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STOREFIELD GROUP LIMITED

PHOENIX PARKWAY

ENVIRONMENTAL SETTING AND SITE DESIGN

JANUARY 2024

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JANUARY 2024

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1 INTRODUCTION

1.1.1 The Storefield Group Ltd (Storefield) has commissioned Wardell Armstrong LLP to prepare an environmental permit application for their proposed development in Corby, North Northamptonshire.

1.1.2 The Site has been identified as a strategic site for employment development within local planning policy. In order to make the site suitable for use as an industrial and commercial development, Storefield propose to raise and level to create a suitable load-bearing development platform.

1.1.3 The site was formally a liquid waste treatment facility, for which the permit has been surrendered. Additionally, the site is also partially located on a landfill site which is currently in formal closure. Prior to this, the site was quarried to remove material for use in the Corby Integrated Iron and Steel works.

1.1.4 It is proposed that the development platform will be constructed of approximately 686,000m³ of suitable waste materials. The scheme has been designed to require the minimum volume of suitable waste materials, which will be recovered through the permanent deposit of these materials.

1.1.5 The following report has been prepared by Wardell Armstrong to provide the Environmental Setting and Site Design to support the permit application. The report describes the setting of the Site in terms of its geology, hydrogeology and hydrology and explains and justifies the design of the Site.

1.1.6 Operations at the site will meet the requirements of the Environment Agency's guidance "Standards and measures for the Deposit of Inert Waste on Land".

1.1.7 Section 2 provides the context of this report.

1.1.8 Section 3 provides details of the Site location, the activities to be undertaken, and receptors that are present within close proximity of the Site.

1.1.9 Section 3 details the historical development at the Site and the proposed development under this permit application.

1.1.10 Section 4 provides further detail on the possible sources of contamination.

1.1.11 Section 5 provides the pollution and control measures.

1.1.12 Section 6 characterises the potential pathways for pollutants.

1.1.13 Section 7 provides a summary of the geology at the site.

1.1.14 Section 8 provides a summary of the hydrology at the site.

1.1.15 Section 9 provides a summary of the hydrogeology at the site.

1.1.16 Section 10 describes the compliance points and the monitoring to be undertaken to confirm that no significant impact has been caused.

1.1.17 Section 11 confirms that there is no requirement for a Site Condition Report.

1.1.18 Section 12 provides a summary of conclusions arising from this report.

2 REPORT CONTEXT

2.1.1 The proposed scheme is for the construction of a suitable development platform to enable commercial development of the site, which was a former waste treatment site, and partially within a site which is a closed landfill. The current land topography of the site is uneven and cannot be developed as it currently stands.

2.1.2 The intention is to import and deposit suitable waste materials to the site, to enable a more uniform land surface to be achieved, in line with the Waste Recovery Plan (provided as Appendix 1).

2.1.3 A series of reports have been prepped by both Firths Consultants and Soiltechnics which should be read in conjunction with this ESSD report. These reports are as follows:

- Ground Investigation Report, prepared by Soiltechnics, Report number STP3996D-G01 September 2020 (provided as Appendix 2);
- Ground Stability Report, prepared by Soiltechnics, Report number STP3966D-S01 Rev A, June 2023 (provided as Appendix 3);
- Hydrogeological Risk Assessment, prepared by Firth Consultants, Report number fc37266, November 2023 (provided as Appendix 4).

2.1.4 In addition to the assessments outlined above in section 2.1.4, Wardell Armstrong have prepared an Amenity and Accident Risk Assessment and Habitats Risk Assessment. This ESSD has been developed based on the outcome of the risk assessments and sets out the site setting and site design, with consideration of the risks identified through the Conceptual Site Model (CSM) and subsequent risk assessments.

3 SITE DETAILS

3.1 Site Location

3.1.1 The site is situated north of Willowbrook Industrial Estate, near to Corby Town, North Northamptonshire. The site is centred at SP 90128 90860 and the nearest postcode is NN17 5BE.

3.1.2 The site location is shown on Drawing No GM10604-014.

3.1.3 The site is approximately 20.5 ha in size, and currently comprises of scrubland, incorporating a closed former landfill (Corby Tubeworks), which is in formal closure. Additionally, there is an area of land which was formerly permitted as a liquid waste treatment facility. The Waste Management Licence originally issued for the landfill did not require the landfill to be capped nor specified a final restoration profile.

3.1.4 The site is bound to the south by the river Willow Brook North, with Willowbrook East Industrial Estate adjacent to the southern boundary of the site. An area of scrubland with a commercial development sits between the area and the Phoenix Parkway Road. Earlstrees Industrial Estate sits approximately 370m west of the permit boundary.

3.1.5 To the north, Mitchell Road runs parallel to the site boundary and forms a route from Phoenix Parkway to Rockingham Motor Speedway. Beyond Mitchell Road there are several industrial and commercial premises, breaking into more rural setting beyond these. An area of vegetation borders the east of the site.

3.1.6 The nearest residential properties are located approximately 750m southwest of the site boundary on Pen Green Lane, beyond Phoenix Parkway and a railway line.

3.1.7 The site lies within the Rockingham Enterprise Area, identified as a strategic site for employment development. However, due to the varied topography, as described in section 2.2 below, essential engineering and enabling works are required to ensure its suitability for development.

3.2 Site Topography

3.2.1 The topography of the site ranges between approximately 105m AOD to the south and 110 AOD towards the north. The landform is varied as a result of soil mounds, tracks, and former lagoons within the site boundary.

3.2.2 The site can roughly be divided into two areas, with the land within the former landfill site in the southern-eastern areas occupying a plateau-like position up to 3m higher

than the northern and western areas of the site. A steep-sided bund, up to 1.5m in height, runs along the western and southern boundaries of the plateau.

3.2.3 Ground levels within the former waste treatment facility site in the north-western portion of the site are up to 10m lower than Mitchell Road to the north-west and up to 7m lower than the unnamed road to the north-east, and fall steeply from these adjacent roads into the site area.

3.2.4 The bases of remediated former dewatering lagoons in the north-western areas of the site are approximately 2m – 2.5m below the level of the surrounding ground.

3.3 Site Activities

3.3.1 The permitted activities will be limited to the deposit for recovery of suitable materials as set out in Table 3.1, below.

Table 3.1: Permitted Site Activities

Activity	Schedule 1 Reference under EPR 2016	Waste Framework Directive Classification
Use of waste in a deposit for recovery operation	Not Listed	**R5**: Recycling or reclamation of other inorganic materials **R13**: Storage of wastes pending any of the operations numbered R5 and R10

3.3.2 In order to achieve the required levels to construct the development platform, approximately 686,000m³ of suitable materials are required. Drawing SK103 provides a volume comparison of existing topographical data and the proposed development. The calculations derived from this drawing evidence the required volume of fill to achieve the required levels.

3.3.3 The list of EWC codes for wastes to be deposited is provided in Table 3.2 below.

Table 3.2: List of Materials for Deposit to Construct Development Platform

EWC Waste Code	Description
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL CHEMICAL TREATMENT OF MINERALS
01 04	Wastes from physical and chemical processing of non-metalliferous minerals
01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	Waste sand and clay
01 04 12	Tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11
01 04 13	Waste from stone cutting and sawing other than those mentioned in 01 04 07

Table 3.2: List of Materials for Deposit to Construct Development Platform	
EWC Waste Code	**Description**
10	WASTES FROM THERMAL PROCESSES
10 11	Wastes from manufacture of glass and glass products
10 11 03	Waste Glass-based fibrous materials
10 11 12	Waste glass other than those mentioned in 10 11 11
10 12	Wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 06	Discarded moulds
10 12 08	Waste ceramics, bricks, tiles and construction products (after thermal processing)
10 13	Wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 11	Waste from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10
10 13 14	Waste concrete and concrete sludge
15	WASTE PACKAGING, ABSORBENTS, WIPING CLOTHS, SLITER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01	Packaging (including separately collected municipal packaging waste)
15 01 07	Glass Packaging
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	Concrete, bricks, tiles and ceramics
17 01 01	Concrete
17 01 02	Bricks
17 01 03	Tiles and ceramics
17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	Wood, glass and plastic
17 02 02	Glass
17 05	Soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	Soil and stones other than those mentioned in 17 05 03
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 01	Wastes from incineration or pyrolysis of waste
19 01 12	Bottom ash and slag other than those mentioned in 19 01 11
19 01 14	Fly ash other than those mentioned in 19 01 13
19 01 18	Pyrolysis wastes other than those mentioned in 19 01 13
19 01 19	Sand from fluidised beds
19 03	Stabilised/solidified wastes
19 03 05	Stabilised wastes other than those mentioned in 19 03 04
19 03 07	Solidified wastes other than those mentioned in 19 03 06
19 08	Wastes from waste water treatment plants not otherwise specified
19 08 01	Screenings
19 08 02	Waste from de-sanding
19 09	Wastes from the preparation of water intended for human consumption or water for industrial use
19 09 01	Solid waste from primary filtration and screenings
19 12	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 05	Glass
19 12 09	Minerals (for example sand, stones)

Table 3.2: List of Materials for Deposit to Construct Development Platform	
EWC Waste Code	**Description**
19 12 12	Other wastes including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
19 13	Wastes from soil and groundwater remediation
19 13 02	Solid waste from soil remediation other than those mentioned in 19 13 01
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	Separately collected fractions (except 15 01)
20 01 02	Glass
20 02	Garden and park wastes (including cemetery wastes)
20 02 02	Soil and stones

3.3.4 It is proposed to import clean inert materials and Incinerator Bottom Ash (IBA) to enable the site to be levelled to enable the construction of a suitable development platform. The source will therefore be the materials that are deposited. Stringent Waste Acceptance Procedures will remove the risk at source.

3.3.5 The IBA has been tested by an MCERTS accredited laboratory, and the results and summary are provided in Appendix 5. The IBA in some cases exceeds the inert waste criteria limits set out in the Landfill Directive.

3.3.6 The results of the IBA testing have been reviewed and the Hydrogeological Risk Assessment confirms that the IBA will not pose a risk to groundwater. A site specific Waste Acceptance Criteria and Waste Acceptance Procedures are provided in the Operating Techniques report which forms part of the permit application.

3.4 Receptors

3.4.1 A number of sensitive receptors are present within close proximity of the Site. These are detailed in Table 3.3 below.

Table 3.3: Receptors within 2km of the Site		
Receptor	Receptor Type	Distance/Direction
Deciduous Woodland (Priority Habitat Inventory)	Habitat	<5m, east, west and south
Deichmann UK Distribution Centre	Commercial	Adjacent to site
Northern Stream (of Willow Brook)	Surface Waters	Runs along southern site boundary
BakeAway, food manufacturer	Industrial	75m, southwest
The WEB, Wincanton Distribution Centre	Commercial	100m, north
Screwfix Corby	Commercial	150m, west

Table 3.3: Receptors within 2km of the Site		
Receptor	Receptor Type	Distance/Direction
Network Q, warehouse and associated car park	Commercial	178m, north
Corby Power Station	Industrial	180m, northwest
Toolstation Corby, building materials supply	Commercial	230m, southeast
Phoenix Parkway Road (A6116)	Infrastructure	240m, west
Corby MOT Centre	Commercial	262m, west
J.B Rubber Tyre Shop	Commercial	265m, west
Travis Perkins	Commercial	265m, west
Gretton Brook (culverted) (Part of Willow Brook (Nene))	Surface Waters	300m, north
Baileys Skip Hire & Recycling Ltd, waste management service	Industrial	300m, west
Gretton Brook Road	Infrastructure	310m, north
Brookfield Plantation LWS	Habitat	335m, north
Jackson's Bakery, food manufacture	Industrial	345m, south
Ford & Slater, truck dealership	Commercial	365m, north
Earlstrees Industrial Estate	Industrial/Commercial	370m, west
Rockingham distribution centre, logistics hub and business centre with associated car park	Commercial	410m, northeast
Corby Commercials, truck repair shop	Commercial	410m, north
Synergy Packaging Solutions Ltd, packaging company	Commercial	450m, southwest
PDI (EMEA) Ltd, chemical manufacturer	Industrial	457m, southeast
Breedon Corby Asphalt Concrete & Ready-Mixed Concrete Plant	Industrial	464m, northwest
Universal Training Services (Midlands) Ltd, training centre	Commercial	465m, north
Northants MX5 Vehicle Repair	Commercial	525m, north
Steel Road	Infrastructure	530m, south
Pen Green Bridge, historical landmark	Recreational/historical	585m, southwest
Brookfield Plantation Cutting LWS	Habitat	640m, northwest
Willowbrook East Industrial Estate	Industrial/Commercial	650m, south
Bailys Skip Hire & Recycling	Commercial	715m, west
Corby Tunnel Quarries LWS	Protected Habitat	740m, northwest
Houses off Gretton Brook Road	Residential	780m, northeast
Smartscan Ltd, electronics manufacturer	Industrial	790m, southeast
Weldon North Industrial Estate	Industrial/Commercial	900m, southeast
Fresh Direct, Corby, fruit and vegetable wholesaler	Commercial	950m, east
Cheeky Monkees Children's Amusement Centre	Recreational	975m, south

Table 3.3: Receptors within 2km of the Site		
Receptor	Receptor Type	Distance/Direction
TATA Steel Corby	Industrial	1km, south
Keepers Lodge Farm	Residential	1.1km, northeast
Pen Green Centre for Children and their families, Non-profit organisation	Nursery	1.2km, southeast
The Figure of Eight, fishing pond	Recreational/environmental	1.2km, northwest
West Cutting LWS	Protected Habitat	1.3km, northwest
Rockingham Primary School	School	1.3km, southwest
Playing Fields/bowling green	Recreational	1.3km, southwest
Properties at Priors Hall Park	Residential	1.3km, east
Bright Beginnings, Montessori School	School	1.3km southwest
Seagrave House Care Home	Nursing/care home	1.3km southwest
Morrisons Corby Distribution Centre	Commercial	1.3km, east
Allotments	Recreational	1.4km, southwest
Corby Business Academy, secondary school	School	1.4km, east
Rockingham Wood LWS	Protected Habitat	1.5km, northwest
Plantation Meadow LWS	Protected Habitat	1.5km, northwest
Corby Old Village	Residential	1.5km, southwest
Corby Old Village Primary School	School	1.5km, south
Be Jolie Beauty, beauty salon	Commercial	1.5km, east
Gretton West Plantation	Habitat	1.6km, northwest
Boundary Plantation	Habitat	1.6km, northwest
Rockingham Wood	Habitat	1.6km, northwest
West Glebe Park	Recreational	1.6km, southwest
Lloyds Horizon Data Centre, corporate office	Commercial	1.6km, northeast
Priors Hall A Learning Community, primary school	School	1.7km, east
Corby Rugby Stars, children's club	Recreational	1.7km, east
St John The Baptist's Church	Recreational	1.7km, south
Adrenaline Alley, Skate park	Recreational	1.7km, southeast
Gretton East Plantation	Habitat	1.7km north
Studfall Infant School and nursery	School	1.8km, West
Corby Old Quarry Gullet LWS	Protected Habitat	1.8km, east
Our Lady of Walsingham Roman Catholic Primary School	School	1.8km, southwest
Shire Lodge Nursing Home	Nursing/care home	1.8km, west
Town Gardens Play Area	Recreational	1.9km, east
Priors Hall Care Home	Nursing/care home	1.9km, east
Priors Hall Dental Practice	Medical	1.9km, east
Southern Stream (of Willow Brook)	Surface Waters	2km, south

3.4.2 The nearest residential receptors are houses on Pen Green Lane, approximately 750m to the southwest from the site boundary.

3.4.3 There are no schools, hospitals or care homes within 1km of the site.

3.4.4 The site is not located within an Air Quality Management Area (AQMA).

3.4.5 The site lies within an area designated a minor aquifer (Secondary A Aquifer) contained within the Northampton Sand Formation. Intrusive ground investigation works have been carried out on site (Appendix 2), and it has been proven that the saturated Northampton Sand Formation deposits remain onsite, therefore groundwater is considered a potential groundwater receptor.

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

3.4.7 The channel of Willow Brook forms the southern boundary of the site and flows in an easterly direction and is considered a surface water receptor.

3.5 Protected Habitats and Species

3.5.1 There are no European Sites including Ramsar Sites, Special Areas of Conservation (SACs), Special Protection Areas (SPAs), or Sites of Special Scientific Interest (SSSIs) within 2km of the site. The nearest SSSI is Cowthick Quarry SSSI, located approximately 3km to the southeast.

3.5.2 A number of field surveys were undertaken in 2018 and 2019 and focussed on reptiles, amphibians (great crested newts), and invertebrates. The surveys have found that great crested newts are present within the pond adjacent to the site. The site has suitable terrestrial habitat for newts, but no suitable breeding habitat was identified. Impacts to great crested newts will be mitigated under licence. Habitats on land adjacent to the east will be enhanced and managed in the long-term, with connectivity between enhanced and existing habitats will be strengthened. Mitigation to reduce impacts to the invertebrate assemblage will also be undertaken during enabling works.

3.5.3 Areas of protected deciduous woodland boarder parts of the site to the east, west and south of the site.

3.5.4 Seven Local Wildlife Sites have been identified within 2km of the site.

3.5.5 A Habitats Risk Assessment has been prepared as part of the permit application to assess the potential impact of the proposed activities to nearby habitats and protected species.

4 SOURCE CHARACTERISATION

4.1 Historical Development

4.1.1 The Site incorporates the closed Corby Tube Works landfill site (C/17) (EAWML 70559) in its southern extent, which has not yet been surrendered. In its northern extent, it consists of a closed, surrendered and remediated former liquid waste treatment facility (C/18) (EAWML 70560). Figure 3.1 below provides an approximate overlay of the site against the permit boundaries for the historic facilities. Drawing STP3996D-02 provides a more detailed plan of existing site features.

Figure 3.1: C18 and C17 Permit Site Plan Overlaid on Aerial View of the Site Boundary

4.1.2 Prior to waste management activities, the site was quarried to remove the underlying ironstone for use in the Corby Iron and Steel Works. The site was subsequently used as dewatering lagoons for blast furnace slurry produced from the blast furnaces which formed part of the Integrated Iron and Steel Works.

4.1.3 On closure of the Integrated Iron and Steel Works, the slurry was removed from the blast furnace lagoons, which were then divided into cells, using bund walls formed from inert rubble, to produce the landfill site.

4.1.4 The liquid waste treatment operation ceased in June 2007. Remediation work was carried out to empty the lagoons and remove and dispose of the liners. The EA agreed the surrender of the WML in October 2010. The area is not considered to be a risk to the environment.

4.1.5 The Corby Tube Works landfill site was issued with a waste management licence in 1984 and ceased the acceptance of waste on 9 November 2004; it was classified as

"Definitively Closed" by the Environment Agency (EA) on 19 December 2008. Since closure and the submission of the closure report in January 2006, the remaining uncapped areas have been in-filled with inert wastes, as agreed with the EA.

4.1.6 During its operation, the landfill site was used for the disposal of controlled wastes from Corby Tubeworks; these include neutralisation filter cake from pickling operations, settlement sludges from Weldon Settlement Ponds, non-hazardous industrial wastes and construction/demolition rubble.

4.1.7 The landfill did not incorporate engineering features such as artificial barriers and liners, capping systems, gas or leachate collection systems. The aftercare requirements set out in the Environmental Permit (WML70559/QP3799NL) in respect of quarterly landfill gas, surface water and groundwater monitoring and an annual stability inspection, have taken place in accordance with the Permit.

4.1.8 At the time of closure, Cells 1, 2 and 5 of the landfill cells were completed, however Cell 3 was only partially completed, and Cell 4 remained empty.

4.1.9 Other than a requirement that "nothing shall be deposited in the final 1m layer which is likely to interfere with final restoration or subsequent cultivation (inert material only)," the Waste Management Licence did not require the capping of completed areas. Equally, no final height profile was specified and as such the completed areas were simply filled to blend in with the surrounding land, which has resulted in a 7 - 10m height difference on the north side of Mitchell Road.

4.1.10 The former use of the site has resulted in an undulating topography with ground levels ranging from approximately 104 to 109 mAOD over the majority of the site. There are seven depressions approximately 2.5m deep in the northwest of the site which are the remnants of the former dewatering lagoons associated with the former landfill. Mitchell Road to the north of the site is at an elevation of 115 to 116 mAOD, approximately 8m to 10m higher than the adjacent levels on the site. In the south of the site the ground elevation slopes steeply downwards to Willow Brook at an elevation of approximately 97 to 100 mAOD.

4.1.11 An overview of the historic landfills within the vicinity of the site is provided in Figure 2 of Appendix 4.

4.2 Proposed Development

4.2.1 The Site lies within the Rockingham Enterprise Area, identified as a strategic site for employment development within the North Northamptonshire Joint Core Strategy

2011-2031. Although the site is allocated for employment use, it requires essential engineering and enabling works to ensure its suitability for employment development.

4.2.2 Engineering and enabling works will involve reprofiling the site to provide a stable and compact development platform using appropriate waste materials.

4.2.3 Drawing D-STP3966D-03 shows the potential development schematic and provides the section locations, A-A and B-B. Drawing D-STP3966D-04a shows the existing and proposed site lives across cross section A-A. Drawing D-STP3966D-04b shows the existing and proposed site levels across cross section B-B. The cross section drawings have been produced using available LIDAR data.

4.2.4 The development platform will be constructed using suitable inert fills, which will be deposited and compacted at the site under controlled conditions. Only inert fills which can support compaction plant will be accepted.

4.2.5 Controlled compaction is necessary to minimise future settlement. Loads imposed by deposition of imported fills will cause some consolidation of existing materials below current site levels. Site investigations will be concluded prior to commencement of the filling operation to determine the amount of settlement and consolidation that will occur and the likely associated timescales.

4.2.6 The platform has been designed with the appropriate materials selected to provide a suitably engineered base with appropriate load bearing to accommodate employment development, and a layer within which to install necessary services.

4.2.7 The design of the development platform will make appropriate provisions to ensure that the underlying landfill can continue to comply with its environmental permit conditions i.e., that landfill gas, surface water and groundwater monitoring can continue to be completed in accordance with the Aftercare Plan. This will involve extending boreholes into and above the engineered fill layer to allow continued monitoring.

4.2.8 The works are expected to take between four to five years to complete.

5 POLLUTION CONTROL MEASURES

5.1 Site Engineering and Site Design

Groundwater Management

5.1.1 Groundwater inflows were observed in some of the exploratory excavations carried out as part of the ground investigation works. This was noted to be predominantly groundwater associated with the aquifer depth, with the exception of shallow or perched water encountered only in one location (TP13), wherein water was seemingly contained within a course grained made ground overlying cohesive soils at 2m depth. A summary of Soiltechnics' observations during ground investigation works is provided in the Ground Investigation Report (Appendix 2).

Surface Water Management System

5.1.2 Storefield have designed the surface water management system and intend that it should function as described in the following paragraphs.

5.1.3 Rainfall or surface waters will be shed from the site surface and directed to surface water ditches. The fill material will be placed in a series of lifts graded to direct surface water to a series of temporary surface ditches. The ditches shall be excavated into the fill and shall prevent water reaching the surrounding water courses.

5.1.4 The ditches will have shallow gradients, with their own soak away capacity and will direct excess water towards more permeable areas of the site. Soak aways will comprise of shallow depressions in areas of permeable material. Standing water will not be permitted on the fill area unless it has been directed specifically to the designated soakaway areas.

5.1.5 The Surface Water Management System will be installed as soon as restoration of Phase 1 is achieved. Surface water ditches will then be installed progressively as each phase of restoration is completed. The surface water control measures shall be in place within one moth of completion of material deposition in that phase.

5.1.6 The effectiveness of the ditches will be monitored such that the ditches and soakaways can be maintained and revisions to the system introduced as the site is progressively completed.

5.1.7 The completion of surface water management systems will be subject to periodic inspection by a third party CQA engineer during construction and verification after

completion of each phase. The CQA procedures include verification for the surface water drainage systems after completion of each phase.

5.1.8 The engineer shall produce a report summarising the construction activity carried out during the works and detailing the engineer's inspections carried out as part of the CQA programme. The report will include the as-built drawings.

Gas and Leachate Management and Monitoring

5.1.9 Strict waste acceptance procedures will be implemented at the site, whereby waste is tested and assessed prior to deposit. As a result of this, it can be determined with a high level of confidence that biodegradation of the material will be negligible, and therefore gas and leachate will management and monitoring will not be required.

Emplacement of Waste

5.1.10 The engineering works will comprise a cut and fill operation to establish a level platform. The northern area of the site will require the greatest fill depth of between approximately 7m to 10m. In the southwestern area of the site, a cut depth of approximately 1m to 3m will be required.

5.1.11 The fill material will be placed as engineered fill in a series of discrete, horizontal, compacted layers in accordance with the 'Specification for Highway Works'.

5.1.12 Plant and methods used shall be appropriate to the compaction requirements for the class of material being compacted.

5.1.13 Infilling will be avoided in excessively wet conditions.

5.1.14 The engineering and enabling works are anticipated to be worked in two phases, over a period of four to five years. Phase 1 is expected to comprise the area to the south of the access road from Phoenix Parkway, and Phase 2 is expected to be to the north of the access road, as shown on the phased development drawing GM10604-008.

5.1.15 Drawings from the Gound Investigation Report prepared by Soiltechnics, September 2020 (STP3966D-G01-03, STP3966D-G01-04a and D-STP3966D-04b) provide a plan drawing and cross sections of existing and proposed levels. The full Gound Investigation Report is submitted as part of the permit application. The final profile of the deposit is that of a uniform surface creating a suitable development platform.

Slopes of Engineered Fill

5.1.16 Slopes of engineered fill between phases during infilling shall be constructed at stable slopes and in any case no steeper than an average of 1 in 2. Slopes in deeper areas shall be benched with 3m wide benches and 3m high steps at 1 in 1.

Settlement and Stability

5.1.17 The findings of the Ground Stability Report (Appendix 3) recommend that the site is monitored during upfilling to validate the predictive model and provide quantitative evidence to inform removal of the surcharge.

5.1.18 The monitoring results from the vibrating wire piezometers showed a limited response to application of load. On this basis no special measures are anticipated to be required to limit rate of filling.

Existing Monitoring Infrastructure to be Retained

5.1.19 Existing landfill boreholes located within the landfill area of the site will be extended upwards into the engineered fill layer to allow continued monitoring in compliance with the extant landfill permit.

5.1.20 In the event that existing boreholes are lost or damaged, they will be replaced. The boreholes will be installed in accordance with a CQA plan.

6 PATHWAY CHARACTERISATION

6.1 Climate

6.1.1 Long term monthly rainfall data (1991 – 2020) has been obtained from the Met Office website[1] for the nearest weather station, Wittering Observing Station, which is located 13 miles to the northeast of the Site. This data is provided in Table 6.1 below. The total average rainfall at Wittering is 613.55mm, which is lower than the average for the Midland District during the same period (809.91mm) and lower than the average for the UK national average which is 1162.93mm.

Table 6.1: Long Term Average Monthly Rainfall Data (1991 – 2020) at Wittering Weather Station

Month	Rainfall (mm)	Month	Rainfall (mm)
January	46.96	July	55.51
February	38.92	August	59.86
March	38.99	September	52.85
April	44.15	October	63.34
May	49.55	November	57.50
June	52.91	December	53.01

6.1.2 Available average wind direction data from the Met Office indicates that the dominant wind direction is from the southwest, as shown in Plate 1 below.

[1] https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-climate-averages/gcrem99cb

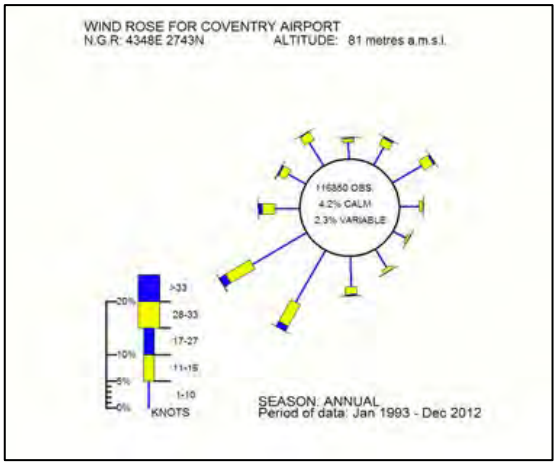

Plate 1: Wind Rose for Coventry Airport showing Average Wind Direction (January 1993 to December 2012)

6.1.3 The monthly mean wind speeds for the location are as follows. The overall annual average wind speed is 9.48 at 10m (knots), which is slightly higher than the UK average for this time period which is 9.27 at 10m (knots).

