade Effluents (Prescribed Processes and Substances) Regulations Application cancelled Automatically positioned to the address	A15NW (E)	993	2	524724 213508
20		Allen Coding Machines Ltd ALLEN CODING MACHINES LTD, 5-6 LITTLE MUNDELLS, 5-6 LITTLE MUNDELLS, WELWYN GARDEN CITY, HERTFORDSHIRE, AL7 1LD Environment Agency, Thames Region AF2361 27th April 1992 Permissions or amendments to discharge under the Water Industry Act 1991 Processes which result in the discharge of Special Category effluents under The Trade Effluents (Prescribed Processes and Substances) Regulations Application cancelled Automatically positioned to the address	A15NW (E)	993	2	524724 213508
	Groundwater Vulne Combined Classification: Combined Vulnerability: Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index: Superficial Patchiness: Superficial Thickness: Superficial Recharge:	rability Map Secondary Superficial Aquifer - Medium Vulnerability Medium Productive Bedrock Aquifer, Productive Superficial Aquifer Intermediate Well Connected Fractures <300 mm.year 40-70% <90% 3-10m Low	A13NW (SE)	0	4	523605 213393
	Groundwater Vulne Combined Classification: Combined Vulnerability: Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index: Superficial Patchiness: Superficial Thickness: Superficial Recharge:	rability Map Secondary Superficial Aquifer - Medium Vulnerability Medium Productive Bedrock Aquifer, Productive Superficial Aquifer Intermediate Well Connected Fractures <300 mm/year 40-70% <90% 3-10m Low	A13SW (S)	0	4	523604 213354
	Groundwater Vulne Combined Classification: Combined Vulnerability: Combined Aquifer: Pollutant Speed: Bedrock Flow: Dilution: Baseflow Index: Superficial Patchiness: Superficial Thickness: Superficial Recharge:	Secondary Bedrock Aquifer - Medium Vulnerability Medium Productive Bedrock Aquifer, No Superficial Aquifer Intermediate Well Connected Fractures <300 mm/year 40-70% <90% 3-10m Low	A13NE (N)	0	4	523608 213422
	Classification:	rability - Soluble Rock Risk Very Significant Risk - High Possibility	A13NW (SE)	0	4	523605 213393
	Bedrock Aquifer De Aquifer Designation:	-	A13SW (S)	0	4	523604 213354

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13NW (SE)	0	4	523605 213393
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - Undifferentiated	A13NW (SE)	0	4	523605 213393
21	Source Protection Zones Name: Not Supplied Source: Environment Agency, Head Office Reference: Not Supplied Type: Zone III (Total Catchment): The total area needed to support the discharge from the protected groundwater source.	A13NW (SE)	0	2	523605 213393
	Extreme Flooding from Rivers or Sea without Defences None				
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
22	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 24.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A13NE (E)	183	5	523910 213429
23	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 6.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A13NE (E)	207	5	523933 213426
24	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 19.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A14NW (E)	243	5	523969 213420
25	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 31.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A14NW (E)	262	5	523988 213416
26	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 19.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A14NW (E)	298	5	524023 213412
27	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 20.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A14NW (E)	331	5	524057 213411

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
28	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 46.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A17SE (NW)	462	5	523184 213757
29	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 40.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A17SE (NW)	499	5	523160 213786
30	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 79.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A17SE (NW)	536	5	523133 213811
31	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 88.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A17SE (NW)	612	5	523094 213877
32	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 138.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A17SE (NW)	612	5	523094 213877
33	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 59.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A17SE (NW)	692	5	523019 213919
34	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 134.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A17SE (NW)	692	5	523019 213919
35	OS Water Network Lines Watercourse Form: Lake Watercourse Length: 45.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A12NW (W)	823	5	522712 213696
36	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 186.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A17SW (W)	850	5	522700 213739

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
37	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 9.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A9SW (SE)	860	5	524027 212584
38	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 2.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A9SW (SE)	866	5	524036 212581
39	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 13.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A9SW (SE)	868	5	524039 212580
40	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 7.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A17SW (NW)	872	5	522763 213899
41	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 28.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A17SW (NW)	872	5	522763 213899
42	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 3.6 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A9SW (SE)	877	5	524052 212576
43	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 24.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A9SW (SE)	879	5	524055 212575
44	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 55.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A17SW (NW)	880	5	522773 213925
45	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 90.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A17SW (NW)	880	5	522773 213925

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
46	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 7.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A9SW (SE)	978	5	524110 212492
47	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 9.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A9SW (SE)	983	5	524116 212489
48	OS Water Network Lines Watercourse Form: Inland river Watercourse Length: 8.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A9SW (SE)	989	5	524126 212486

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Waste

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
49	Licence Number: Location: Operator Name: Operator Location: Authority: Site Category: Licence Status: Issued: Last Modified: Expires: Suspended: Revoked: IPPC Reference:	nagement Facilities (Locations) 102412 Bridgefields, Tewin Road, Welwyn Garden City, Hertfordshire, AL7 1RX W G C Metals Ltd Not Supplied Environment Agency - Thames Region, North East Area Vehicle depollution facility Expired 21st February 2011 Not Supplied 6th July 2018 Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Located by supplier to within 10m	A14SE (E)	850	2	524550 213245
50	Licence Number: Location: Operator Name: Operator Location: Authority: Site Category: Licence Status: Issued: Last Modified: Expires: Suspended: Revoked: IPPC Reference:	nagement Facilities (Locations) 80190 Tewin Rd Depot, Tewin Road, Welwyn Garden City, Hertfordshire, AL7 1BD Welwyn Hatfield District Council Not Supplied Environment Agency - Thames Region, North East Area Special Waste Transfer Stations Modified 20th May 1999 1st September 2015 Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Not Supplied Located by supplier to within 10m	A15NW (E)	961	2	524691 213414
	Local Authority Lan Name:	dfill Coverage Hertfordshire County Council - Has supplied landfill data		0	6	523605 213393
	Local Authority Lan Name:	dfill Coverage Welwyn Hatfield Council - Has no landfill data to supply		0	3	523605 213393
51	Registered Landfill Licence Holder: Licence Reference: Site Location: Licence Easting: Licence Northing: Operator Location: Authority: Site Category: Max Input Rate: Waste Source Restrictions: Status: Dated: Preceded By Licence: Superseded By Licence: Positional Accuracy: Boundary Accuracy: Authorised Waste	Polycell Products Ltd 79/078 30 Broadwater Road, Welwyn Garden City, Hertfordshire Not Supplied As Site Address Environment Agency - Thames Region, North East Area Landfill - Soak away Very Small (Less than 10,000 tonnes per year) Waste produced/controlled by licence holder Site exempt from licenceExempt 19th June 1979 Not Given 79/078 Positioned by the supplier	A9NW (SE)	689	2	524084 212808

LANDMARK INFORMATION GROUP*

Waste

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Registered Waste T	ransfer Sites				
52	Licence Holder: Licence Reference: Site Location:	Welwyn Hatfield District Council WML80190 Tewin Road Depot, Tewin Road, WELWYN GARDEN CITY, Hertfordshire,	A14NE (E)	868	2	524598 213418
	Operator Location:	AL7 1BD Council Offices, The Campus, WELWYN GARDEN CITY, Hertfordshire, AL8				
	Authority: Site Category:	6AE Environment Agency - Thames Region, North East Area Transfer				
	Max Input Rate: Waste Source Restrictions:	Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) No known restriction on source of waste				
	Licence Status: Dated:	Operational as far as is knownOperational 20th May 1999				
	Preceded By Licence: Superseded By	Not Given				
	Licence:					
	Boundary Quality:	Positioned by the supplier Good				
	Authorised Waste	Bonded Asbestos Household, Commercial & Industrial Waste (As In S75 Epa 1990) -				
		Comprising Lwra Cat Bii General Scrap Metal Waste				
		Lwra Cat. Bi General Non-Putrescible Waste Maximum Storage In Licence Maximum Waste Permitted By Licence				
	Prohibited Waste	Leather Processing Waste				
		Metal Swarf/Dusts/Particulates Poisonous, Noxious, Polluting Wastes Pulverised Fuel Ash/Vanadium Contaminated Ash				
		Sludge Wastes Special Waste (As In Epa 1990:S62 Of 1996 Regs) Not Otherwise Specified Toxic Metal Slags Waste Not Otherwise Specified				
	Registered Waste T	reatment or Disposal Sites				
53	Licence Holder:	Rank Xerox Ltd	A14SW	403	2	524091
	Licence Reference: Site Location:	82/134 Bessemer Road, WELWYN GARDEN CITY, Hertfordshire, AL7 1HE	(E)			213260
	Operator Location:	PO Box 17 Bessemer Road, WELWYN GARDEN CITY, Hertfordshire, AL7 1HE				
	Authority: Site Category:	Environment Agency - Thames Region, North East Area Transfer - with treatment				
	Max Input Rate: Waste Source Restrictions:	Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) Waste produced/controlled by licence holder				
	Licence Status: Dated:	Site exempt from licenceExempt 24th May 1984				
	Preceded By Licence:	78/042				
	Superseded By Licence:	Not Given				
	Positional Accuracy: Boundary Quality:	Positioned by the supplier Good				
	Authorised Waste	Acids				
		Alkalis Flammable Solvents				
		Industrial Effluent Treatment Sludge Metasilicate Solution				
		Oil/Water Mixtures				
		Toxic/Poisonous Wastes Waste Solvents				
	Prohibited Waste	Water (Contaminated) Polluting Wastes				

LANDMARK INFORMATION GROUP*

Waste

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Registered Waste T	reatment or Disposal Sites				
54	Authority: Site Category: Max Input Rate: Waste Source Restrictions: Licence Status: Dated: Preceded By Licence: Superseded By Licence:	Rank Xerox Ltd 78/042 Bessemer Road, WELWYN GARDEN CITY, Hertfordshire, AL7 1HE As Site Address Environment Agency - Thames Region, North East Area Treatment - Chemical Undefined Waste produced/controlled by licence holder Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled 8th December 1978 Not Given 82/134 Positioned by the supplier Good Acids Alkalis Controlled Wastes N.O.S Cutting.Oil/Water Inflammable Solvents Non Flammable Solvents Non Flammable Solvents Toxic/Poisonous Wastes Waste Solvents	A14SW (E)	403	2	524110 213329
	Environment Agency must give specific authorisation for this waste to be acceptedWaste requires prior approval					
	Registered Waste T	reatment or Disposal Sites				
55	Boundary Quality: Authorised Waste	30 Broadwater Road, Welwyn Garden City, Hertfordshire As Site Address Environment Agency - Thames Region, North East Area Storage Undefined Waste produced/controlled by licence holder Site exempt from licenceExempt 19th June 1979 79/078 Not Given Manually positioned to the road within the address or location Not Supplied Aqueous Effluent Waste	A9SW (SE)	885	2	524200 212650
	-	reatment or Disposal Sites				
56	Licence Holder: Licence Reference: Site Location: Operator Location: Authority: Site Category: Max Input Rate: Waste Source Restrictions: Licence Status: Dated: Preceded By Licence: Superseded By Licence: Positional Accuracy:	British Lead Mills 92/302 Peartree Lane, WELWYN GARDEN CITY, Hertfordshire, AL7 3UB As Site Address Environment Agency - Thames Region, North East Area Scrapyard Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per year) No known restriction on source of waste Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled 1st January 1993 Not Given Not Given Manually positioned to the address or location	A9NE (SE)	889	2	524450 212900
1	Positional Accuracy: Boundary Quality: Authorised Waste Prohibited Waste	Manually positioned to the address or location Not Supplied Scrap Lead Waste N.O.S.				

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Мар

ID.

57

Authority:

Quadrant Estimated Reference Details Distance Contact NGR (Compass From Site Direction) **Registered Waste Treatment or Disposal Sites** Roche Products Ltd 86/203 Licence Holder: A9SW 966 524100 2 Licence Reference: (SE) 212500 40 Broadwater Road, Welwyn Garden City, Hertfordshire Site Location: Operator Location: As Site Address Environment Agency - Thames Region, North East Area Site Category: Storage - Drummed storage Very Small (Less than 10,000 tonnes per year) Waste produced/controlled by licence holder Max Input Rate: Waste Source Restrictions: Licence Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled

	Electrice elater.	License appear cancelled actainer applicable, cancelled called			
I	Dated:	1st June 1986			
	Preceded By	Not Given			
I	Licence:				
l	Superseded By	Not Given			
	Licence:				
I	Positional Accuracy:	Manually positioned to the address or location			
l	Boundary Quality:	Not Supplied			
	Authorised Waste	Solvents - Chlorinated & Unchlor. A			
		Solvents - Chlorinated & Unchlor. B			
	Prohibited Waste	Liable To Cause Environmental Hazards			
		Poisonous, Noxious And Polluting N.O.S			

Waste

Hazardous Substances

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
58	Name: Location: Reference: Type: Status:	cident Hazards Sites (COMAH) National Grid Gas Plc Welwyn Garden City Holder Station, Tewin Road,Welwyn Garden City, Hertfordshire, Al7 1BD Not Supplied Lower Tier Active Manually positioned to the address or location	A14SE (E)	851	7	524534 213184
59	Name: Location: Reference: Type: Status:	cident Hazards Sites (COMAH) Transco Plc Welwyn Garden City Holder Station, Tewin Road, WELWYN GARDEN CITY, Hertfordshire, AL7 1BD 1023635 Lower Tier Active Manually positioned to the address or location	A14SE (E)	916	7	524595 213160
60	Name: Location: Status:	Illations Handling Hazardous Substances (NIHHS) Transco Welwyn Garden City Holder Station (M20), Tewin Road, WELWYN GARDEN CITY, Hertfordshire Not Active Manually positioned to the address or location	A14SE (E)	860	7	524535 213152
61	Name: Location: Authority: Application Ref: Hazardous Substance: Maximum Quantity: Application date: Decision:	s Substance Consents Bg Transco Plc Welwyn Garden Holder Station, Tewin Road, Welwyn Garden City, Herts, AL7 Welwyn Hatfield District Council N6/2000/0752/Hs Liquefied extremely flammable gas (including LPG) and natural gas (whether liquefied or not) 0 31st May 2000 New application granted conditionallyGranted Manually positioned to the address or location	A14SE (E)	861	8	524528 213125

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid					
	Description:	Lambeth Group	A13NW (N)	0	1	523598 213456
	BGS 1:625,000 Solid	l Geology				
	Description:	White Chalk Subgroup	A13NW (SE)	0	1	523605 213393
62	BGS Recorded Mine Site Name: Location: Source: Reference: Type: Status: Operator: Operator: Operator Location: Periodic Type:	Digswell Lodge Farm Chalk Pit Welwyn Garden City, Hertfordshire British Geological Survey, National Geoscience Information Service 168859 Opencast Ceased Unknown Operator Not Supplied Cretaceous	A19SW (NE)	572	1	524046 213950
		White Chalk Subgroup Chalk Located by supplier to within 10m				
63	Periodic Type: Geology: Commodity:	Prai Sites Sherrardspark Wood Chalk Pit Welwyn Garden City, Hertfordshire British Geological Survey, National Geoscience Information Service 168858 Opencast Ceased Unknown Operator Not Supplied Cretaceous White Chalk Subgroup Chalk Located by supplier to within 10m	A12NW (W)	718	1	522764 213438
64	BGS Recorded Mine Site Name: Location: Source: Reference: Type: Status: Operator: Operator Location: Periodic Type: Geology: Commodity: Positional Accuracy:	eral Sites Digswell Chalk Pit Digswell, Welwyn Garden City, Hertfordshire British Geological Survey, National Geoscience Information Service 168905 Opencast Ceased Unknown Operator Not Supplied Cretaceous White Chalk Subgroup Chalk Located by supplier to within 10m	A18NE (N)	908	1	523786 214378
	Coal Mining Affecte	d Areas				
	In an area that might	not be affected by coal mining				
	Man-Made Mining C Easting: Northing: Distance: Quadrant Reference: Quadrant Reference: Bearing Ref: Cavity Type: Commodity: Solid Geology Detail: Superficial Geology Detail:	524000 214000 592 A19 SW NE Chalk Mining-Details Unknown Chalk Chalk Group	A19SW (NE)	592	9	524000 214000
	Natural Cavities Easting: Northing: Distance: Quadrant Reference: Bearing Ref: Cavity Type: Solid Geology Detail: Superficial Geology Detail:	SE SE Sinkhole x 1	A13SE (SE)	176	9	523830 213260

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Northing: 2 Distance: 3 Quadrant Reference: A Quadrant Reference: S Bearing Ref: S Cavity Type: S Solid Geology Detail: C	SE SE Sinkhole x 1	A13SE (SE)	322	9	523890 213120
	Northing: 2 Distance: 3 Quadrant Reference: A Quadrant Reference: S Bearing Ref: S Cavity Type: S Solid Geology Detail: C	SE SE Sinkhole x 1	A13SE (SE)	350	9	523910 213100
	Northing: 2 Distance: 5 Quadrant Reference: A Quadrant Reference: S Bearing Ref: N Cavity Type: S	SE VE Sinkhole x 1 Chalk Group, Lambeth Group	A18SE (NE)	524	9	523860 213980
	Northing: 2 Distance: 6 Quadrant Reference: A Quadrant Reference: N Bearing Ref: S Cavity Type: S Solid Geology Detail: C	VE S Sinkhole x 1	A8NE (S)	604	9	523840 212770
	Northing: 2 Distance: 6 Quadrant Reference: A Quadrant Reference: N Bearing Ref: S Cavity Type: S Solid Geology Detail: C	NE SE Sinkhole x 1	A8NE (SE)	610	9	523900 212800
	Northing: 2 Distance: 6 Quadrant Reference: A Quadrant Reference: N Bearing Ref: N Cavity Type: S Solid Geology Detail: C	W	A18NW (N)	621	9	523530 214070
	Northing: 2 Distance: 6 Quadrant Reference: A Quadrant Reference: S Bearing Ref: S Cavity Type: S Solid Geology Detail: C	SE Solution Pipe	A8SE (S)	650	9	523800 212700

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Northing: 214/ Distance: 656 Quadrant Reference: A19 Quadrant Reference: SW Bearing Ref: NE	9 / ikhole x 1 alk Group	A19SW (NE)	656	9	524060 214040
	Northing: 213- Distance: 681 Quadrant Reference: A12 Quadrant Reference: NW Bearing Ref: W	2 V lution Pipe x 3 alk Group	A12NW (W)	681	9	522800 213400
	Northing: 214 Distance: 694 Quadrant Reference: A18 Quadrant Reference: NW Bearing Ref: N Cavity Type: Sink Solid Geology Detail: Chaves	8	A18NW (N)	694	9	523510 214140
	Northing: 2129 Distance: 747 Quadrant Reference: A9 Quadrant Reference: NE Bearing Ref: SE	ikhole x 1 alk Group	A9NE (SE)	747	9	524320 212960
	Northing: 212' Distance: 785 Quadrant Reference: A7 Quadrant Reference: SE Bearing Ref: SW Cavity Type: Solu Solid Geology Detail: Charles	/ lution Pipe	A7SE (SW)	785	9	523000 212700
	Northing: 2123 Distance: 800 Quadrant Reference: A9 Quadrant Reference: NE Bearing Ref: SE	ikhole x 1 alk Group	A9NE (SE)	800	9	524300 212850
	Northing:212'Distance:843Quadrant Reference:A9Quadrant Reference:NWBearing Ref:SE	V ikhole x 1 alk Group	A9NW (SE)	843	9	524260 212750

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Northing: Distance: Quadrant Reference: Quadrant Reference: Bearing Ref: Cavity Type: Solid Geology Detail:	SW SW Sinkhole x 1	A7SW (SW)	853	9	522900 212700
	Northing: Distance: Quadrant Reference: Quadrant Reference: Bearing Ref: Cavity Type: Solid Geology Detail:	SW SE Sinkhole x 1	A9SW (SE)	900	9	524240 212660
	Northing: Distance: Quadrant Reference: Quadrant Reference: Bearing Ref: Cavity Type: Solid Geology Detail:	SE SW Sinkhole x 1	A7SE (SW)	924	9	523010 212520
	Northing: Distance: Quadrant Reference: Quadrant Reference: Bearing Ref: Cavity Type: Solid Geology Detail:	SW SE Sinkhole x 1	A9SW (SE)	941	9	524210 212590
	Northing: Distance: Quadrant Reference: Quadrant Reference: Bearing Ref: Cavity Type: Solid Geology Detail:	SW E Sinkhole x 1	A15SW (E)	944	9	524660 213300
	Northing: Distance: Quadrant Reference: Quadrant Reference: Bearing Ref: Cavity Type: Solid Geology Detail:	SW E Sinkhole x 1	A15SW (E)	950	9	524630 213160
	Northing: Distance: Quadrant Reference: Quadrant Reference: Bearing Ref: Cavity Type: Solid Geology Detail:	SW SE Sinkhole x 1	A9SW (SE)	972	9	524280 212600

Geological

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Natural Cavities Easting: 523770 Northing: 214460 Distance: 989 Quadrant Reference: A23 Quadrant Reference: SE Bearing Ref: N Cavity Type: Sinkhole x 1 Solid Geology Detail: Chalk Group Superficial Geology Glacial Sand & Gravel	A23SE (N)	989	9	523770 214460
	Detail: Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service	A13NW (SE)	0	1	523605 213393
	Non Coal Mining Areas of Great Britain Risk: Rare Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	0	1	523604 213354
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service Potential for Compressible Ground Stability Hazards	A13NW (SE)	0	1	523605 213393
	Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (SE)	0	1	523605 213393
	Potential for Ground Dissolution Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	0	1	523617 213329
	Potential for Ground Dissolution Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NW (SE)	0	1	523605 213393
	Potential for Ground Dissolution Stability Hazards Hazard Potential: High Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	0	1	523604 213354
	Potential for Ground Dissolution Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	44	1	523632 213275
	Potential for Ground Dissolution Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	53	1	523552 213230
	Potential for Ground Dissolution Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	158	1	523339 213328
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	183	1	523596 213634
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (SE)	0	1	523605 213393
	Potential for Landslide Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	202	1	523358 213563
	Potential for Landslide Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	222	1	523909 213605
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (SE)	0	1	523605 213393
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	202	1	523358 213563
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	222	1	523909 213605
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	0	1	523604 213354

Geological

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Shrink	ing or Swelling Clay Ground Stability Hazards				
	Hazard Potential: Source:	Moderate British Geological Survey, National Geoscience Information Service	A13NW (SE)	0	1	523605 213393
	Potential for Shrink	Potential for Shrinking or Swelling Clay Ground Stability Hazards				
	Hazard Potential: Source:	No Hazard British Geological Survey, National Geoscience Information Service	A13NW (NW)	202	1	523358 213563
	Potential for Shrink	ing or Swelling Clay Ground Stability Hazards				
	Hazard Potential: Source:	No Hazard British Geological Survey, National Geoscience Information Service	A13NE (NE)	222	1	523909 213605
	Radon Potential - R	adon Affected Areas				
	Affected Area: Source:	The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). British Geological Survey, National Geoscience Information Service	A13NW (SE)	0	1	523605 213393
	Radon Potential - R	adon Protection Measures				
	Protection Measure: Source:	No radon protective measures are necessary in the construction of new dwellings or extensions British Geological Survey, National Geoscience Information Service	A13NW (SE)	0	1	523605 213393