Table 6.2: Long Term Average Wind Speed (1991 – 2020) at Wittering Weather Station

Month	Monthly Mean Wind Speed at 10m (knots)	Month	Monthly Mean Wind Speed at 10m (knots)
January	10.73	July	8.36
February	10.83	August	8.37
March	10.43	September	8.69
April	9.42	October	9.44
May	9.11	November	9.67
June	8.44	December	10.34

6.1.4 The weather forecast will be checked at the start of each day, and staff will be cognisant of weather conditions throughout the working day.

6.1.5 Nearby receptors may be affected in the event that high amounts of dust are generated, although it is unlikely due to the stringent control measures that will be

implemented. Details relating to the control of dust emissions are provided in the Amenity and Accident Risk assessment and the Dust Management Plan, including in this permit application.

6.1.6 Gas is not expected to be generated from the materials accepted for deposit at the site.

6.2 Climate Change Adaptation

6.2.1 The waste operations will be carried out over a period of four to five years, the relatively short term nature of the activities will mean that longer term climate change provisions will not be required.

6.2.2 The site will be developed to an appropriate standard to enable the site to serve a useful purpose and serve the local communities, through employment opportunities.

7 GEOLOGY

7.1.1 The British Geological Survey (BGS) online viewer[2] and the BGS 1:50,000 solid and drift sheet 171 for Kettering (BGS2002[3]) indicate that the site is underlain by infilled ground (opencast ironstone workings and major limestone or sand and gravel quarries which may be partially or completely backfilled), overlying the Northampton Sand Formation.

7.1.2 The Northampton Sand Formation is described as a sandy ironstone which is greenish grey where fresh, weathering to brown limonitic sandstone. This lies on the Whitby Mudstone Formation (a medium to dark grey fossiliferous mudstone and siltstone with rare fine-grained calcareous sandstone beds and limestone nodules).

7.1.3 A summary of geology beneath the site, based on the available information including the Ground Investigation Report (Appendix 4) and reproduced as Table B within the Hydrogeological Risk Assessment prepared by Firth Consultants (Appendix 2) is provided in Table 7.1 below.

Table 7.1: Geological Summary

Geological Unit (from surface downwards)	Approximate thickness at the site (metres)		Description
	North	South	
Made Ground: Former Iron and Steel Works waste	0 to 0.8	Generally absent	Flue dusts, coke fines, slag and refractory rubble and occasional areas of blast furnace materials (dark grey fine to medium sand) in the east
Made Ground: Landfilled Waste	Absent	6 to 10 Base at ~99.5 mAOD	Paper, metal cans, plastic, glass, wood, cloth, and some brick and concrete fragments in a matrix of sandy clay with some fine to course flint gravel
Made Ground: Largely reworked natural deposits	11 to >16	~5	Grey gravelly clay (glacial derived soils), cream brown clayey, gravelly sand or gravelly clay (Grantham Formation derived) or orange brown gravelly sands (Northampton Sand derived), with frequent cobbles and

[2] https://geologyviewer.bgs.ac.uk/?_ga=2.264692555.578845085.1697200666-202357384.1697200666
[3] https://largeimages.bgs.ac.uk/iip/mapsportal.html?id=1003290

Table 7.1: Geological Summary			
Geological Unit (from surface downwards)	**Approximate thickness at the site (metres)**		**Description**
	North	**South**	
			boulders of sandstone. Gravels comprise of limestone and sandstone.
Northampton Sand Formation (NSF)	0.6 to 2.9		Orange brown clayey gravelly sand, with gravels comprising ferruginous sandstone
Whitby Mudstone Formation	49 to 58		Stiff, grey clay encountered at depths between 12.8m and 15.1m below ground level

7.1.4 A plan showing the location of historic boreholes and monitoring wells associated with the closed landfill, trial pits, boreholes and monitoring wells installed by Soiltechnics and location of cross-sections are shown in Fc37266 -Figure 3 Site Investigation Locations. This plan also shows the proposed surface water monitoring locations; SW1 (upstream) SW2 (midstream) and SW3 (downstream).

7.1.5 Schematic cross sections of the geology of the site, borehole locations and groundwater information are shown in the following drawings prepared by Firth Consultants:

- Fc37266 - Figure 4 South-North (west) Schematic Geological Cross Section (A-A');
- Fc37266 - Figure 5 Site Investigation Locations – (Firth Consultants) South-North (east) Schematic Geological Cross Section (B-B');
- Fc37266 - Figure 6 West-East Schematic Geological Cross Section (C-C').

8 HYDROLOGY

8.1 Surface Water Features

8.2 Surface water features are described within Appendix 2 and Appendix 4, and summarised in the following sections.

8.2.1 The nearest main watercourse in proximity to the site is Northern Stream (of Willow Brook) which runs along the southern site boundary.

8.2.2 Gretton Brook which is culverted along the majority of its length is located approximately 300m to the north of the site and is classified as part of Willow Brook (Nene).

8.2.3 Southern Stream (of Willow Brook) is located approximately 2km south of the site.

8.2.4 The Northern Stream and Southern Stream both flow to the east/north-east and join together forming Willow Brook (Nene) approximately 2km north-east of the site. Willow Brook becomes the River Nene further downstream to the northeast. Land immediately to the north of the site is in the catchment of Gretton Brook / Willow Brook (Nene).

8.2.5 Further beyond Broofield Plantation are the catchments of Fineshade Brook and the River Welland (from the confluence of Langton Brook to the confluence of the River Gwash).

8.3 Surface Water Abstractions

8.3.1 There are no active licenced surface water abstractions within 2km of the Site.

8.4 Surface Water Discharges

8.4.1 An Envirocheck Report is provided with in the Ground Investigation Report (Appendix 4). This report identified that there are ten active discharge consents within 1km of the site:

- one relates to the discharge of final/treated sewage effluent to land;
- three relate to either trade or final/treated sewage effluent discharge to Gretton Brook;
- two relate to either trade or final/treated sewage effluent discharging to the Northern Stream of Willow Brook;

- four relate to the discharge of other matter to the Southern Stream of Willow Brook.

8.5 Surface Water Quality

8.5.1 The site is shown to be in the catchment of the Northern Stream (of Willowbrook), and in 2019 it was classified as 'moderate' for ecological and 'fail' for chemical quality due to mercury and polybrominated diphenyl ethers (PBDE)[4].

8.5.2 Southern Stream was also classified as 'moderate' for ecological and 'fail' for chemical quality due to mercury, PBDE and perfluorooctane sulphonate (PFOS)[5].

8.5.3 In 2019 the catchment of Gretton Brook/Willow Brook (Nene) was classified as moderate' for ecological and 'fail' for chemical quality due to mercury, PBDE and PFOS[6].

8.5.4 The catchments of Fineshade Brook and the River Welland (from the confluence of Langton Brook to the confluence of the River Gwash) are classified as 'Good' and 'Moderate' for ecology respectively and 'Fail' for chemical quality due to presence of mercury and PBDE[7].

8.5.5 It is noted that mercury, PFOS and PBDE were not monitored in the UK rivers prior to 2019 and PFOS and PBDE are common causes of chemical failures in UK rivers due to their recent inclusion in the Environment Agency's analytical suite.

8.6 Flood Risk

8.6.1 The Site is located within Flood Zone 1 according to the Environment Agency's current Flood Map. A Flood Risk Assessment undertaken by WA indicated that the risk of flooding from fluvial sources, surface water, groundwater and sewers is considered to be Very Low.

8.6.2 The southwest and southeast boundaries of the Site are located close to areas of land within Flood Zone 3.

[4] Northern Stream | Catchment Data Explorer | Catchment Data Explorer
[5] Southern Stream | Catchment Data Explorer | Catchment Data Explorer
[6] Willow Brook (Nene) | Catchment Data Explorer | Catchment Data Explorer
[7] Welland Upper Operational Catchment | Catchment Data Explorer

9 HYDROGEOLOGY

9.1 Aquifer Characteristics

9.1.1 The following information is summarised from the Hydrogeological Risk Assessment (prepared by Firth Consultants, November 2023).

9.1.2 The site is located on the Northampton Sand Formation which is classed as a Secondary A aquifer. These are permeable layers capable of supporting water supplies at a local, rather than strategic, scale, and in some cases forming an important source of base flow to rivers.

9.1.3 The underlying Whitby Mudstone Formation is classified as unproductive strata, largely unable to provide usable water supplies and are unlikely to have surface water and wetland ecosystems depending on them.

9.1.4 Although the Northampton Sand Formation is a Secondary A aquifer, extensive quarrying activities in the vicinity of the site and in the wider Corby area have removed significant quantities of the Northampton Sand Formation leaving limited thickness of these deposits. Therefore the usefulness of the remaining aquifer is considerably reduced in the vicinity of the site.

9.1.5 The Lower Lincolnshire Limestone and the Grantham Formation which overlie the Northampton Sand Formation (where quarrying activities have not been undertaken) are classified as Principal and Secondary (undifferentiated) aquifers, respectively. It is noted that these aquifers are limited in extent and thickness and are unlikely to provide a viable water supply in the vicinity of the site. The superficial Oadby Member Glacial Till which generally overlies the bedrock where the Ironstone has not been quarried is classified as a secondary (undifferentiated) aquifer.

9.2 Groundwater Levels

9.2.1 Eleven gas and groundwater monitoring wells (LG01 to LG03, LL04 to LL06, LG07 to LG11) were installed in and around the C17 landfill in the south of the site in 2001. These were reported to have been drilled through the made ground and terminated on the Whitby Mudstone Formation between 10 to 14 mbgl. Groundwater levels were measured roughly quarterly from January 2003 until March 2021 and more recently levels were measures between January and March 2022 and in March 2023.

9.2.2 The locations of these wells are shown on Figure 3 and a hydrograph is provided in section 2.5.3 of the Hydrogeological Risk Assessment (Firths Consultants). Wells LG1,

LG2, LG3 and LL4 were often dry and datum levels were not available for LL5 and LG10 therefore these wells have not been included in the hydrograph.

9.2.3 The wells are thought to be screened in the made ground and given that the landfill was not lined it is assumed that the data represents the natural groundwater level as they are likely to be in hydraulic continuity with the remaining Northampton Sand Formation.

9.2.4 The hydrograph shows that groundwater levels in the south of the site range from between approximately 95.5 mAOD and 100 mAOD with an annual fluctuation of between approximately 1.5m and 2m. The highest groundwater levels generally occurring between January and April, and the lowest occurring between September and October. Fc37266- Figure 7 of Appendix 4 indicates the groundwater levels monitored via the monitoring wells installed by Soiltechnics on 30th March 2023 and the piezometric contours based on the monitoring results.

9.2.5 Seven additional wells (BH01, BH02, BH04, BH05, BH06, BH08 and BH09) were installed at the site by Soiltechnics in 2020. BH01 and BH02 were located in the north of the site and encountered obstructions in the made ground and were therefore not installed deep enough to encounter groundwater. BH08 has subsequently been lost. BH01, BH02 and BH08 were replaced with BH01B, BH02B and BH08B in May 2022, the logs are included in Appendix 2 of the Hydrogeological Risk Assessment (Firths Consultants).

9.2.6 It is noted that although the replacement wells were drilled and installed to the base of the Northampton Sand Formation, BH01B and HB02B were dry on two subsequent monitoring rounds in June 2022 and March 2023, and BH08B was dry in March 2023. This is likely to be due to the higher elevation of the Northampton Sand Formation layer in the north of the site, resulting in the aquifer being dry.

9.3 Groundwater Abstractions

9.3.1 There are no licenced groundwater abstractions within 2km of the site, as shown in the Envirocheck report included in the Soiltechnics report, 2020.

9.4 Groundwater Quality

9.4.1 The site is not located within 2km of a Source Protection Zone.

10 RECEPTOR AND COMPLIANCE POINTS

10.1 Groundwater

10.2 To confirm that the works do not have a negative impact on groundwater, monitoring boreholes will be monitored at a monthly frequency during operations.

10.3 The existing monitoring boreholes which are located at the site that have been installed by Soiltechnics (as described in Appendix 2 and 4) can be utilised for this purpose, however it is anticipated that the boreholes may be required to be moved as part of the earthworks.

10.4 In addition, monitoring should also be undertaken immediately following exceptional rainfall events.

10.5 Chemical testing is to be undertaken from the groundwater samples retrieved as per the determinates detailed in the Site Investigation report (Soiltechnics).

10.6 Gas

10.6.1 There are historical gas monitoring boreholes around the site which are associated with the landfill. These boreholes will continue to be monitored in line with the extant TATA Steel Landfill permit. These are shown on Figure 3 of the Hydrogeological Risk Assessment (Firth Consultants).

10.6.2 Strict waste acceptance procedures will be implemented at the site to ensure that only acceptable wastes will be accepted at the site. As a result of this, it can be determined with a high level of confidence that biodegradation of the material will be negligible.

10.6.3 Strict waste acceptance procedures will be implemented at the site, whereby waste is tested and assessed prior to deposit. As a result of this, it can be determined with a high level of confidence that biodegradation of the material will be negligible.

10.6.4 Gas and groundwater boreholes have been installed during the intrusive site investigation works, as described in Appendix 2 and Appendix 4.

10.6.5 It is proposed to utilise these boreholes for future monitoring where possible, or install new boreholes in agreement with the Environment Agency.

10.6.6 Construction of boreholes will be undertaken in accordance with a CQA plan.

10.7 Amenity

10.7.1 The Amenity and Accident Risk Assessment identifies fugitive dust emissions as having potential to be generated through vehicle movements within the site and generated

from the waste activities such as tipping and stockpiling of waste. A Dust Management Plan has been prepared which sets out the daily dust monitoring regime.

11 SITE CONDITION REPORT

11.1.1 There is no requirement to provide a Site Condition Report for the areas that will be subject to a permanent deposit of material. The purpose of a Site Condition Report is to set out the condition of the land at permit issue so that a permit surrender is possible to demonstrate that there has been no deterioration in the quality of the land. Clearly in the case of permanent deposit of waste the land will not be restored to the same condition that was present at the time of permit issue. Instead, the surrender of the permit will be based on records of the materials accepted and the environmental monitoring carried out during the operational life of the site to demonstrate that the material that has been deposited is not impacting or will not impact the environment.

11.1.2 Fuel and other potentially harmful liquids for use in site plant will be stored in an appropriate tank or container with appropriate secondary containment. Bunds will have a capacity of 110% of the largest tank. Tanks or containers storing fuel or other harmful liquids will be stored on impermeable surfacing.

11.1.3 Topographic and engineering surveys will be completed at the site to record the conditions at the commencement of preparation engineering works to establish the formation levels, upon completion of the preparation of the engineering works to confirm the levels, and on an annual basis in during site operations.

11.2 Restoration and Aftercare

11.2.1 The design profile will be stable in the long term, and the scheme is to ensure the ground is of sufficient stability and the correct profile to facilitate a construction platform.

11.3 Proposed After-Use of the Site

11.3.1 Following completion of the works, the site will be a development platform in which an employment park development will be built upon. The development will comprise of a number of units and associated infrastructure (such as access roads). The commercial development will comprise of formal drainage to ensure adequate surface water management and a layer within which to install necessary services.

12 CONCLUSIONS

12.1.1 The site and surrounding areas have been extensively quarried for ironstone and subsequently infilled with a variety of materials including reworked natural material and industrial wastes. The site itself the made ground comprises predominantly reworked natural material in the north and landfilled waste overlying reworked natural material in the south. The made ground is underlain by 0.6m to 2.9m thickness of remnant NSF which overlies the Whitby Mudstone Formation.

12.1.2 Groundwater is present within the base of the made ground and underlying NSF and flows to the north. Based on the groundwater and ground elevations, groundwater from the site is likely to discharge to Northern Stream of Willow Brook, beyond 1.3km north east of the site or springs on the escarpment slope 2.5km north of the site.

12.1.3 Soil sampling and analysis of the made ground at the site shows that is contains heavy metals, cyanide (predominantly complex) and PAHs and has leachable concentrations of sulphate, cyanide, mercury and fluoranthene that exceeds water quality standards. Groundwater sampling has shown that groundwater quality in the NSF beneath the site has likely been impacted by the historic quarrying and landfilling on and in the vicinity of the site.

12.1.4 The proposed development of the site will likely result in much of the site being hard covered, thereby reducing infiltration through the existing made ground. This will reduce leaching of contaminants from the waste material and will likely result in an overall betterment of groundwater quality and long-term reduction in risks to controlled water receptors.

APPENDICES

APPENDIX 1

Waste Recovery Plan (Wardell Armstrong, Version 1, December 2023)

wardell-armstrong.com

ENERGY AND CLIMATE CHANGE
ENVIRONMENT AND SUSTAINABILITY
INFRASTRUCTURE AND UTILITIES
LAND AND PROPERTY
MINING AND MINERAL PROCESSING
MINERAL ESTATES
WASTE RESOURCE MANAGEMENT

STOREFIELD GROUP LIMITED

PHOENIX PARKWAY

WASTE RECOVERY PLAN

JANUARY 2024

wardell armstrong

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STOREFIELD GROUP LIMITED

PHOENIX PARKWAY

WASTE RECOVERY PLAN

JANUARY 2024

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ENERGY AND CLIMATE CHANGE
ENVIRONMENT AND SUSTAINABILITY
INFRASTRUCTURE AND UTILITIES
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MINERAL ESTATES
WASTE RESOURCE MANAGEMENT

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APPENDICES

Appendix 1 Section 106 Agreement
Appendix 2 Rose Group Email - Limestone fill quote
Appendix 3 Evidence of land purchase price and estimated works value
Appendix 4 Phoenix Parkway, Corby – Employment Land Values

DRAWINGS	TITLE	SCALE
D-STP3996D-02	Existing site features	1:1,250 @ A1
D-STP3966D-03	Development Schematic Plan	1:1,500 @ A1
D-STP3966D-04a	Existing and Proposed Site Sections - Section A-A	1:2,000 @ A3 (h) 1:200 @ A3 (v)
D-STP3966D-04b	Existing and Proposed Site Sections - Section B-B	1:2,000 @ A3 (h) 1:200 @ A3 (v)

1 INTRODUCTION

1.1.1 The Storefield Group Ltd (Storefield) has commissioned Wardell Armstrong LLP (WA) to prepare a draft Waste Recovery Plan for its proposed development in Corby, North Northamptonshire.

1.1.2 The site has been identified as a strategic site for employment development within local planning policy. In order to make the site suitable for use as an industrial and commercial development, Storefield propose to raise and level to create a suitable load-bearing development platform. A planning application for the engineered development platform and the outline application for the development of an employment park comprising up to 43,000m² of use,has been submitted and is expected to be granted in 2024. As part of the planning process, a Section 106 agreement has been agreed between Storefield Group Limited, North Northamptonshire Council and TATA Steel UK Limited (planning reference NC/21/00072/OUT). The Section 106 agreement is provided in Appendix 1. The Section 106 specifies that the 'area of development derived from the restoration materials comprising suitable wastes or non-waste materials'.

1.1.3 The site was formerly a liquid waste treatment facility, for which the permit has been surrendered, and landfill site, for which part of the site is still permitted however, the landfill site is in formal closure. Prior to this, the site was quarried to remove material for use in the Corby Integrated Iron and Steel Works.

1.1.4 It is proposed that the development platform will be constructed of approximately 686,000m^3 of suitable waste materials from construction and demolition. The scheme has been designed to require the minimum volume of suitable waste materials, which is part of the test for the use of waste being a 'genuine substitution' for virgin materials.

1.1.5 Reflecting its incorporation into the local development plan, the site is adjacent to similar developments to that proposed. Section 2 provides an overview of the site location, its setting and nearby sensitive receptors.

1.1.6 The scheme is financially viable using virgin raw materials (quarried stone) and Section 3 provides a financial model for proposed works, demonstrating how the waste recovery test has been met in accordance with EA Guidance: Waste Recovery Plans and Deposit for Recovery Permit.

1.1.7 Section 4 sets out how the platform will be constructed with materials appropriate to the scheme and will be constructed to ensure risk to human health and the environment is minimal. The design of the platform has been informed through geotechnical and hydrogeological review to ensure it will present an acceptable risk to the environment, including allowing the permit holder of the underlying landfill to continue to comply with their permit conditions.

2 SITE CONTEXT

2.1 Site Location

2.1.1 The site is located north of Willowbrook East Industrial Estate near Corby town, North Northamptonshire. The site is centred at SP 90128 90860 at nearest postcode NN17 5BE. Figure 2.1 provides the location and site boundary of the proposed recovery operation.

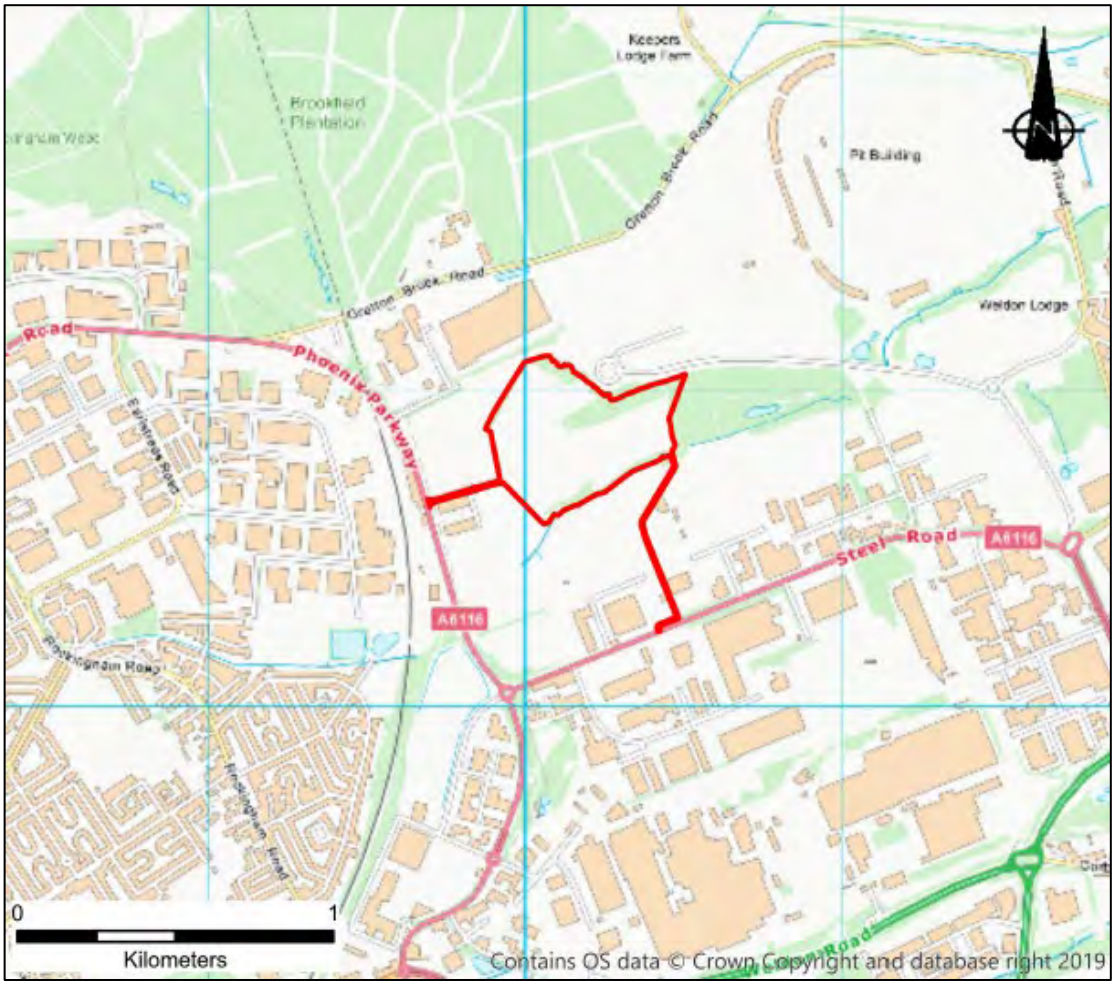

Figure 2.1: Site Location of Proposed Recovery Operation

2.1.2 The Site is approximately 20.5 ha in size, and currently comprises scrubland, incorporating a closed former landfill (Corby Tubeworks) whose environmental permit has not yet been surrendered, and an area formerly permitted as a liquid waste treatment facility. The Waste Management Licence originally issued for the landfill did not require the landfill to be capped nor specified a final restoration profile.

2.1.3 The topography of the Site in broad terms ranges between approximately 105m AOD to the south and 110m AOD towards the north. The landform is varied as a result of soil mounds, tracks, and former lagoons within the site boundary.

2.1.4 The site can be roughly divided into two areas, with the land within the former landfill site in south-eastern areas occupying a plateau-like position up to 3m higher than northern and western areas of the site. A steep-sided bund, up to 1.5m in height, runs along the western and southern boundaries of the plateau.

2.1.5 Ground levels within the former waste treatment facility site in the north-western portion of the site are up to 10m lower than Mitchell Road to the north-west and up to 7m lower than the unnamed road to the north-east, and fall steeply from these adjacent roads into the site area.

2.1.6 The bases of remediated former dewatering lagoons in the north-western areas of the site are approximately 2m - 2.5m below the level of the surrounding ground.

2.2 Land Uses

2.2.1 The site is bound to the south by the river Willow Brook North, with Willowbrook East Industrial Estate adjacent to the south boundary. An area of scrubland with a commercial development sits between the area and the Phoenix Parkway road. Earlstrees Industrial Estate sits approximately 370m west of the permit boundary.

2.2.2 To the north, Mitchell Road runs parallel to the site boundary and forms a route from Phoenix Parkway to Rockingham Motor Speedway. Beyond Mitchell Road there are several industrial and commercial premises, breaking into more rural setting beyond these. An area of vegetation borders the site to the east.

2.2.3 The nearest residential properties are located approximately 750m southwest of the Site boundary on Pen Green Lane, beyond Phoenix Parkway and a railway line.

2.2.4 The Site lies within the Rockingham Enterprise Area, identified as a strategic site for employment development. However due to the varied topography, the Site requires essential engineering and enabling works to ensure its suitability for employment development.

2.2.5 As described in Section 2.1, the Site has a varied topography as a result of no final height profile being specified for completion of the underlying closed landfill. Additionally, one cell of the landfill was incomplete and one remained empty at the time of closure; as such the completed areas were simply filled to blend in with the

surrounding land, which has resulted in a 7 - 10m height difference on the north side of Mitchell Road. The site's permitting history is detailed further in Section 4.1

2.3 Sensitive Receptors

Habitats

2.3.1 There are no European Sites including Ramsar Sites, Special Areas of Conservation (SACs), Special Protection Areas (SPAs), or Sites of Special Scientific Interest (SSSIs) within 2km of the Site. The nearest Site of Special Scientific Interest is Cowthick Quarry SSSI, located approximately 3km to the southeast.

2.3.2 There are Seven Local Wildlife Sites (LWS) are located within 2 km of the Site. The closest of these is the Brookfield Plantation LWS which is located approximately 340m to the north of the site.

2.3.3 There are also 11 Potential Wildlife Sites (PWS) within 2km of the Site, seven of which are within the Nene Valley Nature Improvement Area (NVNIA). The site itself has been identified within a potential wildlife site by the Wildlife Trust.

2.3.4 There are areas of protected deciduous woodland adjacent to the east, west and south of the site boundary.

2.3.5 Gretton Wood ancient woodland sites approximately 1.3km northwest of the site, comprising both 'ancient replanted woodland' and 'ancient and semi-natural woodland'.

2.3.6 A number of field surveys were undertaken in 2018 and 2019 and focussed on reptiles, amphibians (great crested newts), and invertebrates. The surveys have found that great crested newts (GCN) are present within a pond adjacent to the site. The site has suitable terrestrial habitat for newts, but no suitable breeding habitat was identified.

2.3.7 The surveys also found habitat with the potential to support nationally and locally important invertebrate species, including grassland, tall ruderals, woodland edges and ephemeral vegetation, as well as the mosaic nature of the habitats identified on site.

2.3.8 Impacts to great crested newt will be mitigated under licence. Habitats on land adjacent to the east will be enhanced and managed in the long-term, with connectivity between enhanced and existing habitats will be strengthened. Mitigation to reduce impacts to the invertebrate assemblage will also be undertaken during enabling works

2.3.9 Detailed mitigation to avoid and reduce impacts to ecological receptors during construction of the development platform be included in Construction Environment

Management Plan (CEMP) and Landscape and Ecology Environmental Management Plan (LEMP) submitted in support of the planning application (Ref: NC/21/0072/OUT).

2.3.10 In addition, a Habitats Risk Assessment has been prepared as part of the permit application process, to assess the potential impacts from the site activities to the nearby protected habitats and species.

Historic Sites

2.3.11 Weldon Lodge, a Grade II Listed Building is located approximately 1km east of the Site. The nearest Scheduled Monument to the Site is Kirkby Hall, an Elizabethan country house and gardens including the remains of the medieval village of Kirby, approximately 2.5 km to the northeast.

2.4 Geology

2.4.1 The underlying geology of the site was determined using the BGS GeoIndex Onshore tool and with reference to a 2020 Ground Investigation Report by Soiltechnics[1].

2.4.2 The whole of the site's extent is underlain by artificial ground. As discussed further in Section 4.1, the site has been substantially filled with iron and steel work waste and landfill material following quarrying. In the southern part of the site the Made Ground deposits comprise landfill materials (generally sand, gravel and/or clay with limestone, concrete, brick, timber, metal, plastic, fabric, clinker and ash) and in the northern part of the site materials from the iron and steel works with reworked natural deposits beneath. Made Ground extends to around 12-16m depth.

2.4.3 No superficial deposits are recorded at the Site. It is likely that the original geological sequence would have comprised Oadby Member (referred to as Glacial Till or Boulder Clay in previous reports) at surface, with Lincolnshire Limestone Formation and Grantham Formation below. These deposits were likely excavated as 'overburden' during quarrying works to a depth of around 14m and may have been used to restore the excavation following removal of the Northampton Sand Formation.

2.4.4 The bedrock geology is that of the Northampton Sand formation, consisting of "sandy, berthierine-ooidal and sideritic ironstone". The Northampton Sand Formation is underlain by the Whitby Mudstone Formation.

[1] STP3996D- G01 Ground Investigation Report (2020), Soiltechnics

2.5 Hydrogeology

2.5.1 The Northampton Sand formation is classified as a Secondary A aquifer and the Whitby Mudstone Formation is classified as unproductive strata.

2.5.2 Site investigation and groundwater monitoring undertaken by Soiltechnics in 2020 suggest that groundwater may be present within the Northampton Sand Formation, and/or sandy Made Ground (reworked Northampton Sand Formation), beneath the Site. The groundwater flow regime in the Northampton Sand Formation will be influenced by the presence of former quarries and landfills. Groundwater monitoring at the Site by Soiltechnics suggests flow in the Northampton Sand Formation and/or sandy Made Ground (reworked Northampton Sand Formation) maybe from west to east.

2.5.3 Envirocheck report there are no groundwater abstraction licences within 2km of the site.[1] There are no Source Protection Zones within 5km of the Site.

2.6 Hydrology

2.6.1 The local topography slopes down toward the southeast, culminating at the low point of Willow Brook which forms the sites southern boundary. Willow Brook is a Main River which flows in an easterly direction and is a tributary of the River Nene.

2.6.2 The Greeton Brook, an Ordinary Watercourse, generally flows in a north-easterly direction through woodland adjacent to Greeton Brook Road approximately 310m to the north of the site. The Greeton Brook discharges to the Willow Brook approximately 5.8km to the north-east of the site.

2.6.3 Two historic dewatering lagoons for blast furnace slurry, which are now dry basins, are situated within woodland beyond the eastern site boundary, measuring several metres in depth and heavily vegetated with trees and shrubs. The basins are connected by an overflow pipe and the western pond has a pipe extending to the Willow Brook North.

2.6.4 The Site is located within Flood Zone 1 according to the Environment Agency's current Flood Map. A Flood Risk Assessment undertaken by WA indicated that the risk of flooding from fluvial sources, surface water, groundwater and sewers is considered to be Very Low.

2.6.5 The southwest and southeast boundaries of the Site are located close to areas of land within Flood Zone 3.

2.6.6 Envirocheck records one surface water abstraction point within 2km of the site, located approximately 1950m to the southeast. This was operated by the British Steel Corporation for water cooling purposes, but its licence has since been revoked.[1]

2.7 Initial Conceptual Hydrogeological Site Model

2.7.1 An initial Conceptual Hydrogeological Site Model (CHSM) is discussed below in the form of "sources, pathways and receptors". A full CHSM will be provided with the final permit application.

Sources

2.7.2 Onsite sources include the waste within the C17 Landfill and made ground associated with the former quarrying activities and backfill materials.

Pathways

2.7.3 Pathways for potential pollutants include any route from the source to the receptors. The C17 Landfill is unlined and the main pathway from the C17 Landfill to groundwater and the Willow Brook is through infiltration of rainwater through the waste mass and into groundwater in the underlying Northampton Sand Formation (where present) and Whitby Mudstone Formation.

2.7.4 Groundwater flow in the Northampton Sand Formation will be influenced by the presence of former quarries and landfills. Groundwater monitoring at the Site by Soiltechnics in July and August 2020 suggests flow in the Northampton Sand Formation maybe from west to east. Groundwater flow in the Whitby Mudstone Formation is in a southerly direction towards the Willow Brook. Attenuation of contaminants will be by dilution and dispersion within the Northampton Sand Formation and Whitby Mudstone Formation.

Receptors

2.7.5 The Oadby Member, Lincolnshire Limestone Formation and Grantham Formation have been excavated as 'overbuden' during quarrying and are not recorded at the Site, therefore these deposits are not considered as receptors.

2.7.6 Quarrying at the Site also removed most of the Northampton Sand Formation, although Northampton Sand Formation up to 3m thick remains onsite. The Closure Report identified the main receptors as groundwater in the aforementioned Sand Formation and the Willow Brook. However, the 2020 site investigation and

groundwater monitoring undertaken by Soiltechnics suggest that the Willow Brook should not be considered as a potential receptor.

3 MEETING THE WASTE RECOVERY TEST

3.1 Meeting the Definition of Substitution

3.1.1 This section sets out how the proposal to construct the development platform with waste material meets the EA's 'Waste recovery test', as the scheme could and would be carried out using non-waste materials if required.

3.1.2 The planning application (Ref: NC/21/0072/OUT) for the proposed engineering and enabling works and delivery of employment development has been submitted to Corby Borough Council and is presently being processed, with consent expected to be issued in 2024.

3.1.3 As part of the planning process, a Section 106 agreement has been agreed between Storefield Group Limited, North Northamptonshire Council and TATA Steel UK Limited (planning reference NC/21/00072/OUT). The Section 106 agreement is provided in Appendix 1. The Section 106 specifies that the 'area of development derived from the restoration materials comprising suitable wastes or non-waste materials'.

3.1.4 The engineering and enabling works are anticipated to be undertaken over a period of 4 – 5 years. Construction of the development platform will require approximately 686,000m^3 (c. 1,097,600 tonnes) of engineering fill.

3.1.5 The design of the platform is being informed through detailed Site Investigation and Risk Assessment demonstrating that a site will be stable and not present a risk to groundwater, either directly or indirectly by impacting on the extant landfill. These risk assessments will be included within the environmental permit application.

3.1.6 Further details on the design of the development platform, including cross-sections of the proposed works and quantity of material required, are provided in Sections 4.2 and 4.3.

3.1.7 Based on the labour and materials required over the 5-year period, a financial model has been developed to demonstrate that the use of waste materials represents genuine substitution. A summary of the financial model for construction of the development platform is provided in Table 3.1 below, with supporting evidence provided in Appendices 2 to 4.

Table 3.1: Financial Model Summary	
Cost item	**Cost**
Present land value	£4,000,000[1]
Virgin Quarried Materials	£6,860,000[2]
Works (Plant and Labour)	£1,200,000[3]
Total cost of work	**£12,060,000**
Value of land upon completion of works	£13,500,000[2]
Profit	**£1,440,000**
Notes: [1] Confirmation of transaction value provided as Appendix 3 [2] £6.25 per tonne for 1,097,600 tonnes (price confirmation provided as Appendix 2) [3] Evidence of estimated cost of works provided as Appendix 3 [4] expected land value @ £1.35M/ha for 10 ha of developable land (valuation provided as Appendix 4)	

3.1.8 With a predicted profit of £1.44M (circa 12%) the development would still be undertaken using virgin quarried materials, if necessary and would be financially viable. This clearly demonstrates that the use of waste would be genuine substitution for non-waste materials.

4 DEVELOPMENT DESIGN AND WASTE RECOVERY ACTIVITES

4.1 Environmental Permitting History

4.1.1 The Site incorporates the closed Corby Tube Works landfill site (C/17) (EAWML 70559) in its southern extent, which has not yet been surrendered. In its northern extent, it consists of a closed, surrendered and remediated former liquid waste treatment facility (C/18) (EAWML 70560). Figure 4.1 below provides an approximate overlay of the site against the permit boundaries for the historic facilities. Drawing STP3996D-02 provides a more detailed plan of existing site features.

Figure 4.1: C18 and C17 Permit Site Plan Overlaid on Aerial View of the Site Boundary

4.1.2 Prior to waste management activities, the site was quarried to remove the underlying ironstone for use in the Corby Iron and Steel Works. The site was subsequently used as dewatering lagoons for blast furnace slurry produced from the blast furnaces which formed part of the Integrated Iron and Steel Works.

4.1.3 On closure of the Integrated Iron and Steel Works, the slurry was removed from the blast furnace lagoons, which were then divided into cells, using bund walls formed from inert rubble, to produce the landfill site.

4.1.4 The liquid waste treatment operation ceased in June 2007. Remediation work was carried out to empty the lagoons and remove and dispose of the liners. The EA agreed

the surrender of the WML in October 2010. The area is not considered to be a risk to the environment.

4.1.5 The Corby Tube Works landfill site was issued with a waste management licence in 1984 and ceased the acceptance of waste on 9 November 2004; it was classified as "Definitively Closed" by the Environment Agency (EA) on 19 December 2008. Since closure and the submission of the closure report in January 2006, the remaining uncapped areas have been in-filled with inert wastes, as agreed with the EA.

4.1.6 During its operation, the landfill site was used for the disposal of controlled wastes from Corby Tubeworks; these include neutralisation filtercake from pickling operations, settlement sludges from Weldon Settlement Ponds, non-hazardous industrial wastes and construction/demolition rubble.

4.1.7 The landfill did not incorporate engineering features such as artificial barriers and liners, capping systems, gas or leachate collection systems. The aftercare requirements set out in the Environmental Permit (WML70559/QP3799NL) in respect of quarterly landfill gas, surface water and groundwater monitoring and an annual stability inspection, have taken place in accordance with the Permit.

4.1.8 At the time of closure, Cells 1, 2 and 5 of the landfill cells were completed, however Cell 3 was only partially completed, and Cell 4 remained empty.

4.1.9 Other than a requirement that "nothing shall be deposited in the final 1m layer which is likely to interfere with final restoration or subsequent cultivation (inert material only)," the Waste Management Licence did not require the capping of completed areas. Equally, no final height profile was specified and as such the completed areas were simply filled to blend in with the surrounding land, which has resulted in a 7 - 10m height difference on the north side of Mitchell Road.

4.1.10 The design of the development platform will make appropriate provisions to ensure that the underlying landfill can continue to comply with its environmental permit conditions i.e., that landfill gas, surface water and groundwater monitoring can continue to be completed in accordance with the Aftercare Plan. This will involve extending boreholes into and above the engineered fill layer to allow continued monitoring.

4.2 End Use and Design

4.2.1 The Site lies within the Rockingham Enterprise Area, identified as a strategic site for employment development within the North Northamptonshire Joint Core Strategy 2011-2031. Although the site is allocated for employment use, it requires essential engineering and enabling works to ensure its suitability for employment development.

4.2.2 Engineering and enabling works will involve reprofiling the site to provide a stable and compact development platform using appropriate waste materials.

4.2.3 Cross sections showing the present site levels and the proposed development platform levels are provided in Drawings D-STP3966D-03, D-STP3966D-04a and D-STP3966D-04b.

4.2.4 The development platform will be constructed using suitable fill material, comprising of clean inert materials and Incinerator Bottom Ash, which will be deposited and compacted at the site under controlled conditions. Only materials which can support compaction plant will be accepted.

4.2.5 Controlled compaction is necessary to minimise future settlement. Loads imposed by deposition of imported fills will cause some consolidation of existing materials below current site levels. Site investigations will be concluded prior to commencement of the filling operation to determine the amount of settlement and consolidation that will occur and the likely associated timescales.

4.2.6 Detailed stability and hydrogeological risk assessments will be provided with the formal permit application to demonstrate satisfactory long-term stability and environmental protection, specifically to groundwater.

4.2.7 The platform has been designed with the appropriate materials selected to provide a suitably engineered base with appropriate load bearing to accommodate employment development, and a layer within which to install necessary services.

4.3 Quantity of Waste to be Used

4.3.1 The proposed development platform will require approximately 686,000m^3 of suitable waste materials, equating to approximately 1,097,600 tonnes (assuming a density factor of 1.6).

4.3.2 Construction of an appropriate development platform is a necessary improvement to the land, due to current variable differences in topography within the Site, and the

significant difference in levels between the site and the land to the north. The engineered platform will also enable the accommodation of services, such as drainage.

4.3.3 The engineering and enabling works comprise cut and fill operations to establish a level platform appropriate for the construction of employment development. To create the platform, the northern area of the Site will require the greatest fill depth of between approximately 7m – 10m.

4.3.4 In the southwest area of the Site, a cut depth of between approximately 1m – 3m will be required.

Consideration of Alternative Schemes

4.3.5 As part of the design process for the proposed development, alternative schemes have been considered to evaluate the environmental effects of a project. This also allows consideration to whether the same function could be achieved using a smaller amount of waste.

4.3.6 The Proposed Development had been finalised having due regard to the Site's topography, previous land use, and its context within the wider environment.

4.3.7 The current uneven levels of the site, and variable composition of filled material make it unsuitable in its present form for development. The option of developing the site at its current level is therefore not a suitable alternative.

4.3.8 Furthermore, it would not be appropriate to consider alternative site locations as the site lies within the Rockingham Enterprise Area and is identified as a strategic site for employment development.

4.3.9 The design of the proposed levels has been developed been through an iterative design process to reduce the potential environmental effects to the lowest practical level and enhance the potential benefits of the scheme as far as practicable.

4.3.10 It is therefore considered that there is no appropriate alternative design for the development platform that would result in the same function using a smaller amount of material.

4.4 Suitability of Waste Material

4.4.1 It is proposed that the development platform will be constructed from inert waste materials suitable for the design of the works.

4.4.2 The material will mainly comprise construction and demolition waste.

4.4.3 Table 4.1 below provides a list of suitable wastes types that are proposed to be used in the construction of the platform.

Table 4.1: List of Materials for use in Development Platform	
EWC Waste Code	**Description**
01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	Waste sand and clay
01 04 12	Tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11
01 04 13	Waste from stone cutting and sawing other than those mentioned in 01 04 07
10 11 03	Waste Glass-based fibrous materials
10 11 12	Waste glass other than those mentioned in 10 11 11
10 12 06	Discarded moulds
10 12 08	Waste ceramics, bricks, tiles and construction products (after thermal processing)
10 13 11	Waste from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10
10 13 14	Waste concrete and concrete sludge
15 01 07	Glass Packaging
17 01 01	Concrete
17 01 02	Bricks
17 01 03	Tiles and ceramics
17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02 02	Glass
17 05 04	Soil and stones other than those mentioned in 17 05 03
19 01 12	Bottom ash and slag other than those mentioned in 19 01 11
19 01 14	Fly ash other than those mentioned in 19 01 13
19 01 18	Pyrolysis wastes other than those mentioned in 19 01 13
19 01 19	Sand from fluidised beds
19 03 05	Stabilised wastes other than those mentioned in 19 03 04
19 03 07	Solidified wastes other than those mentioned in 19 03 06
19 08 01	Screenings
19 08 02	Waste from de-sanding
19 09 01	Solid waste from primary filtration and screenings
19 12 05	Glass
19 12 09	Minerals (for example sand, stones)
19 12 12	Other wastes including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
19 13 02	Solid waste from soil remediation other than those mentioned in 19 13 01
20 01 02	Glass
20 02 02	Soil and stones

4.4.4 The wastes to be deposited will be largely inert. Incinerator Bottom Ash is also to be deposited, which has been undergone chemical testing and the results of which are provided in the Operating Techniques Report.

4.4.5 The chemical and engineering properties of the imported wastes will be suitable for use in the construction of the development platform and will meet the quality standards given in Section 4.5.

4.5 Meeting Quality Standards

4.5.1 The engineering and enabling works have been carefully designed to ensure that the development platform will be stable and suitable for the future application of the land as an employment development

4.5.2 All incoming waste will be subject to strict waste acceptance procedures to ensure that only the permitted waste types (as provided in Section 4.5) are accepted onto site.

4.5.3 Waste acceptance will involve three levels of verification, those being; 1) basic characterisation of materials; 2) compliance testing of materials received on site; and 3) on-site verification of materials. Each is described in further detail, below.

Level 1: Basic Materials Characterisation

4.5.4 Prior to the operator agreeing to accept materials onto the site, wastes will be subject to Level 1 Basic Characterisation to provide:

- a description of the material (including smell, colour and physical form);
- the source and origin of the material, including a description of the current and/or previous land use at the site from which the materials originate;
- the process producing the material;
- the material treatment applied in compliance with regulation 10, or a statement of reasons why such treatment is not considered necessary;
- the six-figure code applicable to the waste under the European Waste Catalogue;
- identification that the material is appropriate for an inert waste recovery operation (including chemical analysis where applicable); and
- identification of any potential risks to the environment and any additional precautions to be taken at the site (e.g. any additional acceptance and handling procedures that are required to ensure safe and proper deposit).

4.5.5 Where waste is sourced from a brownfield site or there is any other reason to believe waste may not be fully inert, the waste producer will be required to provide representative analysis.

4.5.6 The IBA has been sampled and tested and the results analysed. For four determinads, there are relatively minor exceedances of the inert criteria derived from the Landfill Directive. The determinands and their exceedances are:

- Antimony 0.43mg/kg (inert limit value is 0.06mg/kg);
- Chloride 2,300mg/kg (inert limit value is 800 mg/kg);
- Sulphate 2,200mg/kg (inert limit value is 1,000 mg/kg);
- Total Dissolved Solids 19,000mg/kg (inert limit value is 4,000 mg/kg);

4.5.7 The results set out above are within the non-hazardous criteria limits, and have been used to set the waste acceptance criteria and testing limits on the IBA. These are presented in Table 4.2 below, along with the inert criteria limits for all other determinands.

4.5.8 The full waste sampling data and analysis is provided in the Operating Techniques Report. The IBA testing data has also been analysed and incorporated into the Hydrogeological Risk Assessment (Firth Consultants), which demonstrates that there is no additional risk posed from the inclusion of IBA for deposit. IBA will be tested to demonstrate that it meets the waste acceptance criteria set out in Table 4.2 below.

Table 4.2: Waste Acceptance Criteria for IBA

Component	Symbol	L/S = 10 l/kg mg/kg dry substance
Arsenic	As	0.5
Barium	Ba	20
Cadmium	Cd	0.04
Total Chromium	Cr_{total}	0.5
Copper	Cu	2
Mercury	Hg	0.01
Molybdenum	Mo	0.5
Nickel	Ni	0.4
Lead	Pb	0.5
Antimony	Sb	0.43
Selenium	Se	0.1
Zinc	Zn	4

Table 4.2: Waste Acceptance Criteria for IBA		
Component	**Symbol**	**L/S = 10 l/kg mg/kg dry substance**
Chloride	Cl^-	2,300
Fluoride	F^-	10
Sulphate[(a)]	SO_4^{2-}	2,200
Phenol index	PI	1
Dissolved Organic Carbon[(b)]	DOC	500
Total Dissolved Solids[(c)]	TDS	19,000

(a) This limit value for sulphate may be increased to 6,000 mg/kg, provided that the value of C_0 (the first eluate of a percolation test at L/S = 0.1 l/kg) does not exceed 1,500 mg/l. It will be necessary to use a percolation test to determine the limit value at L/S = 0.1 l/kg under initial equilibrium conditions.
(b) If the waste does not meet this value for Dissolved Organic Carbon (DOC) at its own pH value, it may alternatively be tested at L/S = 10 l/kg and a pH between 7.5 and 8.0. The waste may be considered as complying with the acceptance criteria for DOC, if the result of this determination does not exceed 500 mg/kg.
(c) The value for Total Dissolved Solids can be used alternatively to the values for Sulphate and Chloride.

4.5.9 Where the results of Level 1 Basic Characterisation show that a waste stream is not acceptable for deposit, the waste will not be accepted at the site.

4.5.10 The waste producer must provide Level 1 Basic Characterisation documentation and, where applicable, leaching test results to the operator prior to the receipt of the waste. The documentation and leaching test results will be assessed by a suitably competent person to determine whether the waste is acceptable for deposit at the site.

4.5.11 A copy of the documentation and leaching test results will be kept in a site log and made available for inspection to authorised officers of the Environment Agency. The site log will be kept in the site office.

Level 2: Compliance Testing of Materials

4.5.12 The operator will carry out Level 2 Compliance Testing no less frequently than one per 1,000m^3 or at least once a year for each separate material source. For Chapter 19 codes, testing will be carried out once per 5 batches or 1000m^3 whichever is the lesser. Testing will demonstrate the integrity of Level 1 Basic Characterisation Testing and ensure compliance with the requirements of the Environmental Permit.

4.5.13 All samples taken for Level 2 Compliance Testing will be stored in a closed container suitable for the material being contained (to be determined by a technically

competent person). The containers will be clearly labelled and/or reference sufficient to identify sample source and date of delivery.

4.5.14 Samples will be submitted to an independent laboratory for analysis using UKAS accredited techniques. The determinands for analysis will be selected on the basis of Level 1 Basic Characterisation. Copies of analytical results will be kept in a site log and made available to authorised officers of the Environment Agency.

Level 3: On-Site Verification of Materials

4.5.15 Only waste streams that have been shown to be acceptable for deposit at the site following Level 1 Basic Characterisation and, where applicable, Level 2 Compliance Testing will be received at the site.

4.5.16 The drivers of all vehicles delivering materials to the site must report to the site office to disclose the nature of the material and complete the relevant documentation.

4.5.17 On arrival at the site control office, loads be subject to Level 3 On-Site Verification, comprising:

- a check of the waste transfer note or annual season ticket;
- visual inspection prior to and following deposit of the waste at the site.

4.5.18 Each load of incoming waste will also be assessed for suitability against the development works underway at the time.

4.5.19 A suitably trained and experienced operator will examine transport documentation details and compare the information against the pre-acceptance details on Level 1 Basic Characterisation and the waste types specified in the Environmental Permit.

4.5.20 Loads will be inspected visually by the operator to ensure that, as far as possible, the waste load matches the details given on Level 1 Basic Characterisation and the waste types permitted for acceptance at the site.

4.5.21 Discrepancies found during on-site verification checks will result in the vehicle being detained while supplementary checks are made some. These may include, as appropriate, referral to a suitable competent person, referral to the waste producer to confirm the nature of the waste load, contact with the carrier's base and/or referral to the Environment Agency.

4.5.22 Waste loads that pass the supplementary checks and which conform with the conditions of the Environmental Permit will be accepted at the site. Wastes that do

not conform to the conditions of the Environmental Permit will be rejected from the site.

4.5.23 Once accepted onto site, a visual inspection of the waste load will be undertaken during tipping, paying attention to colour, odour, consistency, and the presence of non-conforming materials. Any wastes that are found not to conform to the conditions of the Environmental Permit will wherever possible be reloaded onto the delivery vehicle for off-site removal, or otherwise removed to a quarantine area for temporary storage prior to off-site removal.

4.5.24 All instances of rejection of loads will be recorded in a site log, which will be made available for inspection by authorised officers of the Environment Agency.

4.5.25 The Site would be managed under the operator's ISO14001 accredited Environmental Management System.

4.6 Measures to Ensure Environmental Protection During Waste Emplacement

4.6.1 The development platform will be constructed in accordance with good site practices that will ensure that environmental protection is maintained throughout the construction process. Wastes will be placed as follows.

- All surfaces in the area where waste is to be deposited shall be cleared of all materials with significant organic content, including surface vegetation and surface soil.
- Slopes shall be cleared of organic matter to the same standard described above and shall be removed from faces in a systematic way as the fill level rises. Each lift of vegetation clearance shall remove organic matter to a height of about 3m above the working surface.
- The waste material shall be placed as engineered fill in a series of discrete, horizontal, compacted layers in accordance with the 'Specification for Highway Works'.
- Plant and methods used shall be used appropriate to the compaction requirements for the class of material being compacted.
- Slopes of engineered fill between phases during infilling shall be constructed at stable slopes and in any case no steeper than an average of 1 in 2. Slopes shall be benched with 3m wide benches and 3m high steps at 1 in 1.
- Infilling will be avoided in excessively wet conditions.

- The filling shall be completed at levels as indicated in Drawings D-STP3966D-04a and 04b.

APPENDICES

APPENDIX 1

Section 106 Agreement

DATED **2023**

(1) North Northamptonshire Council

-and-

(2) Tata Steel UK Limited

-and-

(3) Storefield Group Limited

Section 106 Agreement
relating to
Land at Phoenix Parkway, Corby, NN17 5DP

Planning Reference: NC/21/00072/OUT
Council Legal Reference: 020829

Kings House ● 36-27 King Street ● London ● EC2V 8BB

(Ref: 551629C.3)

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APPENDIX 2 – Construction Training Programme

THIS DEED is made on the day of 2023

(1) **North Northamptonshire Council** of The Corby Cube, Parkland Gateway, Corby, NN17 1QG, United Kingdom (the **Council**);

(2) **Tata Steel UK Limited** (Company Registration Number 02280000) whose registered office address is 18 Grosvenor Place, London, SW1X 7HS, United Kingdom (the **Owner**); and

(3) **Storefield Group Limited (**Company Registration Number 2417831) whose registered office address is Furnace Park Old Telford Way, Telford Way Industrial Estate, Kettering, Northamptonshire, England, NN16 8UN (the **Developer**)

RECITALS

(A) The Council is the local planning authority for the purposes of the TCPA 1990 for the area in which the Property is situated.

(B) The Owner is the freehold owner of the Property.

(C) The Developer is the beneficiary of a contract dated 21 December 2020 (as varied) relating to the grant of a land restoration licence.

(D) The Developer has made the Planning Application and is proposing to carry out the Development, which will inter alia include the Development Platform.

(E) The Council having regard to the provisions of the Local Plan and to all other material considerations resolved at its meeting on 7 June 2023 that Planning Permission should be granted for the Development subject to the prior completion of this deed.

IT IS HEREBY AGREED

1. INTERPRETATION

The following definitions and rules of interpretation apply in this deed:

1.1 Definitions:

Air Quality Mitigation Contribution: the sum payable in accordance with Schedule 1 of this deed.

Commencement of Development: the carrying out in relation to the Development of any material operation as defined by section 56(4) of the TCPA 1990 but disregarding for the purposes of this deed and for no other purpose, the following operations:

- demolition works;
- site clearance;
- ground investigations;
- site survey works;
- temporary access construction works;
- archaeological investigation; and

- erection of any fences and hoardings around the Property.

Commence and Commences shall be construed accordingly.

Commencement Date: the date Development Commences.

Construction Training Programme	means a construction phase training programme in accordance with the principles outlined in paragraph 1 of Appendix 3, to include:-
	(a) measures to facilitate an enhanced understanding of different development construction skills; and
	(b) measures to engage with local colleges or training providers to provide a formal programme of construction education for students

Default Interest Rate: 4% per annum.

Development: the development of the Property authorised by the Planning Permission.

Development Platform: the area of development derived from the restoration materials comprising suitable waste or non-waste materials.

Fire Hydrant Contribution: the sum payable in accordance with Schedule 1 of this deed.

First Occupation	the first date upon which the Development is Occupied pursuant to the Planning Permission and the term "**First Occupied"** shall be interpreted accordingly;

Highways Contribution: the sum payable in accordance with Schedule 1 of this deed.

Index Linked: increased in accordance with the following formula:

Amount payable = the payment specified in this deed x (A/B) where:

A= the figure for the Retail Prices Index (All Items) that applied immediately preceding the date the payment is due.

B= the figure for the Retail Prices Index (All Items) that applied when the index was last published prior to the date of this deed.

Plan: the plan attached as Appendix 1.

Planning Application: the application for outline planning permission submitted to the Council and given reference number NC/21/00072/OUT.

Planning Permission: the planning permission to be granted by the Council in respect of the Planning Application.

Property: the land at Phoenix Parkway, Corby, NN17 5DP shown edged red on the Plan and registered at HM Land Registry with absolute title under title number(s) NN287986.

TCPA 1990: Town and Country Planning Act 1990.

Travel Plan: means the plan to submitted in accordance with the relevant condition of the Planning Permission

Travel Plan Monitoring Contribution: the sum payable in accordance with Schedule 1 of this deed.

VAT: value added tax chargeable under the Value Added Tax Act 1994 and any similar replacement tax and any similar additional tax.

Working Day: any day which is not a Saturday, a Sunday, a bank holiday or a public holiday in England.

1.2 Clause headings shall not affect the interpretation of this deed.

1.3 A **person** includes a natural person, corporate or unincorporated body (whether or not having separate legal personality).

1.4 A reference to a **company** shall include any company, corporation or other body corporate, wherever and however incorporated or established.