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR	
	Contemporary Trad	e Directory Entries					
65	Name: Location: Classification: Status: Positional Accuracy:	Done & Dusted 8, Densley Close, Welwyn Garden City, Hertfordshire, AL8 7JX Cleaning Services - Domestic Inactive Automatically positioned to the address	A13NW (NW)	73	-	523522 213495	
66	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries I B M (Uk) Ltd Rosanne House, Bridge Road, Welwyn Garden City, Hertfordshire, AL8 6UB Computer Manufacturers Inactive Automatically positioned to the address	A13SW (S)	88	-	523601 213228	
67	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Alpha Air Conditioning Uk Ltd 61, Blakemere Road, Welwyn Garden City, Hertfordshire, AL8 7PQ Air Conditioning & Refrigeration Contractors Active Automatically positioned to the address	A13NE (NE)	296	-	523906 213711	
	Contemporary Trad	e Directory Entries					
68	Name: Location: Classification: Status:	United Carpet Cleaning Masters 9, Howardsgate, Welwyn Garden City, Hertfordshire, AL8 6AW Carpet, Curtain & Upholstery Cleaners Inactive Automatically positioned to the address	A8NE (S)	296	-	523685 213037	
	Contemporary Trad	e Directory Entries					
68	Name: Location: Classification: Status:	Mixamate Holdings Ltd Telephone Exchange, Wigmores, Welwyn Garden City, Hertfordshire, AL8 6PH Concrete & Mortar Ready Mixed Inactive	A13SE (S)	306	-	523723 213047	
	-	Automatically positioned to the address					
69	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries R & R Cleaning Services 8, Brockswood Lane, Welwyn Garden City, Hertfordshire, AL8 7BG Commercial Cleaning Services Active Automatically positioned to the address	A12SE (W)	355	-	523152 213260	
	Contemporary Trad						
70	Name: Location: Classification: Status:	Sketchley Retail Ltd 30, Stonehills, Welwyn Garden City, Hertfordshire, AL8 6PD Dry Cleaners Inactive Automatically positioned to the address	A8NE (SE)	377	-	523813 213018	
	Contemporary Trad	e Directory Entries					
70	Name: Location: Classification: Status: Positional Accuracy:	Supasnaps 30 Stonehills, Welwyn Garden City, Hertfordshire, AL8 6PD Photographic Processors Inactive Manually positioned to the address or location	A8NE (SE)	377	-	523812 213018	
	Contemporary Trad	e Directory Entries					
70	Name: Location: Classification: Status: Positional Accuracy:	London Boys Scrap Yards In Welwyn Garden City 39b, Howardsgate, Welwyn Garden City, Hertfordshire, AL8 6AP Car Breakers & Dismantlers Inactive Automatically positioned to the address	A8NE (SE)	384	-	523780 212992	
	Contemporary Trad	e Directory Entries					
70	Name: Location: Classification: Status: Positional Accuracy:	Scrap Car Now Today Cash Welwyn Garden City Howardsgate, Welwyn Garden City, Hertfordshire, al8 6ap Car Breakers & Dismantlers Inactive Manually positioned within the geographical locality	A8NE (SE)	396	-	523792 212987	
	Contemporary Trade Directory Entries						
70	Name: Location: Classification: Status:	Advanced Diagnostic Systems Ltd 19/21, Stonehills House, Stonehills, Welwyn Garden City, Hertfordshire, AL8 6NL Scientific Apparatus & Instruments - Manufacturers Inactive	A8NE (SE)	408	-	523848 212998	
	Positional Accuracy:	Manually positioned to the address or location					

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
70	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Amalgamated Chartered Surveyors 51,Stonehills House,Stonehills, Welwyn Garden City, Hertfordshire, AL8 6NH Commercial Cleaning Services Inactive Manually positioned to the address or location	A8NE (SE)	408	-	523848 212998
71	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Snappy Snaps 59, Howardsgate, Welwyn Garden City, Hertfordshire, AL8 6BB Photographic Processors Inactive Automatically positioned to the address	A8NE (SE)	438	-	523864 212972
72	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Welwyn Garden City Ltd Churchfield House,Guessens Road, Welwyn Garden City, Hertfordshire, AL8 6RJ Car Body Repairs Inactive Automatically positioned to the address	A8NW (S)	482	-	523451 212817
73	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Mr Mop Office Cleaning Services 74, Handside Lane, Welwyn Garden City, Hertfordshire, AL8 6SJ Commercial Cleaning Services Active Automatically positioned to the address	A7NE (SW)	495	-	523211 212902
73	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries All Clear Pest Control 69, Handside Lane, Welwyn Garden City, Hertfordshire, AL8 6SH Pest & Vermin Control Inactive Automatically positioned to the address	A7NE (SW)	513	-	523235 212864
73	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Acorn French Polishing 69, Handside Lane, WELWYN GARDEN CITY, Hertfordshire, AL8 6SH French Polishing Active Automatically positioned to the address	A7NE (SW)	513	-	523235 212864
73	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Acorn French Polishing 69, Handside Lane, Welwyn Garden City, Hertfordshire, AL8 6SH Paint & Varnish Stripping Inactive Automatically positioned to the address	A7NE (SW)	513	-	523235 212864
74	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Photo Imaging Centre 44, Fretherne Road, Welwyn Garden City, Hertfordshire, AL8 6NU Photographic Processors Inactive Automatically positioned to the address	A8NE (S)	496	-	523775 212859
74	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Cypress Semiconductor Gate House, Fretherne Road, Welwyn Garden City, Hertfordshire, AL8 6RD Electronic Component Manufacturers & Distributors Inactive Automatically positioned to the address	A8NE (S)	505	-	523821 212873
74	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Johnsons Cleaners 43, Fretherne Road, Welwyn Garden City, AL8 6NS Dry Cleaners Active Automatically positioned to the address	A8NE (S)	520	-	523811 212851
75	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Shopmobility Unit 53a, The Howard Centre, Howardsgate, Welwyn Garden City, Hertfordshire, AL8 6HA Disability Equipment - Manufacturers & Suppliers Inactive Automatically positioned to the address	A8NE (SE)	500	-	523898 212920

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Contemporary Trad	e Directory Entries				
75	Name: Location: Classification: Status:	The Curtain Co Unit 45, The Howard Centre, Howardsgate, Welwyn Garden City, Hertfordshire, AL8 6HA Blinds, Awnings & Canopies Inactive	A8NE (SE)	500	-	523898 212920
	Positional Accuracy:	Automatically positioned to the address				
	Contemporary Trad	e Directory Entries				
75	Name: Location: Classification:	Bonusprint Unit 30, The Howard Centre, Howardsgate, Welwyn Garden City, Hertfordshire, AL8 6HA Photographic Processors	A8NE (SE)	500	-	523898 212920
	Status: Positional Accuracy:	Inactive Automatically positioned to the address				
	Contemporary Trad					
75	Name: Location: Classification: Status:	Kall Kwik 36b, Howardsgate, Welwyn Garden City, Hertfordshire, AL8 6BJ Printers Active Automatically positioned to the address	A8NE (SE)	500	-	523898 212920
	Contemporary Trad					
75	Name: Location: Classification: Status:	Shopmobility Unit 53A, The Howard Centre, Howardsgate, Welwyn Garden City, Hertfordshire, AL8 6HA Disability Equipment - Manufacturers & Suppliers Inactive Automatically positioned to the address	A8NE (SE)	500	-	523898 212920
	Contemporary Trad	e Directory Entries				
75	Name: Location: Classification: Status:	Prontaprint 18, Howardsgate, Welwyn Garden City, Hertfordshire, AL8 6BQ Copying & Duplicating Services Inactive	A8NE (SE)	500	-	523898 212920
	-	Automatically positioned to the address				
75	Contemporary Trad Name: Location: Classification:	Sovereign Bus & Coach Co Welwyn Garden City Bus Station,Howard Centre, Welwyn Garden City, Hertfordshire, AL8 6ER Bus & Coach Operators & Stations	A8NE (SE)	500	-	523898 212920
	Status: Positional Accuracy:	Inactive Manually positioned to the address or location				
	Contemporary Trad					
76	Name: Location: Classification: Status:	Funnybones Centra Park, Bessemer Road, Welwyn Garden City, Hertfordshire, AL7 1HW Distribution Services Inactive Automatically positioned to the address	A14SW (E)	518	-	524228 213326
	Contemporary Trad	e Directory Entries				
76	Name: Location: Classification: Status: Positional Accuracy:	Grace Foods Centra Park, Bessemer Road, Welwyn Garden City, AL7 1HW Distribution Services Inactive Automatically positioned to the address	A14SW (E)	518	-	524228 213326
	Contemporary Trad					
76	Name: Location: Classification: Status:	Grace Foods Centra Park,Bessemer Road, Welwyn Garden City, Hertfordshire, AL7 1HW Distribution Services Inactive	A14SW (E)	518	-	524228 213326
	-	Automatically positioned to the address				
76	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Luvata Welwyn Garden Centrapark, Bessemer Road, Welwyn Garden City, Hertfordshire, AL7 1HT Brass & Copper Manufacturers & Suppliers Inactive Automatically positioned to the address	A14SW (E)	518	-	524228 213326
	Contemporary Trad	e Directory Entries				
77	Name: Location: Classification: Status:	Hexacath (Uk) Ltd 7, Church Road, Welwyn Garden City, Hertfordshire, AL8 6NT Medical Equipment Manufacturers Inactive Automatically positioned to the address	A8NE (S)	558	-	523714 212767

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
77	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Tristar Motor Group Plc 7, Church Road, Welwyn Garden City, Hertfordshire, AL8 6NT Car Dealers Inactive Automatically positioned to the address	A8NE (S)	558	-	523714 212767
78	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Pakex Uk Plc Unit 1, Prime Point, Bessemer Road, Welwyn Garden City, AL7 1FE Polythene & Plastic Sheeting Supplies Active Automatically positioned to the address	A14SW (E)	564	-	524255 213249
78	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Howdens Joinery Unit 1, Prime Point, Bessemer Road, Welwyn Garden City, AL7 1FE Joinery Manufacturers Inactive Automatically positioned to the address	A14SW (E)	564	-	524255 213249
78	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Howdens Ltd Unit 1, Prime Point, Bessemer Road, Welwyn Garden City, Hertfordshire, AL7 1FE Builders' Merchants Inactive Automatically positioned to the address	A14SW (E)	565	-	524255 213245
79	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Travis Perkins Plc Unit 9 Bessemer Road Business Park,Bessemer Road, Welwyn Garden City, Hertfordshire, AL7 1GF Builders' Merchants Active Automatically positioned to the address	A14SW (SE)	569	-	524219 213139
80	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries K J Taplin 79, Guessens Road, Welwyn Garden City, Hertfordshire, AL8 6RE Car Engine Tuning & Diagnostic Services Inactive Automatically positioned to the address	A8NW (S)	569	-	523392 212740
81	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Lafarge Aggregates Ltd Unit 4, Shires Park, Falcon Way, Welwyn Garden City, Hertfordshire, AL7 1TW Sand, Gravel & Other Aggregates Inactive Automatically positioned to the address	A14NW (E)	569	-	524267 213664
81	Contemporary Trad Name: Location: Classification: Status:		A14NW (E)	569	-	524267 213664
82	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Print Resources 58, Brockswood Lane, WELWYN GARDEN CITY, Hertfordshire, AL8 7BG Printers Active Automatically positioned to the address	A12SW (W)	607	-	522878 213338
83	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Impex Freight Unit 2, Falcon Gate, Falcon Way, Shire Park, Welwyn Garden City, AL7 1TW Freight Forwarders Active Automatically positioned to the address	A14NE (E)	611	-	524335 213566
84	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Heritage & Archive The Vineyard, Welwyn Garden City, Hertfordshire, AL8 7PU Photo & Digital Imaging Bureaus Inactive Manually positioned to the road within the address or location	A19SW (NE)	636	-	524051 214022

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR	
	Contemporary Trad	e Directory Entries					
85	Name: Location: Classification: Status: Positional Accuracy:	Wickes 1, Bessemer Road, Welwyn Garden City, AL7 1GF Builders' Merchants Active Manually positioned to the address or location	A14SW (SE)	644	-	524279 213092	
	Contemporary Trad						
86	Name: Location: Classification: Status:	Webuyanyelectronics.Com 137, Guessens Road, WELWYN GARDEN CITY, Hertfordshire, AL8 6RR Electrical Goods Sales, Manufacturers & Wholesalers Inactive Automatically positioned to the address	A7NE (SW)	648	-	523181 212738	
	Contemporary Trad	e Directory Entries					
87	Name: Location: Classification: Status:	Barco Sales Ltd Unit 15d, Bessemer Road, Welwyn Garden City, Hertfordshire, AL7 1HU Distribution Services Active Automatically positioned to the address	A14SE (E)	648	-	524334 213219	
	Contemporary Trad	e Directory Entries					
88	Name: Location: Classification: Status: Positional Accuracy:	S A S Machine Co Ltd Orion House, Bessemer Road, Welwyn Garden City, Hertfordshire, AL7 1HH Machinery - Industrial & Commercial Active Automatically positioned to the address	A14NE (E)	652	-	524383 213451	
	Contemporary Trad	e Directory Entries					
89	Name: Location: Classification: Status: Positional Accuracy:	Cereal Partners 2 Albany Place, 28, Bridge Road East, Welwyn Garden City, AL7 1RR Food Products - Manufacturers Active Automatically positioned to the address	A9NW (SE)	652	-	524207 212968	
	Contemporary Trad						
90	Name: Location: Classification: Status:	Grace Foods Uk Ltd Centra Park, Bessemer Road, Welwyn Garden City, Hertfordshire, AL7 1HT Frozen Food Processors & Distributors Inactive Automatically positioned to the address	A14SE (E)	660	-	524363 213280	
	Contemporary Trad						
90	Name: Location: Classification: Status:	Enco Products Ltd Centra Park, Bessemer Road, Welwyn Garden City, Hertfordshire, AL7 1HT Distribution Services Inactive Automatically positioned to the address	A14SE (E)	660	-	524363 213280	
	Contemporary Trad	e Directory Entries					
91	Name: Location: Classification: Status: Positional Accuracy:	A & M Services 63, Pentley Park, Welwyn Garden City, Hertfordshire, AL8 7SF Domestic Appliances - Servicing, Repairs & Parts Inactive Automatically positioned to the address	A18NW (N)	682	-	523545 214135	
	Contemporary Trad	e Directory Entries					
92	Name: Location: Classification: Status: Positional Accuracy:	Clinical Hypnosis 28, The Cloisters, Welwyn Garden City, Hertfordshire, AL8 6DX Engineers - General Inactive Automatically positioned to the address	A8SW (S)	687	-	523554 212607	
	Contemporary Trad						
93	Name: Location: Classification: Status:	Inspace Mechanical & Electrical 43, Longcroft Lane, Welwyn Garden City, Hertfordshire, AL8 6EB Air Conditioning & Refrigeration Contractors Active Automatically positioned to the address	A8SE (S)	754	-	523733 212567	
	Contemporary Trade Directory Entries						
94	Name: Location: Classification:	Pc Disposals Bessemer House, Bessemer Road, Welwyn Garden City, Hertfordshire, AL7 1HJ Waste Disposal Services	A14SE (E)	757	-	524407 213097	
	Status: Positional Accuracy:	Inactive Automatically positioned to the address					

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR			
	Contemporary Trade Directory Entries								
95	Name: Location: Classification: Status: Positional Accuracy:	Welwyn Lighting Designs Ltd Aquarius House, Bessemer Road, Welwyn Garden City, AL7 1HH Lighting Manufacturers Inactive Automatically positioned to the address	A14SE (E)	767	-	524455 213212			
96	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Kwik Fit Unit A, Bridge Park, 27, Bridge Road East, Welwyn Garden City, AL7 1JE Tyre Dealers Active Automatically positioned to the address	A9NE (SE)	784	-	524407 213034			
96	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Kwik-Fit Unit A, Bridge Park, 27, Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1JE Tyre Dealers Inactive Automatically positioned to the address	A9NE (SE)	784	-	524407 213034			
96	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Halfords Autocentre Unit B, Bridge Park, 27, Bridge Road East, Welwyn Garden City, AL7 1JE Garage Services Active Automatically positioned to the address	A9NE (SE)	802	-	524423 213025			
97	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Moorlands Motor Company 17 Broadwater Rd, Welwyn Garden City, Hertfordshire, AL7 3BQ Car Dealers - Used Inactive Manually positioned to the road within the address or location	A9NW (SE)	807	-	524236 212777			
97	Contemporary Trad Name: Location: Classification: Status: Pacifianal Accuracy:	e Directory Entries Supertyres 13-15 Broadwater Rd, Welwyn Garden City, Hertfordshire, AL7 3BQ Mot Testing Centres Inactive Manually positioned to the address or location	A9NW (SE)	814	-	524280 212808			
	,								
97	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Super Tyres Motorist Centre 17, Broadwater Road, Welwyn Garden City, Hertfordshire, AL7 3BQ Tyre Dealers Inactive Automatically positioned to the address	A9NW (SE)	839	-	524272 212766			
97	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Supertyres Mot Ltd 17, Broadwater Road, Welwyn Garden City, Hertfordshire, AL7 3BQ Mot Testing Centres Inactive Automatically positioned to the address	A9NW (SE)	839	-	524272 212766			
	Contemporary Trad	e Directory Entries							
97	Name: Location: Classification: Status: Positional Accuracy:	Adams Autocare Unit 10 Broad Court,Broadwater Road, Welwyn Garden City, Hertfordshire, AL7 3BQ Garage Services Active Manually positioned within the geographical locality	A9NW (SE)	843	-	524258 212748			
<u> </u>	Contemporary Trad	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
97	Name: Location: Classification: Status:	Pod Drinks Plc 21a, Broadwater Road, Welwyn Garden City, AL7 3BQ Vending Machine Manufacturers Inactive Automatically positioned to the address	A9NW (SE)	859	-	524261 212730			
98	Contemporary Trad Name: Location: Classification: Status:	• •	A9NE (SE)	814	-	524351 212890			

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
98	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Continental Data Graphics Ltd Albany Place, Hyde Way, Welwyn Garden City, AL7 3BT Engineers - General Inactive Automatically positioned to the address	A9NE (SE)	814	-	524351 212890
98	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Cephalon Albany Place, Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3BT Pharmaceutical Manufacturers & Distributors Inactive Automatically positioned to the address	A9NE (SE)	814	-	524352 212890
99	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Tracy'S French Polishing 26, Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1HL French Polishing Inactive Automatically positioned to the address	A9NE (SE)	822	-	524408 212958
99	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Scrap Cars Vans Caravans Buyer 26, Bridge Road East, Welwyn Garden City, AL7 1HL Car Breakers & Dismantlers Inactive Automatically positioned to the address	A9NE (SE)	824	-	524406 212952
99	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Alan Tracy Ltd 26, Bridge Road East, Welwyn Garden City, AL7 1HL French Polishing Active Automatically positioned to the address	A9NE (SE)	824	-	524406 212952
99	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Uk Pest Solutions Ltd Albany Chambers,26 Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1HL Fumigation Services Active Automatically positioned to the address	A9NE (SE)	824	-	524406 212952
99	Contemporary Trad Name: Location: Classification: Status:		A9NE (SE)	826	-	524413 212957
99	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Atford 26, Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1HL Engine Manufacturers & Distributors Inactive Automatically positioned to the address	A9NE (SE)	826	-	524413 212957
100	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Just Tyres Unit E-F, Bridge Park, 27, Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1JE Tyre Dealers Inactive Automatically positioned in the proximity of the address	A9NE (SE)	826	-	524446 213017
100	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries National Tyres & Autocare Unit 2c Bridge Park,27 Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1JE Tyre Dealers Active Automatically positioned to the address	A9NE (SE)	830	-	524446 213010
100	Contemporary Trad Name: Location: Classification: Status:		A9NE (SE)	867	-	524477 212988

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
100	Contemporary Trade Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Babyland Unit 6, Tewin Road Business Centre, Garden Court, Welwyn Garden City, Hertfordshire, AL7 1BH Children & Babywear - Manufacturers & Wholesalers Inactive Automatically positioned to the address	A9NE (SE)	868	-	524478 212988
100	Contemporary Trade Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Village Electrics Unit 6, Tewin Road Business Centre, Garden Court, Welwyn Garden City, Hertfordshire, AL7 1BH Electrical Engineers Inactive Automatically positioned to the address	A9NE (SE)	868	-	524478 212988
100	Contemporary Trade Name: Location: Classification: Status:		A9NE (SE)	874	-	524499 213016
100	Contemporary Trade Name: Location: Classification: Status:	e Directory Entries Auto Wiz Unit 4, Tewin Road Business Centre, Garden Court, Welwyn Garden City, Hertfordshire, AL7 1BH Car Body Repairs Active	A9NE (SE)	885	-	524493 212979
100	Contemporary Trade Name: Location: Classification: Status:	Masterfit Auto Services & Repairs Unit 3, Tewin Road Business Centre, Garden Court, Welwyn Garden City, AL7 1BH Tyre Repairs & Retreading Active	A9NE (SE)	896	-	524502 212973
100	Contemporary Trade Name: Location: Classification: Status:	Automatically positioned to the address e Directory Entries Esso Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1LE Petrol Filling Stations - 24 Hour Active Manually positioned to the address or location	A9NE (SE)	904	-	524502 212956
100	Contemporary Trade Name: Location: Classification: Status:	e Directory Entries Mark Tempest Autocentre Ltd Unit 1-2, Tewin Road Business Centre, Garden Court, Welwyn Garden City, AL7 1BH Garage Services Active	A9NE (SE)	913	-	524517 212965
101	Contemporary Trade Name: Location: Classification: Status:	Automatically positioned to the address e Directory Entries E C Motors Broadwater Rd, Welwyn Garden City, Hertfordshire, AL7 3BQ Garage Services Inactive Manually positioned to the road within the address or location	A9NW (SE)	829	-	524225 212738
102	Contemporary Trade Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries John Grundy Motoring Services 1, Pippens, Welwyn Garden City, Hertfordshire, AL8 7AB Garage Services Active Automatically positioned to the address	A19NW (NE)	845	-	524132 214216
103	Contemporary Trade Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Auto Gallery 1, Greenfield, Welwyn Garden City, Hertfordshire, AL8 7HW Car Dealers Inactive Automatically positioned to the address	A19NW (N)	867	-	523945 214313
104	Contemporary Trade Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Lemsford Metal Products 1982 Ltd 24, Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3UQ Sheet Metal Work Active Automatically positioned to the address	A9NE (SE)	869	-	524322 212773

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
104	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Cleamax Engineering Ltd 24, Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3UQ Machinery - Industrial & Commercial Active Automatically positioned to the address	A9NE (SE)	869	-	524322 212773
104	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries F R E S C H 26-28, Hyde Way, Welwyn Garden City, AL7 3UQ Recycling Services Inactive Automatically positioned to the address	A9NE (SE)	905	-	524370 212770
105	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Cleaners Welwyn Garden City 82, Longcroft Lane, Welwyn Garden City, Hertfordshire, AL8 6EJ Carpet, Curtain & Upholstery Cleaners Inactive Automatically positioned to the address	A8SE (S)	873	-	523647 212428
106	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries L J Whiteman & Son 27a, Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3UQ Garage Services Inactive Automatically positioned to the address	A9NE (SE)	878	-	524407 212858
106	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries L J Whiteman & Son Welwyn Test Centre 27a, Hyde Way, Welwyn Garden City, AL7 3UQ Mot Testing Centres Active Automatically positioned to the address	A9NE (SE)	878	-	524407 212858
106	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Imedco 27, Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3UQ Medical Equipment Manufacturers Active Automatically positioned to the address	A9NE (SE)	891	-	524406 212835
106	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Imedco Ltd 27, Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3UQ Medical Equipment Manufacturers Inactive Automatically positioned to the address	A9NE (SE)	891	-	524406 212835
106	Contemporary Trad Name: Location: Classification: Status:		A9NE (SE)	905	-	524410 212817
107	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Ats Euromaster Ltd 17, Tewin Road, WELWYN GARDEN CITY, Hertfordshire, AL7 1BD Tyre Dealers Active Automatically positioned to the address	A14SE (E)	879	-	524528 213072
107	Contemporary Trad Name: Location: Classification: Status:		A14SE (E)	879	-	524528 213072
107	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Duo Cars Tewin Road, Welwyn Garden City, Hertfordshire, AL7 1BD Car Dealers - Used Inactive Automatically positioned to the address	A14SE (E)	899	-	524554 213084
107	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries Welwyn Car Centre Tewin Rd, Welwyn Garden City, Hertfordshire, AL7 1BD Car Dealers - Used Inactive Manually positioned to the road within the address or location	A14SE (E)	919	-	524568 213064