1.5 Unless the context otherwise requires, words in the singular shall include the plural and in the plural shall include the singular.

1.6 Unless the context otherwise requires, a reference to one gender shall include a reference to the other genders.

1.7 A reference to any party shall include that party's personal representatives, successors and permitted assigns and in the case of the Council the successors to its respective statutory functions.

1.8 Unless the context otherwise requires, a reference to a statute or statutory provision is a reference to it as amended, extended or re-enacted from time to time.

1.9 Unless the context otherwise requires, a reference to a statute or statutory provision shall include any subordinate legislation made from time to time under that statute or statutory provision.

1.10 A reference to **writing** or **written** includes fax but not e-mail.

1.11 A reference to **this deed** or to any other deed or document referred to in this deed is a reference to this deed or such other deed or document as varied or novated (in each case, other than in breach of the provisions of this deed) from time to time.

1.12 References to clauses and Schedules are to the clauses and Schedules of this deed.

1.13 An obligation on a party not to do something includes an obligation not to allow that thing to be done.

1.14 Any words following the terms **including**, **include**, **in particular**, **for example** or any similar expression shall be construed as illustrative and shall not limit the sense of the words, description, definition, phrase or term preceding those terms.

1.15 Where an obligation falls to be performed by more than one person, the obligation can be enforced against every person so bound jointly and against each of them individually.

2. STATUTORY PROVISIONS

2.1 This deed constitutes a planning obligation for the purposes of section 106 of the TCPA 1990, section 111 of the Local Government Act 1972, section 1 of the Localism Act 2011 and any other enabling powers.

2.2 The covenants, restrictions and obligations contained in this deed are planning obligations for the purposes of section 106 of the TCPA 1990 and are entered into by the Owner with the intention that they bind the interests held by those persons in the Property and their respective successors and assigns.

2.3 The covenants, restrictions and obligations contained in this deed are enforceable by the Council in accordance with section 106 of the TCPA 1990.

3. CONDITIONALITY

With the exception of clause 2, clause 3, clause 9, clause 10, clause 12, clause 15, clause 16, clause 17, clause 19, clause 20, clause 22 and clause 24 (which take effect immediately), this deed is conditional on the grant and issue of the Planning Permission.

4. COVENANTS TO THE COUNCIL

4.1 The Owner covenants with the Council to:

4.1.1 observe and perform the covenants, restrictions and obligations contained in Schedule 1.

4.1.2 give at least 15 Working Days written notice to the Council of the intended Commencement Date.

5. COVENANTS BY THE COUNCIL

The Council covenants with the Owner and the Developer to observe and perform the covenants, restrictions and obligations contained in Schedule 2.

6. INDEXATION

6.1 All financial contributions payable to the Council shall be Index Linked.

6.2 Where reference is made to an index and that index ceases to exist or is replaced or rebased then it shall include reference to any index which replaces it or any rebased index (applied in a fair and reasonable manner to the periods before and after rebasing under this deed) or in the event the index is not replaced, to an alternative reasonably comparable basis or index as the Council shall advise the Owner in writing.

7. RELEASE

No person shall be liable for any breach of a covenant, restriction or obligation contained in this deed after parting with all of its interest in the Property, except in respect of any breach subsisting prior to parting with such interest.

8. DETERMINATION OF DEED

8.1 The obligations in this deed (with the exception of clause 10) shall cease to have effect if before the Commencement of Development, the Planning Permission:

8.1.1 expires;

8.1.2 is varied or revoked other than at the request of the Owner; or

8.1.3 is quashed following a successful legal challenge.

9. LOCAL LAND CHARGE

This deed is a local land charge and shall be registered as such by the Council.

10. COUNCIL'S COSTS

10.1 The Owner shall pay to the Council on or before the date of this deed:

10.1.1 the Council's reasonable and proper legal costs together with all disbursements incurred in connection with the preparation, negotiation, completion and registration of this deed.

10.1.2 the sum of £2,500.00 (Two Thousand Five Hundred Pounds) as a contribution towards the Council's costs of monitoring the implementation of this deed.

11. INTEREST ON LATE PAYMENT

If any sum or amount has not been paid to the Council by the date it is due, the Owner shall pay the Council interest on that amount at the Default Interest Rate (both before and after any judgment). Such interest shall accrue on a yearly basis for the period from the due date to and including the date of payment.

12. OWNERSHIP

12.1 The Owner warrants that no person other than the Owner has any legal or equitable interest in the Property.

12.2 Until the covenants, restrictions and obligations in Schedule 1 have been complied with, the Owner will give to the Council within 10 Working Days, the following details of any conveyance, transfer, lease, assignment, mortgage or other disposition entered into in respect of all or any part of the Property:

12.2.1 the name and address of the person to whom the disposition was made; and

12.2.2 the nature and extent of the interest disposed of.

13. REASONABLENESS

Any approval, consent, direction, authority, agreement or action to be given by the Council under this deed shall not be unreasonably withheld or delayed.

14. CANCELLATION OF ENTRIES

14.1 On the written request of the Owner at any time after each or all of the obligations have been performed or otherwise discharged (and subject to the payment of the Council's reasonable and proper costs) the Council will issue a written confirmation of such performance or discharge.

14.2 Following the performance and full satisfaction of all the terms of this Agreement or if this deed is determined pursuant to clause 8 (and subject to the payment of the Council's reasonable and proper costs and charges) the Council will on the written request of the Owner cancel all entries made in the local land charges register in respect of this deed.

15. DISPUTES

15.1 Any dispute, controversy or claim arising out of or relating to this deed, including any question regarding its breach, existence, validity or termination or the legal relationships established by this deed, shall be finally resolved by arbitration in accordance with the Arbitration Act 1996. It is agreed that:

15.1.1 the tribunal shall consist of one arbitrator appointed jointly by the parties;

15.1.2 in default of the parties' agreement as to the arbitrator, the arbitrator shall be appointed on either party's request by the President for the time being of the Royal Institution of Chartered Surveyors;

15.1.3 the costs of the arbitration shall be payable by the parties in the proportions determined by the arbitrator (or if the arbitrator makes no direction, then equally); and

15.1.4 the seat of the arbitration shall be London.

16. NO FETTER OF DISCRETION

Nothing (contained or implied) in this deed shall fetter or restrict the Council's statutory rights, powers, discretions and responsibilities.

17. WAIVER

No failure or delay by the Council to exercise any right or remedy provided under this deed or by law shall constitute a waiver of that or any other right or remedy. No single or partial exercise of such right or remedy shall prevent or restrict the further exercise of that or any other right or remedy.

18. FUTURE PERMISSIONS

Nothing in this agreement shall prohibit or limit the right to develop any part of the Property in accordance with any planning permission (other than the Planning Permission or modification, variation or amendment thereof) granted after the date of the Planning Permission.

19. AGREEMENTS AND DECLARATIONS

19.1 The parties agree that:

19.1.1 nothing in this deed constitutes a planning permission or an obligation to grant planning permission; and

19.1.2 nothing in this deed grants planning permission or any other approval, consent or permission required from the Council in the exercise of any other statutory function.

20. NOTICES

20.1 Any notice or other communication to be given under this deed must be in writing and must be:

20.1.1 delivered by hand; or

20.1.2 sent by pre-paid first class post or other next working day delivery service.

20.2 Any notice or other communication to be given under this deed must be sent to the relevant party as follows:

20.2.1 to the Council at the address above marked for the attention of Development Control Manager

20.2.2 to the Owner at the address above;

20.2.3 to the Developer at the address above;

or as otherwise specified by the relevant party by notice in writing to each other party.

20.3 Any notice or other communication given in accordance with clause 20.1 and clause 20.2 will be deemed to have been received:

20.3.1 if delivered by hand, on signature of a delivery receipt or at the time the notice or document is left at the address provided that if delivery occurs before 9.00 am on a Working Day, the notice will be deemed to have been received at 9.00 am on that day, and if delivery occurs

after 5.00 pm on a Working Day, or on a day which is not a Working Day, the notice will be deemed to have been received at 9.00 am on the next Working Day; or

20.3.2 if sent by pre-paid first class post or other next working day delivery service, at 9 a.m. on the second Working Day after posting.

20.4 A notice or other communication given under this deed shall not be validly given if sent by e-mail.

20.5 This clause does not apply to the service of any proceedings or other documents in any legal action or, where applicable, any arbitration or other method of dispute resolution.

21. THIRD PARTY RIGHTS

A person who is not a party to this deed shall not have any rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this deed.

22. VALUE ADDED TAX

22.1 Each amount stated to be payable by the Council or the Owner to the other under or pursuant to this deed is exclusive of VAT (if any).

22.2 If any VAT is at any time chargeable on any supply made by the Council or the Owner under or pursuant to this deed, the party making the payment shall pay the other an amount equal to that VAT as additional consideration on receipt of a valid VAT invoice.

23. GOVERNING LAW

This deed and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) shall be governed by and construed in accordance with the law of England and Wales.

This document has been executed as a deed and is delivered and takes effect on the date stated at the beginning of it.

Executed as a deed by affixing the common seal of

NORTH NORTHAMPTONSHIRE COUNCIL in the

presence of:

.....

Authorised Signatory

Executed as a deed by acting by a director
Tata Steel UK Limited
In the presence of:

Signature of Director:_____

Signature of witness:_____

Name (in BLOCK CAPITALS):_____

Address:_____

Executed as a deed by acting by a director
Storefield Group Limited
In the presence of:

Signature of Director:_____

Signature of witness:_____

Name (in BLOCK CAPITALS):_____

Address:_____

SCHEDULE 1
Covenants to the Council

PART 1 – Financial Obligations

1. Highways Contribution

1.1 On or before the Commencement Date to pay to the Council the sum of £30,000.00 (Thirty Thousand Pounds) for the cost of upgrading of the footway on the eastern side of Phoenix Parkway to a 3m footway and cycleway.

1.2 On or before the Commencement Date to pay to the Council the sum of £11,000.00 (Eleven Thousand Pounds) towards the cost of enhancing the Steel Road roundabout scheme.

2. Travel Plan Monitoring Contribution

2.1 On or before the Occupation Date to pay to the Council the sum of £3,000.00 (Three Thousand Pounds) towards the cost of monitoring the Travel Plan.

3. Air Quality Mitigation Contribution

3.1 On or before the Occupation Date to pay to the Council the sum of £120,708.10 (One Hundred and Twenty Thousand Seven Hundred and Eight Pounds and Ten Pence) towards the cost of monitoring the air quality.

PART 2 – Employment Obligations

1. CONSTRUCTION TRAINING

1.1 To submit to the Council for approval and obtain the written approval of the Council to a Construction Training Programme covering those elements set out in paragraph 1 of Appendix 3 prior to the Commencement of Development and thereafter to carry out the measures in the Approved Construction Training Programme.

1.2 Not to Commence or permit the Commencement of Development until a Construction Training Programme satisfying the requirements of paragraph 1 above has been approved in writing by the Council.

SCHEDULE 2
Covenants by the Council

PART 1

1. Highways Contribution

1.1 To pay the Highways Contribution into a separately identified interest bearing section of the Council's combined accounts within thirty (30) Working Days and in the event that is not done to pay interest to the payer on the Highways Contribution in accordance with the Default Interest Rate

1.2 Not to use any part of the Highways Contribution other than for the purposes for which it was paid as outlined in Part 1 of Schedule 1 (whether by the Council or another party).

1.3 In the event that the Highways Contribution has not been spent or committed for expenditure in accordance with Part 1 of Schedule 1 by the Council within 10 years following the date of receipt of the Highways Contribution the Council shall refund to the Developer any part of the Highways Contribution which has not been spent of committed for expenditure, together with any accrued interest

2. Travel Plan Monitoring Contribution

2.1 To pay the Travel Plan Monitoring Contribution into a separately identified interest bearing section of the Council's combined accounts as soon as reasonably practicable

2.2 Not to use any part of the Travel Plan Monitoring Contribution other than for the purposes for which it was paid (whether by the Council or another party).

2.3 In the event that the Travel Plan Monitoring Contribution has not been spent or committed for expenditure by the Council within 10 years following the date of receipt of the Travel Plan Monitoring Contribution the Council shall refund to the Developer any part of the Travel Plan Monitoring Contribution which has not been spent of committed for expenditure, together with any accrued interest

3. Air Quality Mitigation Contribution

3.1 To pay the Air Quality Mitigation Contribution into a separately identified interest bearing section of the Council's combined accounts as soon as reasonably practicable

3.2 Not to use any part of the Air Quality Mitigation Contribution other than for the purposes for which it was paid (whether by the Council or another party).

3.3 In the event that the Air Quality Mitigation Contribution has not been spent or committed for expenditure by the Council within 10 years following the date of receipt of the Air Quality Mitigation Contribution the Council shall refund to the Developer any part of the Air Quality Mitigation Contribution which has not been spent of committed for expenditure, together with any accrued interest

APPENDIX 1

Plan

APPENDIX 2

Construction Training Programme

1. **CONSTRUCTION TRAINING**

1.1 The Owner shall work with a local training provider to arrange a series of site visits for students across different construction skills.

1.2 These site visits are intended to provide useful insight into areas such as the management and scheduling of a construction project and the health and safety measures necessary on a large construction site.

1.3 The Owner shall fund transport to and from the Development.

1.4 The anticipated range of construction education activity could include:-

1.4.1 education work during the construction phase of each building (allowing a minimum six visits per building);

1.4.2 time input including "project briefings" from the developer's project management team;

1.4.3 time input from main contractor (construction education provisions should be included in the tender documents for main contractor) for example (but without limitation) in the form of "project briefings" and /or "technical works"; and

1.4.4 the Owner/developer working with a local training provider to share its experience of sustainable construction; this may involve working with students in a workshop environment or helping with project work on an individual basis.

2. **INTRODUCTION**

2.1.1 This appendix offers a guide to future drafting of details in connection with the Construction Training Programme which is to be submitted to and approved by the Council pursuant to Schedule 1.

2.2 The Parties agree that:

2.2.1 It is not prescriptive given the scope for change and variable training and education needs arising during construction and Occupation.

2.2.2 The initiatives covered by the Construction Training Programme are to be sponsored or carried out by the Owner, but this does not preclude the involvement of contractors, a local education provider, Job Centre Plus, the Skills Funding Agency, or other agencies.

2.2.3 The training opportunities and other initiatives provided under the cover of the Construction Training Programme shall relate to new jobs and business opportunities created by the Development (at both the construction and operational stages of the Development) and the

associated vocational and other skills requirements of the Owner, developer, their contractors and future occupiers of the Development.

APPENDIX 2

Rose Group Email - Limestone fill quote

Heath, Katie

Subject: Aggregate Prices - Corby

From: Jack McQuade <jack@rosegroup.co.uk>
Sent: 01 December 2021 10:13
To: Jonah Clarke <jonah.clarke@storefield.co.uk>
Subject: Aggregate Prices - Corby

Hi Jonah,

As requested, please find the prices below we can offer for your site at Corby: -

Limestone Fill Delivered	£7.50 Per tonne
Limestone Fill Ex Works	£5.00 Per tonne

If you need anything else at all or have any questions, please let me know.

Kind regards,

Jack McQuade
Aggregates Managing Director
Rose Group Aggregates (Corby)
Rose House, Unit 1, Ellis Court, Manton Park
Corby
NN17 5DY
Tel: 01536 662211
Email: jack@rosegroup.co.uk
Web: www.rosegroup.co.uk

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Registered office: Low Cross House, Padholme Road East, Peterborough, PE1 5XL

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APPENDIX 3

Evidence of land purchase price and estimated works value

Storefield
PLANT LIMITED

Esti

Furnace Park, Old Telford Way
Telford Way Industrial Estate
Kettering
Northamptonshire NN16 8UN

Telephone: 01536 418121
Fax: 01536 525424

Phoenix Parkway,
Steel Road,
Corby

Document No:

Date/Tax Point: Monday, 20 D

Order No:

Ordered By:

Details	Quantity		Unit Price £
Machinery, Management Labour Costs			
Land Purchase Price			
Stone Own Haulage Delivered to Site	Volume of Void (m3)		686,000
	Cube to Ton		1.60
	Price / Ton	£	6.25
Price Of Stone			

Bank details for payment by BACS:
National Westminster Bank Plc
Sort Code: 60-06-11
Account No: 46781447
Payment due within 30 days from the date of invoice
All queries must be made within 5 working days from the date of invoice.

Estimate Total

imate

1

December 2021

	Net £
	£ 1,200,000.00
	£ 4,000,000.00
	£ 6,860,000.00
	12,060,000.00

Storefield Plant Rushton Limited
Plant Hire Invoice Summary

Sales Person: select from list **Date:** Monday, 20 December 2021

Customer: select from list **Order No:**

Ordered By: **Phone No:**

E-Mail:

Site Address: **Hire Start Date:**

Date Off Hired:

Type of Hire: select from list *Lookup column:* *#N/A*

Plant Item on Hire: select from list 0 **Serial No:** #N/A

Attachments included in Hire:		**Returned?:**
	select from list	N/A
	select from list	N/A
	select from list	N/A
	select from list	N/A
	select from list	N/A
	select from list	N/A

Hire Rate: #N/A #N/A

If the hire is per day, complete the invoice period dates below. If it is a weekly hire, leave these dates blank.
If the hire is per hour, amend the "Invoiced Quantity" figure to reflect the total hours to be invoiced.

Invoice Period: ***From:*** ***To:*** ***Invoiced Qty:*** #N/A

Additional Charges:						
Transport In					**Rate:**	
Fuel	Quantity:		Litres		**Rate:**	£0.00
Adblue	Quantity:		Litres		**Rate:**	£0.00
select from list					**Rate:**	
select from list					**Rate:**	
select from list					**Rate:**	
Transport Out					**Rate:**	

Storefield
PLANT LIMITED

Sales Invoice

Furnace Park, Old Telford Way
Telford Way Industrial Estate
Kettering
Northamptonshire NN16 8UN

Telephone: 01536 418121
Fax: 01536 525424

Document No:

Date/Tax Point: Monday, 20 December 2021

Order No:

Ordered By:

Details	Net £
Site Address - From: *To:*	
	0.00

Net Amount		0.00
VAT	20.00%	0.00
Invoice Total		0.00

VAT Registration Number: 657 6909 82

Bank details for payment by BACS:
National Westminster Bank Plc
Sort Code: 60-06-11
Account No: 46781447

Payment due within 30 days from the date of invoice
All queries must be made within 5 working days from the date of invoice.

Storefield Plant Rushton Limited
Transport Invoice Summary

Sales Person: select from list

Date: Monday, 20 December 2021

Customer: select from list

Order No:

Ordered By:

Phone No:

E-Mail:

Site Address (From):

Site Address (To):

Details:

Hire Rate:

Storefield PLANT LIMITED

Sales Invoice

Furnace Park, Old Telford Way
Telford Way Industrial Estate
Kettering
Northamptonshire NN16 8UN

Telephone: 01536 418121
Fax: 01536 525424

Document No:

Date/Tax Point: Monday, 20 December 2021

Order No:

Ordered By:

Details	Net £
Work Location:	

Net Amount		0.00
VAT	20.00%	0.00
Invoice Total		0.00

Bank details for payment by BACS:
National Westminster Bank Plc
Sort Code: 60-06-11
Account No: 46781447

VAT Registration Number: 657 6909 82

Payment due within 30 days from the date of invoice
All queries must be made within 5 working days from the date of invoice.

Storefield Plant Rushton Limited
ContractInvoice Summary

Sales Person: select from list **Date:** Monday, 20 December 2021

Customer: select from list **Order No:**

Ordered By: **Phone No:**

E-Mail:

Work Location:

Details:

Customer No.	Customer Name	Address 1
select from list		
CASH0001	Cash Sales	
INTERNAL	Storefield Plant Rushton Limited	
BIRD0001	Bird Contractors Ltd	Horninghold Hall
BOUGLOAM	Boughton Loam Limited	Telford Way
BROW0001	C L Brown Surfacing Contractors	Cabak Farmhouse
COML0001	Comley Demolition	Southern Way, Rye Common
CPBG0001	CPB Groundworks & Civils Limited	Unit 4
FOXO0001	Fox (Owmby) Limited	Caenby Hall
FRON0001	Frontiers Developments Limited	Clements Farm
GCE0001	GCE Hire Fleet Ltd	Aaron Road industrial Estate
GREE0002	Green Infrastructure Solutions	30 Connaught Street
MPH0001	MPH Construction	41 Cosby Road
STAP0001	Stapleford Commercial Group	Romalee
STOR0001	Storefield Aggregates Limited	Furnace Park, Old Telford Way
STOR0002	Storefield Environmental Limited	Furnace Park, Old Telford Way
THRE0001	Three Shires Limited	Piper Hole Farm
TOM00001	Tom Blackwell Limited	Woodcot Place
TUTS0001	TUTS (UK) Limited	1 North Folds Road
WGCH0001	W G Childs & Sons	Manor Farm
WILL000A	Willowbrook Construction Limited	Pywell Road
WILL0001	Willshift Plant Ltd	58 Gorse Road

Salesman ID	Name
select from list	
DW	Doug Wright
IC	Ian Canover
JS	Jason Stirling

Additional Charges
select from list
Adjustment
Commissioning
Damage
Decommissioning
Missing Items
On Site Move
Operator Only
Transport In

Address 2	Town/City	County
	Horninghold	Leicestershire
Telford Way Industrial Estate	Kettering	Northamptonshire
17 Langar Lane	Harby	Melton Mowbray
Odiham	Hook	Hampshire
Parkhill Road	Castle Ashby	Northamptonshire
Caenby Corner	Market Rasen	Lincolnshire
Brickendon Lane	Brickendon	Hertfordshire
Station Road	Whittlesey	Peterborough
	Kettering	Northamptonshire
	Littlethorpe	Leicestershire
Stapleford Road	Stapleford Abbotts	Essex
Telford Way Industrial Estate	Kettering	Northamptonshire
Telford Way Industrial Estate	Kettering	Northamptonshire
Eastwell Road	Scalford	Leicestershire
White Ash Green	Halstead	Essex
Oakley Hay Industrial Estate	Corby	Northamptonshire
Twywell	Kettering	Northamptonshire
Willowbrook East	Corby	Northamptonshire
	Kettering	Northamptonshire

Type of Hire	*Lookup Column*	*Unit*
select from list		
Self Drive: Daily	*7*	*per Day*
Self Drive: Weekly	*8*	*per Week*
Operated: Hourly	*9*	*per Hour*

Post Code
LE16 8DH
NN16 8UN
LE14 4BL
RG29 1HU
NN17 1LA
LN8 2BU
SG13 8NS
PE7 2EX
NN16 8NU
LE19 2HG
RM4 1EJ
NN16 8UN
NN16 8UN
LE14 4SS
CO9 1PB
NN18 9AT
NN14 3AH
NN17 5XJ
NN16 9TE

Invoice Units
Day(s)
Week(s)
Hour(s)

Plant ID	Item
select from list	
D/02	Caterpillar D6T LGP
D/03	Komatsu D65 PX
D/04	Caterpillar D6R LGP
D/05	Caterpillar D6T LGP
D/HI	Dozer
E/01	Volvo EC220DL
E/08	Volvo EC300DL
E/09	Volvo EC220DL
E/10	Caterpillar 320EL
E/11	Volvo EC140EL
E/12	Volvo EC140EL
E/13	Volvo EC140EL
E/14	Caterpillar 308E2 QC
E/16	Caterpillar 313F L GC
E/17	Caterpillar 313F L GC
E/18	Caterpillar 320GC Q
E/19	Caterpillar 320GC Q
E/20	Caterpillar 320GC Q
E/HI	Excavator
L/02	Volvo L120H
L/03	Hyundai HL760-9
L/04	Volvo L120H
L/HI	Loading Shovel
FT/01	Mecalac TA6S
BR/01	Atlas Copco MB1200E 20T Breaker
DT/01	Caterpillar 730C2
DT/02	Caterpillar 730C2
DT/03	Volvo A30G
DT/HI	Dump Truck
TX/01	Cat 963
TX/02	Cat 953
C/01	R400 Crusher
C/HI	Crusher
S/02	883+ Terex
S/03	595 Terex
S/05	Commander Screener
S/HI	Screener
R/01	Hamm roller
T/01	John Deere 6125M
TR/01	Jpm Trailer
RS/01	Roadsweeper
RS/02	Roadsweeper
FB/01	Fuel Bowser
FB/02	Fuel Bowser
FB/03	Fuel Bowser
WB/01	Water Bowser
WLSB/01	Wheeled Loading Shovel Bucket

WW/01	Wheel Wash
RB/01	Riddle Bucket
ASB/01	Allu Screening Bucket
VDB/01	V Ditch Bucket
8TBR/01	8T Breaker
14TBR/01	14T Breaker
20TBR/01	20T Breaker
30TBR/01	30T Breaker
RT/01	Ripper Tooth
8TPF/01	8T Pallet Forks
14TPF/01	14T Pallet Forks
20TPF/01	20T Pallet Forks
SG/01	Selector Grab
RG/01	Rotating Grab
SH/01	Shear
M/01	Muncher

Attachments
select from list
1' Bucket (Toothed)
1' Bucket (Bladed)
1'6" Bucket (Toothed)
1'6" Bucket (Bladed)
2' Bucket (Toothed)
2' Bucket (Bladed)
2'6" Bucket (Toothed)
2'6" Bucket (Bladed)
3' Bucket (Toothed)
3' Bucket (Bladed)
4' Bucket (Toothed)
4' Bucket (Bladed)
5' Bucket (Toothed)
5' Bucket (Bladed)
6' Bucket (Toothed)
7' Bucket (Toothed)
Ditching Bucket

Description	Serial Number	Collection Date
DOZER	JRW00676	08/01/15
DOZER	70282	25/03/08
DOZER	SAH01583	09/08/07
DOZER	CAT00D6TCSGZ00418	11/08/18
Dozer	Hired In Dozer	
20 ton excavator	220755	13/02/14
30 ton excavator	210755	19/11/13
20 ton excavator	221270	02/12/14
20 ton excavator	NAZ0224	20/11/15
14 ton excavator	310595	07/12/16
14 ton excavator	310875	18/08/17
14 ton excavator	310882	18/08/17
8 ton excavattor	0FJX100714	01/09/18
13 ton excavator	CAT0313FHGJD10307	13/09/18
13 ton excavator	0GJD10304	24/09/18
20 ton excavator	0KTN00342	03/08/18
20 ton excavator	0KTN00336	03/08/18
20 ton excavator	0KTN00337	13/08/18
Excavator	Hired In Excavator	
Wheeled Loading shovel	VCEL120HPF0014470	15/06/15
Wheeled Loading shovel	HHKHLL010CD0000534	25/06/18
Wheeled Loading shovel	16147	08/06/18
Loading Shovel	Hired In Loading Shovel	
6 ton dumper	SLBD1DJ0EJ7PR5398	07/09/18
Breaker for 20 ton excavator	DEQ15014	18/02/15
30ton dumptruck	CAT0730CA2T401157	06/09/18
30ton dumptruck	CAT0730CV2T401156	07/09/18
30ton dumptruck	742248	
Dump Truck	Hired In Dump Truck	
tracked loading shovel	2D51958	25/07/01
tracked loading shovel	20202013	31/08/03
Material Crusher	PIDR400POME48553	23/04/14
Crusher	Hired In Hired Dump	
3 way Screener	TRX883STHDGGB3363	30/05/17
1 way Screener	TRX595HTCDGE58668	29/08/14
high belt screener	2815673	
Screener	Hired In Screener	
20 ton roller	H1761470	31/08/11
wheeled tractor	1/06125MEDK750242	28/06/13
14 ton dump trailer for tractor	2015-6418	16/09/15
Roadsweeper	KX54 VDZ	12/10/04
Roadsweeper	Y106 HPE	11/09/09
Fuel Bowser		
Fuel Bowser		
Fuel Bowser		
Water Bowser		
Wheeled Loading Shovel Bucket		

Wheel Wash		
Riddle Bucket		
Allu Screening Bucket		
V Ditch Bucket		
8T Breaker		
14T Breaker		
20T Breaker		
30T Breaker		
Ripper Tooth		
8T Pallet Forks		
14T Pallet Forks		
20T Pallet Forks		
Selector Grab		
Rotating Grab		
Shear		
Muncher		