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Contemporary Trad	e Directory Entries				
108	Name: Location: Classification: Status: Positional Accuracy:	Essen Bioscience Ltd Bio-Park, Broadwater Road, Welwyn Garden City, AL7 3AX Laboratory Equipment, Instruments & Supplies Inactive Automatically positioned to the address	A9SW (S)	882	-	523949 212514
	Contemporary Trad					
108	Name: Location: Classification: Status:	Biopark Hertfordshire Broadwater Road, Welwyn Garden City, Hertfordshire, AL7 3AX Laboratories Inactive Automatically positioned to the address	A9SW (S)	896	-	523946 212497
	Contemporary Trad	e Directory Entries				
108	Name: Location: Classification: Status:	Biopark Broadwater Road, Welwyn Garden City, Hertfordshire, AL7 3AX Laboratories Active Automatically positioned to the address	A9SW (S)	896	-	523946 212497
	Contemporary Trad	e Directory Entries				
108	Name: Location: Classification: Status: Positional Accuracy:	Temag Pharma Ltd Broadwater Road, Welwyn Garden City, Hertfordshire, AL7 3AX Pharmaceutical Manufacturers & Distributors Inactive Automatically positioned to the address	A9SW (S)	896	-	523946 212497
	Contemporary Trad	e Directory Entries				
108	Name: Location:	C N Bio Innovations Bio-Park, Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AX	A9SW (S)	896	-	523946 212497
	Classification: Status: Positional Accuracy:	Scientific Apparatus & Instruments - Manufacturers Inactive Automatically positioned to the address				
	Contemporary Trad	e Directory Entries				
109	Name: Location: Classification: Status: Positional Accuracy:	Bounty 29, Broadwater Road, Welwyn Garden City, AL7 3BQ Distribution Services Active Automatically positioned to the address	A9SW (SE)	888	-	524243 212678
	Contemporary Trad					
109	Name: Location: Classification: Status:	Ecri Institute Europe 29, Broadwater Road, Welwyn Garden City, AL7 3BQ Medical Equipment Manufacturers Active Automatically positioned to the address	A9SW (SE)	899	-	524248 212667
	Contemporary Trad	e Directory Entries				
110	Name: Location: Classification: Status: Positional Accuracy:	British Lead Mills Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UB Metal Industries - Primary Inactive Automatically positioned to the address	A9NE (SE)	890	-	524458 212910
	Contemporary Trad	e Directory Entries				
111	Name: Location: Classification: Status:	Roche Products Ltd 40 Broadwater Rd, Welwyn Garden City, Hertfordshire, AL7 3AY Pharmaceutical Manufacturers & Distributors Inactive Automatically positioned to the address	A9SW (SE)	892	-	524110 212588
	Contemporary Trad	e Directory Entries				
112	Name: Location: Classification: Status:	Supertyres Motorists Centre Ltd 23a, Broadwater Road, Welwyn Garden City, AL7 3BQ Tyre Dealers Active Automatically positioned to the address	A9SE (SE)	905	-	524298 212701
	Contemporary Trad	e Directory Entries				
112	Name: Location: Classification: Status:	Ridge Engineering Co Ltd 23a Broadwater Rd, Welwyn Garden City, Hertfordshire, AL7 3AU Electrical Engineers Inactive Manually positioned to the address or location	A9SE (SE)	905	-	524298 212700

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Contemporary Trad	e Directory Entries				
112	Name: Location: Classification: Status:	Supertyres Motorists Centre Newton House, 23a, Broadwater Road, Welwyn Garden City, Hertfordshire, AL7 3BQ Tyre Dealers Inactive	A9SE (SE)	905	-	524298 212701
	Positional Accuracy:	Automatically positioned to the address				
113	Contemporary Trad Name: Location: Classification: Status: Positional Accuracy:	e Directory Entries R S B Uk Ltd Bridgefields, Welwyn Garden City, Hertfordshire, AL7 1RX Road Haulage Services Active Automatically positioned to the address	A14SE (E)	916	-	524617 213238
	Contemporary Trad	e Directory Entries				
114	Name: Location: Classification: Status:	Esso Bridge Road East, Welwyn Garden City, AL7 1LE Petrol Filling Stations Inactive Automatically positioned to the address	A9NE (SE)	916	-	524512 212950
	Contemporary Trad	e Directory Entries				
114	Name: Location: Classification: Status: Positional Accuracy:	Esso Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1LE Petrol Filling Stations Inactive Automatically positioned to the address	A9NE (SE)	917	-	524514 212951
	Contemporary Trad	e Directory Entries				
115	Name: Location: Classification: Status: Positional Accuracy:	Computa Tune 13, Haymeads, Welwyn Garden City, Hertfordshire, AL8 7AD Car Engine Tuning & Diagnostic Services Inactive Automatically positioned to the address	A19NW (NE)	917	-	524111 214307
	Contemporary Trad					
116	Name: Location: Classification: Status:	Bioshine Cleaning Services 5, The Links, Welwyn Garden City, Hertfordshire, AL8 7DS Cleaning Services - Domestic Active Automatically positioned to the address	A7SW (SW)	918	-	522834 212675
	Contemporary Trad	e Directory Entries				
117	Name: Location: Classification: Status: Positional Accuracy:	Drake Electronics Ltd 26-28, Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3UQ Radio Communication Equipment Inactive Automatically positioned to the address	A9NE (SE)	923	-	524367 212740
	Contemporary Trad	e Directory Entries				
117	Name: Location: Classification: Status: Positional Accuracy:	Presswork Unit 23-24, Peartree Farm, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UW Printers Inactive Automatically positioned to the address	A9SE (SE)	931	-	524338 212702
	Contemporary Trad					
117	Name: Location: Classification: Status:	Prompt Fire Protection Unit 25, Peartree Farm, Peartree Lane, Welwyn Garden City, AL7 3UW Firefighting Equipment Active Automatically positioned to the address	A9SE (SE)	940	-	524348 212698
	Contemporary Trad	e Directory Entries				
117	Name: Location: Classification: Status:	Jj Engineering (Uk) Ltd Unit 19/20, Peartree Farm, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UW Precision Engineers Inactive	A9SE (SE)	943	-	524331 212679
		Manually positioned to the address or location				
117	Contemporary Trad Name: Location: Classification: Status:	e Directory Entries A C Precision Unit 26, Peartree Farm, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UW Precision Engineers Inactive	A9SE (SE)	947	-	524355 212696
		Automatically positioned to the address				

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
117	Contemporary Trad Name: Location:	e Directory Entries Peartree Clutch & Engine Centre 1 Peartree Farm,Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UW	A9SE (SE)	982	-	524390 212680
	Classification: Status:	Active Automatically positioned to the address	(32)			212000
447	Contemporary Trad	-	A005	004		50,4000
117	Name: Location: Classification:	G V A Engineering Co Ltd Unit 1, Peartree Farm, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UW Precision Engineers	A9SE (SE)	984	-	524392 212680
	Status: Positional Accuracy:	Inactive Automatically positioned to the address				
	Contemporary Trad	-				
117	Name: Location: Classification:	Peartree Welding Centre Unit 2, Peartree Farm, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UW Car Body Repairs	A9SE (SE)	990	-	524398 212678
	Status: Positional Accuracy:	Inactive Automatically positioned to the address				
	Contemporary Trad	-				
118	Name: Location: Classification: Status:	Chestminster Ltd Bridgefields, Welwyn Garden City, Hertfordshire, AL7 1RX Road Haulage Services Inactive	A15SW (E)	937	-	524655 213313
	Contemporary Trad	Automatically positioned to the address				
119	Name:	Digitimer Ltd	A9NE	952	-	524456
	Location: Classification: Status: Positional Accuracy:	37, Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3BE Medical Instruments - Manufacturers Inactive Automatically positioned to the address	(SE)			212799
	Contemporary Trad					
120	Name: Location: Classification: Status:	Jardak 14, Tewin Road, Welwyn Garden City, AL7 1BW Commercial Cleaning Services Active	A15SW (E)	957	-	524621 213103
		Automatically positioned to the address				
120	Contemporary Trade Directory Entries A15SW 957 - 524621					524621
120	Location: Classification: Status:	14, Tewin Road, Welwyn Garden City, AL7 1BW Cleaning Materials & Equipment Active Automatically positioned to the address	(E)	307	-	213103
	Contemporary Trad	e Directory Entries				
120	Name: Location: Classification: Status: Desitional Accuracy:	Jardak Services 14, Tewin Road, Welwyn Garden City, Hertfordshire, AL7 1BW Commercial Cleaning Services Inactive Automatically positioned to the address	A15SW (E)	961	-	524624 213100
	Contemporary Trad					
120	Name: Location:	Hertfordshire Community Nhs Trust Unit 1a Port Road Howard Court,14 Tewin Road, Welwyn Garden City, Hertfordshire. AL7 1BW	A15SW (E)	961	-	524624 213100
	Classification: Status: Positional Accuracy:	Hospitals Active Automatically positioned to the address				
	Contemporary Trad	-				
120	Name: Location: Classification: Status:	Shindengen (Uk) Ltd 12, Tewin Road, Welwyn Garden City, Hertfordshire, AL7 1BW Electronic Component Manufacturers & Distributors Inactive	A15SW (E)	968	-	524627 213085
	-	Automatically positioned to the address				
120	Contemporary Trad Name:	e Directory Entries L G A Finishing Ltd	A15SW	976	-	524650
	Location: Classification: Status:	Unit 20 Tewin Court, Welwyn Garden City, Hertfordshire, AL7 1AU Packaging Materials Manufacturers & Suppliers Active Manually positioned to the address or location	(E)			213135

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Contemporary Trad	e Directory Entries				
120	Name: Location: Classification: Status: Positional Accuracy:	Amerco Electrical Distributors Ltd 18, Tewin Court, Welwyn Garden City, Hertfordshire, AL7 1AU Electrical Goods Sales, Manufacturers & Wholesalers Inactive Automatically positioned to the address	A15SW (E)	999	-	524667 213107
	Contemporary Trad	e Directory Entries				
121	Name: Location: Classification: Status: Positional Accuracy:	Best Choice 4 U Ltd 177, Knightsfield, Welwyn Garden City, AL8 7QG Commercial Cleaning Services Active Automatically positioned to the address	A23SE (N)	964	-	523840 214430
	Contemporary Trad	e Directory Entries				
122	Name: Location: Classification: Status: Positional Accuracy:	Premier Electrical Services 3, Applecroft Road, WELWYN GARDEN CITY, Hertfordshire, AL8 6JZ Washing Machines - Servicing & Repairs Active Automatically positioned to the address	A7SE (SW)	966	-	523035 212455
	Contemporary Trad	e Directory Entries				
123	Name: Location: Classification: Status: Positional Accuracy:	Vosper Thornycroft Controls Ltd 8, Tewin Road, Welwyn Garden City, Hertfordshire, AL7 1BW Control Panel Manufacturers Inactive Automatically positioned in the proximity of the address	A15SW (E)	967	-	524621 213068
	Contemporary Trad	e Directory Entries				
123	Name: Location: Classification: Status: Positional Accuracy:	Hamamatsu Photonics (Uk) Ltd 10, Tewin Road, Welwyn Garden City, Hertfordshire, AL7 1BW Electronic Component Manufacturers & Distributors Inactive Automatically positioned to the address	A14SE (E)	967	-	524614 213051
	Contemporary Trad					
124	Name: Location: Classification: Status:	Dansi Express Deliveries Ltd 43, Lodgefield, Welwyn Garden City, Hertfordshire, AL7 1SD Road Haulage Services Inactive Automatically positioned to the address	A19NE (NE)	974	-	524426 214155
	Contemporary Trad					
125	Name: Location: Classification: Status:	British Premium Meats 32 Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3UQ Meat - Wholesale Inactive Manually positioned to the address or location	A9NE (SE)	980	-	524444 212741
	Contemporary Trad	e Directory Entries				
125	Name: Location: Classification: Status:	Tecmed Ltd 32a Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3AW Medical Instruments - Manufacturers Inactive Manually positioned to the address or location	A9NE (SE)	999	-	524442 212710
	Contemporary Trad	e Directory Entries				
126	Name: Location: Classification: Status: Positional Accuracy:	Flowline Manufacturing 58, Tewin Road, Welwyn Garden City, Hertfordshire, AL7 1BD Flow Measurement Systems - Manufacturers Inactive Automatically positioned to the address	A15SW (E)	994	-	524698 213238
	Contemporary Trad					
126	Name: Location: Classification: Status:	Hallgrove Garage 4, Tewin Court, Welwyn Garden City, AL7 1AU Garage Services Active Automatically positioned to the address	A15SW (E)	995	-	524688 213198
	Contemporary Trade Directory Entries					
127	Name: Location: Classification: Status:	Jack O'Neill Unit 3, Peartree Farm, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UW Domestic Appliances - Servicing, Repairs & Parts Inactive	A9SE (SE)	996	-	524405 212675
		Automatically positioned to the address				

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Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Fuel Station Entries					
128	Name: Location: Brand: Premises Type: Status: Positional Accuracy:	Central Garage Church Road , , Welwyn Garden City, Hertfordshire, AL8 6PW OBSOLETE Not Applicable Obsolete Automatically positioned to the address	A8NE (S)	430	-	523659 212883
	Fuel Station Entries	Fuel Station Entries				
129	Name: Location: Brand: Premises Type: Status: Positional Accuracy:	Tesco Head Office Welwyn Automat Kestrel Way (Tesco Ho) , Shire Park , Welwyn Garden City, Hertfordshire, AL7 1GA Tesco Hypermarket Non-Retail Manually positioned to the road within the address or location	A19SE (NE)	820	-	524479 213810
	Fuel Station Entries					
130	Name: Location: Brand: Premises Type: Status: Positional Accuracy:	Mfg Eastbridge Bridge Road East , , Welwyn Garden City, Hertfordshire, AL7 1LE ESSO Petrol Station Open Manually positioned to the address or location	A9NE (SE)	917	-	524514 212951

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Sensitive Land Use

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
131	Ancient Woodland Name: Reference: Area(m ²): Type:	Sherrardspark Woods 1116056 566977.51 Ancient and Semi-Natural Woodland	A12SE (W)	292	10	523195 213349
132	Ancient Woodland Name: Reference: Area(m ²): Type:	A12SE (W)	384	10	523099 213376	
133	Areas of Adopted Green Belt Authority: Welwyn Hatfield District Council Plan Name: Welwyn Hatfield Local Plan Status: Adopted Plan Date: 15th April 2005		A12NE (NW)	295	8	523264 213603
134	Local Nature Reserves Name: Sherrardspark Wood Multiple Area: Y Area (m2): 731961.94 Source: Natural England Designation Date: 1st January 1998		A13NW (NW)	245	10	523280 213544
135	Nitrate Vulnerable Zones Name: Lee Nvz Description: Surface Water Source: Environment Agency, Head Office		A13NW (SE)	0	4	523605 213393
136	Designation Date: Date Type:	entific Interest Sherrardspark Wood N 743104.83 Natural England 1000271 Local Nature Reserve 1st February 1986 Notified Site Of Special Scientific Interest 1st February 1986 Notified Site Of Special Scientific Interest 1st February 1986 Notified	A12SE (W)	279	10	523211 213333

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Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Welwyn Hatfield District Council - Environmental Health Department	August 2013	Annual Rolling Update
St Albans City & District Council - Environmental Health Department	February 2015	Annual Rolling Update
East Hertfordshire District Council - Environmental Health Department	January 2013	Annual Rolling Update
North Hertfordshire District Council - Environmental Health Department	October 2014	Annual Rolling Update
Discharge Consents		
Environment Agency - Thames Region	July 2019	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - Thames Region	March 2013	Annual Rolling Update
Integrated Pollution Controls		
Environment Agency - Thames Region	October 2008	Variable
Integrated Pollution Prevention And Control	h h 2010	Quantaria
Environment Agency - South East Region - North East Thames Area	July 2019	Quarterly
Environment Agency - Thames Region	July 2019	Quarterly
Local Authority Integrated Pollution Prevention And Control		.,
East Hertfordshire District Council - Environmental Health Department	January 2014	Variable
Welwyn Hatfield District Council - Environmental Health Department	May 2012	Variable
St Albans City & District Council - Environmental Health Department	May 2014	Variable
North Hertfordshire District Council - Environmental Health Department	September 2014	Variable
Local Authority Pollution Prevention and Controls		
East Hertfordshire District Council - Environmental Health Department	January 2014	Annual Rolling Update
Welwyn Hatfield District Council - Environmental Health Department	May 2012	Annual Rolling Update
St Albans City & District Council - Environmental Health Department	May 2014	Annual Rolling Update
North Hertfordshire District Council - Environmental Health Department	September 2014	Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements		
East Hertfordshire District Council - Environmental Health Department	January 2014	Variable
Welwyn Hatfield District Council - Environmental Health Department	May 2012	Variable
St Albans City & District Council - Environmental Health Department	May 2014	Variable
North Hertfordshire District Council - Environmental Health Department	September 2014	Variable
Nearest Surface Water Feature Ordnance Survey	January 2019	
•	January 2019	
Pollution Incidents to Controlled Waters Environment Agency - Thames Region	September 1999	Not Applicable
Prosecutions Relating to Authorised Processes		
Environment Agency - Thames Region	March 2013	Annual Rolling Update
Prosecutions Relating to Controlled Waters		
Environment Agency - Thames Region	March 2013	Annual Rolling Update
Registered Radioactive Substances		
Environment Agency - Thames Region	June 2016	
River Quality		
Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points		
Environment Agency - Head Office	July 2012	Annually
River Quality Chemistry Sampling Points		
Environment Agency - Head Office	July 2012	Annually
Substantiated Pollution Incident Register		
Environment Agency - South East Region - North East Thames Area	July 2019	Quarterly
Environment Agency - Thames Region - North East Area	July 2019	Quarterly
Water Abstractions		
Environment Agency - Thames Region	July 2019	Quarterly
Water Industry Act Referrals		
Environment Agency - Thames Region	October 2017	Quarterly

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Agency & Hydrological	Version	Update Cycle
Groundwater Vulnerability Map		
Environment Agency - Head Office	June 2018	Annually
Groundwater Vulnerability - Soluble Rock Risk		
Environment Agency - Head Office	June 2018	Annually
Bedrock Aquifer Designations		
Environment Agency - Head Office	January 2018	Annually
Superficial Aquifer Designations		
Environment Agency - Head Office	January 2018	Annually
Source Protection Zones		
Environment Agency - Head Office	July 2019	Quarterly
Extreme Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	August 2019	Quarterly
Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	August 2019	Quarterly
Areas Benefiting from Flood Defences		
Environment Agency - Head Office	August 2019	Quarterly
Flood Water Storage Areas		
Environment Agency - Head Office	August 2019	Quarterly
Flood Defences		
Environment Agency - Head Office	August 2019	Quarterly
OS Water Network Lines		
Ordnance Survey	April 2019	Quarterly
BGS Groundwater Flooding Susceptibility		
British Geological Survey - National Geoscience Information Service	May 2013	Annually

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Waste	Version	Update Cycle
BGS Recorded Landfill Sites		
British Geological Survey - National Geoscience Information Service	June 1996	Not Applicable
Historical Landfill Sites		
Environment Agency - Head Office	July 2019	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - Thames Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - South East Region - North East Thames Area	July 2018	Quarterly
Environment Agency - Thames Region - North East Area	July 2018	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - South East Region - North East Thames Area	July 2019	Quarterly
Environment Agency - Thames Region - North East Area	July 2019	Quarterly
Local Authority Landfill Coverage		
East Hertfordshire District Council - Environmental Health Department	May 2000	Not Applicable
Hertfordshire County Council - Spatial Planning and Economy Unit	May 2000	Not Applicable
North Hertfordshire District Council - Environmental Health Department	May 2000	Not Applicable
St Albans City & District Council - Environmental Health Department	May 2000	Not Applicable
Welwyn Hatfield District Council - Environmental Health Department	May 2000	Not Applicable
Local Authority Recorded Landfill Sites		
East Hertfordshire District Council - Environmental Health Department	May 2000	Not Applicable
Hertfordshire County Council - Spatial Planning and Economy Unit	May 2000	Not Applicable
North Hertfordshire District Council - Environmental Health Department	May 2000	Not Applicable
St Albans City & District Council - Environmental Health Department	May 2000	Not Applicable
Welwyn Hatfield District Council - Environmental Health Department	May 2000	Not Applicable
Registered Landfill Sites Environment Agency - Thames Region - North East Area	March 2003	Not Applicable
Registered Waste Transfer Sites Environment Agency - Thames Region - North East Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites	lune 2015	Not Appliable
Environment Agency - Thames Region - North East Area	June 2015	Not Applicable
Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	April 2018	Bi-Annually
Explosive Sites		
Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS)		
Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements		
East Hertfordshire District Council	April 2015	Variable
Hertfordshire County Council - Spatial Planning and Economy Unit	February 2016	Variable
North Hertfordshire District Council	February 2016	Variable
St Albans City & District Council	February 2016	Variable
Welwyn Hatfield District Council	February 2016	Variable
Planning Hazardous Substance Consents		
East Hertfordshire District Council	April 2015	Variable
		Variable
Hertfordshire County Council - Spatial Planning and Economy Unit	February 2016	valiable
	February 2016 February 2016	Variable
Hertfordshire County Council - Spatial Planning and Economy Unit North Hertfordshire District Council St Albans City & District Council	,	

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Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology		
British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Recorded Mineral Sites		
British Geological Survey - National Geoscience Information Service	April 2019	Bi-Annually
CBSCB Compensation District		
Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Coal Mining Affected Areas		
The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability		
Ove Arup & Partners	October 2000	Not Applicable
Non Coal Mining Areas of Great Britain		
British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Compressible Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Ground Dissolution Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Landslide Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Running Sand Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards		
British Geological Survey - National Geoscience Information Service	January 2019	Annually
Radon Potential - Radon Affected Areas		
British Geological Survey - National Geoscience Information Service	July 2011	Annually
Radon Potential - Radon Protection Measures		
British Geological Survey - National Geoscience Information Service	July 2011	Annually
Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries		
Thomson Directories	July 2019	Quarterly
Fuel Station Entries		
Catalist Ltd - Experian	September 2019	Quarterly
Gas Pipelines		
National Grid	July 2014	
Underground Electrical Cables		
National Grid	December 2015	

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Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural England	August 2018	Bi-Annually
Areas of Adopted Green Belt		
East Hertfordshire District Council	March 2019	As notified
North Hertfordshire District Council	March 2019	As notified
St Albans City & District Council	March 2019	As notified
Welwyn Hatfield District Council	March 2019	As notified
Areas of Unadopted Green Belt		
East Hertfordshire District Council	March 2019	As notified
North Hertfordshire District Council	March 2019	As notified
St Albans City & District Council	March 2019	As notified
Welwyn Hatfield District Council	March 2019	As notified
Areas of Outstanding Natural Beauty		
Natural England	June 2019	Bi-Annually
Environmentally Sensitive Areas		
Natural England	January 2017	
Forest Parks		
Forestry Commission	April 1997	Not Applicable
Local Nature Reserves		
Natural England	March 2019	Bi-Annually
Marine Nature Reserves		
Natural England	July 2019	Bi-Annually
National Nature Reserves		
Natural England	July 2019	Bi-Annually
National Parks		
Natural England	April 2017	Bi-Annually
Nitrate Vulnerable Zones		
Environment Agency - Head Office	December 2017	Bi-Annually
Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	October 2015	
Ramsar Sites		
Natural England	April 2019	Bi-Annually
Sites of Special Scientific Interest		
Natural England	March 2019	Bi-Annually
Special Areas of Conservation		
Natural England	June 2019	Bi-Annually
Special Protection Areas		
Natural England	April 2019	Bi-Annually



Data Suppliers

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	Map data
Environment Agency	Environment Agency
Scottish Environment Protection Agency	SEPÃO Seottish Environment Protection Agency
The Coal Authority	The Coal Authority
British Geological Survey	British Geological Survey
Centre for Ecology and Hydrology	Centre for Ecology & Hydrology NATURAL ENVIRONMENT RESEARCH COUNCIL
Natural Resources Wales	Cyfoeth Naturiol Cymru Natural Resources Wales
Scottish Natural Heritage	SCOTTISH NATURAL HERITAGE
Natural England	NATURAL ENGLAND
Public Health England	Public Health England
Ove Arup	ARUP
Peter Brett Associates	peterbrett

LANDMARK INFORMATION GROUP*

Useful Contacts

Contact	Name and Address	Contact Details		
1	British Geological Survey - Enquiry Service	Telephone: 0115 936 3143		
	British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk		
2	Environment Agency - National Customer Contact Centre (NCCC)	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk		
	PO Box 544, Templeborough, Rotherham, S60 1BY			
3	Welwyn Hatfield District Council - Environmental Health Department	Telephone: 01707 357000 Fax: 01707 375490 Website: www.welhat.gov.uk		
	Council Offices, Campus East, Welwyn Garden City, Hertfordshire, AL8 6AE			
4	Environment Agency - Head Office	Telephone: 01454 624400		
	Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Fax: 01454 624409		
5	Ordnance Survey	Telephone: 03456 05 05 05		
	Adanac Drive, Southampton, Hampshire, SO16 0AS	Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk		
6	Hertfordshire County Council - Spatial Planning and Economy Unit	Telephone: 01992 556266 Fax: 01992 556015 Email: spatialplanning@hertfordshire.gov.uk		
	County Hall, Hertford, Hertfordshire, SG13 8DN	Website: www.hertsdirect.org		
7	Health and Safety Executive	Website: www.hse.gov.uk		
	5S.2 Redgrave Court, Merton Road, Bootle, L20 7HS			
8	Welwyn Hatfield District Council	Telephone: 01707 357000 Fax: 01707 375490		
	Council Offices, Campus East, Welwyn Garden City, Hertfordshire, AL8 6AE	Website: www.welhat.gov.uk		
9	Peter Brett Associates	Telephone: 0118 950 0761		
	Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN	Fax: 0118 959 7498 Email: reading@pba.co.uk Website: www.pba.co.uk		
10	Natural England	Telephone: 0300 060 3900		
	County Hall, Spetchley Road, Worcester, WR5 2NP	Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk		
11	East Hertfordshire District Council	Telephone: 01279 655261		
	Wallfields, Pegs Lane, Hertford, Hertfordshire, SG13 8EQ	Fax: 01992 552280 Website: www.eastherts.gov.uk		
-	Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk		
	Chilton, Didcot, Oxfordshire, OX11 0RQ	Email: radon@phe.gov.uk Website: www.ukradon.org		
-	Landmark Information Group Limited	Telephone: 0844 844 9952		
	Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk		

Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.