Self-Drive Hire Rate			Operated Hire Rate		
per Hour	**per Day**	**per Week**	**per Hour**	**per Day**	**per Week**
Self-Drive: Hourly	*Self Drive: Daily*	*Self Drive: Weekly*	*Operated: Hourly*	*Operated: Daily*	*Operated: Weekly*
N/A	£240.00	£1,200.00	£44.00	N/A	N/A
N/A	£200.00	£1,000.00	£44.00	N/A	N/A
N/A	£240.00	£1,200.00	£44.00	N/A	N/A
N/A	£240.00	£1,200.00	£44.00	N/A	N/A
N/A	£240.00	£1,200.00	£44.00	N/A	N/A
N/A	£130.00	£650.00	£34.00	N/A	N/A
N/A	£180.00	£900.00	£38.00	N/A	N/A
N/A	£130.00	£650.00	£34.00	N/A	N/A
N/A	£130.00	£650.00	£34.00	N/A	N/A
N/A	£95.00	£475.00	£32.00	N/A	N/A
N/A	£95.00	£475.00	£32.00	N/A	N/A
N/A	£95.00	£475.00	£32.00	N/A	N/A
N/A	£75.00	£375.00	£30.00	N/A	N/A
N/A	£95.00	£475.00	£32.00	N/A	N/A
N/A	£95.00	£475.00	£32.00	N/A	N/A
N/A	£130.00	£650.00	£34.00	N/A	N/A
N/A	£130.00	£650.00	£34.00	N/A	N/A
N/A	£130.00	£650.00	£34.00	N/A	N/A
N/A	£130.00	£650.00	£34.00	N/A	N/A
N/A	£250.00	£1,200.00	£42.00	N/A	N/A
N/A	£250.00	£1,200.00	£42.00	N/A	N/A
N/A	£250.00	£1,200.00	£42.00	N/A	N/A
N/A	£250.00	£1,200.00	£42.00	N/A	N/A
N/A	£29.00	£145.00	£28.00	N/A	N/A
N/A	£90.00	£450.00	N/A	N/A	N/A
N/A	£240.00	£1,200.00	£42.00	N/A	N/A
N/A	£240.00	£1,200.00	£42.00	N/A	N/A
N/A	£240.00	£1,200.00	£42.00	N/A	N/A
N/A	£240.00	£1,200.00	£42.00	N/A	N/A
N/A	£200.00	£1,000.00	£42.00	N/A	N/A
N/A	£200.00	£1,000.00	£42.00	N/A	N/A
N/A	£500.00	£2,500.00	£72.00	N/A	N/A
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N/A	£200.00	£1,000.00	£50.00	N/A	N/A
N/A	£40.00	£200.00	N/A	N/A	N/A
N/A	£40.00	£200.00	N/A	N/A	N/A
N/A	£125.00	£750.00	£36.00	N/A	N/A
N/A	£90.00	£450.00	£32.00	N/A	N/A
N/A	£40.00	£200.00	N/A	N/A	N/A
N/A	£120.00	N/A	N/A	N/A	N/A
N/A	£120.00	N/A	N/A	N/A	N/A
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N/A				N/A	N/A
N/A				N/A	N/A
N/A				N/A	N/A
N/A		£100.00		N/A	N/A

N/A				N/A	N/A
N/A				N/A	N/A
N/A				N/A	N/A
N/A				N/A	N/A
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N/A				N/A	N/A
N/A				N/A	N/A
N/A				N/A	N/A
N/A				N/A	N/A
N/A				N/A	N/A
N/A				N/A	N/A
N/A				N/A	N/A
N/A				N/A	N/A

Plant ID	Description	Serial Number	Collection Date	01/08/18	02/08/18
C/01	Powersceen Crusher R400				
D/03	Komatsu D65 PX Dozer				
D/04	Caterpillar D6R LPG Dozer				
D/05	Caterpillar D6T LGP	CAT00D6TCSGZ00418	11/08/18		
DT/01	Caterpillar 730C2	CAT0730CA2T401157	06/09/18		
DT/02	Caterpillar 730C2	CAT0730CV2T401156	07/09/18		
E/08	Volvo EC300				
E/09	Volvo EC220				
E/10	Caterpillar 320				
E/11	Volvo EC140				
E/12	Volvo EX140EL				
E/13	Volvo EC140EL				
E/16	Caterpillar 313F L GC	CAT0313FHGJD10307	13/09/18		
E/18	Caterpillar 320GC Q	0KTN00342	03/08/18		
E/19	Caterpillar 320GC Q	0KTN00336	03/08/18		
E/20	Caterpillar 320GC Q	0KTN00337	13/08/18		
L/01	Volvo L120H				
L/02	Volvo L120H				
L/03	Hyundai HL760-9 Wheeled Loading Shovel				
S/02	Terex Finlay 883+ Screener				
S/03	Terex 595 Screener				
S/05	Commander Screener				
	Caterpillar 308E2 QC	0FJX100714	01/09/18		
	Mecalac TA6S	SLBD1DJ0EJ7PR5398	08/09/18		

Plant Utilisation

03/08/18	04/08/18	05/08/18	06/08/18	07/08/18	08/08/18	09/08/18	10/08/18	11/08/18	12/08/18	13/08/18	14/08/18	15/08/18	16/08/18	17/08/18	18/08/18	19/08/18	20/08/18	21/08/18	22/08/18	23/08/18	24/08/18	25/08/18	26/08/18	27/08/18	28/08/18	29/08/18	30/08/18	31/08/18	01/09/18
																				1	1								
																	1	1	1	1	1				1	1	1	1	
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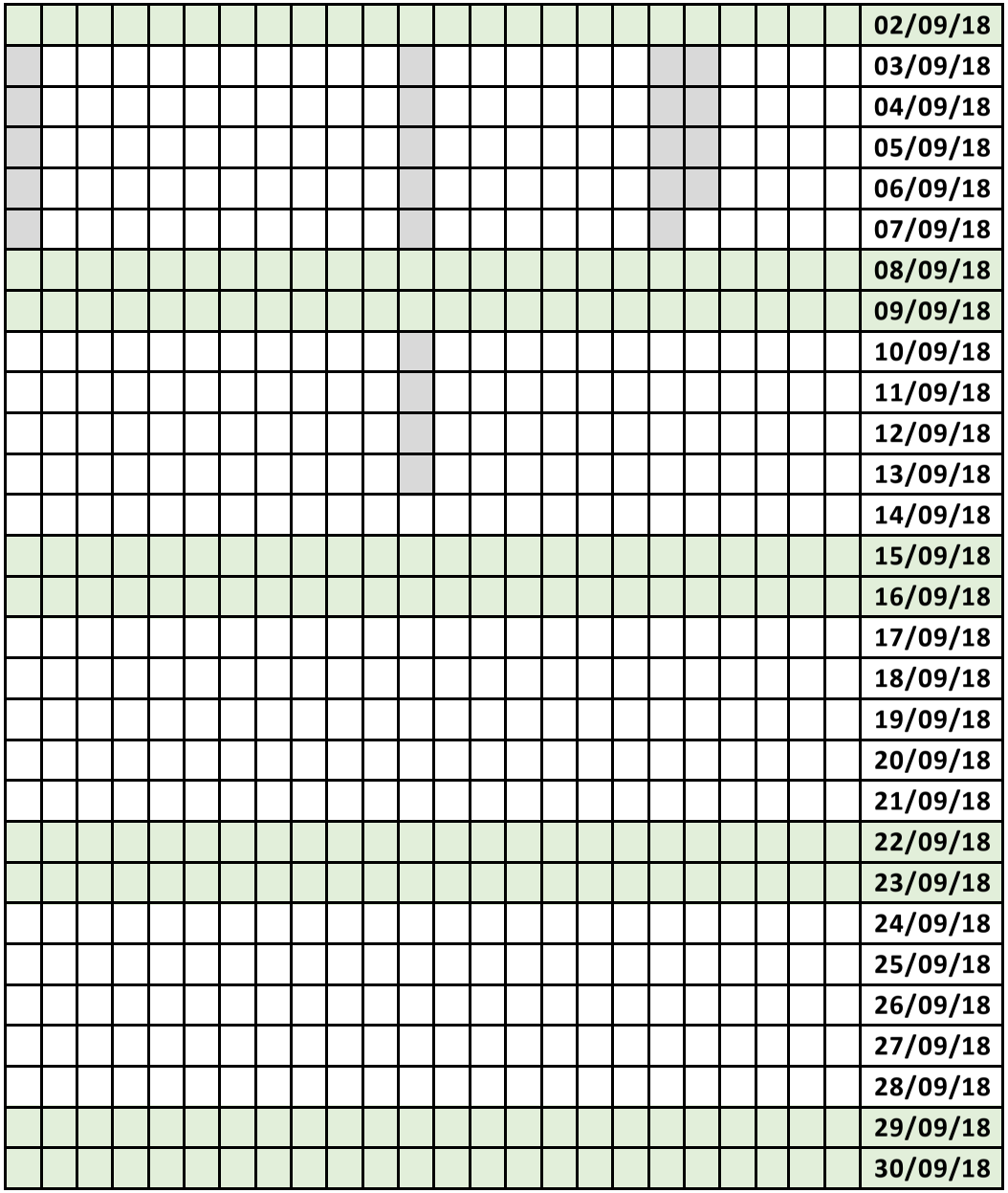
02/09/18
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23/09/18
24/09/18
25/09/18
26/09/18
27/09/18
28/09/18
29/09/18
30/09/18

Total Days Available for Hire	Total Days Hired	Utilisation
#NAME?	2	#NAME?
#NAME?	9	#NAME?
#NAME?	9	#NAME?
#NAME?	0	#NAME?
#NAME?	0	#NAME?
#NAME?	0	#NAME?
#NAME?	9	#NAME?
#NAME?	9	#NAME?
#NAME?	5	#NAME?
#NAME?	9	#NAME?
#NAME?	9	#NAME?
#NAME?	8	#NAME?
#NAME?	0	#NAME?
#NAME?	9	#NAME?
#NAME?	9	#NAME?
#NAME?	9	#NAME?
#NAME?	9	#NAME?
#NAME?	9	#NAME?
#NAME?	7	#NAME?
#NAME?	9	#NAME?
#NAME?	3	#NAME?
#NAME?	9	#NAME?
#NAME?	0	#NAME?
#NAME?	0	#NAME?

APPENDIX 4

Phoenix Parkway, Corby – Employment Land Values

budworth hardcastle
property consultants

6 Riley Road
Kettering
Northants
NN16 8NN

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www.budworthhardcastle.com

D Wright
Storefield Group Ltd
Furnace Park
Old Telford Way
Kettering
NN16 8UN

7th December 2021

Our ref: PKA/rs

Dear Mr Wright,

Phoenix Parkway (Former Quarry), Corby – Employment Land Values

You have requested advice on the value of the employment land at Phoenix Parkway once the enabling works have been completed.

The Site

The site extends to a gross area of some 37 acres (14.97ha) with access on to Phoenix Parkway via Napier Close.

In addition to the road access, rights have been reserved to allow services to be brought on to the site and for foul and surface water drainage systems to be connected into the existing network.

Planning Application (NC/21/0072/OUT)

A planning application has been lodged to build up the levels of this former quarry with imported suitable inert fill.

The fill will be used to build up the ground level to a maximum height of 116m AOD. This process will create engineered plateaus with a load bearing capability of 30kN/m^2. The height of the plateaus will facilitate connection to adjacent road infrastructure and foul and surface water drainage systems.

Future Development

The site is allocated for employment use and, with the provision for the engineered plateaus, the land will be capable of delivering employment uses such as open storage and small scale industrial buildings typically with footprints of 1,850 – 2800m^2.

Due to the fact that the ground will be made up (albeit engineered), there will be limits to the size and type of development that can take place and this will have an impact on market/capital values of the net developable area of the site.

Employment Land Market – Overview

In the last 18 months, there has been considerable growth in employment land values generally across this sub-region of the UK. That growth has been driven primarily by unprecedented demand from both investors and occupiers for strategic warehouse distribution space.

Employment Land Values

Standard Land Values

Currently, employment along the A14 generally and Corby in particular is being sold for values in the order of **£2.1m/ha (£850k per acre) - £2.4m/ha (£975k per acre)**.

Values at this level relate to land capable of taking large footprint strategic warehousing. The subject site, given the load bearing limitations created by the engineered platforms would sell at a discount to these figures.

The Subject Site (Engineered Plateaus)

The value that this site would secure in the prevailing market is fairly reflected in the value band range:

£1,250/ha (£500k per acre) **- £1,350m/ha** (£550k per acre).

Assuming a net developable site Area of say 10.0 ha (25 acres):

£12.5m - £13.75m

Below is some recent evidence of land sales, all of which (with the exception of Birchington Road) relate to land which has been fully remediated and where there are very limited additional abnormal costs anticipated as the land is brought forward for standard warehouse distribution development.

Recent Comparable Transactions

- Gateway Park, Kettering (Segro)
  March '21: 17.6ha (43.6 acres) sold to Ball Packaging Ltd for £38.8m (£2.2m/ha. £890k/acre).
- Princewood Road, Corby (Greencore)
  Sept '21: 2.81ha (6.96 acres) sold to Canmoor for £5.75m (£2.05m/ha. £825k/acre).
- Sallow Road, Corby (Roquette)
  Nov '21: 4.09ha (10.11 acres) sold to Evo Industrial Ltd for £8.9m (£2.17m/ha. £880k/acre).
- Birchington Road, Corby (Roquette)
  Currently in legals: 13.4ha (33.1 acres) to be sold to Equation Properties for £18.2m (£1.36m/ha. £550k/acre). This price reflects the nature of the ground and the remediation costs required before development can commence.

- Earlstrees Road, Corby (MWB Civils)
  Currently in legals: 3.23ha (8 acres) to be sold to Pembury Real Estate for £6.5m (£2.01m/ha. £810k/acre). The price reflects some £840k of demolition and site clearance costs.

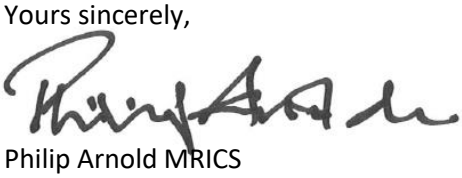
All these sites have or are being purchased speculatively. The purchasing developers still require detailed planning consent.

The value band above is a fair reflection of the market value of the subject site.

It represents a 35% discount from those land values being achieved on the open market for sites with similar allocations but where they can develop larger scale buildings than those structures that can be delivered on the engineered platforms being proposed for the subject site.

This report is prepared as an aid to your ongoing discussions. It is not a valuation report that you can rely on. The value figures reflect prevailing market conditions

Yours sincerely,



Philip Arnold MRICS
Director

For and on behalf of Budworth Hardcastle

parnold@budworthhardcastle.com

DRAWINGS

Rockingham Enterprise Area, Corby
STP3996D

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Industrial unit
To Rockingham Speedway
Undeveloped land
Undeveloped land
Mitchell Road
Proposed CNOR
(disused/under construction)
Roundabout
Former liquid waste ponds
Former turning/ parking area
Area inaccessible to topographic survey due to steep banks
Area inaccessible to topographic survey due to steep banks
Former access tracks
Woodland
(steep banks)
Woodland
Rough grassland
Former access tracks
Rough grassland
Soil mound
Napier Road
Soil mound
Retail/commercial
Rough grassland
Area inaccessible to topographic survey due to steep banks
Levels fall sharply towards Willow Brook
Access from Steel Road in the south
Car park
Entrance to site
Car park
Car park
Retail/commercial
Attenuation area
Willow Brook inaccessible to monitoring immediately southwest of the site

Cell 1
Cell 2
Cell 3
Cell 4
Cell 5

BH01 BH02 BH03 BH03a BH04 BH05 BH06 BH08 BH09
TP01 TP02 TP03 TP04 TP05 TP06 TP07 TP08 TP09 TP10 TP11 TP12 TP13 TP14 TP15 TP16 TP17 TP18 TP19 TP20 TP21 TP22 TP23 TP24 TP25 TP26 TP27 TP28
LG1 LG2 LG3 LG4 LG5 LG6 LG7 LG8 LG9 LG10 LG11
SP02

Key

- BH — Approximate location of proposed borehole formed by Cable and Tool percussive techniques
- TP — Approximate location of proposed trial pit excavation
- SP — Approximate location of proposed water sampling points
- Historic borehole
- Planning application boundary
- Area of site lying within Corby Borough Council
- Area of site lying within East Northampton Council
- 1 — Approximate location and orientation of photographic reference

Title	Scale	Drawing number
Plan showing existing site features and location of exploratory points	1:1250 at A1	02

Report Ref: STP3996D-G01
Revision: 01
September 2020

Rockingham Enterprise Area, Corby
STP3996D

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Potential for future development

Potential for future development

A

Ch 0m

B

Ch 0m

FFL 114
3000m²

FFL 113
3000m²

FFL 115
4000m²

Final phase
(potential retail/commercial use)

Final phase
(potential retail/commercial use)

Ecological offsetting

FFL 114.5
2000m²

FFL 112
2000m²

FFL 115
2000m²

FFL 109
2000m²

FFL 110
1500m²

FFL 110
3000m²

FFL 110
4000m²

Dry Attenuation Basin No. 2

FFL 110.5
2000m²

FFL 111
4000m²

Retained Open Mosaic Habitat

Potential land parcel for future development

Access from Phoenix Parkway

FFL 109
4000m²

Retained ecological habitat

Access from Steel Road

Dry Attenuation Basin No. 1

Potential land parcel for future development

A

B

Title	Scale	Drawing number
Plan showing potential development schematic and section locations	1:1500 at A1	03

Report Ref: STP3996D-G01
Revision: 01

September 2020

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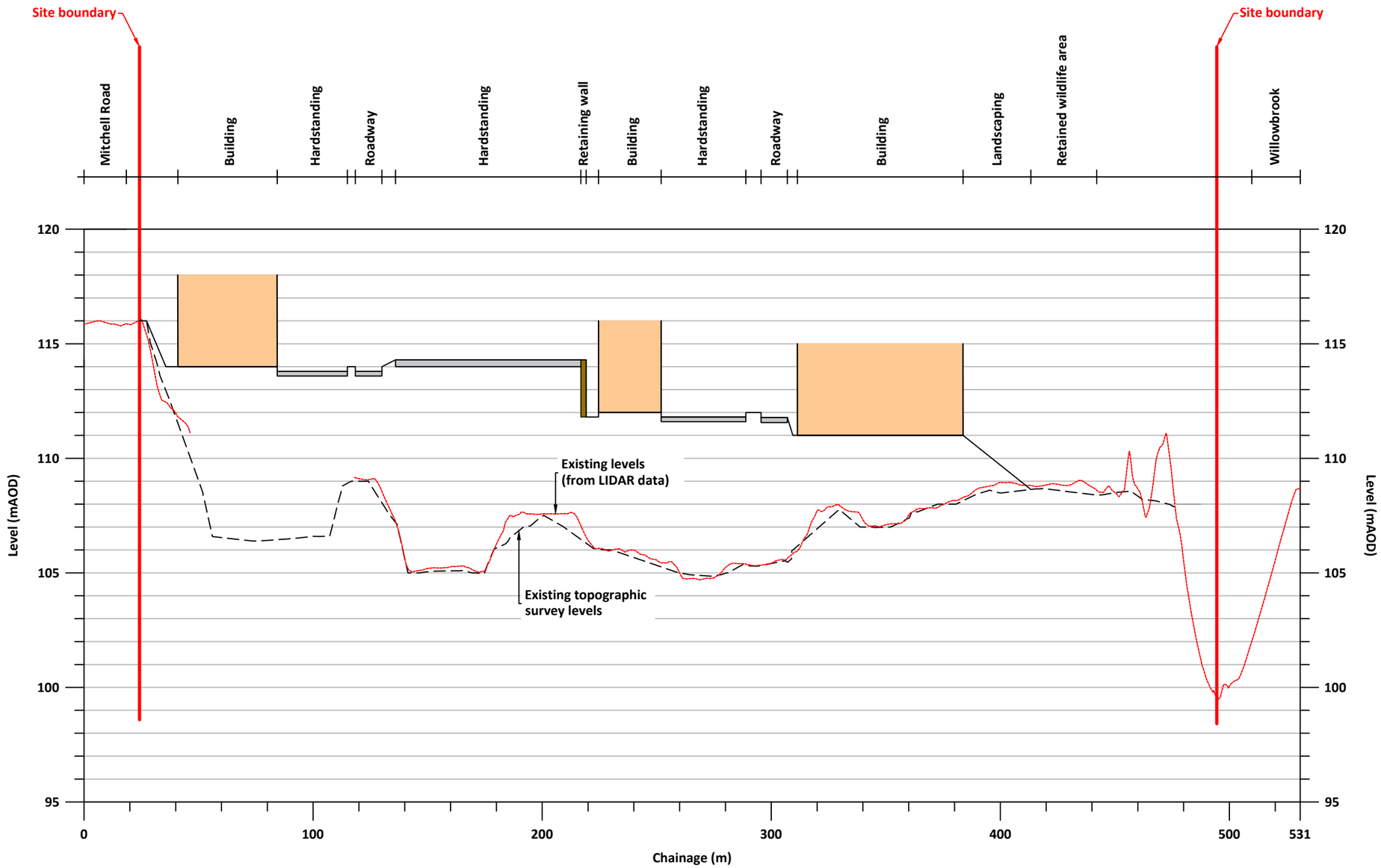

Notes

1. Section location indicated on Drawing 03
2. LIDAR data has been obtained from https://data.gov.uk/ (LIDAR Composite DSM - 25cm) licensed under the Open Government Licence v.3.0

Title	Scale	Drawing number
Section A-A indicating existing and potential proposed site levels	1:2000 at A3 (horizontal) 1:200 at A3 (vertical)	04a

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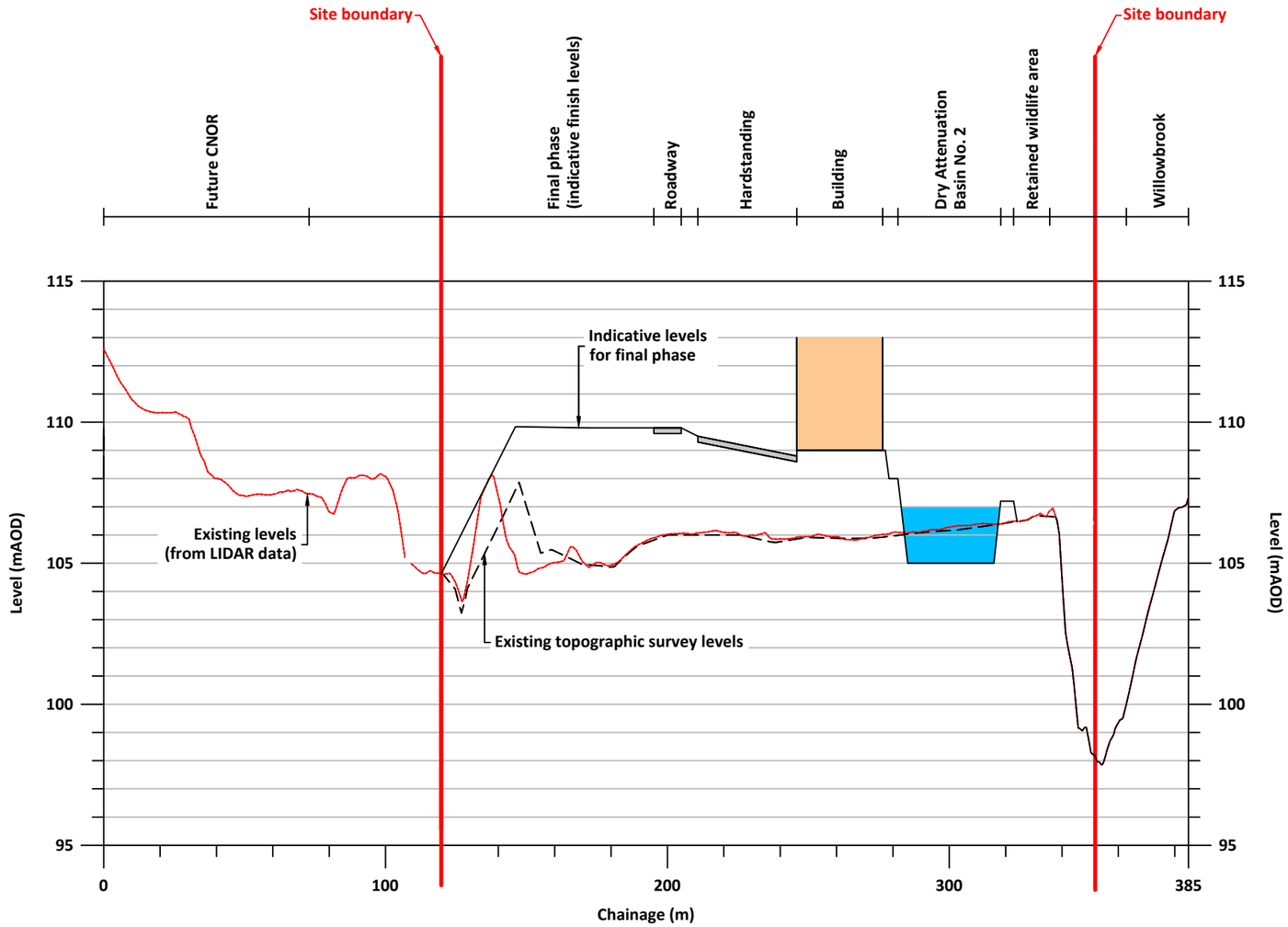

Notes

1. Section location indicated on Drawing 03
2. LIDAR data has been obtained from https://data.gov.uk/ (LIDAR Composite DSM - 25cm) licensed under the Open Government Licence v.3.0

Title	Scale	Drawing number
Section B-B indicating existing and potential proposed site levels	1:2000 at A3 (horizontal) 1:200 at A3 (vertical)	04b

APPENDIX 2

Ground Investigation Report (Soiltechnics, September 2020)

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Engineered Platform to Facilitate Employment Use
Land off Napier Road
Rockingham Enterprise Area
Corby

Ground Investigation Report

Cedar Barn, White Lodge, Walgrave, Northamptonshire NN6 9PY

t: 01604 781877 **e**: mail@soiltechnics.net
f: 01604 781007 **w**: www.soiltechnics.net

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Land off Napier Road
Rockingham Enterprise Area
Corby
NN17 5DP

GROUND INVESTIGATION REPORT

Soiltechnics Ltd. Cedar Barn, White Lodge, Walgrave, Northampton. NN6 9PY.
Tel: (01604) 781877 Fax: (01604) 781007 E-mail: mail@soiltechnics.net

Report originators

Prepared by

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Reviewed by

S. Drage

Sarah Drage B.Sc, (Hons)., MIEnvSc., FGS — sarah.drage@soiltechnics.net — Director

Aerial photograph of site

Site boundaries are outlined in red.

Bookmarking

As a PDF version this document is bookmarked. If you click on the bookmark icon on a PDF viewer then the main contents listing is shown and by clicking on the bookmark you can navigate through the report.

Report status and format

Report section	Principal coverage	Report status	
		Revision	Comments
1	Executive summary		
2	Introduction		
3	Desk Study		
4	Fieldwork		
5	Laboratory testing		
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List of drawings

Drawing	Principal coverage	Status	
		Revision	Comments
01	Site location plan		
02	Plan showing existing site features and location of exploratory positions		
03	Plan showing potential development schematic and section locations		
04a/04b	Sections indicating existing and potential proposed site levels		
05	Schematic conceptual site model – existing		
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07	Topographic and hydrogeological setting		
08	Section showing construction of combined water & gas monitoring standpipe installed in boreholes		

List of appendices

Appendix	Content		Status	
			Revision	Comments
A	Definitions of geo-environmental terms used in this report			
B	Trial pits	Machine excavated		
C	Borehole records	Cable and tool percussion drilling		
D	Copies of laboratory test result certificates (Chemical).	Concentrations of chemical contaminants		
E	Analysis and summary of test data in relation to concentrations of chemical contaminants			
F	Conceptual models for chemical contamination			
G	Record of in-situ gas monitoring results			
H	Copies of statutory undertakers' replies			
I	Copy of correspondence received from the Environment Agency and Environmental Health Officers			
J	Copy of desk study information produced by Envirocheck			
K	Chemical testing certificates for Class II Cohesive Fill			
L	Drawings indicating groundwater flow direction			
M	Tata Steel UK short note report February 2015			
N	Corus UK Ltd; Closure report for Corby tubeworks landfill site – Waste management licence no. C/17 (EAWML 70559) January 2006			
O	Landfill gas, groundwater, and surface water monitoring results (2001 – 2014)			

1 Executive summary

General

We recommend the following executive summary is not read in isolation to the main report which follows.

Site description, history and development proposals

The site is an extensive, former quarry and closed landfill site to the northeast of Corby. The site is now predominantly covered mainly by rough vegetation. Infrastructure and depressions associated with the former landfill such as dewatering lagoons remain visible at surface. Site levels are around 8-10m lower than the adjacent Mitchell Road to the north. Willow Brook forms the sites southern boundary.

The scheme will comprise the installation of an engineered development platform to facilitate employment use. An ecological wildlife corridor is proposed to be retained along the southern boundary of the site, whereby no infilling is proposed.