Historical Mapping Legends

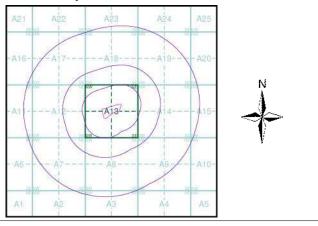
Ordnance	Survey County S	Series 1:10,560	0	rdnance Surve	ey Plan 1	:10,000	1:10,000 Raster Mapping			
Grav Pit	vel Sand Pit	Other	Contraction of the second	Chalk Pit, Clay Pit	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	°₀ Gravel Pit		Gra∨el Pit		Refuse tip or slag heap
C Quar	rry Shingle	•••••• •••••••• Orchard		Sand Pit	,	 Disused Pit or Quarry 		Rock		Rock (scattered)
^{**} ***** ******** ********************	ers	Marsh	0.000	Refuse or Slag Heap		Lake, Loch or Pond		Boulders	00 000	Boulders (scattered)
		207 209 x07 227 207 209 x07 227		. Dunes	° 2 0 0 1 0 0 1	p Boulders		Shingle	Mud	Mud
Mixed Woo	d Deciduous	Brushwood	* * *	Coniferous Trees	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Non-Coniferous Trees	Sand	Sand		Sand Pit
			φ	Orchard ∩ ₀_	Scrub	עזיע Coppice	1111111	Slopes	٢٢٢٢٢٢٢	Top of cliff Underground
Fir	Furze	Rough Pasture	ា ា ក	Bracken SMUU	Heath '	、,,,,Rough Grassland		General detail - O∨erhead detail		detail Narrow gauge railway
	rrow denotes 🔉 🔺	Trigonometrical Station	<u>، د</u>	Marsh	Reeds	<u>→_</u> Saltings		Multi-track railway		Single track railway
	ite of Antiquities 🔹 🛧	Bench Mark		Direc	tion of Flow of	Water	_•_•	County boundary (England only)	••••	Ci∨il, parish or community boundary
• Si	ump, Guide Post, ignal Post urface Level	Well, Spring, Boundary Post		Glasshouse	**	Sand		District, Unitary, Metropolitan, London Borough boundary		Constituency boundary
Sketched	Instrum Contou	200		Sloping Masonry	Pylon — — 🗆 — Pole	Electricity Transmission Line	۵ ^۵ **	Area of wooded vegetation	۵۵ ۵۵	Non-coniferous trees
Main Roads	Fenced Minor F	Roads Un-Fenced	Cutting	Embankm		— Standard Gauge	Ω	Non-coniferous trees (scattered) Coniferous	** **	Coniferous trees Positioned
	Sunken Road	Raised Road	 Road'''	J //	·····	Multiple Track ⊢ Standard Gauge Single Track	* 4 4	trees (scattered) Orchard		tree Coppice
and the second states of the s	Road over Railway	Railway over River	Under	Over Cross			் க வர் காட	Rough Grassland		or Osiers Heath
	Railway o∨er Road //	Level Crossing			unty		00_ 00_	Scrub	⊐⊻⁄≀∟	Marsh, Salt Marsh or Reed
	Road over River or Canal	Road over		Administrative Co or County of City Municipal Boroug		_	S	Water feature	← ←	Flow arrows
	Road o∨er Stream			Burgh or District	Council or County Con	stituency	MHW(S)	Mean high water (springs)	MLW(S)	Mean low water (springs
	County Boundary (Geogra County & Ci∨il Parish Bou	• •		Civil Parish Shown alternately w	/hen coincidence	of boundaries occurs	+-	Telephone line (where shown)	- • • -	Electricity transmission li (with poles)
+· +· + · +	Administrati∨e County & 0	_	Ch	Boundary Post or Stone Church	PO	Police Station Post Office	← BM 123.45 m	Bench mark (where shown)	Δ	Triangulation station
Co. Boro. Bdy.	County Borough Boundary		F E Sta	Club House Fire Engine Station Foot Bridge	РН	Public Convenience Public House Signal Box		Point feature (e.g. Guide Post or Mile Stone)	\boxtimes	Pylon, flare st or lighting tow
Co. Burgh Bdy.	County Burgh Boundary (Scollanu)		Fountain Guide Post		Spring Telephone Call Box	•[•	Site of (antiquity)		Glasshouse
⊻	Rural District Boundary		MP	Mile Post	TCP	Telephone Call Post				

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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Hertfordshire	1:10,560	1884	2
Hertfordshire	1:10,560	1899	3
Hertfordshire	1:10,560	1925	4
Hertfordshire	1:10,560	1939	5
Hertfordshire	1:10,560	1950	6
Ordnance Survey Plan	1:10,000	1960	7
Ordnance Survey Plan	1:10,000	1966	8
Ordnance Survey Plan	1:10,000	1976	9
Ordnance Survey Plan	1:10,000	1989	10
10K Raster Mapping	1:10,000	1999	11
Street View	Variable		12

Historical Map - Slice A



Order Details

Order Number: Slice: Site Area (Ha): Search Buffer (m):

219955306_1_1 Customer Ref: A115249 WGC Campus West National Grid Reference: 523600, 213390 А 2.31 1000

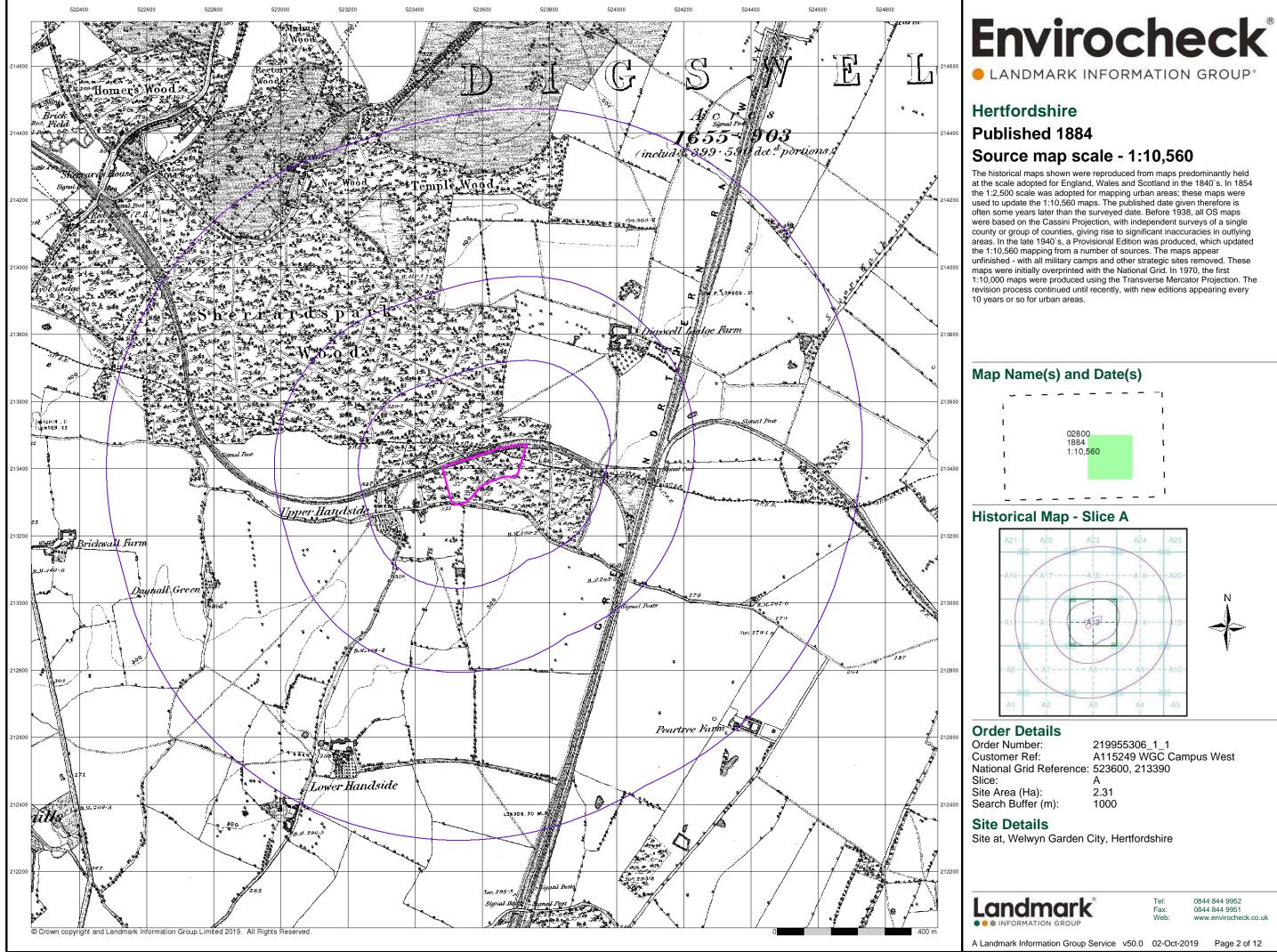
Site Details

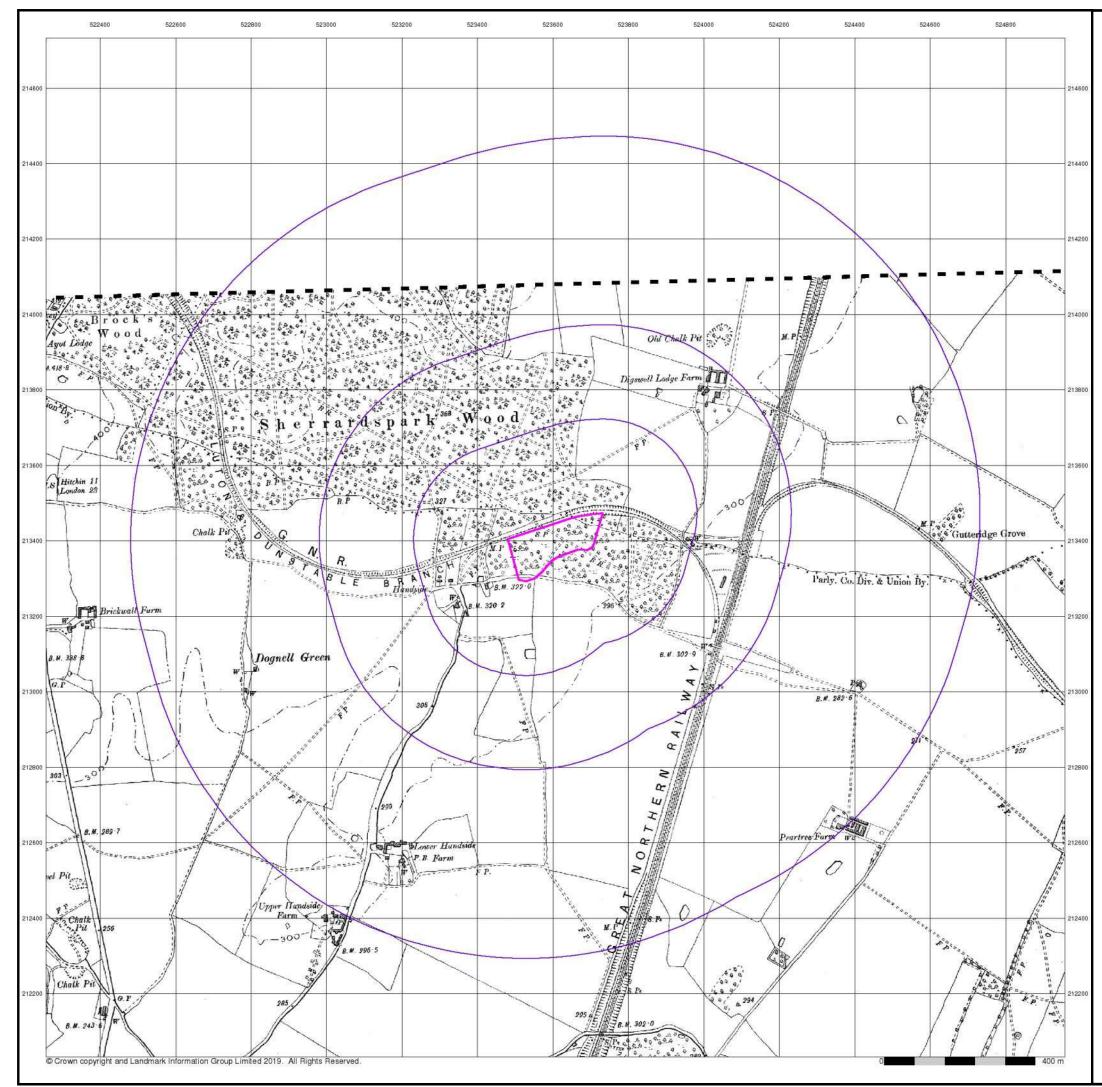
Site at, Welwyn Garden City, Hertfordshire



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Hertfordshire

Published 1899

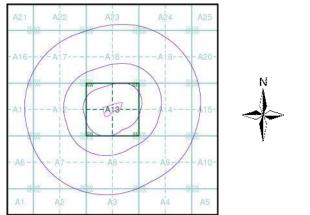
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

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Historical Map - Slice A



Order Details

Order Number: Customer Ref: National Grid Reference: 523600, 213390 Slice: Site Area (Ha): Search Buffer (m):

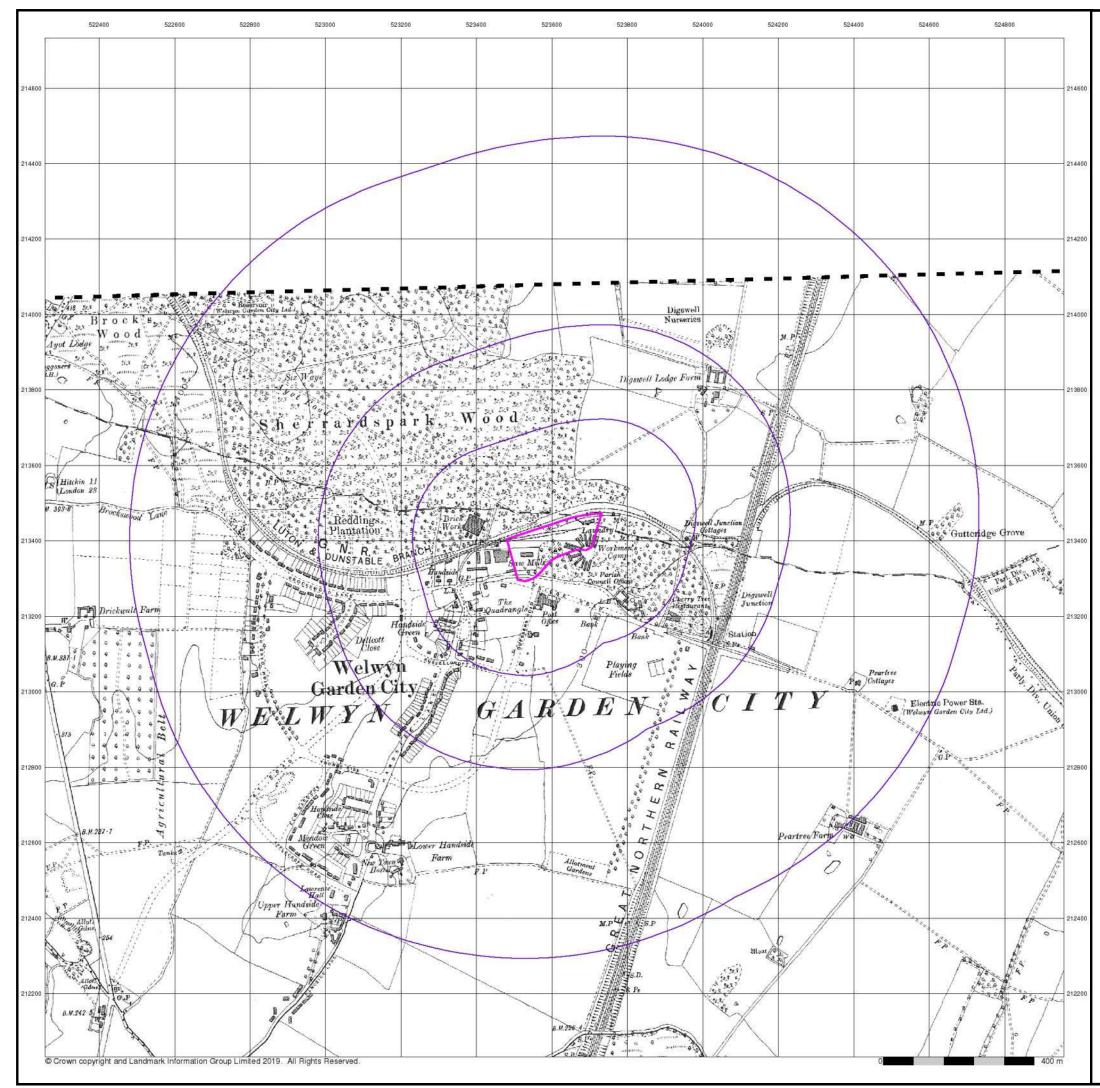
219955306_1_1 A115249 WGC Campus West А 2.31 1000

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Hertfordshire

Published 1925

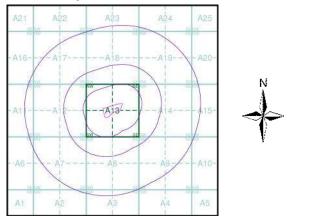
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

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Historical Map - Slice A



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219955306_1_1 A115249 WGC Campus West А 2.31 1000

Site Details

Site at, Welwyn Garden City, Hertfordshire



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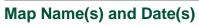


Hertfordshire

Published 1939

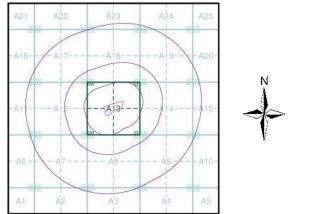
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.



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Site Details

Site at, Welwyn Garden City, Hertfordshire





Hertfordshire

Published 1950

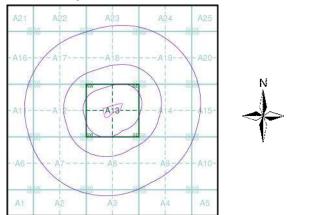
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

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Historical Map - Slice A



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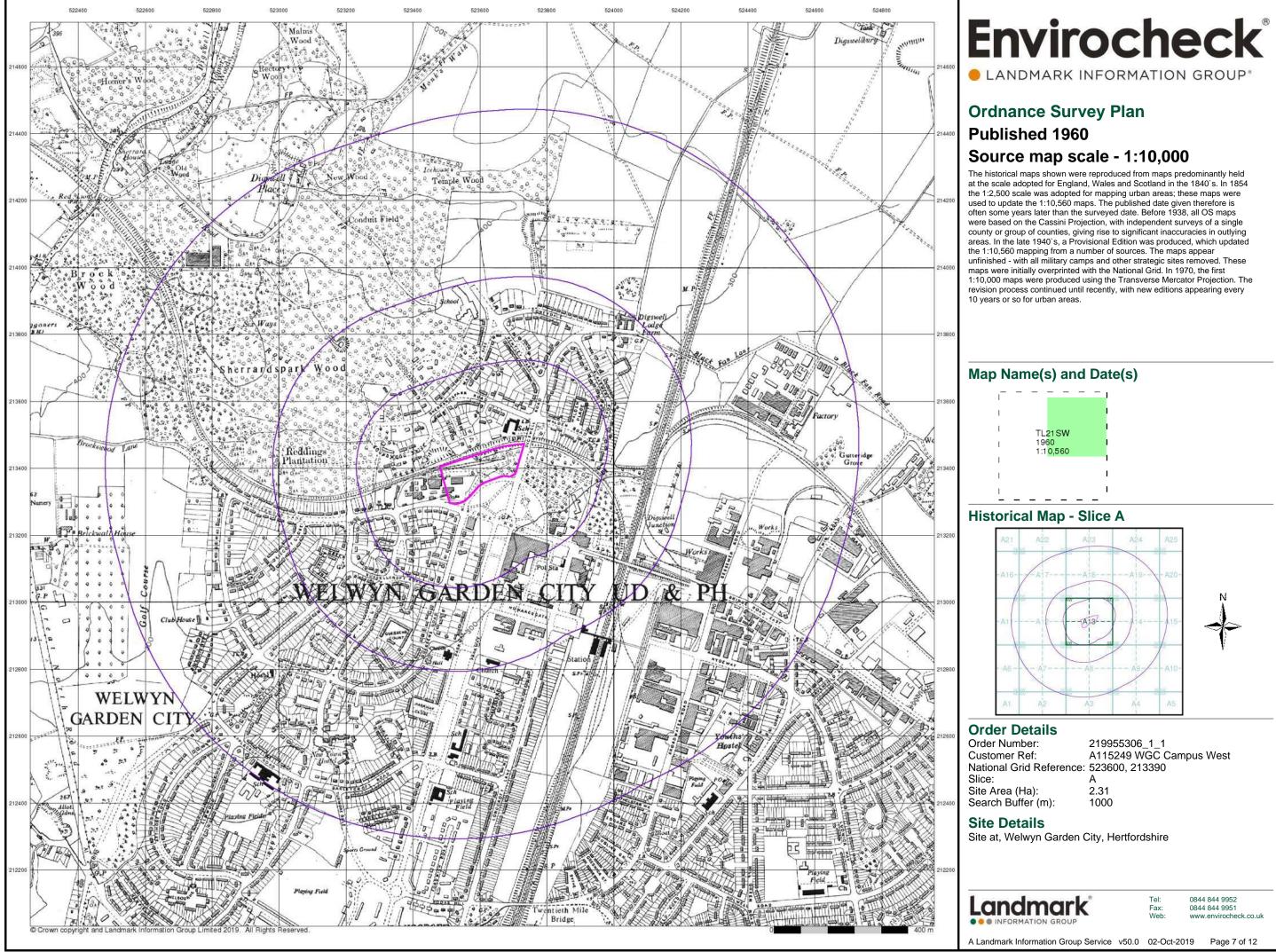
Order Number: Customer Ref: National Grid Reference: 523600, 213390 Slice: Site Area (Ha): Search Buffer (m):

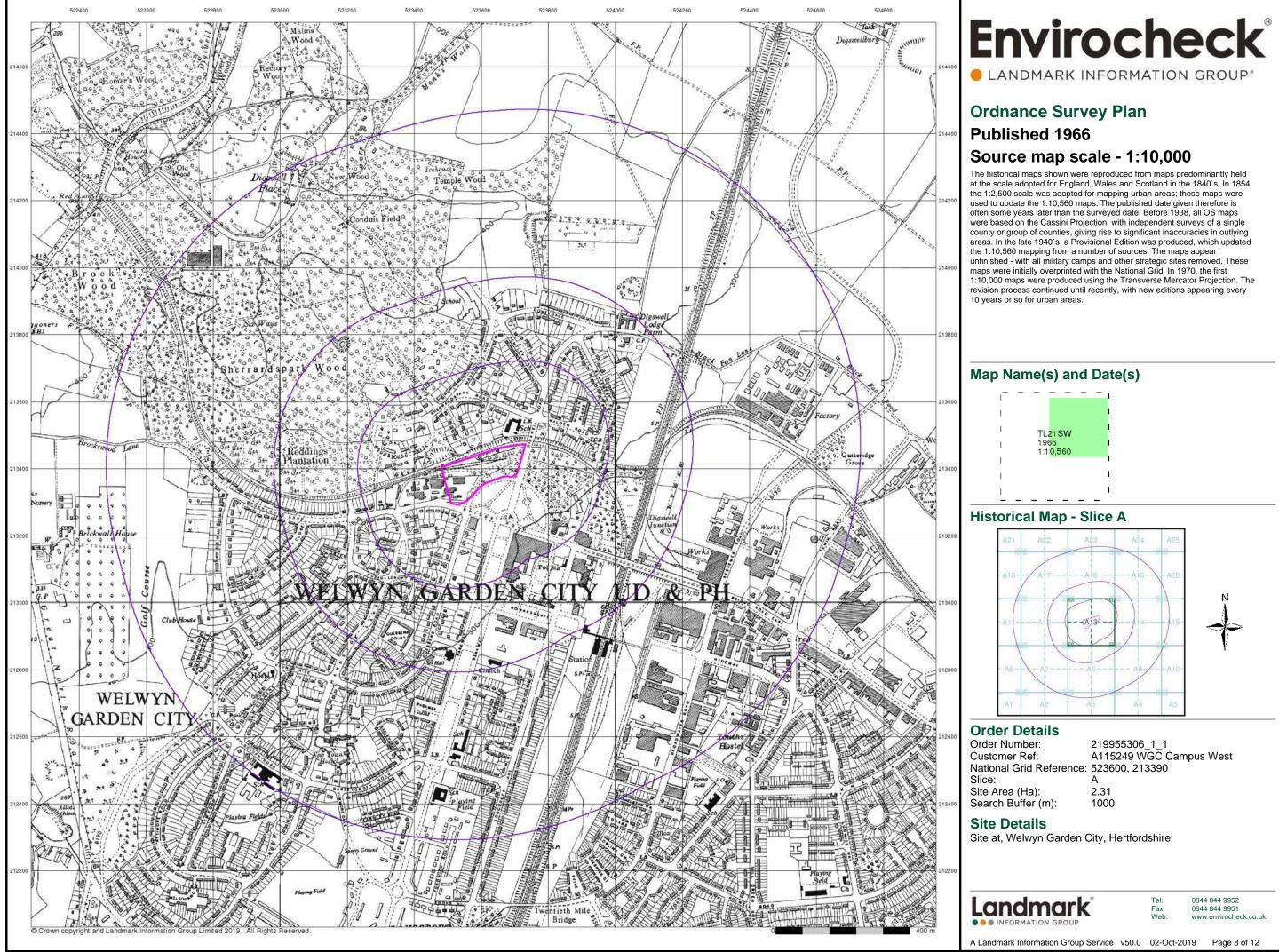
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Site Details

Site at, Welwyn Garden City, Hertfordshire







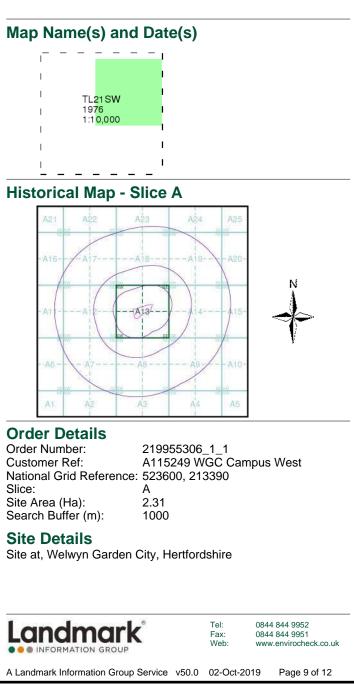


Ordnance Survey Plan

Published 1976

Source map scale - 1:10,000

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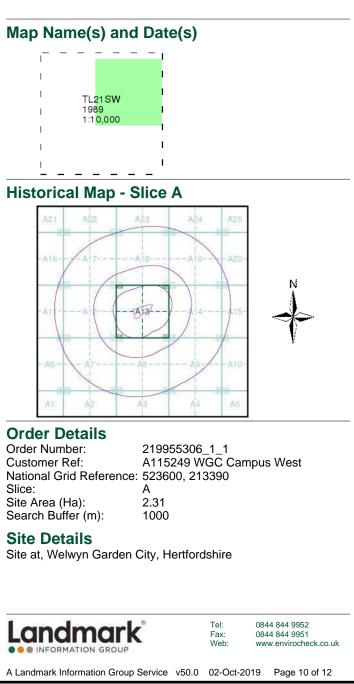
Envirocheck[®]

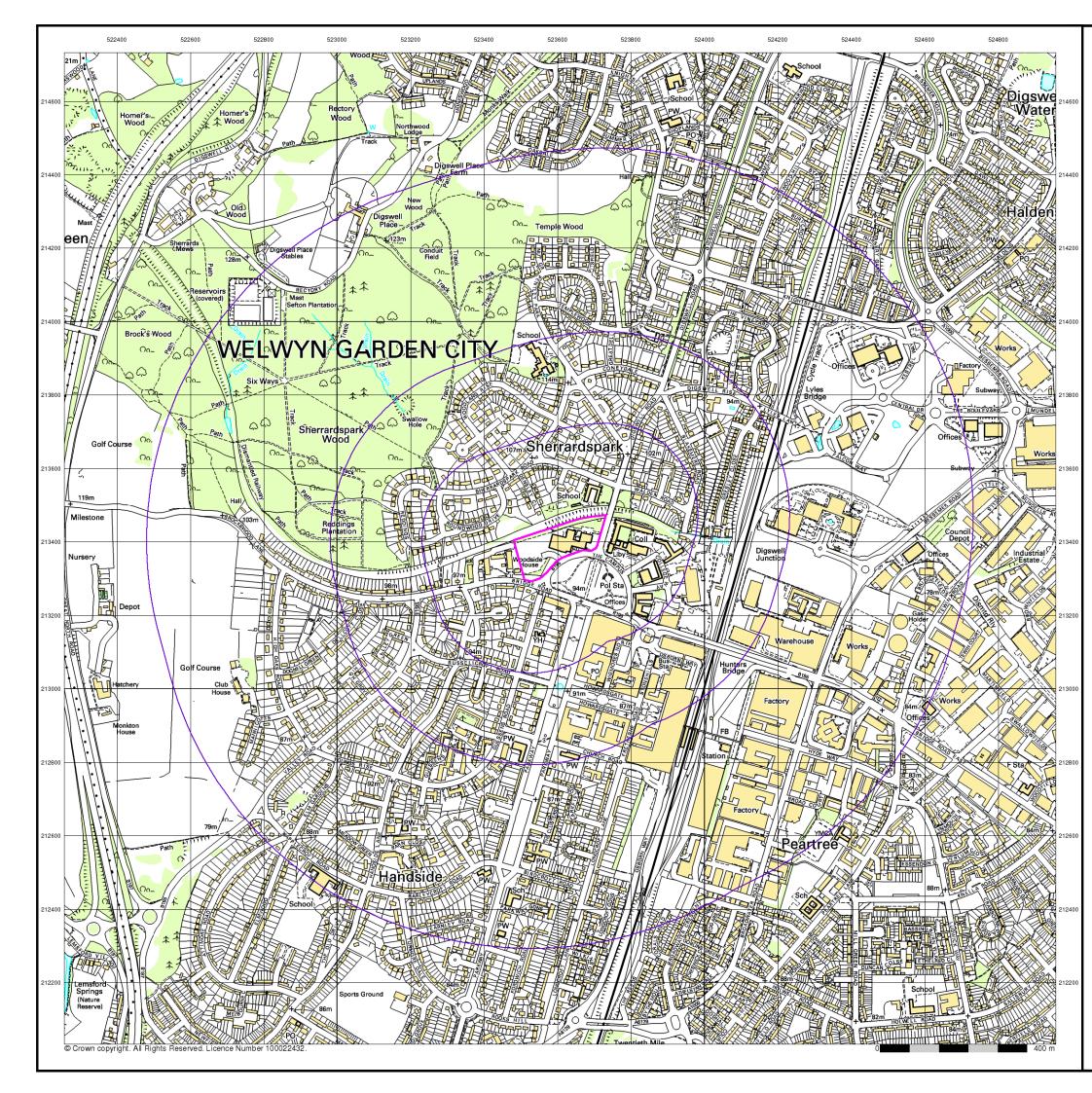
Ordnance Survey Plan

Published 1989

Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.





10k Raster Mapping

Published 1999

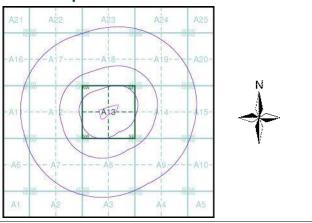
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)

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I							I
L							I

Historical Map - Slice A



Order Details

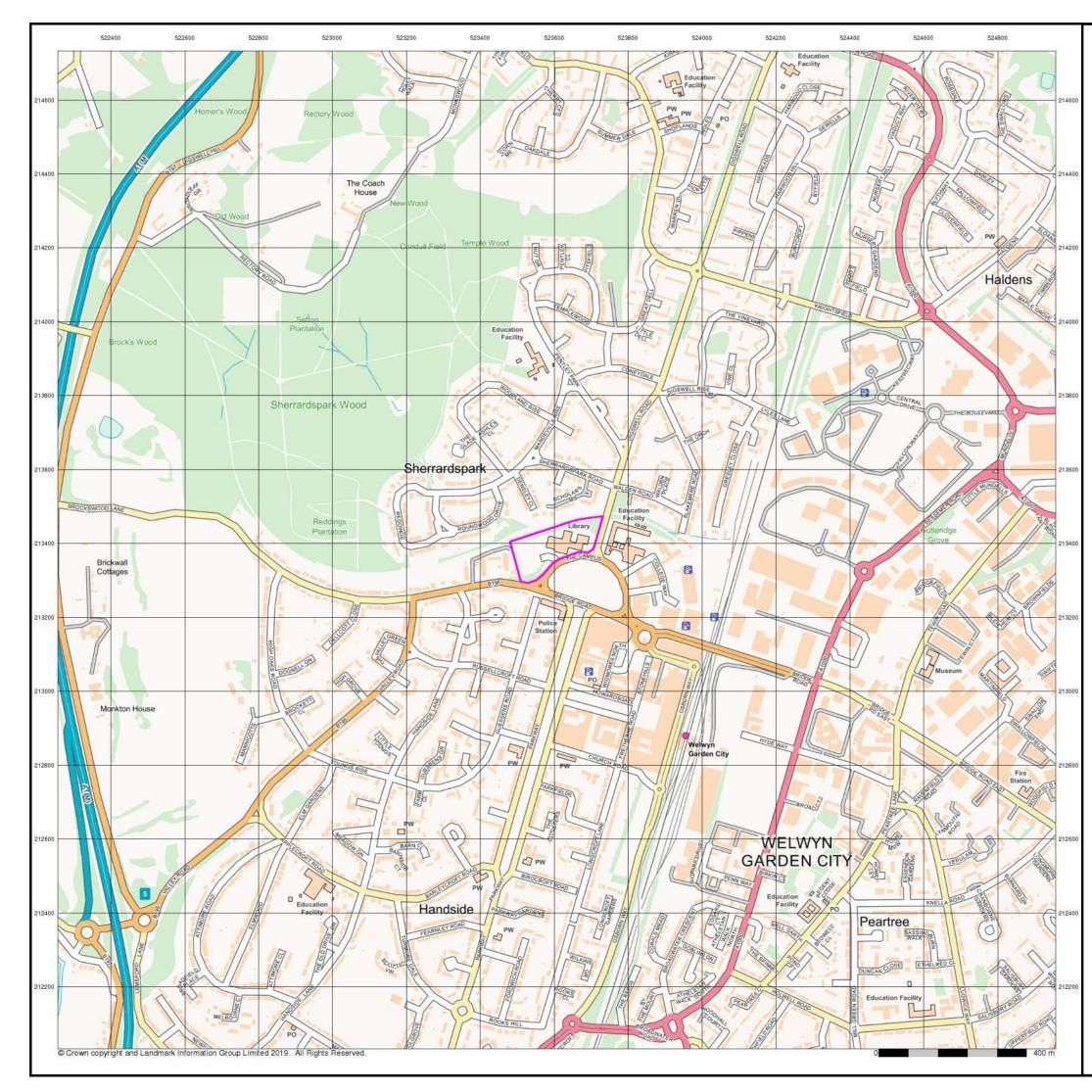
Order Number: Slice: Site Area (Ha): Search Buffer (m):

219955306_1_1 Customer Ref: A115249 WGC Campus West National Grid Reference: 523600, 213390 А 2.31 1000

Site Details

Site at, Welwyn Garden City, Hertfordshire





Street View

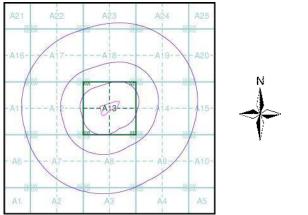
Published 2019

Source map scale - 1:10,000

Street View is a street-level map for the whole of Great Britain produced by the Ordnance Survey. These maps are provided at a nominal scale of 1:10,000

Map Name(s) and Date(s)

Street View Map - Slice A



Order Details

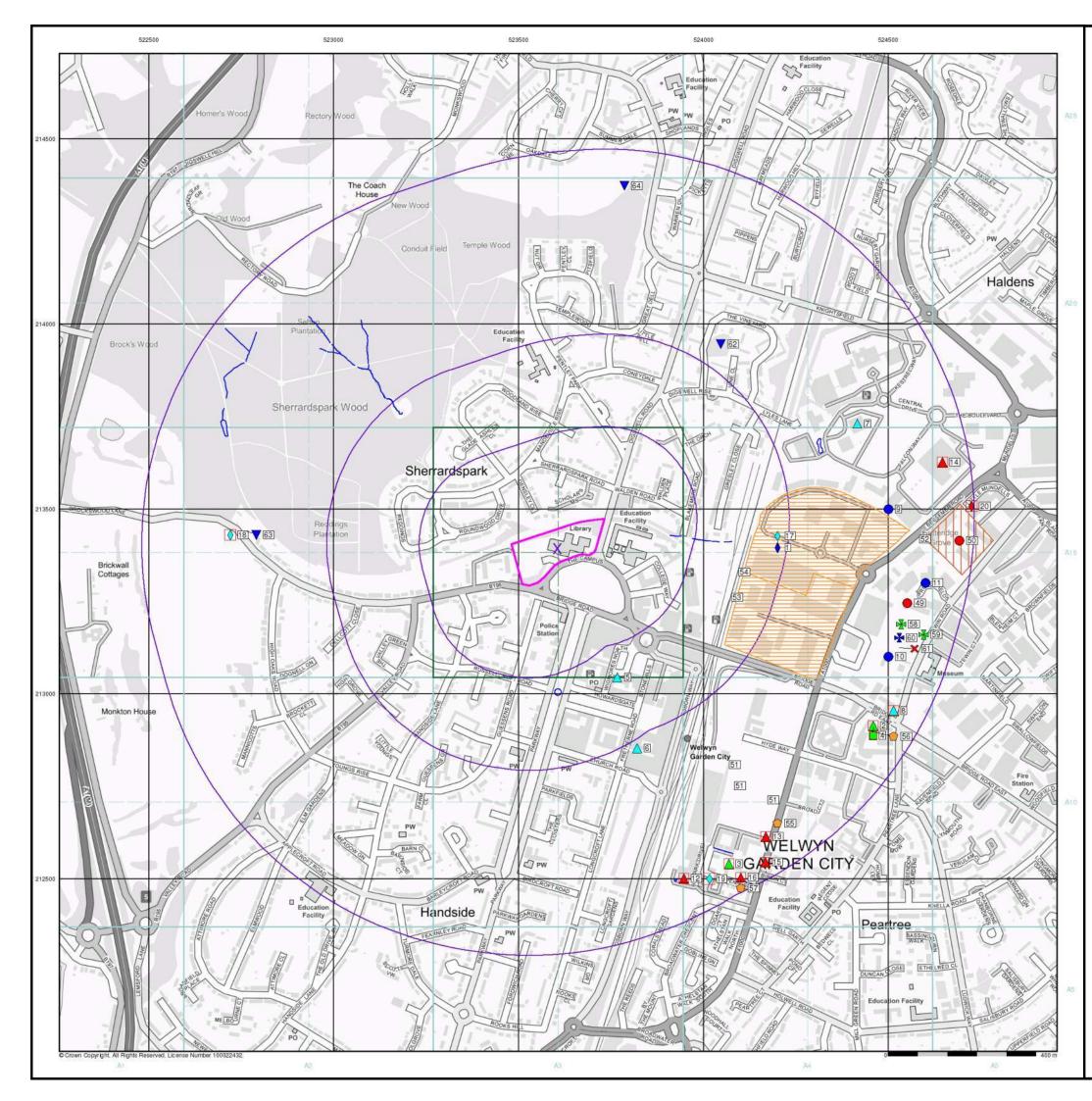
Slice: Site Area (Ha): Search Buffer (m):

Order Number:219955306_1_1Customer Ref:A115249 WGC Campus WestNational Grid Reference:523600, 213390 А 2.31 1000

Site Details

Site at, Welwyn Garden City, Hertfordshire





General

General			
🔼 Specified Site	Specified Buffer(s)	Х	Bearing Refer
Several of Type at	t Location		
~ ~	Hydrological	W	aste
Contaminated Lan (Location)	d Register Entry or Notice	▼	BGS Recorde
🚫 Contaminated Lan	d Register Entry or Notice	\square	BGS Recorde
🔶 Discharge Conser	nt	\odot	EA Historic La
L Enforcement or Pr	ohibition Notice		EA Historic La
A Integrated Pollution	n Control	\mathbf{A}	Integrated Pol Waste Site
Integrated Pollution	n Prevention Control	\boxtimes	Licensed Wa: (Landfill Bounda
Local Authority Int and Control	egrated Pollution Prevention		Licensed Was
🛆 Local Authority Po	llution Prevention and Control		Local Authorit
Control Enforceme	ent Prevention and	Ш	Local Authorit
O Pollution Incident t	o Controlled Waters	\square	Registered La
Prosecution Relati	ng to Authorised Processes	►	Registered La
🔶 Prosecution Relati	ng to Controlled Waters		Registered La
🔺 Registered Radioa	active Substance		Registered La
🥆 River Network or V	Nater Feature	۲	Registered W
🕂 River Quality Sam	pling Point		Registered W
🔶 Substantiated Poll	ution Incident Register	\bigcirc	Registered W (Location)
🔶 Water Abstraction	ı		Registered W
🔶 Water Industry Ac	t Referral	Ha	azardou
Geological		*	COMAH Site
BGS Recorded Mi	neral Site	M	Explosive Site
		_	

Industrial Land Use

- ★ Contemporary Trade Directory Entry
- 🖈 Fuel Station Entry

Site Sensitivity Map - Slice A

Order Details

219955306_1_1 A115249 WGC Campus West ce: 523600, 213390 А 2.31 1000

Tel: Fax: Web:

Site Details

Site at, Welwyn Garden City, Hertfordshire



- ierence Point 🛛 🛽 🛛 🛛 🕫

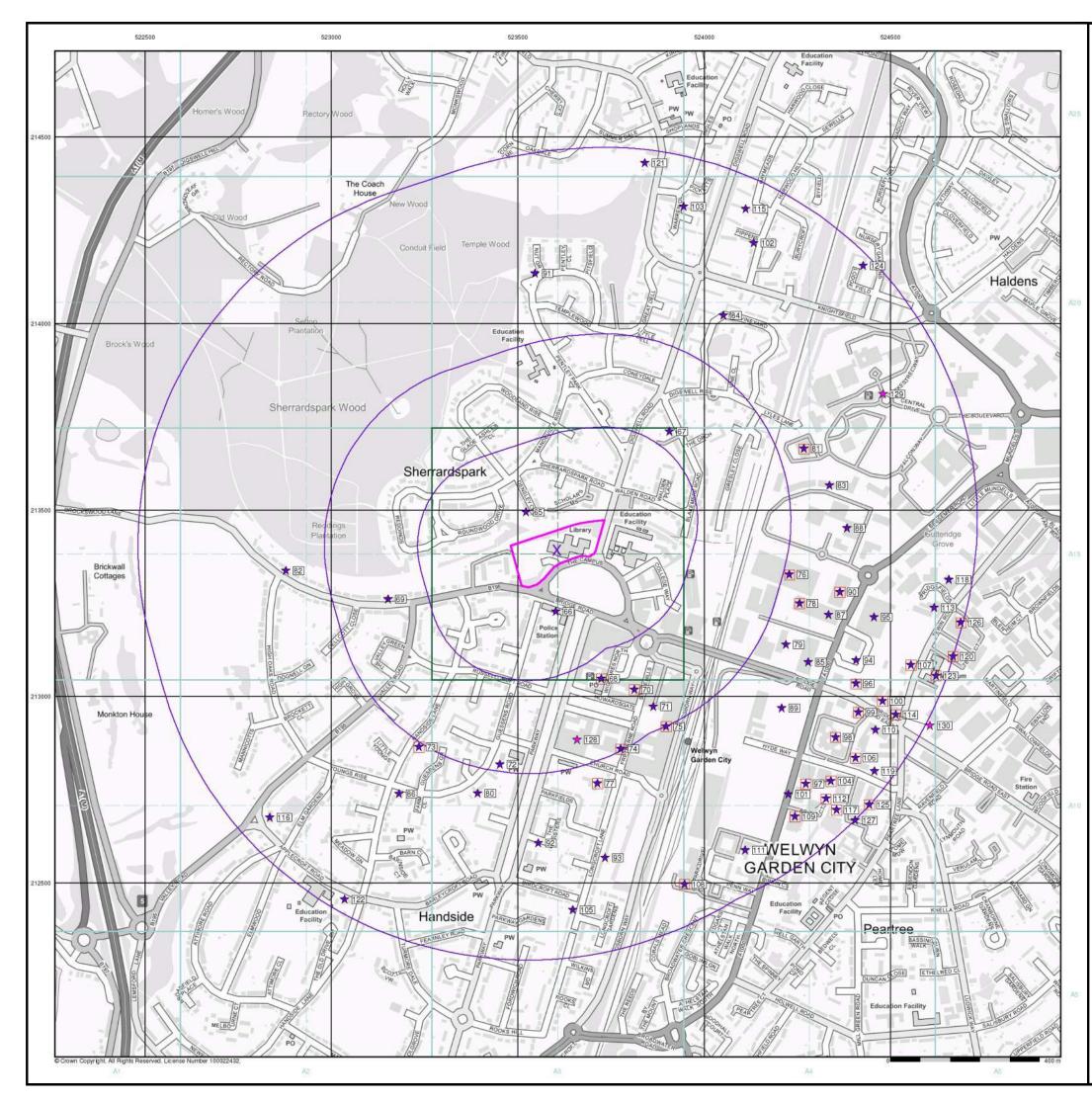
- led Landfill Site (Location) ded Landfill Site La⊓dfill (Buffered Point) _a⊓dfill (Polygon) ollution Control Registered aste Management Facility aste Management Facility (Location) rity Recorded Landfill Site (Location) rity Recorded Landfill Site Landfill Site andfill Site (Location). Landfill Site (Point Buffered to 100m) a⊓dfill Site (Point Buffered to 250m). Vaste Tra⊓sfer Site (Location) Vaste Transfer Site Vaste Treatment or Disposal Site Vaste Treatment or Disposal Site us Substances