Ground conditions encountered

Made Ground on site comprises an assortment of steel and iron works waste, landfill material and naturally derived, overburden soils from the former quarrying activities. Made Ground extends to around 12-16m and is underlain by a residual veneer of Northampton Sand Formation, with Whitby Mudstone at depth.

Chemical and gaseous contamination

None of the concentrations of contaminants recorded near surface on site are considered to present a significant risk of harm to current or proposed site users. The installation of a development platform above localised impacted soils situated at shallow depth will minimise the risk further.

Significant concentrations of some heavy metals, sulphate, ammonia and cyanide have been recorded within waters on site, compared to respective EQS threshold criteria, though concentrations largely remain below UK Drinking Water Standard thresholds. The recorded concentrations are largely reflective of the wider, Earlstree area water quality.

The installation of a development platform has the potential to induce leachate generation through consolidation of the fill material in the short term. We note however that soils on site were largely dry, with limited perched water in the Made Ground and were largely cohesive at depth, which will limit downward migration of induced leachate. Further, the southern section of the site (above the closed landfill) will receive less waste than the northern counterpart and will remain untouched in the area of the wildlife corridor. In the longer term, the platform and subsequent commercial development, will provide a further barrier to water infiltration and will divert surface water directly to attenuation ponds and then Willow Brook, thus preventing the infiltration and run-off pathways through contaminated soil.

Overall, the inclusion of development platform and subsequent potential for redevelopment will remove the vast majority of pathways between impacted soils and identified receptors. Careful consideration and mitigation measures to minimise the risk to construction operatives and off site receptors during the early stages of site preparation in particular is needed and mitigation measures to limit the exposure risk to such receptors is required.

The assessments made herein are based on a single monitoring round. Additional monitoring will be required prior to and indeed during platform installation to confirm and refine this assessment.

2 Introduction

2.1	Objectives
2.2	Status of this report
2.3	Client instructions and confidentiality
2.4	Site location and scheme proposals
2.5	Report format and investigation standards
2.6	Soiltechnics liability

2.1 Objectives

2.1.1 This report describes a ground investigation carried out for a development proposal for construction of a development platform off Napier Road, within Rockingham Enterprise Area, Corby.

2.1.2 The objective of the ground investigation was to establish ground conditions and to include an evaluation of potential chemical and gaseous contamination of the site leading to the production of a risk assessment in relation to contamination.

2.1.3 The investigation has also been produced to support a planning application for the site by satisfying National Planning Policy Framework (2019) section 178.

2.1.4 A Preliminary Report (desk study) was initially carried out for the site by Soiltechnics in March 2019, a copy of which was provided to East Northants Council and Corby Borough Council for review by Environmental Health Officers as part of Pre-Application discussions and consultation. The Preliminary Report was not formally submitted to either Local Authority and thus, this for completeness and ease of reference, has been incorporated within this report, alongside Phase 2 works.

2.2 Status of this report

2.2.1 This report is final based on our current instructions.

2.3 Client instructions and confidentiality

2.3.1 The initial Desk Study was reported in March 2019, though has now been updated. Intrusive investigations were carried out in July and August 2020 and reported in September 2020 acting on instructions received from Storefield Group Limited.

2.3.2 This report has been prepared for the sole benefit of our above named instructing client, but this report, and its contents, remains the property of Soiltechnics Limited until payment in full of our invoices in connection with production of this report.

2.3.3 Our original investigation proposals were outlined in our letter to Storefield Limited Group in March 2020 following discussions with Local Authorities and the Environment Agency. The investigation generally followed our original investigation proposals, though ground obstructions inhibited extension of a number of boreholes (ref Section 6 for further information). The investigation process was however determined to maintain as far as possible the original investigation budget costs.

2.4 Site location and scheme proposals

2.4.1 The National Grid reference for the site is 490190, 290880. A plan showing the location of the site is presented on Drawing 01. The site crosses the jurisdiction boundary of two Local Authorities: East Northants Council to the east and Corby Borough Council to the west. The Local Authority boundaries are highlighted on Drawing 02.

2.4.2 We understand the scheme will comprise the installation of a development platform with the importation of inert material to raise current site levels. An ecological wildlife corridor is proposed to be retained along the southern boundary of the site, whereby no infilling is proposed.

2.4.3 Levels on site are currently around 8-10m below the level of the adjacent Mitchell Road in the north. Thus, it is proposed to raise levels on site in order to provide a suitable development platform and viable commercial/industrial development site.

2.4.4 A preliminary schematic of how the proposed site might look is presented on Drawing 03.

2.5 Report format and investigation standards

2.5.1 Sections 2 to 6 of this report describe the factual aspects of the investigation. A preliminary engineering appraisal is presented in Section 7, with Section 8 providing a risk assessment of chemical contamination based on readily available historic records, inspection of the soils and laboratory testing. Section 9 provides a similar risk assessment in relation to gaseous contamination.

2.5.2 Geo-environmental aspects

2.5.2.1 The investigation process follows the principles of BS 10175:2011+A2:2017 *'Investigation of potentially Contaminated Sites – Code of Practice'*. The following elements, defined in BS 10175, have been completed and incorporated in this report.

a) Phase I — Preliminary investigation (desk study and site reconnaissance)
b) Phase II — Exploratory and detailed (intrusive) investigations

2.5.2.2 The extent and result of the preliminary investigation (desk study) is presented in Section 3. Fieldwork combined the exploratory investigation and main investigation stages into one phase with the extent of these works described in Sections 4 to 6. An engineering appraisal is presented in Section 7 whilst chemical and gaseous contamination are discussed in Sections 8 and 9. Any supplementary investigations deemed necessary are identified in Section 10.

2.5.2.3 This investigation has been carried out and reported based on our understanding of best practice. Improved practices, technology, new information and changes in legislation may necessitate an alteration to the report in whole or part after publication. Hence, should the development commence after expiry of one year from the publication date of this report then we would recommend the report be referred back to Soiltechnics for reassessment. Equally, if the nature of the development changes, Soiltechnics should be advised and a reassessment carried out if considered appropriate.

2.6 Soiltechnics liability

2.6.1 Soiltechnics disclaims any responsibility to our Client and others in respect of any matters outside the scope of this report. This report has been prepared with reasonable skill, care and diligence in accordance with the terms of our contract, taking account of the manpower, resources, investigations and testing devoted to it by agreement with our Client. This report is confidential to our Client and Soiltechnics accepts no responsibility of whatsoever nature to third parties to whom this report or any part thereof is made known. Any such party relies upon the report at their own risk.

3 Desk study information

3.1	General
3.2	Description of the site
3.3	Injurious and invasive weeds
3.4	History of the site
3.5	Geology and geohydrology of the area
3.6	Landfill and infilled ground
3.7	Radon
3.8	Flood risk
3.9	Site sensitivity and pollution incidences to controlled waters
3.10	Climatic influences
3.11	Trade directory
3.12	Previous investigations and information

3.1 General

3.1.1 We have carried out a desk study which was limited to a review of readily available information including:

a) Review of published Ordnance Survey maps dating back to 1886 at various published scales

b) Inspection of geological maps produced by the British Geological Survey together with relevant geological memoirs

c) Site reconnaissance

d) Other relevant published documents

3.1.2 We have obtained old Ordnance Survey maps using the Envirocheck database system. In addition to retrieval of historical and current Ordnance Survey data, Envirocheck provide information compiled from outside agencies including: -

- Ordnance Survey
- Environment Agency
- Scottish Environment Protection Agency
- The Coal Authority
- British Geological Survey
- Centre for Ecology and Hydrology
- Countryside Council for Wales
- Scottish Natural Heritage
- Natural England
- Health Protection Agency

3.1.3 The study did not extend to research of meteorological information or consultation with other interested parties such as English Heritage (ancient monuments), Ordnance Survey (survey control points), Planning Authorities or Archaeological Units.

3.1.4 A copy of records produced by Envirocheck is presented in Appendix J. Envirocheck produce a wealth of factual database information. Although we can provide a discussion on each of the database topics, this would produce a very lengthy document, but some of these discussions would not be relevant to the aims of this report. As a consequence, we have extracted some of the relevant topics and discussed them in this section of the report.

3.1.5 In addition, a series of investigations have been carried out at the site by others. The reports/findings are discussed within this section.

3.2 Description of the site

3.2.1 The site (the former North Brook Landfill Site) is located within an industrial/commercial setting approximately 2.3km to the northeast of Corby town centre. Earlstree Industrial Estate lies to the west, Willowbrook East Industrial Estate to the south, Weldon North Industrial Estate to the east and Gretton Brook Road and Rockingham Speedway to the north/northeast. The area has a rich industrial history (ref Section 3.3) and has been extensively quarried and filled. This has resulted in a change to the topographic profiles both on and off site which is discussed below. Generally, however, the natural, local topography slopes down toward the east, culminating at the low point of Willow Brook which forms the sites southern boundary. Willow Brook is a tributary of the River Nene.

3.2.2 The site is irregular in shape and covers approximately 20.5 hectares. The site, now disused, forms part of the larger North Brook Landfill Site. We understand the permit for the landfill is extant, though the permit for the slurry ponds has been surrendered. Accordingly, infrastructure and legacy of the landfill remains on site by virtue of steep changes of level toward the north and south, square depressions associated with the former liquid waste pond excavations, internal tracks and roadways, central hardstanding and substantial slag boulders at surface in the northeast. Levels across the site are generally irregular underfoot and much of the site surface comprises overgrown grassland, weeds and shrubs. The main, current access routes to the site, are from Phoenix Parkway in the west and Steel Road in the south.

3.2.3 The north-western boundary of the site is defined by Mitchell Road which is around 8-10m higher than adjacent levels on site (ref topographic survey data included on Drawing 02). The northeast boundary is defined by a new, currently disused carriageway which we understand will form part of the Corby North Orbital Road (CNOR). The southern boundary is defined by a series of semi mature trees and hedgerow associated with the steep banks of Willow Brook. Substantial car parking areas for the nearby industrial units are present to the south of Willow Brook. Grassland immediately southwest of the site is relatively low compared to site levels and we understand this area is used as drainage attenuation for the larger industrial estates of northeast Corby, which subsequently drains to Willow Brook. The eastern site boundary is defined by fencing with woodland, formerly part of the quarry/landfill, beyond. Land immediately to the west comprises open grassland with relatively new retail units to the southwest and Phoenix Parkway beyond.

3.2.4 The following photographs indicate the site conditions at the time of our site walkover in 2019. Locations and orientations of the photographs are indicated on Drawing 02:

Photograph 01
General view of the site looking northeast from the western boundary.

Photograph 02
View of a former liquid waste pond in the northwest (foreground) and steep bank along the northern boundary with Mitchell Road beyond.

Photograph 03
View of the central, northern area of the site, with blast furnace slag boulders present at surface. View looking northeast.

Photograph 04
View of the northeast site boundary with the proposed CNOR and Rockingham Speedway beyond.

Photograph 05
View across the southwest corner of the site looking west, with commercial/ industrial units on Napier Road to the west (right) and Phoenix Parkway beyond.

Photograph 06
View from the southwest corner of the site, looking southwest, showing the drainage attenuation land and raised car park for the Willowbrook Industrial Estate beyond (left of picture).

3.2.5 The following photographs, taken during our most recent phase of works, indicate that site conditions remain largely unchanged between 2019 and 2020. Locations and orientations of the photographs are indicated on Drawing 02:

Photograph 07

View from the west of the site, looking east, showing the raised area of land located between the former liquid waste ponds.

Photograph 08

View from the east of the site, looking west, showing the predominant vegetation type on site.

3.3 Injurious and invasive weeds

3.3.1 Injurious and invasive weeds

3.3.1.1 The following weeds are controlled under the Weeds Act 1959:

- Common Ragwort
- Spear Thistle
- Creeping or Field Thistle
- Broad leaved Dock
- Curled Dock

3.3.1.2 Whilst it is not an offence to have the above weeds growing on your land, you must:

- Stop them spreading to agricultural land, particularly grazing areas or land used for forage, like silage and hay
- Choose the most appropriate control method
- Not plant them in the wild

Should you allow the spread of these weeds to another party's land, Natural England could serve you with an Enforcement Notice. You can also be prosecuted if you allow animals to suffer by eating these weeds.

3.3.1.3 In addition to the above, you must not plant in the wild or cause certain invasive and non-native plants to grow in the wild as outlined in the Wildlife and Countryside act 1981. It is an offence under section 14(2) of the act to *'plant or otherwise cause to grow in the wild*' any plants listed in schedule 9, part II. This can include moving contaminated soil or plant cuttings. The offence carries a fine or custodial sentence of up to 2 years. The most commonly found invasive, non-native plants include:

- Japanese knotweed
- Giant hogweed
- Himalayan balsam
- Rhododendron ponticum
- New Zealand pigmyweed

You are not legally obliged to remove these plants or to control them. However, if you allow Japanese knotweed to spread to another party's land, you could be prosecuted for causing a private nuisance.

3.3.1.4 The presence of such weeds on site may have considerable effects on the cost / timescale in developing the site. Japanese knotweed can cause significant damage to buildings, roads and pavements following development, if untreated prior to development.

3.3.1.5 Our investigations exclude surveys to identify the presence of injurious and invasive weeds. We did not observe any obvious evidence the above species, however, we recommend specialists in the identification and procedures to deal with injurious and invasive weeds are appointed prior to commencement of any works on site.

3.4 History of the site

3.4.1 An attempt to trace the history of the site has been carried out by reviewing copies of readily available Ordnance Survey maps and aerial photographs. The recent history of the site based on these records is summarised in the following table:

Summary description of site history from Ordnance Survey maps

Date	Onsite	Offsite
1885	The site is recorded as deciduous woodland to the north and west and open fields to the south and east. A west to east trending stream (Willow Brook) is recorded toward the south,	The Kettering to Manton railway line runs north-south, approximately 350m to the west of the site. Site is surrounded by woodland and open fields in all other directions.
1886	As above.	No significant changes
1887-89	As above.	No significant changes
1900	Large Ironstone quarry encroaches the site to the south west.	Quarry extends beyond the western boundary of the site.
1901	As above.	No significant changes.
1938-50	Further development of quarry to the south west of site. Rest of site remains woodland and open field	Industrial and residential development 500m beyond the sites southern boundary comprising of railway lines, and the Lancashire and Corby Steel Works.
1938-52	Site and surrounding land stripped and shown on the maps as an ironstone quarry. Vast development of iron and steel works on site along with associated infrastructure and railway lines.	Quarries located in all directions of the site. Vast residential development approximately 800m to the south west of site. Large iron and steel works located 925m to the south of site.
1952	Cuttings/quarry faces are largely, no longer recorded. Land to the west recorded as scrub vegetation and land to the east recorded as coniferous woodland. Central rail tracks remain.	Woodland extends beyond the eastern boundary of the site, otherwise there has been no additional significant changes.
1958	As above.	No significant change.
1964	Two large ponds to the south of site. Eastern section remains as woodland. Railway and infrastructure (cranes/buildings storage areas) recorded in the north. Slopes recorded along northern boundary and centrally indicating site has been terraced. Localised, small slurry ponds in the north.	No significant changes.
1967-68	As above.	Continued residential and industrial growth to the south and south west of the site. Development of the Brookfield Plantation 500m to the northwest of site.

Summary description of site history from Ordnance Survey maps		
Date	**Onsite**	**Offsite**
1974-85	As above.	Land immediately to the south of the site has been stripped for drainage and occupied by a large sludge bed. Iron works continues to grow to the south of the site.
1982-87	Ponds in the south now recorded as sludge beds (part of landfill site).	Sludge beds recorded immediately off site to the east and south.
1987	Continued earthworks on site, two ponds separated to accommodate further sludge beds. Railway no longer recorded on site.	No significant changes.
1987-92	Sludge beds remain on site, but have been separated into five cells. Three new square sludge beds (liquid management and transfer site) have been positioned to the north-west of the site. Drainage features observed within the centre and south east of the site.	Land immediately to the south of the site now been redeveloped for the Willowbrook East industrial estate and contains a number of commercial buildings. Land to the west of the railway line now referred to as Earlstrees Industrial Estate.
2003	An additional three sludge beds/liquid management plants have been positioned to the north west of the site. Previous sludge beds and ponds to the centre of the site have been backfilled, and rough vegetation occupies the entire site.	Large car park extends across the entire southern boundary of the site with the Willowbrook East industrial estate. Rockingham Motor Speedway located approximately 350m to the north west of site.
2006	Site remains rough vegetation, with ponds and backfilled ponds present to the centre of the site.	As above.
2008	As above.	Large industrial unit located 100m to the north of the site.
2017	Sludge beds (liquid management and transfer site) have been removed from site. Site remains covered by grassland and rough vegetation	No significant changes.
Table 3.4.1		

3.4.2 Further information pertaining to the sites history and specific nature of activities on site is provided in section 3.12.

3.5 Geology and geohydrology of the area

3.5.1 We have reviewed geological mapping of the area produced by the British Geological Survey (BGS) at a scale of 1:50,000. A summary of the recorded geological information for the site is presented in the table below:

Summary of Geology and likely aquifer containing strata					
Strata	**Bedrock or superficial**	**Approximate thickness**	**Typical soil type**	**Likely permeability**	**Aquifer designation**
Infilled Ground	N/A (Artificial)	Not recorded on maps	Unknown	Unknown	N/A
Northampton Sand Formation	Bedrock	0-8m	Ironstone, Ooidal, sandstone	Permeable	Secondary A aquifer
Whitby Mudstone Formation	Bedrock	49-58m	Mudstone	Impermeable	Unproductive Strata

Table 3.5.1

3.5.2 Due to the extensive quarrying activities on site, it is likely that the original geology would have comprised Glacial Till around 3.5m thick (Boulder Clay) at surface, with Lincolnshire Limestone and Grantham Formation (Lower Estuarines) below. These deposits were likely excavated as 'overburden soil' during quarrying works to a depth of around 14m and typically would have been used to restore the excavation following removal of the Northampton Sand Formation.

3.5.3 Secondary A aquifers are predominantly permeable layers capable of supporting water supplies at a local rather than strategic scale. In some cases, Secondary A aquifers can form an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers.

3.5.4 Unproductive strata are defined as deposits exhibiting low permeability with negligible significance for water supply or river base flow. Unproductive Strata are generally regarded as not containing groundwater in exploitable quantities.

3.5.4 Water abstractions

3.5.4.1 Envirocheck records one surface water abstraction point within 2km of the site, located approximately 1948m to the southeast. This was operated by the British Steel Corporation for water cooling purposes, but its licence has since been revoked.

3.5.4.2 Envirocheck report there are no groundwater abstraction licences within 2km of the subject site.

3.5.4.3 The site is not recorded to be within a Source Protection Zone.

3.5.5 Coal mining and brine extraction

3.5.5.1 The site is not recorded to be within an area affected by past or present coal mining, or minerals worked in association with coal or brine extraction (within the Cheshire Brine Compensation District).

3.5.6 Shallow mining and natural subsidence hazards

3.5.6.1 The British Geological Survey present hazard ratings for shallow mining and natural subsidence hazards. The site has the following ratings;

Table summarising mining and subsidence hazards

Hazard	Rating
Mining hazard in non-coal mining areas	No hazard
Potential for collapsible ground stability hazard	Very low
Potential for compressible ground stability hazard	Moderate
Potential for ground dissolution stability hazard	No hazard
Potential for landslide ground stability hazard	Very low
Potential for running sand ground stability hazard	Very low
Potential for shrinking or swelling clay ground stability hazard	No hazard

Table 3.5.6

3.5.6.2 Notably and likely owing to previous backfilling and landfill activities on site, the potential for compressible ground stability hazard is considered **moderate**.

3.5.6.3 In addition to the above hazard ratings, a report completed by Ove Arup and Partners in December 1991, commissioned by the Department of the Environment (DoE) indicates where mining should be borne in mind when considered planning and development of land. The site is not recorded as lying in an area of conclusive rock mining as indicated by the report.

3.5.7 Borehole records

3.5.7.1 The British Geological Survey (BGS) retain records of boreholes formed from ground investigations carried out on a nationwide basis. The location of boreholes with records held by the BGS is recorded on the borehole map on the BGS website. We do not normally obtain copies of these records but can do on further instructions. There is normally a charge made by the BGS for retrieving and copying these records.

3.5.7.2 The British Geological Survey (BGS) retain records of boreholes formed from ground investigations carried out on a nationwide basis. There are some boreholes recorded close to the site and we can obtain records if required.

3.6 Landfill and infilled ground

3.6.1 There are a number of registered and historical landfills within and surrounding the site. The following table summarises landfill sites recorded within 2.0km of the subject site;

Summary of Landfill sites				
Landfill name	**Type**	**Location**	**Waste authorised**	**Licence status**
British Steel Corporation	Historical	On Site	Inert / Industrial	Cancelled (Last received waste FEB 1986).
Candy Filter Sludge Ponds	Historical	On Site	Inert/ Special*/ Liquids/ Sludge	Cancelled
North Brook Lagoons	Historical	On Site	Industrial/ Special*/ Liquids/ Sludge	Cancelled
CDC Deene Quarry	Authorised	On Site	A04: Household/ Commercial/ Industrial	Closure
North Brook Landfill Site	Authorised	On Site	A07: Industrial	Closure (Last received waste NOV 2004)
Refractory Tip	Historical	353m NE	Inert/ Industrial	Cancelled (Last input date Feb 1986)
Refractory Tip	Historical	720m SE	Inert/ Industrial/ Liquids/ Sludge	Cancelled (Last received waste FEB 1986)
North East Materials Stockyard	Historical	720m SE	Inert/ Liquids/ Sludge	Cancelled (Last received waste DEC 1990)
Refractory Tip	Historical	734m NW	Inert/ Industrial/ Liquids/ Sludge	Cancelled (Last received waste FEB 1986)
Works Dry Tip	Historical	850m NE	Inert/ Commercial/ Household/ Liquid/ Sludge	Cancelled (Last received waste NOV 1985)
Railway Cutting	Historical	860m SE	Inert	Cancelled (Last received waste DEC 1981)
Gretton SME	Historical	1170m NE	Industrial	Cancelled (Last received waste DEC 1976)
Priors Hall Quarry	Historical	1240m SE	Inert	Cancelled (Last received waste DEC 1983)
Solway Foods	Historical	1620m NW	Inert	Cancelled (Last received waste JUN 1994)
Princewood Road Site	Authorised	1900m NW	L05: Inert LF	Transferred

Table 3.6.1

* Waste that has hazardous properties and is defined in the Special Waste Regulations 1996. Such properties may be flammable, irritant, toxic, harmful, carcinogenic or corrosive.

3.7 Radon

3.7.1 With reference to the Building Research Establishment (BRE) publication "*Radon: guidance on protective measures for new buildings*" (2007), the site is located where no protection is required.

3.7.2 The Building Research Establishment publication applies to all new buildings, conversions and refurbishments whether they be for domestic or non-domestic use. For non-domestic buildings, the guidance supplements the requirements for radon protection at work specified in the Ionising Radiations Regulations 1999, legislation made under the Health and Safety at Work Act administered by the Health and Safety Executive (HSE). Further information is contained in the HSE/BRE guide "*Radon in the Workplace".*

3.7.3 It is noteworthy that the BRE and BGS / HPA information is based on statistical analysis of measurements made in dwellings in combination with geological units, which are known to emit radon. Therefore there is a risk for actual radon levels at the site to exceed the levels assessed by the BGS / HPA / BRE. Currently, the only true method of checking actual radon levels is by measurement within a building on the site over a period of several months. It should be noted that it is not currently a requirement of the Building Regulations to test new buildings for radon, however the BRE recommends testing on completion or occupation of all new buildings (domestic and non-domestic), extensions and conversions. Should you wish to undertake radon monitoring following completion of the development, we can provide proposals.

3.8 Flood risk

3.8.1 Envirocheck indicates the site at large is not located within a fluvial or tidal flood plain, though a small channel of potential fluvial flooding is recorded along the southern boundary associated with Willow Brook. In addition, larger areas of fluvial flooding are recorded immediately off site to the southeast and southwest. These are notably low-lying areas compared with site levels.

3.8.2 In addition, Envirocheck reports some very localised areas on site with a low risk potential for surface water flooding.

3.8.3 It should be noted that this information does not constitute a site specific Flood Risk Assessment (FRA), and a full FRA may be required for the development to support a planning application or satisfy planning conditions.

3.9 Site sensitivity and pollution incidences to controlled waters

3.9.1 The site is located within a nitrate vulnerable zone.

3.9.2 The site is not located within an area of ancient woodland, adopted greenbelt, Local Nature Reserve, Site of Special Scientific Interest or Ramsar site.

3.9.3 Envirocheck records several pollution incidences to controlled waters within 500m of the site these are summarised in the table below;

Table summarising pollution incidences to controlled waters nearby

Date	Distance (m)	Pollutant	Severity
June 1992	0	Unknown	Cat 3 – Minor incident
July 1995	199 S	Organic wastes: Milk	Cat 3 – Minor incident
February 1992	273 NW	Unknown	Cat 2 – Significant incident
December 1992	317 W	Unknown	Cat 3 – Minor incident
March 1993	345 NW	Unknown	Cat 2 – Significant incident
February 1994	356 NW	Oils- Diesel	Cat 3 – Minor incident
March 1998	392 S	Crude sewage	Cat 3 – Minor incident
September 1997	414 NW	Oils – Other oils	Cat 3 – Minor incident
July 1993	416 N	Unknown	Cat 2 – Significant incident
June 1997	426 NW	Oils – Waste oils	Cat 3 – Minor incident

Table 3.9.3

3.10 Climatic influences

3.10.1 Rainfall

3.10.1.1 With reference to Met Office data, in comparison to the rest of the UK, The Midlands have a relatively low rainfall; less than 800mm per year, compared to 3000-4000mm in northern England and Scotland. In the Midlands, the rainfall is also relatively evenly distributed throughout the year.

3.10.2 Wind

3.10.2.1 Again with reference to Met Office data, the Midlands is one of the more sheltered parts of the UK. Prevailing winds are generally from the southwest associated with Atlantic depressions. As the depression moves away, wind direction can change to be from the west and then northwest. In the spring, the strongest winds in the coastal regions of eastern England are from the northeast, but their penetration inland is dependent on land-sea temperature difference and the strength of convection activity.

3.11 Trade directory

3.11.1 There are several trades recorded within 300m of the site, these are summarised in the table below;

Table summarising trades nearby

Name	Distance (m)	Classification	Activity
Brammer	163 SW	Engineering materials	Active
Pumpkin Print Ltd	176 SW	Printers	Inactive
Crown	203 SW	Wallpapers and wall covering	Active
Travis Perkins Plc	271 W	Builders' merchants	Active
JB Rubber Ltd	276 W	Tyre dealers	Active
Northamptonshire Pallets Ltd	292 W	Pallets, crates and packing cases	Inactive
Tony Weston	292 W	Garage service	Inactive

Metal morphosis	292 W	Metal products - fabricated	Inactive
ACK (Haulage) Ltd	294 W	Road haulage services	Inactive
Xj Services	296 W	Garage services	Inactive
Wenshield Engineering*	301m NW	Aluminium fabricators	Inactive

Table 3.11.1

* The distances indicated by Envirocheck are based on a single point entry on the map. For Wenshield Engineering, this point is located at the factories northern access point, but the factory itself extends to within 20m of the site.

3.12 Previous investigations and information

3.12.1 Central to the development is an assessment of contamination and ground conditions associated with previous activities on site; notably quarrying and landfill activities. The history and extent of quarrying is described in previous paragraphs, together with a summary of reported landfill information. Furthermore, we note:

- North Brook Landfill Site (referred to as C17) is in definitive closure. Confirmation of Definitive Closure as from 19th December 2008 is outlined in the Environment Agency correspondence to Corus Tubes of 23rd January 2009.
- The closure requirements for North Brook Landfill (C17) are outlined in Variation Notice number QP3799NL, and include 4 yearly reviews of the Hydrogeological Risk Assessment, ongoing water and gas monitoring, stability assessments and annual performance reports.
- The license for North Brook Lagoons (referred to as C18) has been surrendered, as outlined in Environment Agency surrender notice number EPR/PP3395NH/S002.

3.12.2 Following closure of the landfills, Tata Steel Ltd and Corus UK Ltd have reviewed the land quality to inform future developers of any concerns on site which may have a bearing on future activities. Whilst we have no reliance on these reports, the below provides a summary of the data/information available to us at this time.

3.12.3 Tata Steel Ltd short note (February 2015)

3.12.3.1 Phase 1 (Containing former licenced lagoons)

3.12.3.1.1 Tata Steel Ltd records the use of the liquid waste treatment area located toward the northwest of the site (referred to as C18) ceased in June 2007. Remediation work was carried out to empty the lagoons and remove and dispose of the liners. The Environmental Agency agreed the surrender of the site in October 2010.