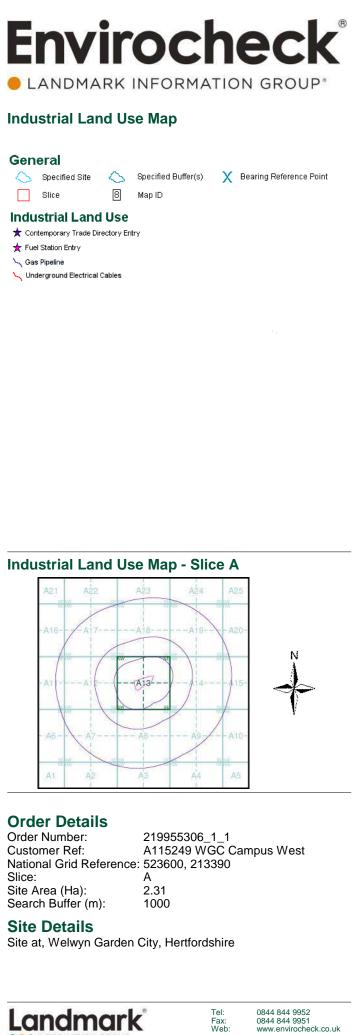
- 🙀 NIHHS Site
- 🗱 Planning Hazardous Substance Consent
- 🗱 Planning Hazardous Substance Enforcement



Page 1 of 5

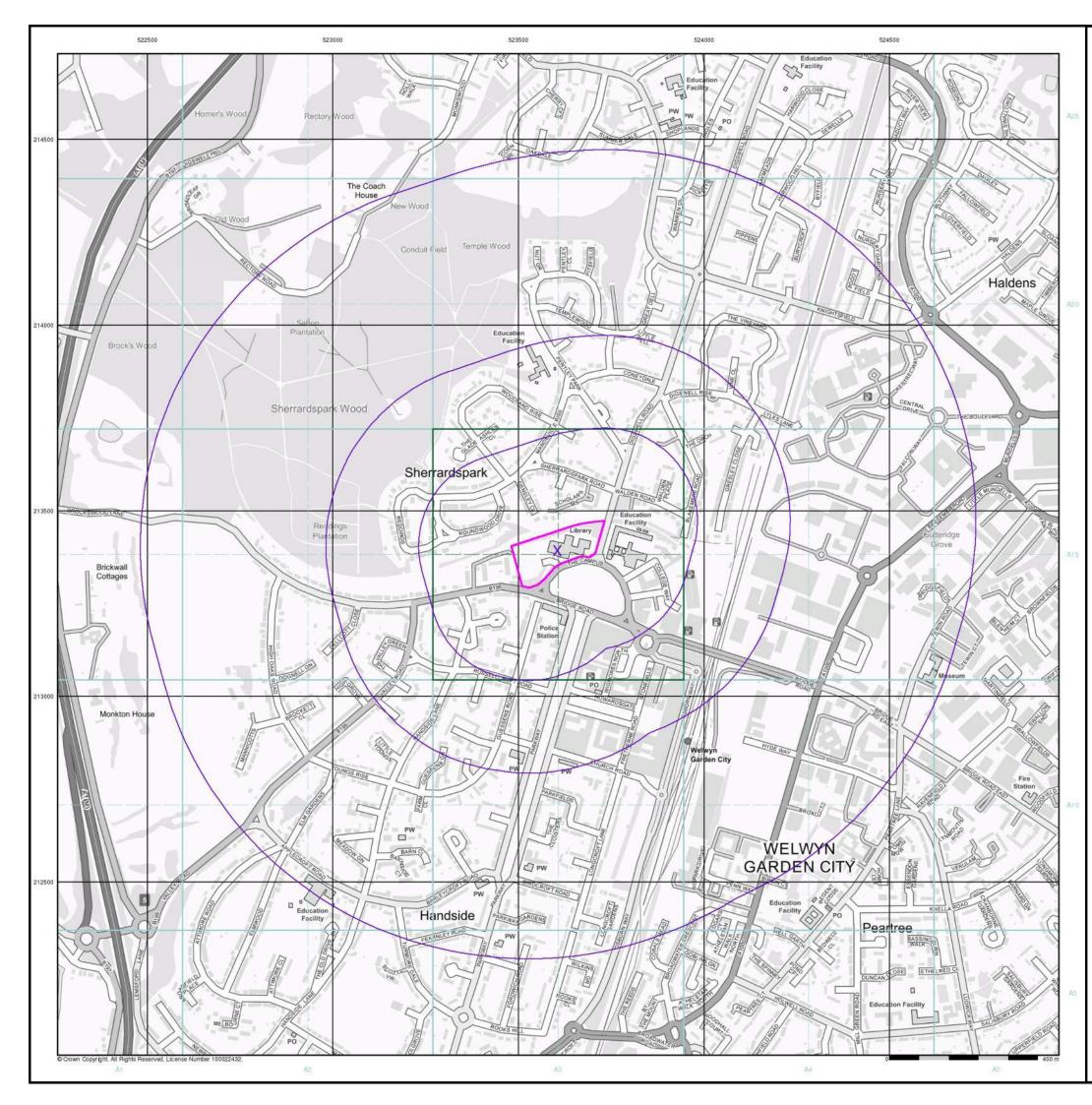
A Landmark Information Group Service v50.0 02-Oct-2019





A Landmark Information Group Service v50.0 02-Oct-2019

Page 2 of 5



General

🔼 Specified Site

- C Specified Buffer(s)
- X Bearing Reference Point

Agency and Hydrological (Flood)

Extreme Flooding from Rivers or Sea without Defences (Zone 2)

Flooding from Rivers or Sea without Defences (Zone 3)

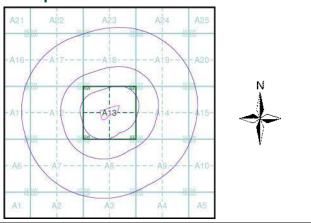
Area Benefiting from Flood Defence



Flood Water Storage Areas

--- Flood Defence

Flood Map - Slice A



Order Details

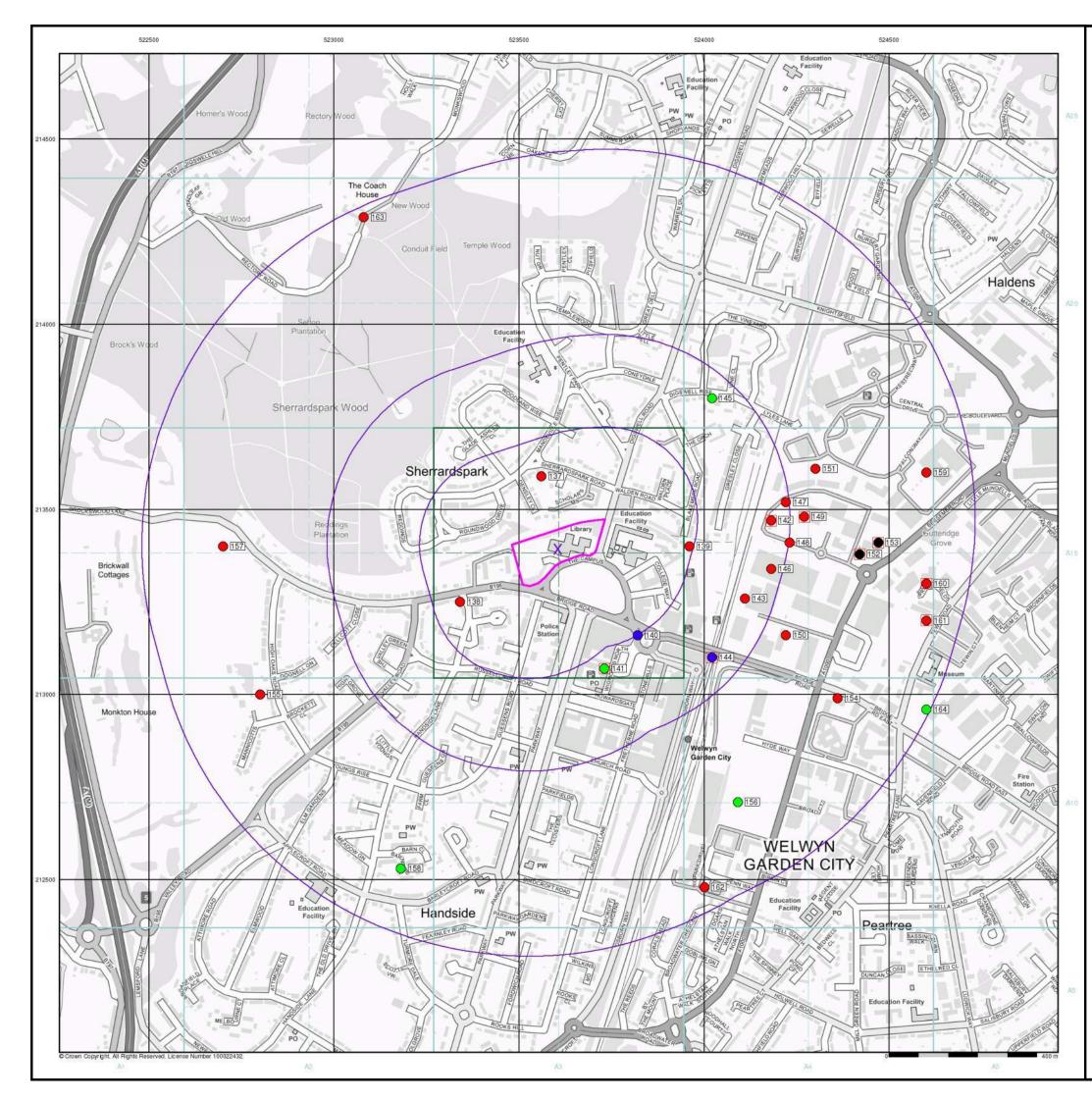
Slice: Site Area (Ha): Search Buffer (m):

Order Number: 219955306_1_1 Customer Ref: A115249 WGC Campus West National Grid Reference: 523600, 213390 А 2.31 1000

Site Details

Site at, Welwyn Garden City, Hertfordshire





General

🔼 Specified Site C Specified Buffer(s) X Bearing Reference Point 8 Map ID Several of Type at Location

Agency and Hydrological (Boreholes)

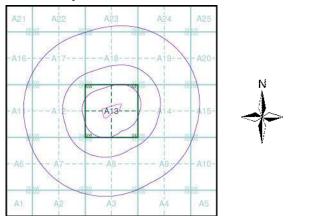
- 😑 BGS Borehole Depth 0 10m
- BGS Borehole Depth 10 30m
- 🔴 BGS Borehole Depth 30m +
- Confidential

○ Other

For Borehole information please refer to the Borehole .csv file which accompanied this slice.

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

Borehole Map - Slice A



Order Details

Order Number: Slice: Site Area (Ha): Search Buffer (m):

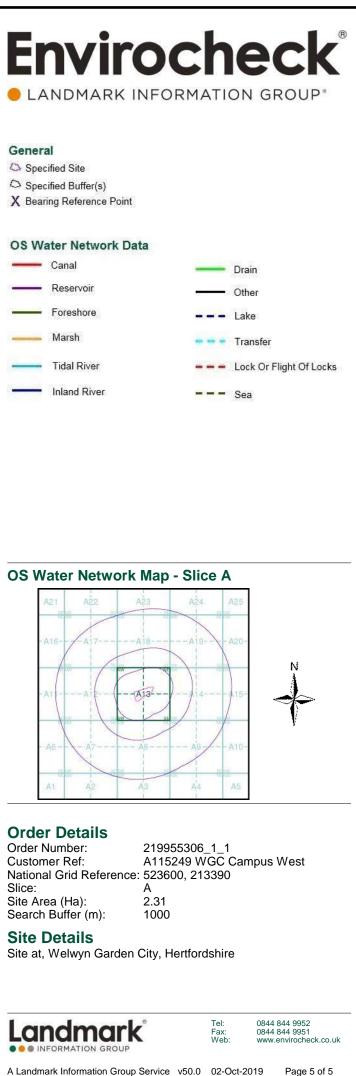
219955306_1_1 Customer Ref: A115249 WGC Campus West National Grid Reference: 523600, 213390 А 2.31 1000

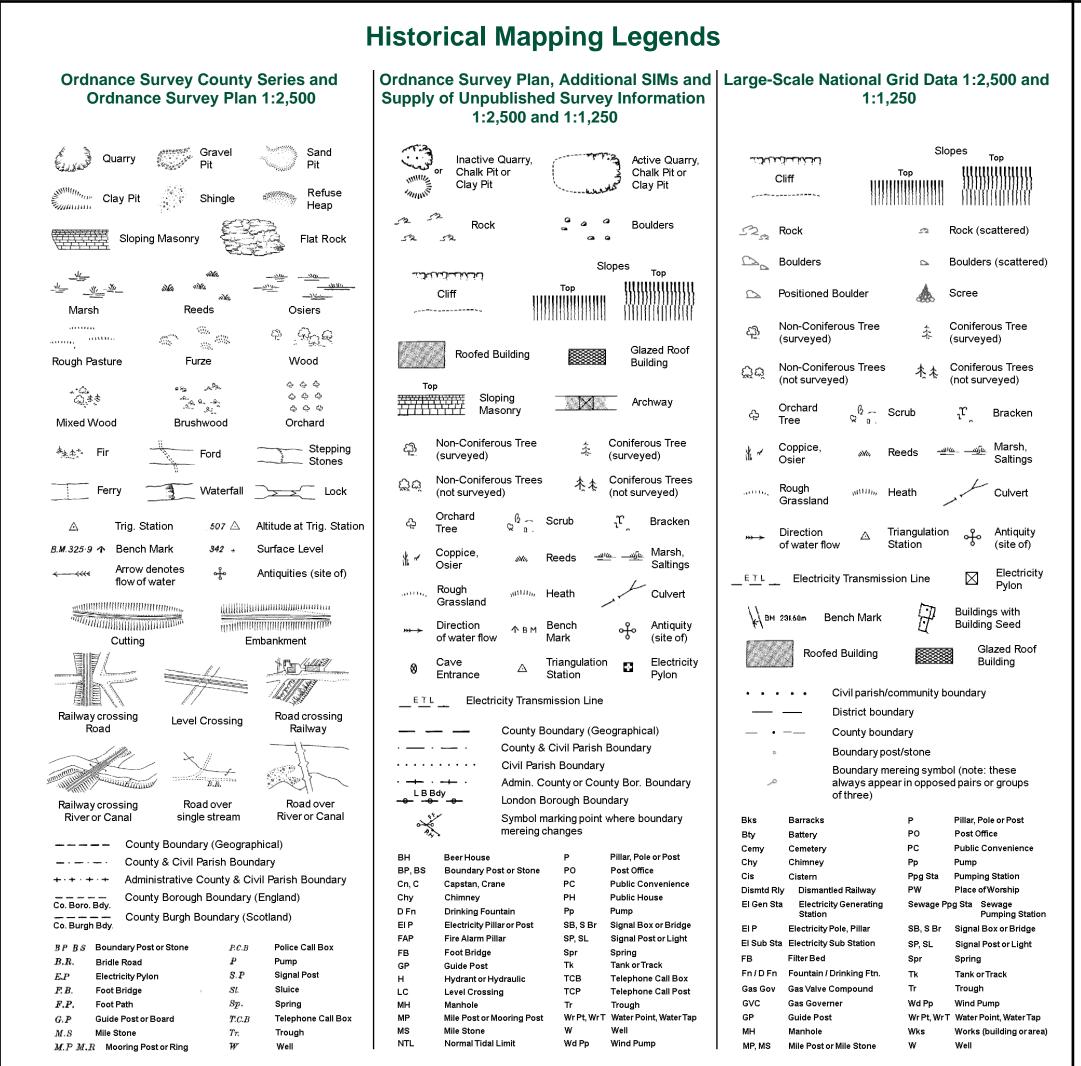
Site Details

Site at, Welwyn Garden City, Hertfordshire





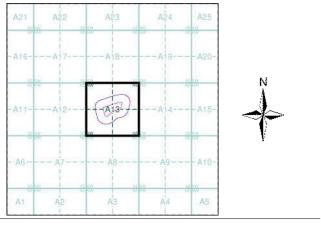




Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Hertfordshire	1:2,500	1878	2
Hertfordshire	1:2,500	1898	3
Hertfordshire	1:2,500	1923	4
Hertfordshire	1:2,500	1938	5
Ordnance Survey Plan	1:1,250	1961	6
Additional SIMs	1:1,250	1961 - 1985	7
Ordnance Survey Plan	1:1,250	1969	8
Ordnance Survey Plan	1:2,500	1972	9
Additional SIMs	1:1,250	1992	10
Large-Scale National Grid Data	1:1,250	1993	11

Historical Map - Segment A13



Order Details

Order Number: Customer Ref: National Grid Reference: 523600, 213390 Slice: Site Area (Ha): Search Buffer (m):

219955306_1_1 A115249 WGC Campus West Α 2.31 100

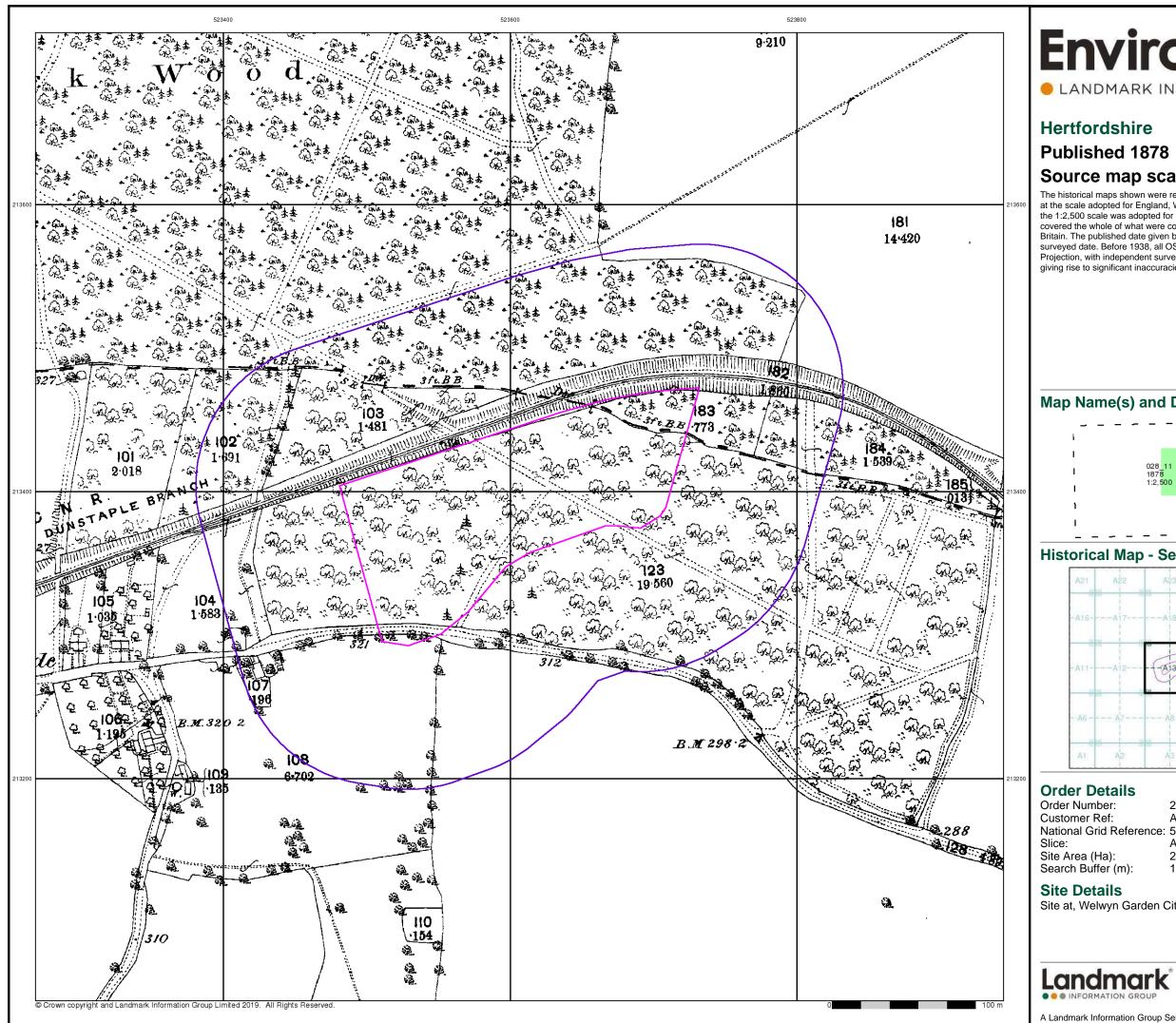
Site Details

Site at, Welwyn Garden City, Hertfordshire



Tel Fax: Web 0844 844 9952 0844 844 9951 virocheck.co.uk

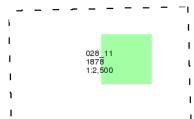
A Landmark Information Group Service v50.0 02-Oct-2019 Page 1 of 11



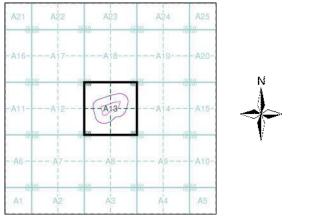
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13