3.12.3.2 Phase 2

3.12.3.2.1 Whilst landfill area C17 is recorded as 'Definitively Closed' by the Environmental Agency, the previous waste management licence for the landfill was issued in 1984 by Northamptonshire County Council for the receipt of;

- ***Waste Category A*** – Solid Inert Waste
- ***Waste Category B*** – Solid Semi-Inert Waste
- ***Waste Category C*** – Solid Putrescible Waste (excluding domestic waste and animal carcases)
- ***Waste Category D*** – Difficult Waste

3.12.3.2.2 In their report (Appendix M) Tata Steel Ltd states that other than a requirement that 'nothing shall be deposited in the final 1m layer likely to interfere with final restoration or subsequent cultivation (inert material only)' the waste management licence did not require the capping of completed areas within the landfill. This is to promote natural re-vegetation of the land.

3.12.3.2.3 Equally no final height profile was specified and as such the completed areas were filled to blend in with the surrounding land.

3.12.3.3 Overview

3.12.3.3.1 Following closure of the former C18 lagoons, the area was remediated, the license successfully surrendered and the area is not considered to present an ongoing risk to the environment.

3.12.3.3.2 A number of large remnant 'skulls' of slag and metal are also reported, adjacent to the former lagoons and about the site, which Tata state will need removing prior to development.

3.12.4 Corus UK Ltd closure report (January 2006)

3.12.4.1 The closure report was produced for the 'definite closure' of landfill site C17 (Phase 2) and was compiled as part of the initial phase in the closure process. The information provided in the report (Appendix N) follows regulation 15 of the landfill regulations.

3.12.4.2 Gas Monitoring

3.12.4.2.1 In 2001 a series of 11 boreholes were drilled on site (C17) within the Made Ground for groundwater and gas monitoring, details of which are provided within the closure report.

3.12.4.2.2 Monthly gas monitoring revealed negligible landfill gas production. It was proposed that monitoring would continue beyond the release of the closure report, and that any deviation from baseline data would trigger further work.

3.12.4.2.3 Gas monitoring continued to August 2014 and in the last 10 years recorded gas levels approximately ranging from;

C17 Gas monitoring 2004 - 2014	
Gas	**Date description**
Methane	Generally in the range of 0 – 2.5%. Two spike concentrations of 9% and 13% recorded in LG10 only, in 2003
Oxygen	Generally around 20%. Variably reductions to around 15% and spikes to <1% in LG01, 03, 04, 05, 07 and 11 in particular.
Carbon Dioxide	Generally <5%. Spike concentrations up to 18% in LG01. Sporadic and infrequent concentrations (up to 12%) in LL04, LG07 and LG11.
Table 3.12.4	

3.12.4.2.4 A copy of the gas monitoring data provided to us is presented in Appendix O.

3.12.4.3 Leachate/Groundwater Monitoring

3.12.4.3.1 The 11 boreholes drilled in 2001 were reported to have terminated on the Whitby Mudstone Formation (Upper Lias Clay), and borehole logs indicated that the area was Made Ground. Groundwater monitoring boreholes were predominantly positioned towards the southern boundary of the site nearest to the Willowbrook North Stream.

3.12.4.3.2 Groundwater monitoring was undertaken between 2003 and 2014, results showed elevated levels of zinc and iron within all boreholes sampled. Levels were notably highest between July 2003 and April 2007.

3.12.4.3.3 A ground investigation conducted by FWS Consultants Ltd in 2004 in the area of landfill adjacent to the western boundary of the site also revealed elevated levels of zinc contamination. This was attributed to the widespread presence of flue dusts on site caused by the former blast furnaces during quarrying activity.

3.12.4.4 Surface water monitoring

3.12.4.4.1 Surface water monitoring was conducted within the Willowbrook North Stream upstream (along Pen Green Lane) and downstream (along Baird Road) of the site between 2003 and 2014.

3.12.4.4.2 Although results showed naturally elevated levels of copper (Cu) above EQS guideline values, there was no deviation in the trend between samples taken upstream or downstream (Appendix E). Therefore, it was considered that the site has had no impact on surface water.

3.12.4.4.3 A Geo-environmental investigation conducted by FWS Consultants Ltd in 2004 for the landfill immediately west of the subject site also monitored surface water (Drawing 02). They reported on historic periodic pollution from one or more unknown sources upstream of Pen Green Lane, and as such it was considered unrelated to the subject site.

3.12.4.5 Overview

3.12.4.5.1 The Corus UK Ltd closure report suggests that the landfill activities have caused little environmental impact, with the possible exception of zinc contamination, based on leachate/groundwater and surface monitoring completed on site. Zinc is associated with flue dust from the adjacent site to the west which was used to store the flue dust. The site to the west has now also ceased operations.

3.12.4.5.2 Gas monitoring records show variable concentrations of methane and carbon dioxide throughout the investigation period.

3.12.5 Geoenvironmental Report on a site at Phoenix Parkway, Corby (2004)

3.12.5.1 This report was carried out by FWS Consultants Limited for Corus UK Limited. The report describes an investigation on land immediately adjacent to the 'site' toward the west.

3.12.5.2 The geology of the site is reported to be 0-13m of iron and steelworks waste (*"slag, flue dust, rubble, blast furnace slurry etc")* over backfilled quarry overburden (clay and sand) with approximately 1.5-3m of remnant Northampton Sand Formation (ironstone) which is conjectured to be the base of the former quarry. Lias mudstone (Whitby Mudstone) is reported at depth.

3.12.5.3 The report indicates that a number of contaminants were recorded at elevated levels (based on then-current guidelines). No significant contamination was identified in the natural quarry backfill. Five main zones were identified for remediation by virtue of substantial ammonia, phenol and tar associated with iron and steel work waste and high lead and zinc associated with blast furnace slurry:

- Buried lagoon 1A and immediate surroundings
- The central area of the site (associated with shallow deposited steelwork waste)
- The south and southeast corner of the site (associated with substantial iron and steelwork waste)
- The southeast corner of the site which contained up to 13m of blast furnace slurry.
- A narrow channel in the west (associated with 1-4m of iron and steelwork waste).

3.12.5.4 Remedial measures were proposed which predominantly comprised excavation of the waste materials followed, where appropriate by sorting, crushing, treatment and replacement of the excavated materials.

3.12.6 Four yearly review of Hydrological Risk Assessment, Tata (2012)

3.12.6.1 A Hydrogeological risk assessment (HRA) report had been previously carried out at the site (2008) which concluded that there was no detrimental risk to groundwater from the landfill site. The purpose of this report was to determine if the ongoing activities on site (since the time of the closure report) had impacted conditions and as such whether the original HRA was still valid.

3.12.6.2 The report informs us that throughout its life the landfill operated on a dilute and disperse basis and did not have any landfill engineering features (barriers, liners, capping systems, gas or leachate collection systems).

3.12.6.3 The report concludes that the landfill remained in compliance with the requirements of the Groundwater Regulations, and the monitoring results confirmed no evidence of deterioration in the quality of groundwater or surface water.

3.12.7 Corby Land Quality Historical Review, Tata (2015)

3.12.7.1 This report provides a brief review of the sites history and describes the type of activities carried out on site. Namely:

- Prior to licensing the site was quarried for ironstone for use in the Corby Integrated Iron and Steel Works and subsequently used as dewatering lagoons for blast furnace slurry.
- On closure of the Iron and Steel Works the slurry was removed from the lagoons which were then divided into cells using inert rubble to form landfill cells.
- The area known as C17 (the southern half of the site) was licensed for Category A (solid inert), B (solid, semi inert), C (solid putrescible) and D (difficult waste), but excluded asbestos and other special waste. The landfill operated until 2004 and does not have any landfill engineering features.
- Land immediately east of C17 comprises woodland and former blast furnace slurry ponds. The higher, woodland area was backfilled some time before 1950.
- Land adjacent to the site C18 lagoons (land in the northeast of the site) was reported to contain large ‘skulls’ of slag and iron which are considered unprocessed lumps of material.

3.12.8 Gas Monitoring at Rockingham Motor Speedway, Corby (2017 to 2019)

3.12.8.1 These reports have been carried out by FWS Consultants Limited and have been provided to us for review by Corby Borough Council. The reports describe annual gas monitoring which have been carried out at Rockingham Motor Speedway on an annual basis in accordance with Environment Agency letter EAWML 70561 (2012), relating to Permit 70561 (License C/20). The reports conclude the following:

- The gas monitoring results are generally within the range of the historical results, indicating little change in the soil atmosphere in the area surrounding the two lined landfills covered by Licence C/20 or the general site, no sign of offsite migration and no cause for concern.
- Monitoring should continue on an annual frequency, until licence surrender.

3.12.9 Groundwater and Surface Water Monitoring at Rockingham Motor Speedway, Corby (2017 to 2019)

3.12.9.1 These reports have been carried out by FWS Consultants Limited and have been provided for review by Corby Borough Council. The reports describe the annual water monitoring carried out at Rockingham Motor Speedway in accordance with the amendment to the conditions of Environmental Permit 70561 and landfill licence C20. The reports conclude the following:

Groundwater Flow Direction:

- The groundwater flow direction is generally from the west to east, with a localised northwest to southeast direction in the vicinity of a hydrocarbon hotspot on the northern boundary.

Groundwater Quality:

- Water sampled from the Lower Estuarine Series remained similar to previous recorded ranges and does not appear to be significantly impacted by the two landfills covered by Licence C/20.
- No impact on the groundwater quality has been identified that can be attributed to Licenced (C/20) Landfills Area A or Area B.
- Groundwater quality up hydraulic gradient of the site shows signs of continued improved quality.
- Localised PAH and phenol contamination is present and believed to coincide with areas of historic landfilling in the quarry by British Steel Corby Works. The reports have concluded that the extent of this hotspot appears to be very localised and relatively immobile and is not significantly impacting on groundwater quality within the wider Northampton Ironstone aquifer.

4 Fieldwork

4.1	General
4.2	Site restrictions
4.4	Exploratory trial pits
4.4	Light cable percussion boring
4.5	Measurement of landfill type gases in gas monitoring standpipes
4.6	Sampling strategies

4.1 General

4.1.1 Fieldwork comprised the following activities: -

- Excavation of twenty-seven exploratory trial pits
- Excavation of nine exploratory boreholes using cable and tool percussion drilling techniques

4.1.2 A plan of the site showing observed/existing site features and position of exploratory points is presented on Drawing 02.

4.1.3 The extent of fieldwork activities and position of exploratory points were determined by Soiltechnics, in consultation with Corby Borough Council and East Northants Council Environmental Protection Officers, and with the local area Groundwater and Contaminated Land Technical Specialist from the Environment Agency. Some positions were relocated as the result of in ground obstructions or access restrictions (see 4.2).

4.1.4 Exploratory points were positioned to avoid known locations of underground services, to provide a reasonable coverage of the site and in view of the initial Desk Study and risk assessment which identified specific areas of concern. Prior to commencement of exploratory excavations an electronic cable locating tool was used to scan the area of the excavation. If we received a response to this equipment, then the excavation would be relocated.

4.1.5 All soils exposed in excavations were described in accordance with BS EN ISO 14688 *'Identification and Classification of soil'* and BS EN ISO 14689 *'Identification and classification of rock'.*

4.2 Site restrictions

4.2.1 Whilst the site is private land and largely fenced off to public access, members of the public do access the site regularly, therefore borehole positions were fenced off at all times to prevent access.

4.2.2 Access to the Willow Brook, towards the south west of the site, was inaccessible due to the steep embankments and overgrown vegetation within this area of the site and thus obtaining a surface water sample immediately upstream of the site was not possible.

4.2.3 BH01 had to be relocated due to the steep embankments located towards the north of the site. The new location was surveyed in after relocation and can be found on Drawing 02. BH08 was relocated towards the north western side of the site to obtain the relevant information from this area of the site. Due to significant obstructions and re-mobilisations, BH07 was cancelled and BH08 moved to accommodate the change and obtain a spread of data across the site. Once again, the new borehole location was surveyed in on relocation.

4.4 Exploratory trial pits

4.4.1 Trial pits TP01 to TP27 were excavated to a maximum depth of 4.0m using a 360° tracked excavator. The excavations were backfilled in the approximate order of excavation, with approximately 0.5m of a clean, imported capping layer (Class II Cohesive Fill) used to cap off any disturbed soils within the trial pits, to limit any potential future exposure of site users to potentially contaminated soils. The chemical testing certificates for this cohesive fill product can be found in Appendix K. Whilst we attempted to reinstate the excavation to its original condition some short-term settlement of the backfilling materials may occur. A Geotechnical Engineer supervised the excavations.

4.4.2 Sampling and logging was carried out as trial pit excavations proceeded but were not entered at depths exceeding 1.2m, or where trial pit sides were deemed unstable. The density of granular soils encountered in excavations was gauged by the ease of excavation.

4.4.3 Soil samples for subsequent laboratory determination of concentration of chemical contaminants were taken as a sub sample from soil contained in the excavator bucket, discarding any soil, which may have been in contact with the bucket, and stored in new plastic containers, which were labelled and sealed. If as a consequence of visual or olfactory evidence, a sample was suspected to be contaminated by organic material, the sample was stored in an amber glass jar with a PTFE sealing washer.

4.4.4 Trial pit records are presented in Appendix B.

4.4 Light cable and tool percussion boring

4.4.1 Boreholes BH01 to BH09 were excavated using light cable percussion boring techniques as described in EN ISO 22475-1:2006 forming 150mm diameter holes. Temporary casing was advanced within the borehole excavation to maintain the stability of the hole. When groundwater was encountered the excavation was temporarily halted to allow for groundwater observations to be made. Following groundwater observations, the casing was advanced within the hole and the location of the water strikes recorded. The casing was subsequently advanced to maintain the stability of the borehole and seal off the water to prevent further ingress. Additional records were taken when (and if) the casing produced a seal against water ingress and at the commencement and completion of a day's drilling operations. When obstructions were encountered a chisel was employed to break through the obstruction. Time taken to progress the excavation using the chisel is recorded on the borehole logs.

4.4.2 Soil samples for subsequent laboratory determination of concentration of chemical contaminants were taken from 'intact' bulk disturbed samples obtained in the cutting shoe of the drilling rig. A sub sample was obtained discarding soil, which would have been in contact with the drilling rig cutting shoe with the subsamples taken.

4.4.3 Samples were taken at regular intervals in each exploratory location, with additional samples taken where visual or olfactory evidence of contamination was observed. All samples were collected in a plastic tub and a 250ml amber glass jar with a PTFE sealing washer where possible.

4.4.4 The borehole excavations were formed by drillers who are NVQ Level 2 qualified in Land Drilling under the Construction Awards Alliance CAA with samples logged by an experienced Geotechnical Engineer.

4.4.5 Records of boreholes formed by light cable and tool percussion drilling techniques are presented in Appendix C.

4.4.6 Combined gas and groundwater monitoring standpipes were installed in boreholes BH01, BH02, BH04, BH05, BH06, BH08 and BH09. The standpipes were installed following the recommendations of BS EN ISO 22475-1:2006 *'Geotechnical Investigation and Testing – Sampling methods and groundwater measurements – Part 1: Technical Principles for execution'* (figure 6) and BS8576:2014 *'Guidance on investigations for ground gas – Permanent gases and Volatile Organic Compounds (VOCs)'* (figure 7). Details of the standpipe installation are recorded on Drawing 08.

4.4.7 Water levels in the standpipes have been measured during return visits to the site. The water level was measured using a measuring tape calibrated in 1mm intervals with an electronic end piece, which emits an alarm sound in contact with water. Water levels are measured from ground levels at the borehole position. Records of water levels are provided in Section 6.

4.4.8 A description of measurement of landfill type gases in gas monitoring standpipes is provided in subsequent report paragraphs below.

4.5 Measurement of landfill type gases in gas monitoring standpipes

4.5.1 The concentrations of landfill type gases collected within gas monitoring standpipes installed in boreholes BH01, BH02, BH04, BH05, BH06, BH08 and BH09 were measured using a portable infra-red gas analyser (model GA5000, manufactured by Geotechnical Instruments). Initially the gas analyser was connected to the gas valve on the top of the standpipe to allow the flow rate to be measured. Essentially this is a measurement of gas pressure produced in the standpipe, which is compared with atmospheric pressure at the time of measurement to produce an equivalent gas 'flow' in l/hr. The equipment used is capable of measuring to an accuracy of 0.1l/hr; below this the gas analyser records zero flow. Following BS8485:2015 '*Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings* (clause 6.4.4), we assume flows of 0.1l/hr when the gas analyser reads zero, thus producing a pessimistic gas flow rate in our assessment of ground gases.

4.5.2 Following measurement of 'flow' the gas analyser pumps gases contained in the standpipe through the analyser. Initial readings of gas concentrations are noted manually, followed by subsequent recordings at regular time periods until 'steady state' concentrations are achieved. The analyser records 'peak' and 'steady' concentrations of the following gases:

- Methane (CH_4)
- Carbon dioxide (CO_2)
- Oxygen (O_2)

4.5.3 The ambient atmospheric temperature and barometric pressure was also recorded at the site.

4.5.4 Methane in concentrations of between 5 to 15% in air is potentially explosive. The 5% methane concentration in air is defined as the Lower Explosive Limited (LEL). The gas analyser measures a percentage of the LEL. For example, 10% LEL equates to 10% of 5%, i.e. 0.5% methane concentration in air.

4.5.5 Records of gas monitoring data are presented in Appendix G.

4.6 Sampling strategies

4.6.1 Environmental

4.6.1.1 Details of sampling with respect to contamination issues are described in Sections 5 and 8.

4.6.2 Sample retention

4.6.2.1 Samples are stored for a period of one month following issue of this report, unless otherwise requested.

5 Laboratory testing

5.1 Chemical testing

5.1 Chemical testing

5.1.1 Chemical testing was carried out based on ground conditions and with reference to the contamination Initial Conceptual Model as presented in Section 8. The test methods are recorded on the chemical test certificates. The following table summarises the chemical testing scheduled;

Table summarising chemical testing

Exploratory point	Depth (m)	Medium/soil type	Testing scheduled (Refer to Appendix A for details).
BH05	11.00	Made Ground	Suite 1 (soil)
BH06	12.00	Northampton Sand Formation	Suite 1 (soil)
BH09	7.00	Made Ground	Suite 17 (soil)
TP02	0.2	Made Ground	Asbestos screening
TP02	1.00	Made Ground	Suite 2 (leachate)
TP03	1.00	Made Ground	Suite 17 (leachate) Suite 17 (soil)
TP03	2.00	Made Ground	Suite 1 (soil)
TP05	0.2	Made Ground	Asbestos screening
TP05	1.00	Made Ground	Suite 1 (soil)
TP07	0.2	Made Ground	Asbestos screening
TP09	0.2	Made Ground	Asbestos screening
TP10	2.00	Made Ground	Suite 17 (leachate) Suite 17 (soil)
TP13	0.2	Made Ground	Asbestos screening
TP15	2.00	Made Ground	Suite 2 (leachate)
TP15	0.2	Made Ground	Asbestos screening
TP16	0.2	Made Ground	Asbestos screening
TP17	0.2	Made Ground	Asbestos screening
TP18	1.00	Made Ground	Asbestos screening
TP18	2.00	Made Ground	Suite 1 (soil)
TP19	1.00	Made Ground	Asbestos screening Suite 1 (soil)
TP20	0.2	Made Ground	Asbestos screening
TP21	0.2	Made Ground	Asbestos screening
TP21	1.00	Made Ground	Suite 1 (soil)
TP23	0.1	Made Ground	Asbestos screening
TP23	0.7	Made Ground	Suite 17 (leachate) Suite 17 (soil)
TP23	3.5	Made Ground	Suite 1 (soil)
TP25	2.5	Made Ground	Suite 2 (leachate)
TP27	0.1	Made Ground	Asbestos screening
TP18	1.00	Made Ground	Asbestos Quantification
BH01	0.1	Made Ground	Suite 1 (soil)
BH05	0.1	Made Ground	Suite 17 (soil)
BH09	0.1	Made Ground	Asbestos screening Suite 1 (soil)

Table summarising chemical testing			
Exploratory point	**Depth (m)**	**Medium/soil type**	**Testing scheduled (Refer to Appendix A for details).**
TP09	0.1	Made Ground	Suite 1 (soil)
TP19	0.1	Made Ground	Suite 17 (soil)
TP20	0.1	Made Ground	Suite 17 (soil)
BH05	10.10	Groundwater sample	Suite 17 plus water quality parameters (water)
BH06	12.95	Groundwater sample	
BH08	15.15	Groundwater sample	
BH09	10.55	Groundwater sample	
SP02	-	Surface water sample (Willow Brook)	
Table 5.1.1			

5.1.2 Laboratory test certificates for chemical testing are presented in Appendix D.

6 Ground conditions encountered

6.1	Soils/rocks
6.2	Groundwater
6.3	Evidence of contamination
6.4	Obstructions and instability

6.1 Soils / Rocks

6.1.1 The exploratory excavations encountered the following geological profile, in order of superposition:

- Made Ground
- Suspected Northampton Sand Formation
- Whitby Mudstone Formation

6.1.2 Made Ground

6.1.2.1 Made Ground was encountered in all positions and extended to depths between 11.7m and in excess of 16m depth. Obstructions considered to be sandstone cobbles and boulders were encountered throughout the Made Ground at variable depths which prohibited continuation of a number of boreholes beyond the Made Ground. A number of different types of Made Ground are present across the site, which are detailed below.

6.1.2.2 Landfill waste material (former southern landfill)

6.1.2.2.1 Landfill material was encountered in all trial pit locations located within the former southern landfill site (see Drawing 02 for cell locations). Landfill material extended to around 10m depth and was underlain with Made Ground comprising largely naturally derived soils (ref 6.1.2.4 below).

6.1.2.2.2 The landfill material comprised a variable assortment of sand, gravel and clay soils combined with variable content of limestone, concrete, brick, timber, metal, plastic, fabric, clinker and ash. The following photograph represents the general appearance of the material found on site.

Photograph 01 Landfill material, as observed in the southwest of the site.

Photograph 02 Demolition type rubble

6.1.2.3 Former Iron and Steel works waste

6.1.2.3.1 Former steel works type waste, comprising suspected flue dusts, coke fines, slag and refractory rubble was encountered to variable depths from surface across the northern part of the site. Where present, it generally extended to depths between 0.3 and 0.8m and commonly included gravels of slag. Suspected blast furnace materials (dark grey fine to medium sand) were encountered from surface toward the east (as encountered in TP09) and also within the eastern landfill cells below around 2m depth. Such material was generally underlain with naturally derived soils.

Photograph 03 Suspected blast furnace waste close to surface with naturally derived soils below.

6.1.2.4 Made Ground - Naturally derived soils

6.1.2.4.1 Naturally derived Made Ground; believed to comprise a mixture of Glacial Till and Grantham Formation, and to a lesser extent Northampton Sand Formation, was encountered across the northern half of the site and at depth in the south (beneath landfill cells). Such material extended to between 12->16m.

6.1.2.4.2 Such Made Ground was thus recovered as grey, gravelly clay (glacial derived soils), creamish brown clayey, gravelly sand or gravelly clay (Grantham Formation derived) or orange brown gravelly sands (Northampton Sand derived), with frequent cobbles and boulders of sandstone. Gravels comprised of limestone and sandstone. The following photographs represent the general composition of such Made Ground found on site.

Photograph 04 Glacially derived Made Ground

Photograph 05 Grantham Formation derived soils.

Photograph 06 Northampton Sand and/or Grantham Formation derived soils.

6.1.3 Probable Northampton Sand Formation

6.1.3.1 Suspected Northampton Sand Formation was encountered in BH04, BH05, BH06 and BH09 to depths of between 9.7m and 15.1m. Whilst the appearance of the material was 'clean', the drilling process masked any bedding planes and thus we cannot be totally confident that such material was definitely naturally deposited.

6.1.3.2 Suspected Northampton Sand Formation comprised an orangish brown clayey gravelly sand, with gravels comprising of ferruginous sandstone. In BH01 and BH02, bedded sandstone was encountered, resulting in the termination of these boreholes. The following photograph represents the general composition of the suspected Northampton Sand Formation as extracted from boreholes.

Photograph 07 shows the Suspected Northampton Sand Formation found on site.

6.1.4 Whitby Mudstone Formation

6.1.4.1 Whitby Mudstone Formation was encountered in BH05, BH06 and BH09 at depths of between 12.8m and 15.1m.

6.1.4.2 Whitby Mudstone Formation generally comprised stiff, grey clay. The following photograph represents the general Whitby Mudstone Formation encountered on site.

Photograph 08 shows the Whitby Mudstone Formation found on site.

6.1.5 Summary

6.1.5.1 The investigation generally confirmed published and historic geological records. For ease of interpretation, a schematic conceptual site model indicating the general lateral and vertical extent of geology across the site is presented on Drawing 05.

6.2 Groundwater

6.2.1 Groundwater inflows were observed in some of the exploratory excavations. We note this was predominantly associated/considered to be groundwater associated with the aquifer at depth, with the exception of shallow/perched water encountered in only one location (TP13), wherein water was seemingly contained within a coarse grained Made Ground overlying cohesive soils at 2m depth. A summary of our observations is tabulated below:

Table summarising groundwater observations

Exploratory point	Date of observation	Depth (m) bgl	Observations	Geological horizon
BH04	23/07/2020	11.9m	Groundwater strike at 11.9m, filling borehole to 11.6m in 6 minutes, 11.4m in 10 minutes and 11.2m in 20 minutes.	Probable Northampton Sand Formation
	30/07/2020	10.10m	Return monitoring visit	
	11/08/2020	10.24m		
	19/08/2020	10.12m		
BH05	10/07/2020	12.2m	Groundwater strike at 12.2m. filling borehole to 11m after 20 minutes	Probable Northampton Sand Formation
	30/07/2020	8.95m	Return monitoring visit	
	11/08/2020	8.96m		
	19/08/2020	9.03m		
BH06	14/07/2020	13.2m	Groundwater strike at 13.2m, filling borehole to 12m in 6 minutes, 11.9m in 10 minutes, 11.8m in 16 minutes and 11.6m after 20 minutes.	Probable Northampton Sand Formation
	30/07/2020	12.84m	Return monitoring visit	
	11/08/2020	12.81m		
	19/08/2020	12.87m		
BH08	24/07/2020	16.2m	Groundwater strike at 16.2m, filling borehole to 16m in 6 minutes, 14.8m in 10 minutes and 14.7m in 20 minutes.	Suspected Made Ground
	30/07/2020	14.41m	Return monitoring visit	
	11/08/2020	14.44m		
	19/08/2020	6.11m		
BH09	09/07/2020	13.1m	Groundwater strike at 13.1m, filling borehole to 11.2m in 6 minutes, 10.7m in 10 minutes, 9.2m in 16 minutes and 9.1m in 20 minutes.	Probable Northampton Sand Formation
	30/07/2020	10.37m	Return monitoring visit	
	11/08/2020	10.54m		
	19/08/2020	10.42m		
TP13	13/07/2020	2.00m	Rapid inflow of water at 2m depth. Water filled the pit to 1.5m in 20 minutes.	Made Ground

Table 6.2.1

6.2.2 It should be noted that water levels will vary depending generally on recent weather conditions and only long-term monitoring of levels in standpipes will provide a measure of seasonal variations in groundwater levels.

6.2.3 We have also returned to site to measure water levels within Willow Brook both upstream to the site (off Penn Green Lane) and downstream (immediately east of the site). Level data indicates the surface water levels falls from 103.75mAOD on the west to 96.46mAOD in the east at the time of monitoring. We note levels are likely to fluctuate based on seasonal and climatic influences. With the levels in Willow Brook being slightly higher than groundwater levels recorded on site, it is possible that Willow Brook is behaving as a losing stream close to the site.

6.2.4 Groundwater flow direction

6.2.4.1 To inform the Conceptual Site Model and risk assessment, the groundwater flow direction has been determined using groundwater monitoring data. Utilising monitoring data from all standpipes extending into groundwater at depth, a groundwater flow direction toward the northeast has been determined. We note however that groundwater levels in BH05 and BH09 are considerably higher, which may be the result of artificial influences. Discounting BH05 and BH09, then groundwater flow direction appears to be toward the east. A full set of drawings indicating groundwater flow directions over the monitoring periods are presented in Appendix L.

6.2.4.2 Drawing 07 presents a wider area hydrogeological setting for the site and reinforces the likely dominant groundwater flow direction toward the east. Such assessment is also confirmed within historic and adjacent site monitoring data (as described in Section 3.12) and in view that Willow Brook may behave as a losing stream close to the site.