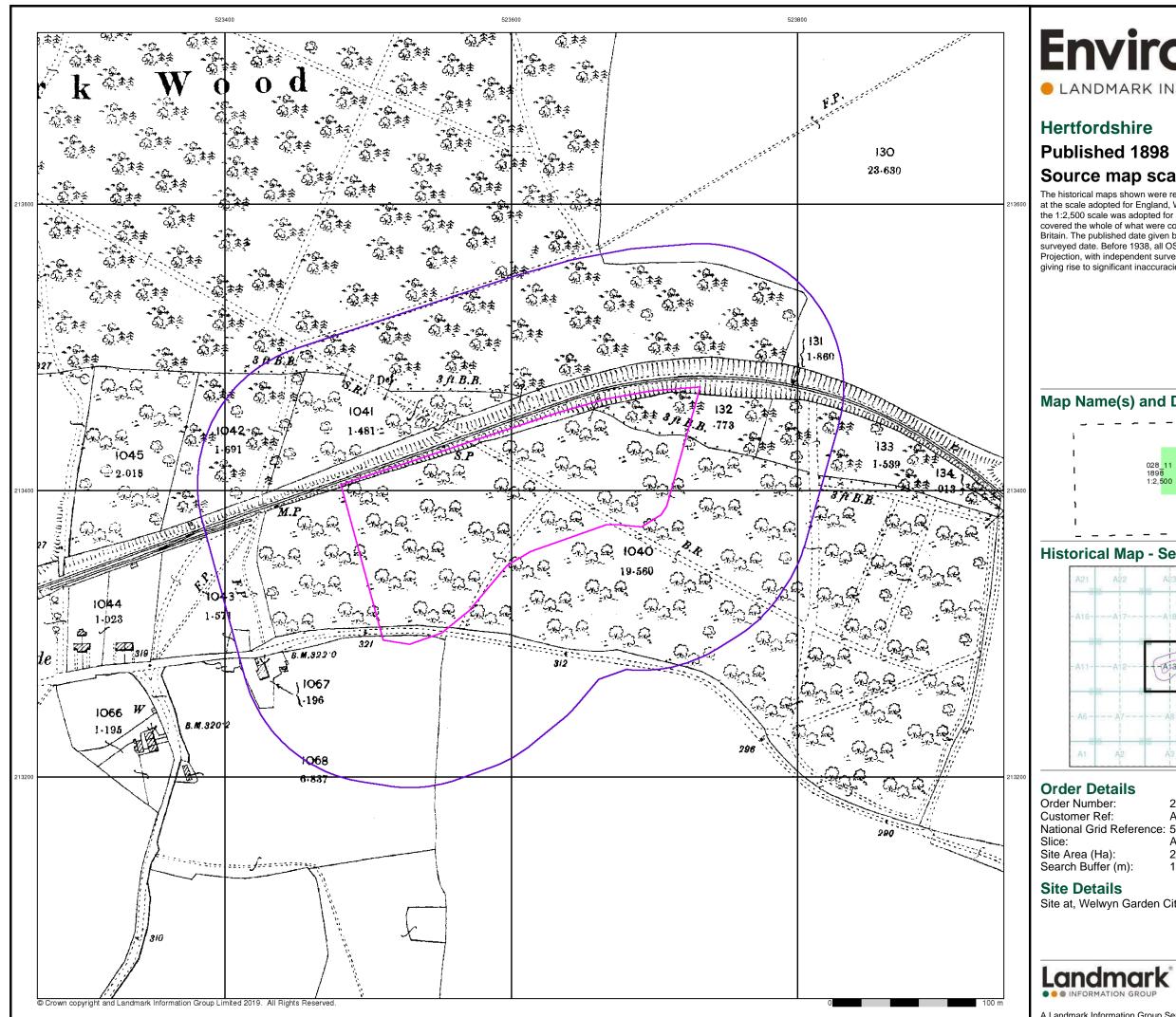


Order Number:	2199
Customer Ref:	A11
National Grid Reference:	5236
Slice:	Α
Site Area (Ha):	2.31
Search Buffer (m):	100

955306_1_1 I5249 WGC Campus West 600, 213390

Site at, Welwyn Garden City, Hertfordshire

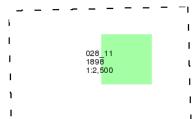
Tel: Fax: Web:



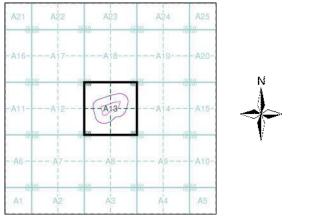
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



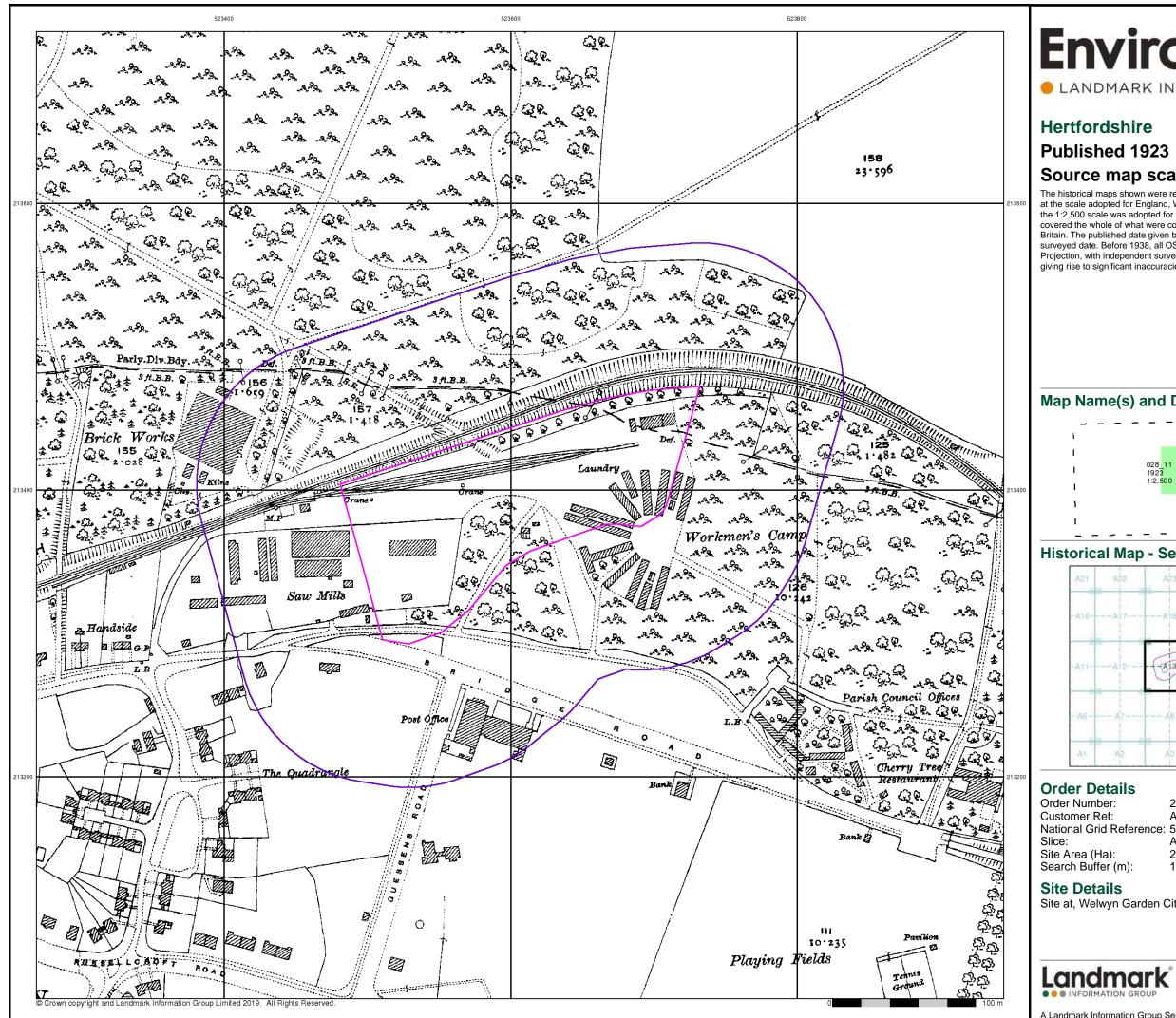
Historical Map - Segment A13



Order Number:	2199
Customer Ref:	A11
National Grid Reference:	5236
Slice:	А
Site Area (Ha):	2.31
Search Buffer (m):	100

955306_1_1 5249 WGC Campus West 600, 213390

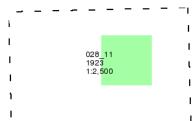
Site at, Welwyn Garden City, Hertfordshire



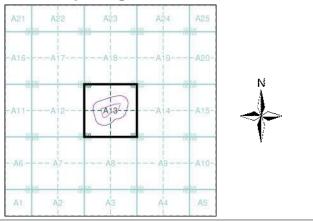
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



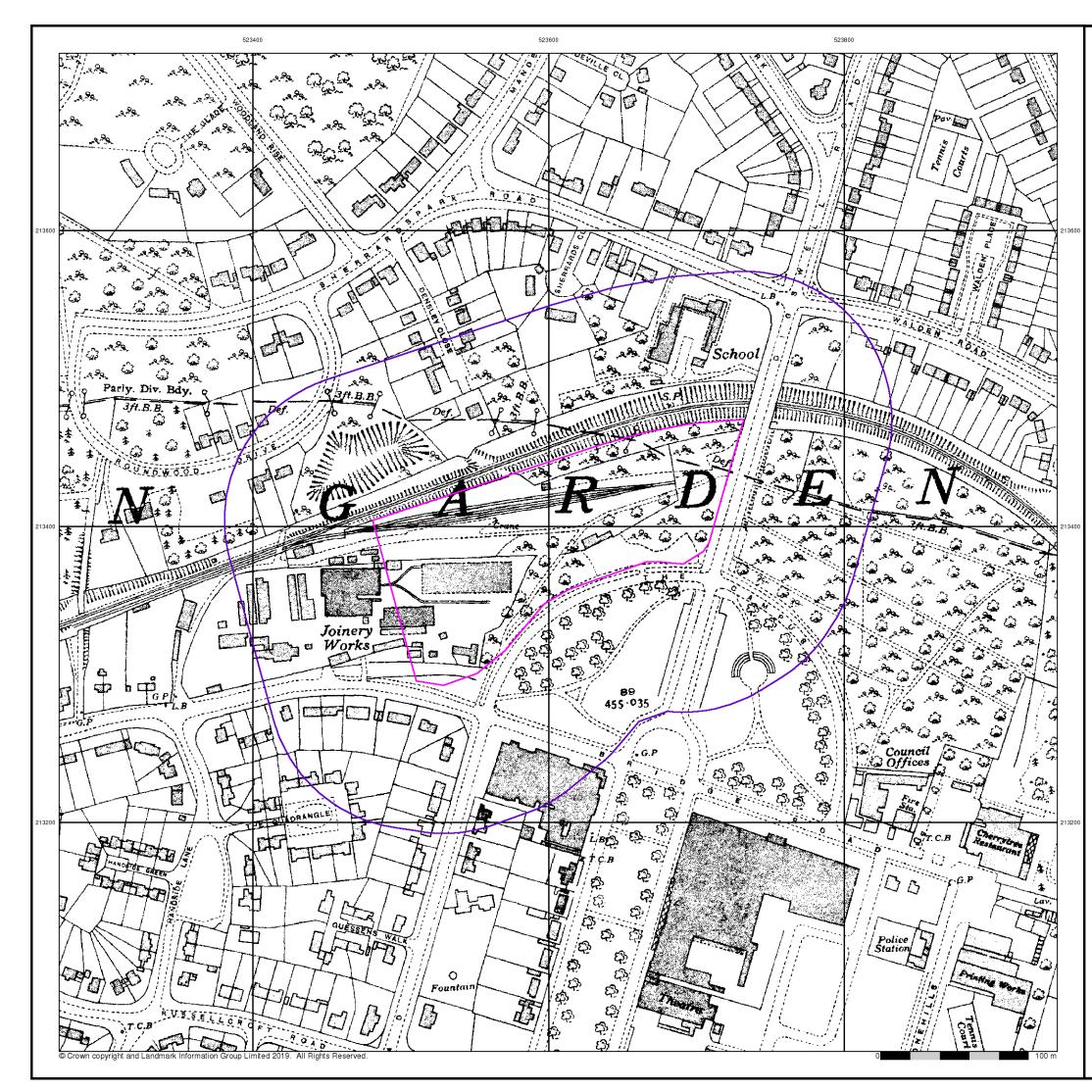
Historical Map - Segment A13



Order Number:	2199
Customer Ref:	A115
National Grid Reference:	5236
Slice:	А
Site Area (Ha):	2.31
Search Buffer (m):	100

955306_1_1 5249 WGC Campus West 600, 213390

Site at, Welwyn Garden City, Hertfordshire



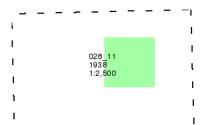
Hertfordshire

Published 1938

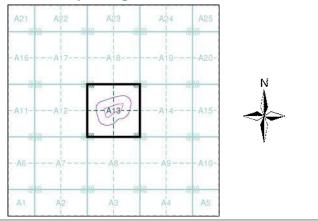
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	2199
Customer Ref:	A11
National Grid Reference:	5236
Slice:	Α
Site Area (Ha):	2.31
Search Buffer (m):	100

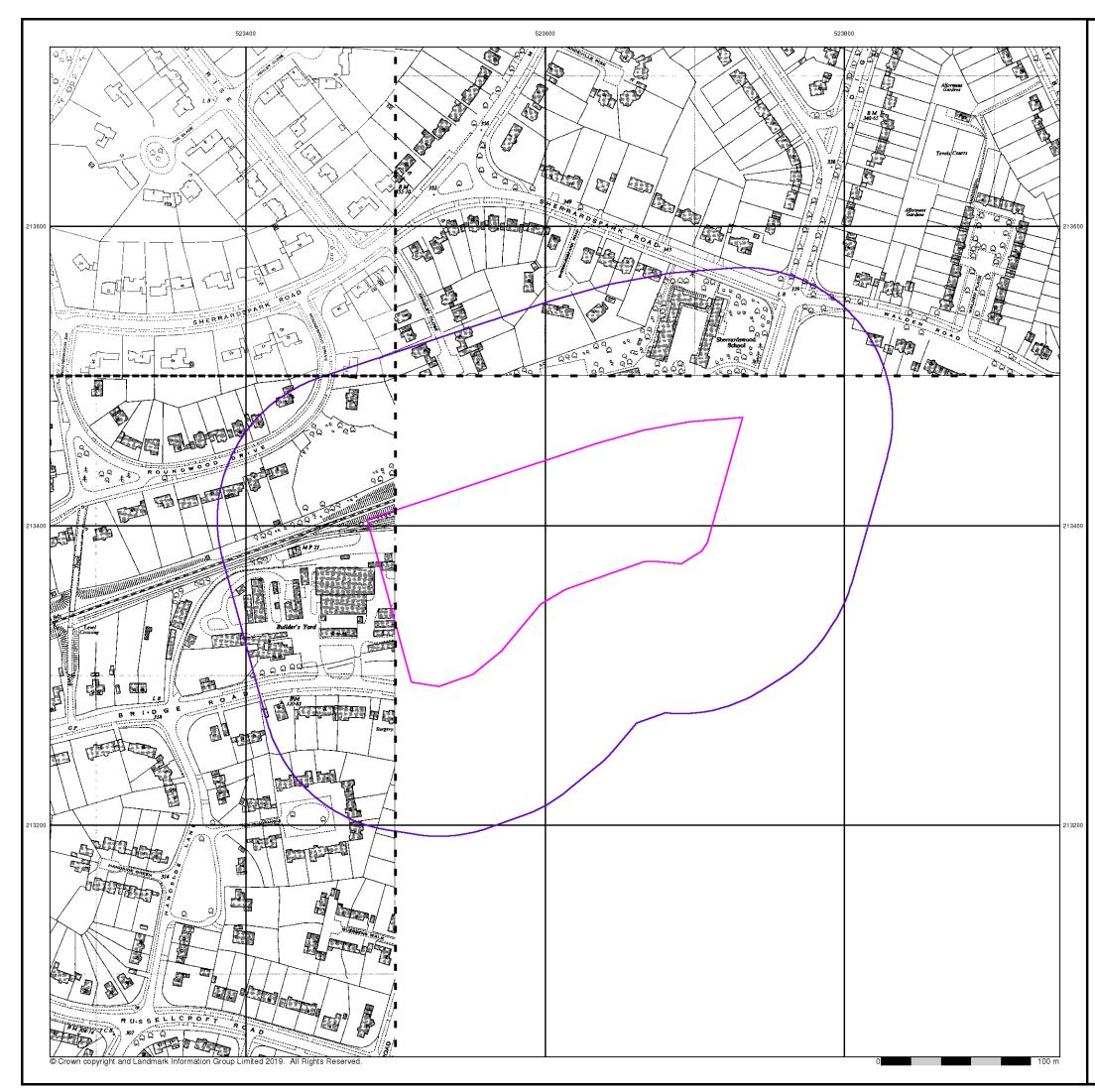
219955306_1_1 A115249 WGC Campus West 523600, 213390 A 2.31

Site Details

Site at, Welwyn Garden City, Hertfordshire



Tel: Fax: Web:



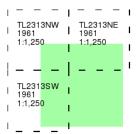
Ordnance Survey Plan

Published 1961

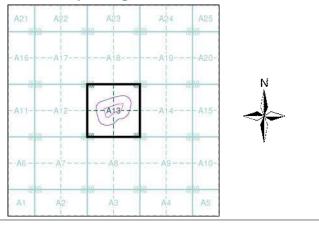
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	219
Customer Ref:	A11
National Grid Reference:	523
Slice:	Α
Site Area (Ha):	2.3
Search Buffer (m):	100

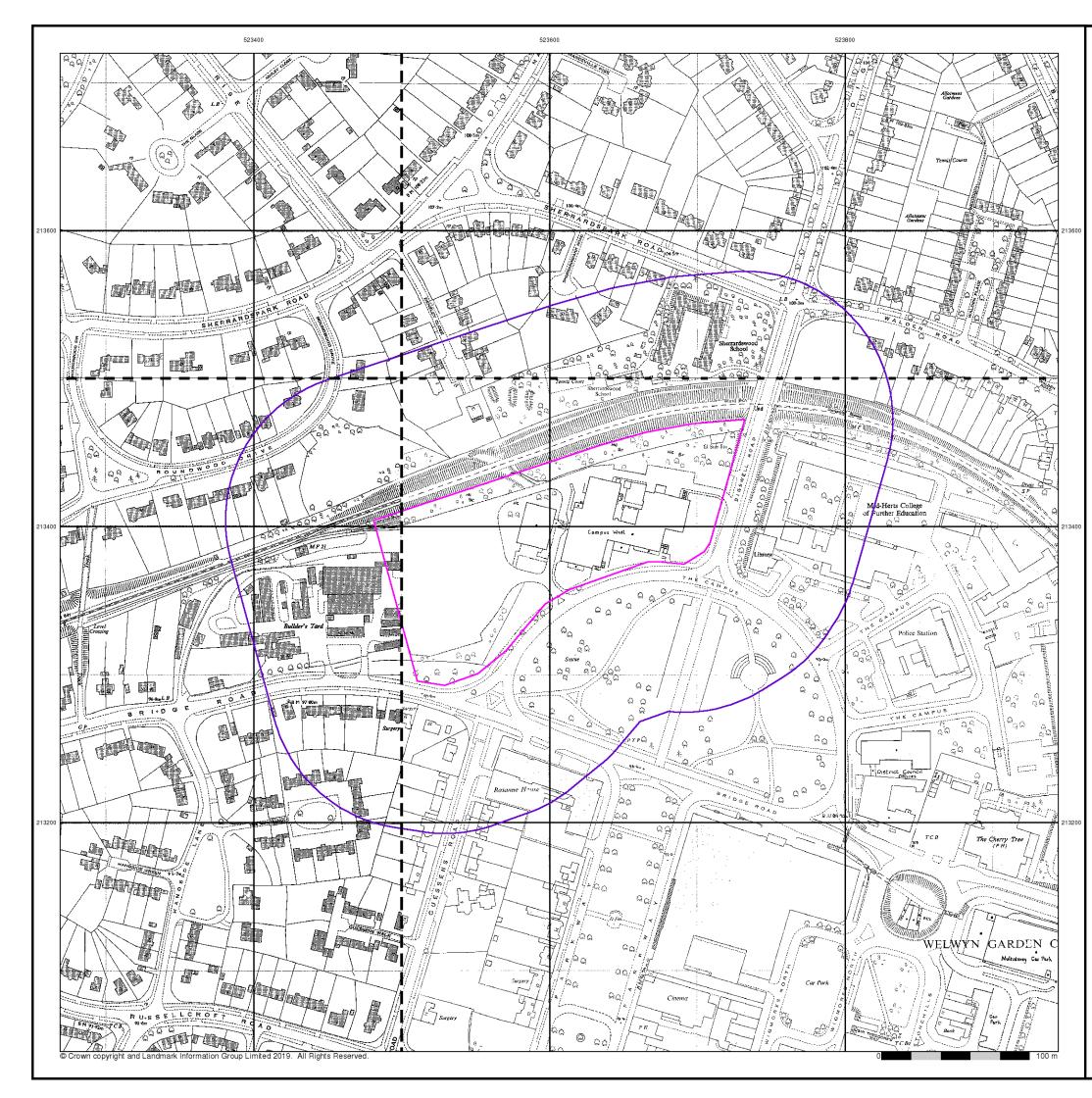
219955306_1_1 A115249 WGC Campus West 523600, 213390 A 2.31

Site Details

Site at, Welwyn Garden City, Hertfordshire



Tel: Fax: Web:



Envirocheck[®]

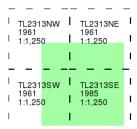
Additional SIMs

Published 1961 - 1985

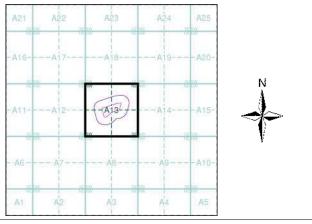
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	219955306_1_1
Customer Ref:	A115249 WGC Campus West
National Grid Reference:	523600, 213390
Slice:	A
Site Area (Ha):	2.31
Search Buffer (m):	100

Site Details

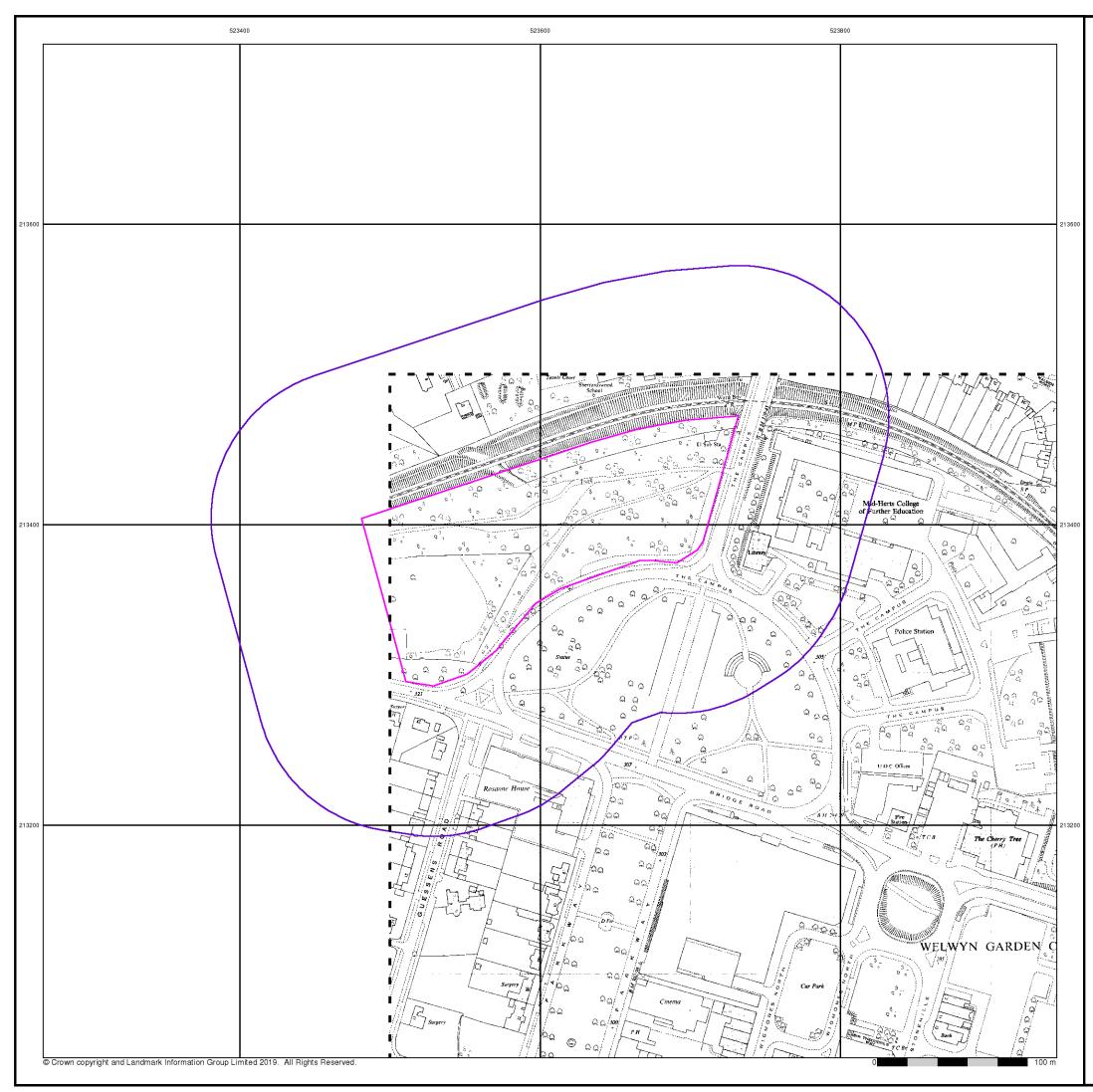
Site at, Welwyn Garden City, Hertfordshire



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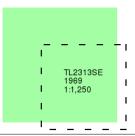
Ordnance Survey Plan

Published 1969

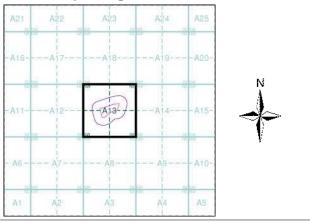
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	21995
Customer Ref:	A1152
National Grid Reference:	52360
Slice:	A
Site Area (Ha):	2.31
Search Buffer (m):	100
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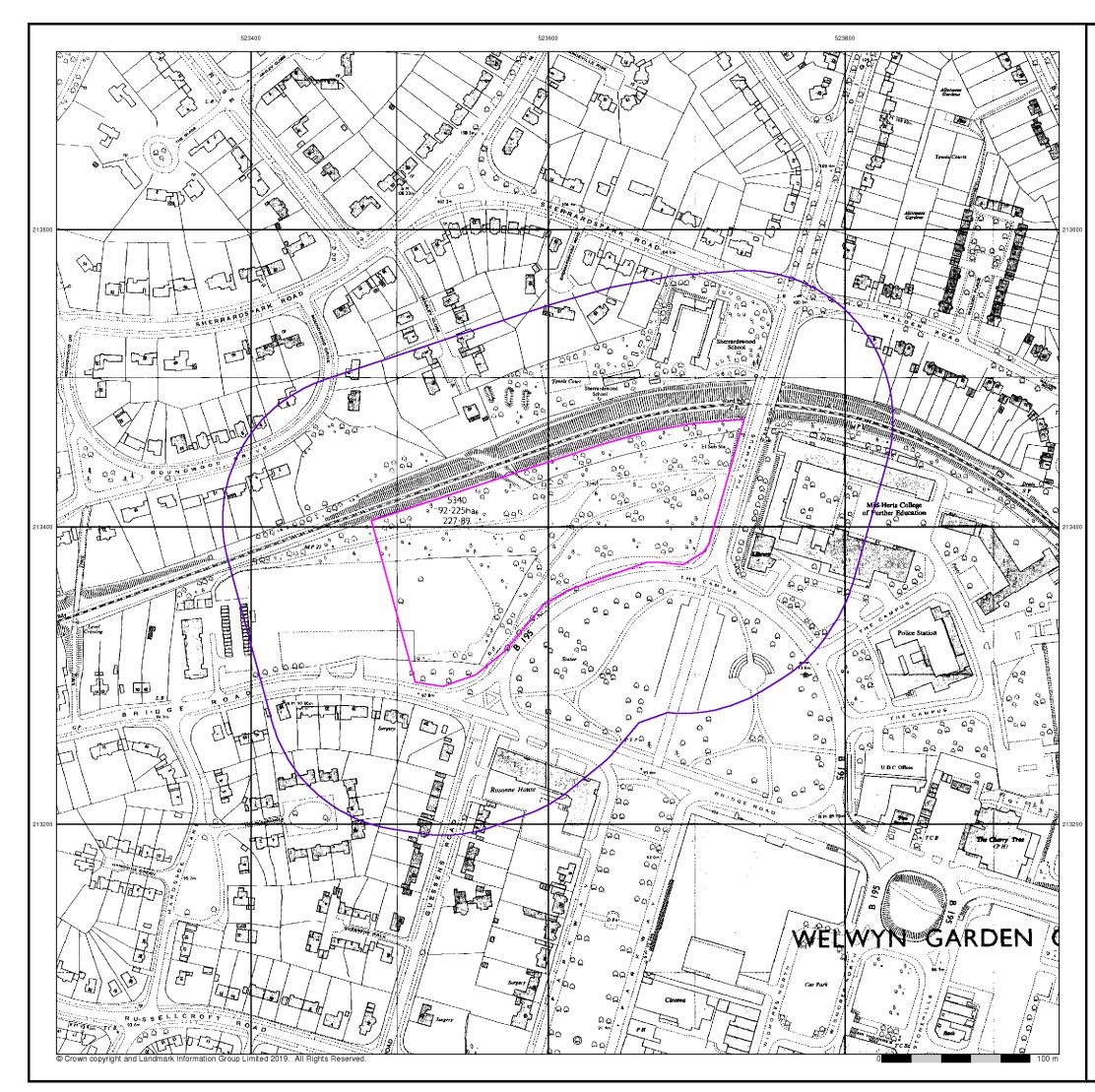
Site Details

Site at, Welwyn Garden City, Hertfordshire



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Tel: Fax: Web:



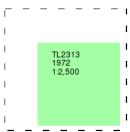
Ordnance Survey Plan

Published 1972

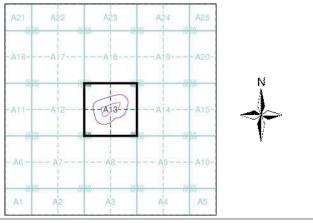
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	2199
Customer Ref:	A11
National Grid Reference:	5236
Slice:	A
Site Area (Ha):	2.31
Search Buffer (m):	100

219955306_1_1 A115249 WGC Campus West 523600, 213390 A 2.31 100

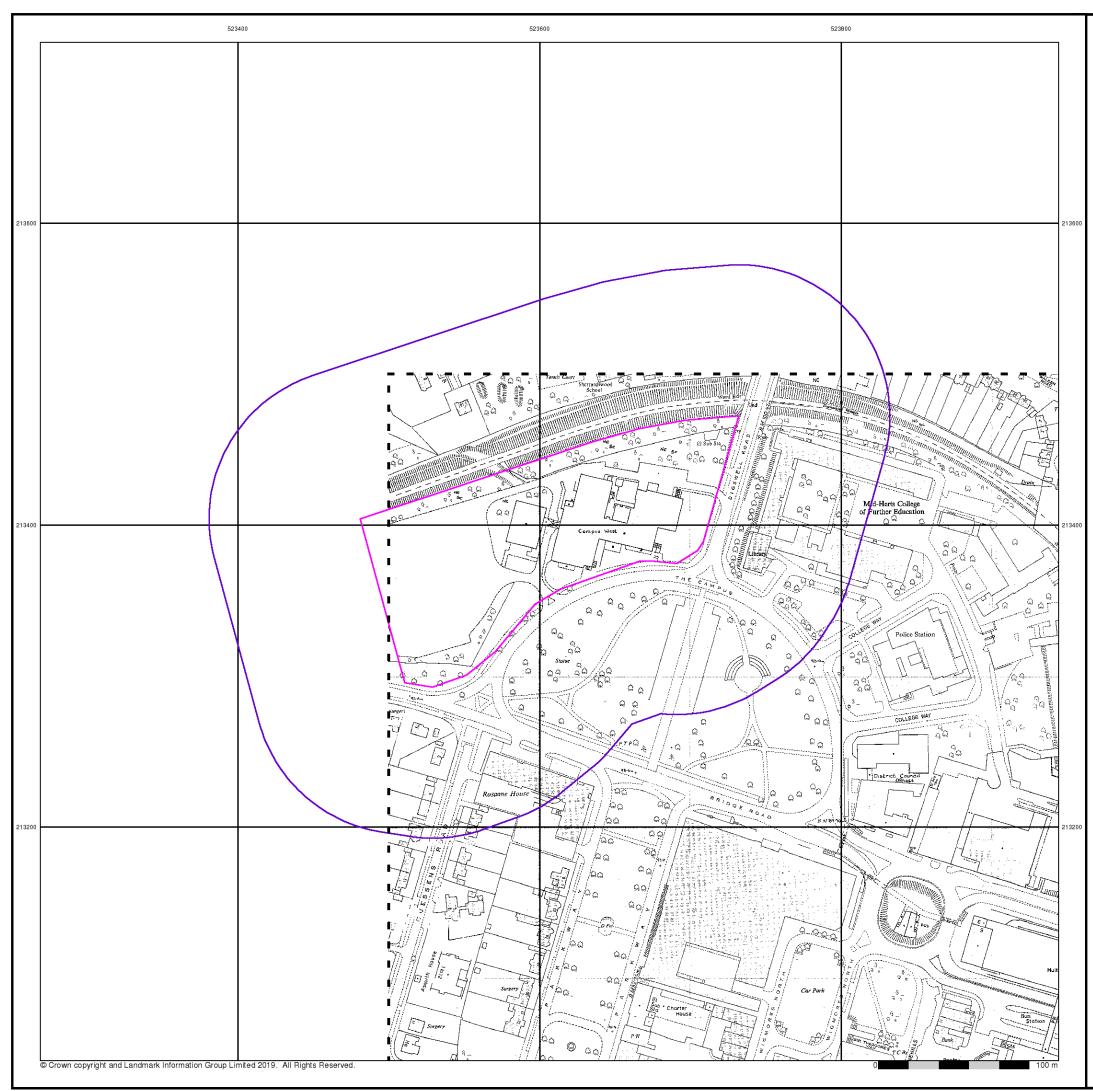
Site Details

Site at, Welwyn Garden City, Hertfordshire



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Tel: Fax: Web:



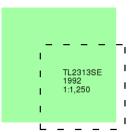
Additional SIMs

Published 1992

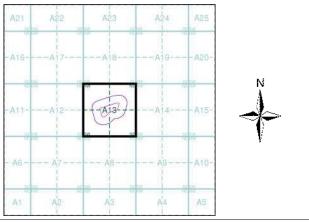
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

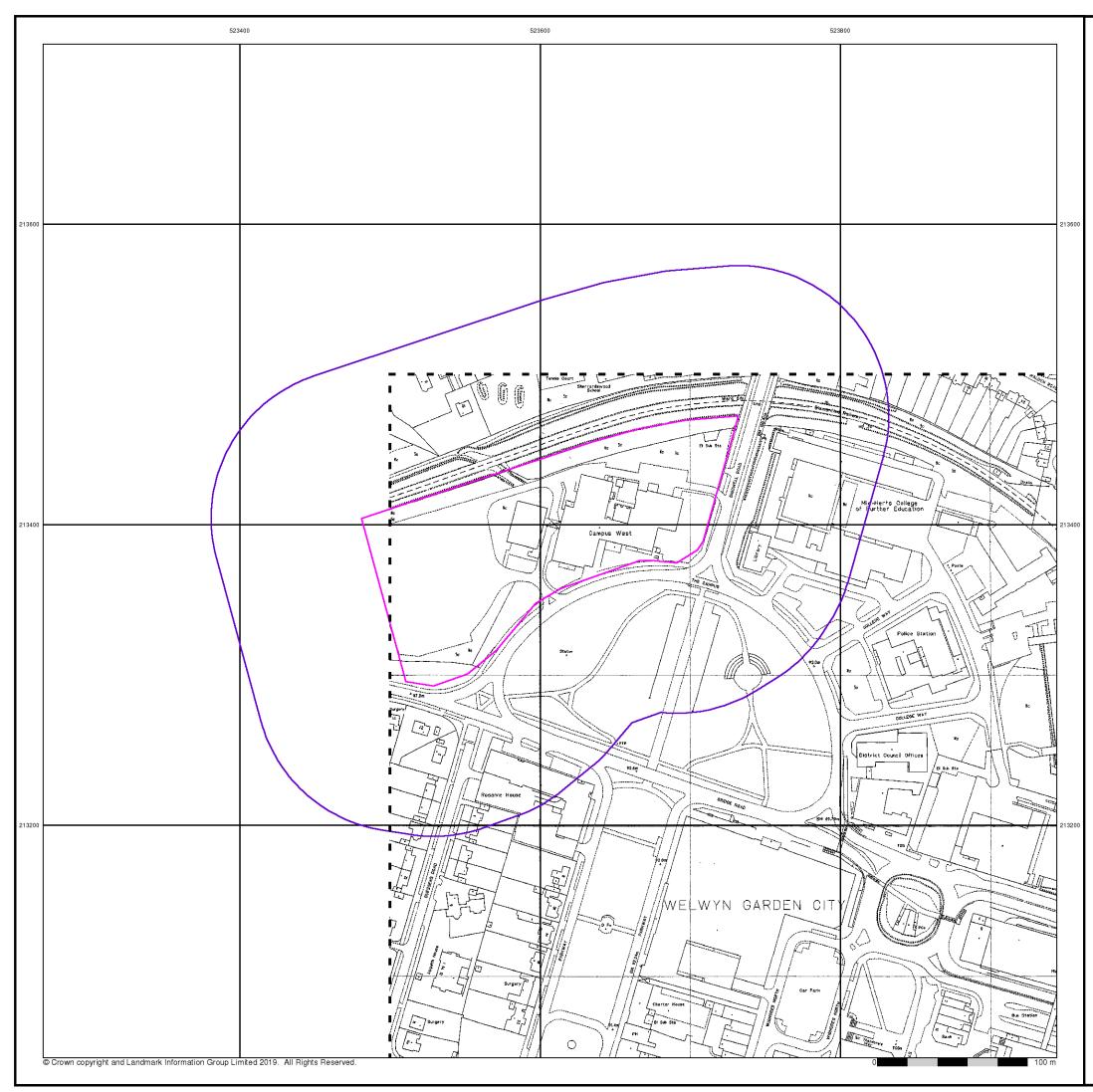
Order Number:	219955306_1_1
Customer Ref:	A115249 WGC Campus West
National Grid Reference:	523600, 213390
Slice:	A
Site Area (Ha):	2.31
Search Buffer (m):	100

Site Details

Site at, Welwyn Garden City, Hertfordshire



Tel: Fax: Web:

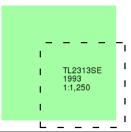


Large-Scale National Grid Data Published 1993

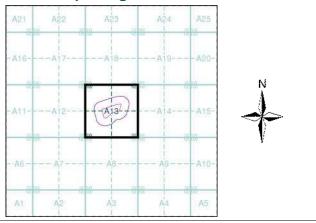
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

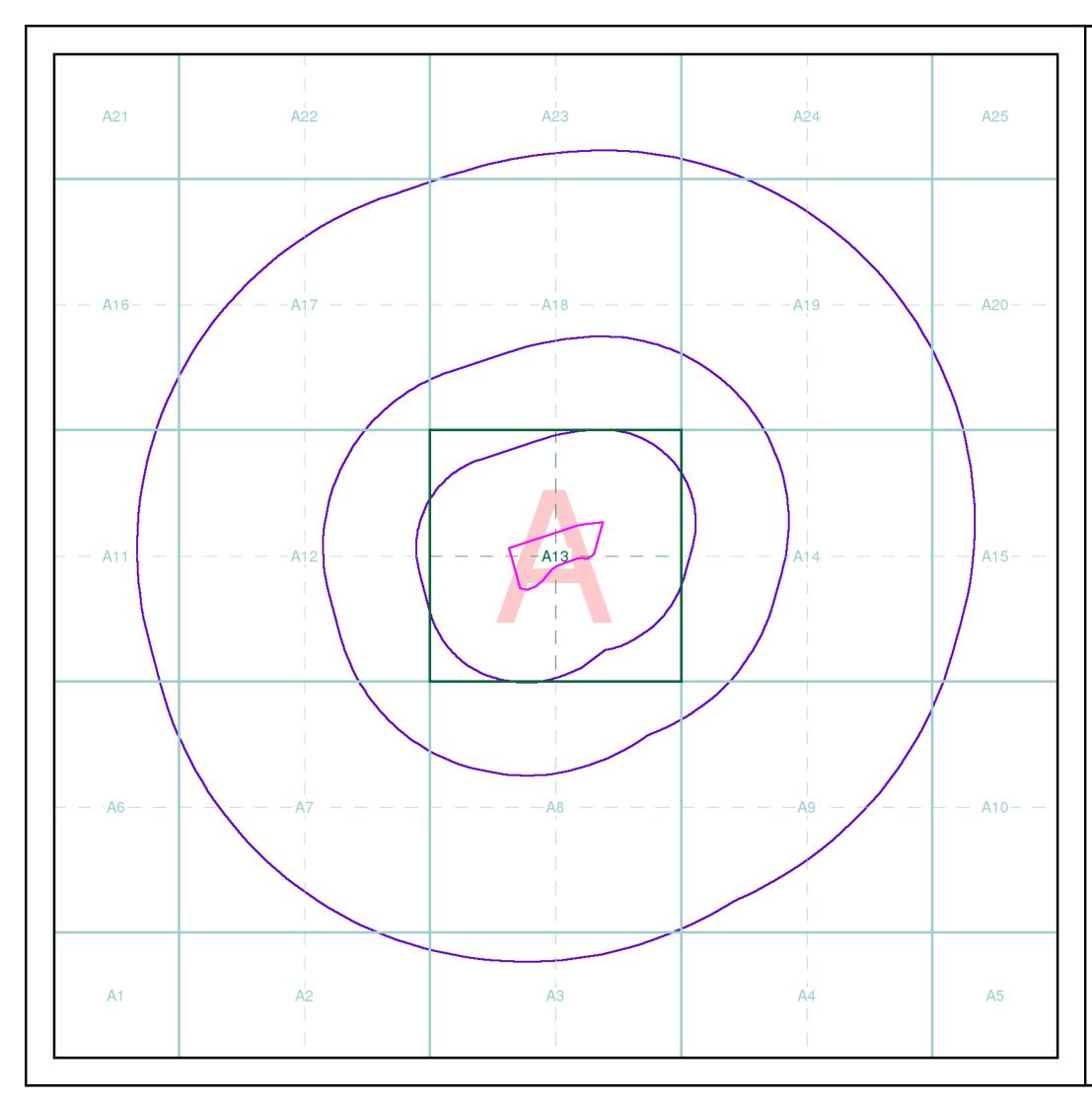
Order Number:	2199
Customer Ref:	A115
National Grid Reference:	5236
Slice:	А
Site Area (Ha):	2.31
Search Buffer (m):	100

219955306_1_1 A115249 WGC Campus West 523600, 213390 A 2.31

Site Details

Site at, Welwyn Garden City, Hertfordshire





Index Map

For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

Slice

Each slice represents a 1:10,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice "grid". This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

Segment

A segment represents a 1:2,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

Quadrant

A quadrant is a quarter of a segment. These are labelled as NW, NE, SW, SE and are referenced in the datasheet to allow features to be quickly located on plots. Therefore a feature that has a quadrant reference of A7NW will be in Slice A, Segment 7 and the NW Quadrant.

A selection of organisations who provide data within this report:





British **Geological Survey**





Envirocheck reports are compiled from 136 different sources of data.

Client Details

Mr D Perera, WYG Environment Planning Transport Ltd, 1 Angel Court, London, EC2R 7HJ

Order Details

Order Number: Customer Ref: National Grid Reference: 523600, 213390 Site Area (Ha): Search Buffer (m):

219955306_1_1 A115249 WGC Campus West 2.31 1000

Site Details

Site at, Welwyn Garden City, Hertfordshire

Full Terms and Conditions can be found on the following link: http://www.landmarkinfo.co.uk/Terms/Show/515



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Appendix C – Qualitative Risk Assessment Methodology



This qualitative risk assessment has been undertaken in accordance with CIRIA C552: Contaminated Land Risk Assessment, A Guide to Good Practice (Rudland et al., 2001). The CIRIA C552 risk categories and the assessment methodology are detailed below.

Fable C.1 Definition of Magnitude of Consequence

Category	Definition			
Severe	Acute risks to human health, catastrophic damage to buildings/property, major pollution of controlled waters.			
Medium	Chronic risk to human health, pollution of sensitive controlled waters, significant effects on sensitive ecosystems or species, significant damage to buildings or structures.			
Mild	Pollution of non sensitive waters, minor damage to buildings or structures.			
Minor	Requirement for protective equipment during site works to mitigate health effects, damage to non sensitive ecosystems or species.			

The likelihood of an event (probability) takes into account both the presence of the hazard and target and the integrity of the pathway and has been assessed based on the categories given in Table 5.2 below.



Table C.2 Definit	ion of Probability	/ of Exposure
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Category	Definition
High Likelihood	Pollutant linkage may be present, and risk is almost certain to occur in long term, or there is evidence of harm to the receptor.
Likely	Pollutant linkage may be present, and it is probable that the risk will occur over the long term.
Low Likelihood	Pollutant linkage may be present, and there is a possibility of the risk occurring, although there is no certainty that it will do so.
Unlikely	Pollutant linkage may be present, but the circumstances under which harm would occur are improbable.

The potential severity of the risk and the probability of the risk occurring have been combined in accordance with the matrix presented in Table E.3 below, in order to give a level of risk for each potential hazard.

Table C.3 Definition of Magnitude of Consequence

		Potential Severity			
		Severe	Medium	Mild	Minor
	High Likelihood	Very High	High	Moderate	Low/Moderate
Probability	Likely	High	Moderate	Low/Moderate	Low
of Risk	Low Likelihood	Moderate	Low/Moderate	Low	Very Low
	Unlikely	Low/Moderate	Low	Very Low	Very Low

The risk assessment is presented in Table C.4.



Table C.4 Qualitative Risk Assessment

	Source	Pollutant	Pathway	Receptor	Likelihood of Occurrence	Associated Hazard (Severity)	Risk
			Direct dermal contact or ingestion, migration and inhalation of dust/gases / vapours	Current & Future Site Users	Low Likelihood Hardstanding covers most of the site, limiting potential for exposure to underlying made ground.	Medium	Low/ Moderate
On - Site	Site use and inorganics,	Lateral and vertical migration in groundwater	Groundwater in Superficial Deposits	Likely Groundwater if present is likely to be mobile with leaching potential and the site lies within a Source	Medium	Moderate	
	industry (PAOC 1)	PAH, and TPH		Groundwater in Bedrock Geology	Protection Zone III. A groundwater abstraction is located within 250m of the site.		
			On-Site Surface Waters and Adjacent Land	Unlikely Hardstanding covering reduces the pathway between the Made Ground and surface water run-off.	Medium	Low	
On - Site	Current site use including car park and vehicle usage	Metals, inorganics, PAH, TPH, Solvents, Hydrocarbons	Surface water runoff	Adjacent Land	Likely Car park in use during period where car emissions contained greater levels of lead etc. High mobility of fuel and oil leaks. Car parks potential targets for fly-tipping, introducing new hazards.	Medium	Low
On - site	Leaks and spills from vehicles and	Metals, inorganics, PAH, TPH,	Direct dermal contact or ingestion, migration and inhalation of dust/gases/ vapours	Current & Future Site Users	Unlikely Hardstanding covers most of the site, limiting potential for exposure.	Medium	Low

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	Source	Pollutant	Pathway	Receptor	Likelihood of Occurrence	Associated Hazard (Severity)	Risk
	previous industry	Solvents, hydrocarbons	Vertical migration downwards via leaching				
				Groundwater in Superficial Deposits	Unlikely Hardstanding covers most of the site, limiting potential		
			Lateral and vertical migration in groundwater	Groundwater in Bedrock Geology	for exposure. The site is in Source Protection Zone III and no groundwater abstractions present within 250m of the site.	Medium	Low
			Surface water runoff	Adjacent Land	Likely High surface runoff is anticipated as a result of the large amount of hardstanding covering the site.	Minor	Low
Off - Site	Adjacent land uses, including the railway line and major roads	Metals, inorganics, PAH, TPH, hydrocarbon, asbestos and clinker	Surface water runoff	Adjacent Land	Low Relatively inert and small-scale contamination form adjacent sources. Construction and expansion of railway in a period where contaminants such as asbestos and clinker were widespread.	Medium	Low / Moderate

Phase I Geo-Environmental Assessment