6.3 Evidence of contamination

6.3.1 During the excavation of our exploratory points, evidence of potential contamination was identified. A summary of these observations is presented below;

Table summarising contamination observations

Exploratory point	Depth of contamination	Strata	Description	Location of Trial Pits (see Drawing 02 for reference)
TP06	0.6-0.8m	Made Ground	Strong TPH odour during excavation	Located within the former turning/parking area
TP10	1.6-2.6m	Made Ground	Strong TPH odour during excavation	Located within landfill cell 5
TP12	1-2.6m	Made Ground	Strong TPH odour during excavation	Located towards the central area of the site
TP20	1.9-2.6m	Made Ground	Strong TPH odour during excavation	Located within landfill cell 2
TP21	1.1-2.3m	Made Ground	Very strong hydrocarbon odour during excavation	Located within landfill cell 1

TP22	1.1-3.00m	Made Ground	Very strong TPH odour during excavation	Located within landfill cell 1
TP23	0.7-2.6m	Made Ground	Very strong hydrocarbon odour during excavation	Located within landfill cell 1
TP24	0.2-3.00m	Made Ground	Strong hydrocarbon odour during excavation	Located within landfill cell 1

Table 6.3.1

6.4 Obstructions and instability

6.4.1 The following table summarises obstructions encountered during our exploratory excavations;

Table summarising obstructions and instability observations

Exploratory point	Depth of obstruction/instability	Description of obstruction and/or instability
TP13	2.00m	Trial pit sides beginning to collapse on completion of excavation.
TP16	3.10m	Trial pit terminated due to obstruction.
TP20	3.20m	Trial pit terminated due to concrete obstruction.
TP21	2.30m	Trial pit terminated due to metal sheet obstruction.
TP26	3.00m	Trial pit terminated due to concrete obstruction.
TP26	3.20m	Trial pit terminated due to concrete obstruction.
BH01	11.7m	Borehole terminated due to sandstone obstruction.
BH02	7.00m	Borehole terminated due to sandstone obstruction.
BH03	14.1m	Borehole terminated due to the cable snapping and the rig tools getting stuck in the ground, due to sandstone obstruction encountered.
BH03a	14.00m	Borehole terminated due to sandstone obstruction.
BH04	12.3m	Borehole terminated due to sandstone obstruction.

Table 6.4.1

7 Preliminary engineering appraisal

7.1	General
7.2	Preliminary assessment

7.1 General

7.1.1 A detailed geotechnical appraisal is outside of our brief at this stage. The following, initial assessment is based on review of desk study information, together with observations of ground conditions on site. Should it be proposed for development to continue at the site, additional intrusive investigations will be required to support and verify the following assessment.

7.2 Preliminary assessment

7.2.1 We have been provided with a topographical survey of the site and undertaken a site reconnaissance which shows site levels are low compared with perimeter site boundary levels to the north. Ground levels will generally require raising to achieve an amenable platform for an industrial development which also allows gravity operated storm drainage to the south and thus outfall to Willowbrook.

7.2.2 It is proposed that inert fills will be deposited and compacted at the site under controlled conditions. Preliminary design levels suggest a maximum fill depth of some 9 to 10m in the north-western corner of the site (over the former North Brook lagoons). Some localised cutting will be required in the south western corner of the site to gain access to Napier Road, and to facilitate a stormwater attenuation basin. It is understood that some 5 acres of land will also be retained toward the south, and left undisturbed/unfilled, for provision of an ecological corridor.

7.2.3 Only inert fills which can support compaction plant will be accepted unless they can be treated on site to allow compaction. Controlled compaction of fills will minimise future settlement of the fills imported to raise site levels.

7.2.4 Loads imposed by deposition of imported fills will cause some consolidation of existing soils below current site levels. The amount of settlement and likely timescales to achieve the settlement will requires further analysis and monitoring.

7.2.5 One option to minimise the potential for future settlement is surcharging once design fill levels are achieved. This comprises overfilling the site and monitoring settlement of the surcharge. Inevitably some settlement will occur but will diminish with time, and once the rate of settlement has reduced to minimal levels then the surcharge will be moved, possibly to other areas of the site, to allow building development to take place.

7.2.6 This sequence of controlled filling will produce a development platform capable of supporting structurally stiff raft foundations imposing a uniformly distributed stress no greater than 30kN/m^2. At such stress levels settlements will likely be within tolerable limits.

7.2.7 Should an increase in stress be required to support proposed developments, an alternative foundation solution such as piles could be utilised. Piles would transmit super structural loads through the imported fill and infilled ground and into the Whitby Mudstone at depth to achieve shaft adhesion and end bearing support.

8 Chemical contamination

8.1	Contaminated land, regulations and liabilities
8.2	Objectives and procedures
8.3	Development characterisation and identified receptors
8.4	Identification of pathways
8.5	Assessment of sources of contamination
8.6	Initial conceptual model
8.7	Laboratory testing
8.8	Updated conceptual model
8.9	Mitigation measures
8.10	Risk assessment summary and recommendations
8.11	On site monitoring

8.1 Contaminated land, regulation and liabilities

8.1.1 Statute

8.1.1.1 Part IIA of the Environment Protection Act 1990 became statute in April 2000. The principal feature of this legislation is that the hazards associated with contaminated land should be evaluated in the context of a site-specific risk-based framework. More specifically contaminated land is defined as:

> *"any land which appears to the local authority in whose area it is situated to be in such a condition, by reasons of substances in, on or under the land, that:*
>
> *a) Significant harm is being caused or there is a significant possibility of such harm being caused; or*
> *b) Pollution of controlled waters is being or is likely to be caused".*

8.1.1.2 Central to the investigation of contaminated land and the assessment of risks posed by this land is that:

i) There must be contaminants(s) at concentrations capable of causing health effects (*Sources).*
ii) There must be a human or environmental receptor present, or one which makes use of the site periodically *(Receptor)*; and
iii) There must be an exposure pathway by which the receptor comes into contact with the environmental contaminant *(Pathway).*

8.1.1.3 In most cases the Act is regulated by Borough or District Councils and their role is as follows:

i) Inspect their area to identify contaminated land
ii) Establish responsibilities for remediation of the land

iii) See that appropriate remediation takes place through agreement with those responsible, or if not possible:
- by serving a remediation notice, or
- in certain cases carrying out the works themselves, or
- in certain cases by other powers

iv) keep a public register detailing the regulatory action which they have taken

8.1.1.4 For "special" sites the Environment Agency will take over from the Council as regulator. Special sites typically include:-

- Contaminated land which affects controlled water and their quality
- Oil refineries
- Nuclear sites
- Waste management sites

8.1.2 Liabilities under the Act

8.1.2.1 Liability for remediation of contaminated land would be assigned to persons, organisations or businesses if they caused, or knowingly permitted contamination, or if they own or occupy contaminated land in a case where no polluter can be found.

8.1.3 Relevance to predevelopment conditions

8.1.3.1 For current use, Part IIA of the Environmental Protection Act 1990 provides the regulatory regime. The presence of harmful chemicals could provide a 'source' in a 'pollutant linkage' allowing the regulator (local authority or Environment Agency) to determine if there is a significant possibility of harm being caused to humans, buildings or the environment. Under such circumstances the regulator would determine the land as 'contaminated' under the provision of the Act requiring the remediation process to be implemented.

8.1.4 Relevance to planned development

8.1.4.1 The developer is responsible for determining whether land is suitable for a particular development or can be made so by remedial action. In particular, the developer should carry out an adequate investigation to inform a risk assessment to determine:

a) Whether the land in question is already affected by contamination through source – pathway – receptor pollutant linkages and how those linkages are represented in a conceptual model
b) Whether the development proposed will create new linkages e.g. new pathways by which existing contaminants might reach existing or proposed receptors and whether it will introduce new vulnerable receptors, and
c) What action is needed to break those linkages and avoid new ones, deal with any unacceptable risks and enable safe development and future occupancy of the site and neighbouring land?

8.1.4.2 Building control bodies enforce compliance with the Building Regulations. Practical guidance is provided in Approved documents, one of which is Part C, '*Site preparation and resistance to contaminants and moisture'* which seeks to protect the health, safety and welfare of people in and around buildings, and includes requirements for protection against harm from chemical contaminants.

8.1.5 Pollution of controlled waters

8.1.5.1 Part IIA of the Environment Protection Act 1990, defines pollution of controlled waters as

> *'The entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter'*

8.1.5.2 Paragraphs A38 and A39 of statutory guidance (DETR 2000) further define the basis on which land may be determined to be contaminated land on the basis of pollution of controlled waters.

> *'Before determining that pollution of controlled waters is being, or likely to be, caused, the Local Authority should be satisfied that a substance is continuing to enter controlled waters, or is likely to enter controlled waters. For this purpose, the local authority should regard something as being likely when they judge it more likely than not to occur'*
>
> *'Land should not be designated as contaminated land where:*
>
> *a) A substance is already present in controlled waters:*
> *b) Entry into controlled waters of that substance from the land has ceased, and*
> *c) It is not likely that further entry will take place.*
>
> *Substances should be regarded as having entered controlled waters where:*
>
> *a) They are dissolved or suspended in those waters; or*
> *b) If they are immiscible with water, they have direct contact with those waters, or beneath the surface of the waters'*

8.1.5.3 Controlled waters are defined in statute to be:

> *'territorial waters which extend seawards for 3 miles, coastal waters, inland freshwaters, that is to say, the waters in any relevant lake or pond or of so much of any relevant river or watercourse as is above the freshwater limit, and groundwaters, that is to say, any waters contained in underground strata.'*

8.1.8 Further information

8.1.8.1 The above provides a brief outline as regards current statute and planning controls. Further information can be obtained from the Department for the Environment, Food and Rural Affairs (DEFRA) and their Web site www.defra.gov.uk.

8.2 Objectives and procedures

8.2.1 Objectives

8.2.1.1 This report section discusses investigations carried out with respect to chemical contamination issues relating to the site. The investigations were carried out to determine if there are any liabilities with respect to Part IIA of the Environment Protection Act. As stated in Section 2.4.2, the investigation process followed the principles of BS 10175:2011+A2:2017 *'Investigation of potentially contaminated sites – Code of Practice',* with the investigation combining a desk study (preliminary investigation) together with the exploratory and main investigations (refer BS 10175 for an explanation).

8.2.1.2 This section of the report produces *'Conceptual models'* based on investigatory data obtained to date. The conceptual model is constructed by identification of *contaminants* and establishment of feasible *pathways* and *receptors.* The conceptual model allows a *risk assessment* to be derived. Depending upon the outcome of the risk assessment it may be necessary to carry out remediation and/or further investigations with a view to eliminating, reducing or refining the risk of harm being caused to identified receptors. If appropriate, our report will provide recommendations in this respect.

8.2.1.3 Clearly, we must consider the current pre-development condition, establishing risks which may require action to render the site safe to all relevant (current) receptors meeting the requirements of current legislation (Part IIA of the Environmental Protection Act 1990).

8.2.1.4 Definition of terms used in the preceding paragraph and subsequent parts of this section of the report are presented in Appendix A.

8.2.2 Procedure to assess risks of chemical contamination

8.2.2.1 For the purposes of presenting this section of this report, we have adopted the following sequence in assessing risks associated with chemical contamination.

Table outlining sequence to assess risk associated with chemical contamination

Conceptual model element	Contributory information	Outcome
Receptor	Development categorisation	Identification of receptors at risk of being harmed Method of analysing test data Criteria for risk assessment modelling
Pathways	Geology and ground conditions Development proposals	Identification of critical pathways from source to receptor
Source	Previous site history Desk study information Site reconnaissance Fieldwork observations	Testing regime Identification of a chemical source Analysis of test data and other evidence

Table 8.2.2

8.2.2.2 We have adopted, in general, the procedures described in CIRIA C552 *'Contaminated land risk assessment - a guide to good practice'* in deriving a risk assessment. Initially we have carried out a 'phase 1 assessment' based on desk study information and site reconnaissance, to produce an initial conceptual model and thus a preliminary risk assessment. This model / assessment is then used to target fieldwork activities and laboratory testing, with the results of this part of the investigation used to allow a phase 2 assessment to be produced by updating the conceptual model and refining the risk assessment.

8.3 Development characterisation and identified receptors

8.3.1 Site characterisation

8.3.1.1 The nature of the site has a significant influence on the likely exposure pathways between potentially contaminated soils and potential receptors. The following table summarises elements which characterise the site based on site observations and desk study information.

Summary of site characteristics

Element	Source / criteria	Characteristic
Current land use	Observations	Currently not in use but accessible to the general public.
Future land use	Advice	Development platform for likely commercial/industrial use thereafter with localised landscaping ,amenity (green) space, and ecological space.
Site history	Desk study	Opencast, partially restored quarry followed by landfill site which included ponds/lagoons and receipt of industrial and special waste and liquid sludge and management of household and industrial wastes.
Geology	Desk study and site investigation	Infilled ground, some 12-16m depth (including landfill material and replacement 'overburden soils' including Glacial Till and Grantham Formation deposits) overlying. Northampton Sand Formation and Whitby Mudstone.
Ground water	Aquifer potential	Secondary A Aquifer in Northampton Sand Formation. Whitby Mudstone Formation is Unproductive Strata.
	Abstractions	None within 1km.
	Source protection zone	Not within SPZ.
Surface waters	Location	Willow Brook forms sites southern boundary, which flows easterly. Gretton Brook located 1.2km to the northeast.
	Abstractions	None within 1km.

Table 8.3.1

8.3.2 Identified receptors

8.3.2.1 The principal receptors subject to harm caused by any contamination of the proposed development site are as follows.

Principle Receptor	Detail
Humans	Users of the current site
	End user of the developed site
	Construction operatives and other site investigators
Vegetation	Plants and trees, both before and after development
Controlled waters	Surface waters (Rivers, streams, ponds and above ground reservoirs)
	Ground waters (used for abstraction or feeding rivers / streams etc)

Table 8.3.2

This section of the report assesses those receptors listed above.

8.3.3 Human receptors

8.3.3.1 The Contaminated Land Exposure Assessment (CLEA) model can be used to derive guideline values, against which land quality data can be compared to allow an assessment of the likely impacts of soil contamination on humans. The parameters used within the model can be chosen to allow guideline values to be derived for a variety of land uses and exposure pathways. For example, a construction worker is likely to be exposed in different ways and for different durations than an adult in a residential setting.

8.3.3.2 The current site, whilst private land, can and is accessed by the general public for recreational purposes such as dog walking. Taking a worst-case scenario, we will initially consider the critical site user (receptor) to be a child under the age of 8 years. Following completion of the proposed development (installation of the platform and longer-term construction of commercial/industrial land use) the critical site user (receptor) is considered to be an adult. These criteria have been used in the conceptual model for the current and future site use. Our assessment also considers construction operatives as adult receptors and adjacent (off site) receptors as adults in a commercial/industrial setting.

8.3.4 Vegetation receptors

8.3.4.1 Soil contaminants can have an adverse effect on plants if they are present at sufficient concentrations. The effects of phytotoxic contaminants include growth inhibition, interference with natural processes within the plant and nutrient deficiencies.

8.3.4.2 Vegetation on site predominantly comprises rough grassland and scrub vegetation. Semi-mature trees/woodland is located on the southern bank of the landfill site with more substantial vegetation/woodland off site to the east. It is proposed to retain some 5 acres of the southern areas for ecological habitat together with retaining the southern gulley woodland. It is also proposed to plant new trees as part landscaping within the proposed development and on this basis, vegetation is considered a current and future receptor of the site.

8.3.5 Water receptors

8.3.5.1 The site lies within an area designated as a minor aquifer (Secondary A Aquifer) contained within the Northampton Sand Formation. After intrusive investigations, it has been proven that saturated Northampton Sand Formation deposits remain onsite, therefore groundwater is considered a potential ground water receptor.

8.3.5.2 The channel of Willow Brook forms the southern boundary of the site and flows in an easterly direction. It is considered a potential surface water receptor.

8.3.5 Summary of identified receptors

8.3.5.1 Based on the above assessments, the following table summarises identified and critical receptors.

Table summarising identified (viable) receptors

Principle Receptor	Detail	Viable and critical receptors		
		Viability and justification		Critical receptor
Humans	Users of the current site (R1)	Yes	Site accessible to public including children	Child
	End user of the developed site (R2)	Yes	Platform will form basis for future Industrial/ commercial use	Adult
	Construction operatives and other site investigators (R3)	Yes	Site proposed for redevelopment.	Adult
	Adjacent site users (R4)	Yes	Surrounding industrial site users	Adult
Vegetation	Current site (R5)	Yes	Low level vegetation on site and woodland adjacent	Vegetation
	Developed site R5)	Yes	Ecological corridor retained on site. New landscaping included within redevelopment scheme	Vegetation
Controlled waters	Surface waters (Rivers, streams, ponds and above ground reservoirs) (R6)	Yes	Willow Brook at southern site boundary	Surface waters
	Ground waters (used for abstraction or feeding rivers / streams etc) (R7)	Yes	Site located over a minor aquifer (Secondary A Aquifer) within Northampton Sand Formation	Groundwater

Table 8.3.5

8.4 Identification of pathways

8.4.1 Pathways to human receptors

8.4.1.1 Guidance published by the Environment Agency in Science Report SC050021/SR3 *'Updated technical background to the CLEA model'* provides a detailed assessment of pathways and assessment and human exposure rates to source contaminants. In summary, there are three principal pathway groups for a human receptor:

Table summarising likely pathways

Principal pathways	Detail
Ingestion through the mouth	Ingestion of air-borne dusts
	Ingestion of soil
	Ingestion of soil attached to vegetables
	Ingestion of home-grown vegetables
Inhalation through the nose and mouth.	Inhalation of air-borne dusts
	Inhalation of vapours
Absorption through the skin.	Dermal contact with dust
	Dermal contact with soil

Table 8.4.1

8.4.1.2 The site is currently unoccupied, though is accessed by the general public for recreational/dog walking use. Following redevelopment, landscaping and green areas are proposed, though these will predominantly be located upon an imported capping/platform. Minor areas of ecological land will be maintained in the south. The use/accessibility of these areas to the general public/site users is currently unknown so we must assume that they will be accessible and thus that the above pathways will be relevant to all future users. On this basis all of the above pathways (listed in Table 8.4) are considered as potential pathways to current and proposed users, with the exception of those associated with home grown vegetables.

8.4.1.3 For construction operatives, exposure pathway will be critical during the early stages of earthworks and land preparation. Following more extensive inclusion of a development platform on site the exposure potential will be limited, though with the ecological corridor being retained all pathways should be expected throughout the redevelopment, again with the exception of those associated with vegetable growth/consumption.

8.4.1.4 A summary of our pathway assessment is presented in Section 8.4.4.

8.4.2 Pathways to vegetation

8.4.2.1 Guidance published by the Environment Agency in Science Report SC050021/SR (Evaluation of models for predicting plant uptake of chemicals from soil) provides a detailed assessment of plant uptake pathways. In summary, plants are exposed to contaminants in soils by the following pathways:

- Passive and active uptake by roots.
- Gaseous and particulate deposition to above ground shoots.
- Direct contact between soils and plant tissue.

8.4.2.2 On the basis that vegetation is present on site and will be retained following redevelopment, all of the above routes of exposure are considered to be viable pathways for current and future site use.

8.4.3 Pathways to controlled waters

8.4.3.1 A number of pathways exist for the transport of soil contamination to controlled waters. A summary of these pathways is presented below:

- Percolation of water through contaminated soils.
- Near-surface water run-off through contaminated soils.
- Saturation of contaminated soils by flood waters.
- Lateral groundwater flow.
- Induced leachate generation.

8.4.3.2 The likely variable nature of near surface soils on site means that we assume that both percolation of water through contaminated soils and near surface run-off are likely pathways to receptors.

8.4.3.3 Existing ground levels are high compared to Willow Brook and associated drainage areas to the south, so despite surrounding areas being recorded as liable to flood, the risk of saturation of floodwaters on site is considered low.

8.4.3.4 As the result of downward migration of contaminants through soils we also consider the subsequent lateral migration of dissolved phase contaminants off site.

8.4.3.5 The proposed development will incorporate the loading and thus consolidation and compression of existing soils and landfill material on site which could induce leachate generation and subsequent migration within soils toward groundwater.

8.4.4 Summary of identified likely pathways

8.4.4.1 Based on the above assessments, the following table summarises likely pathways of potential chemical contaminants at the site to identified receptors.

Table of likely pathways

Receptor group	Critical receptor	Pathway
Current site users	Child (recreational/ short term receptor) (R1)	Ingestion air-borne dusts (P1)
		Ingestion of soil.(P2)
		Inhalation air-borne dusts (P3)
		Inhalation of vapours (P4)
		Dermal contact with dust (P5)
		Dermal contact with soil (P6)
Potential proposed site users and construction operatives	Adult construction operative and proposed site users (R2 & R3)	Ingestion of air-borne dusts (P1)
		Ingestion of soil (P2)
		Inhalation of air-borne dusts (P3)
		Inhalation of vapours (P4)
		Dermal contact with dust (P5)
		Dermal contact with soil (P6)

Vegetation	Ecological corridor and new planting (R4 & R5)	Root uptake, deposition to shoots and foliage contact. (P7)
Controlled waters	Groundwater (R6)	Percolation of water through contaminated soils (P8)
		Saturation of contaminated soils by flood waters (low likelihood) (P9)
		Leachate generation during/following development of the platform (P10)
	Surface water (R7)	Near-surface water run-off through contaminated soils (P11)
		Lateral migration of dissolved phase contaminants in groundwater toward surface water receptors (P12)

Table 8.4.4

8.5 Assessment of sources of chemical contamination

8.5.1 Introduction

8.5.1.1 Initially, potential sources of contamination are assessed using the following elements of the investigation process.

- History of the site
- Desk study information
- Site reconnaissance
- Geology
- Fieldwork

These elements will dictate a relevant soil/water testing regime to quantify possible risks of any identified contaminative sources which may harm identified receptors.

8.5.2 Source assessment – History of the site

8.5.2.1 The history of the site and its immediate surroundings based on published Ordnance Survey maps is described in Section 3.

8.5.2.2 Based on published historical maps and other available source information the site and adjacent sites have been quarried and contained railway land and a series of tanks before being used for the deposition of iron and steel works waste and then being recorded as a landfill site accepting commercial, industrial, liquid waste and special waste.

8.5.2.3 Railway land is recorded in 'Industry Profiles' (Metal manufacturing, refining and finishing works: iron and steel works) published by the Department of the Environment, which provides an indication of the type of chemical contaminants likely to be used by the industry. For railway land, these include, metals and heavy metals, asbestos, polycyclic aromatic hydrocarbons (PAH), Chlorinated Aliphatics and PCBs.

8.5.2.4 The content of recorded tanks is unknown though we would anticipate they contained fuel and thus there is a risk of localised hydrocarbons on site.

8.5.2.5 Iron and steel works are listed in 'Industry profiles' (Metal manufacturing, refining and finishing works: iron and steel works). Potential contaminants include (though are not limited to) metals and heavy metals, ammonia, PAH, volatile organic compounds, phenols, hydrocarbons, PCBs and asbestos.

8.5.2.6 Contaminants associated with the landfill use are subject to the type of waste deposited but will likely include a vast range of both organic and inorganic contaminants.

8.5.2.7 At this stage we have assumed there is a risk of each of the potential contaminants impacting soils at the site and the adjacent site. On this evidence the site is considered to be at risk of chemical contamination from both on site past activities and at risk of migration of chemical contamination from adjacent sites.

8.5.3 Source assessment – Desk study information

8.5.3.1 Envirocheck presents a detailed database of environmental information in relation to the site including;

- Pollution incidents
- Landfill sites
- Trading activities

8.5.3.2 Based on the Envirocheck data (refer Appendix J) a pollution incident (minor) was recorded on site in 1992. Other pollution incidents of varying severity are also recorded to the northwest and west of the site (considered up hydraulic gradient) between 1992-1994. These events have the potential to have impacted soils on site and so must be considered a risk, albeit the residual risk is low, based on the age and severity of the majority of incidents.

8.5.3.3 The site is recorded as a landfill. Associated risks are outlined in 8.5.2.

8.5.3.4 The site is located within a predominantly industrial area of Corby. Contemporary trading activities (as reported by Envirocheck) include engineering materials company (183m SW), garage services (approximately 290m W) and aluminium fabricators (immediately north of the site beyond Mitchell Road). Based on the distance and direction of the engineering materials company and garage services, they are not considered to present an immediate risk to the site. The aluminium fabricators are however immediately north and thus contaminants associated with the industry present a potential risk to the subject site. Whilst metal fabrication is not listed specifically in the Department of the Environment Industry Profiles, as a potentially worst-case scenario, we must assume that possible contaminants stored on site (localised fuels/oils, powder coatings, paints and solvents) could impact soils and then migrate to the site.

8.5.4 Source assessment – Site reconnaissance

8.5.4.1 A full description of the site and observed adjacent land uses is provided in Section 3 of this report. A plan summarising observations made on site during our site reconnaissance visit is presented on Drawing 02.

8.5.4.2 We did not observe any obvious evidence of any current or recent activities on site or immediately adjacent sites likely to result in a potential source of ongoing/new chemical contamination. We did however observe infrastructure associated with the former landfill (described in 8.5.2) and substantial slag deposits at surface across the site and within the ground.

8.5.4.3 Based on the above observations, in isolation, we are of the opinion, that there are potential contaminative sources on site which could affect near surface soils and pose a risk to human receptors.

8.5.5 Source assessment – Geology

8.5.5.1 The geological map of the area indicates the topography local to the site is formed in deposits of Worked Ground and we are aware the site has been substantially filled with iron and steel work waste and landfill material – risk associated with such material has been discussed in 8.5.2.

8.5.5.2 Deposited fill/waste is underlain with overburden soils (sands and clays of the Grantham Formation and Glacial Till). Such soils (not affected by artificial contamination) are not considered to pose a risk of harm or contain naturally elevated levels of contaminants. A residual layer of ironstone of the Northampton Sand Formation may also be present below the infilled soils. Typically, and in our experience, the Northampton Sands can exhibit elevated concentrations of naturally occurring arsenic, vanadium and chromium, however as the deposits are likely to be at substantial depth, they are not considered to present a significant source of contamination which might impact end users and thus have not been considered further.

8.5.6 Source assessment - Fieldwork observations

8.5.6.1 During the excavation of our exploratory points, evidence of potential contamination was identified which are summarised below:

- Hydrocarbon odours within discreet and localised areas of Made Ground, generally at depths between 0.5-3m depth, most notably within Cell 1 and Cell 2 of the landfill in the southwest, but also toward the central/eastern area of the site.
- Landfill material contained within cells to the south of the site.
- Iron and steel works waste: Remnant slag skull and debris across the site, flue dusts and blast furnace slurry waste.
- Made Ground across the site, including anthropogenic content such as brick, concrete and slag and with the potential to include asbestos.

8.5.6.2 We obtained samples of the potentially chemically impacted soils for subsequent laboratory testing.

8.5.7 Source assessment - summary

8.5.7.1 Based on the paragraphs above, we have identified the following potential sources of contamination:

Table summarising results of source assessment

Source	Origin of information	Possible contaminant	Probability of risk occurring	Likely extent of contamination
On site				
Railway land (S1)	Historical maps	Metals, heavy metals, asbestos, PAH, Chlorinated Aliphatics and PCBs.	Likely	At depth across the site.
Tanks (S2)	Historical maps	Oil/fuel hydrocarbons.	Likely	Possibly localised areas at depth on site.
Iron and steel works waste (including slag/flue dust/slurry waste) (S3)	Desk study information	Metals, heavy metals, ammonia, PAH, volatile organic compounds, phenols, hydrocarbons, PCBs and asbestos.	High likelihood	Site wide
Landfill site including special waste and liquid waste (S4)	Desk study information	Vast range of both organics and inorganics	High likelihood	Site wide
Made Ground across the site, outside the landfill, (S5)	Fieldwork	Metals, heavy metals, PAH and asbestos	High likelihood	Site wide
Localised hydrocarbon odours and staining (S8)	Fieldwork	Oil/fuel hydrocarbons.	Likely	Discreet locations across the site.
Adjacent sites				
Iron and Steel works waste (S3)	Desk study information	Metals, heavy metals ammonia, PAH, volatile organic compounds, phenols, hydrocarbons, PCBs and asbestos.	High likelihood	Potentially site wide effect
Landfill sites (S6)	Desk study information	Vast range of both organics and inorganics	High likelihood	Potentially site wide effect.
Industrial uses including metal fabricator (S7)	Desk study information	Metals, solvents, hydrocarbons	Low likelihood	Potentially limited to northern boundary.

Table reference 8.5.7

8.6 Initial Conceptual Model

8.6.1 Based on our assessment of potential contaminative sources, identified receptors and viable pathways to receptors described in preceding paragraphs, we have produced an initial conceptual model in the form of a table which is presented in Appendix F.

8.6.2 Based on the conceptual model there are risks which exceed the low category which in our opinion are unacceptable and require either remedial action or further investigation by laboratory testing of soil / water samples to refine the risk assessment.

8.7 Laboratory testing

8.7.1 Testing regime

8.7.1.1 In order to carry out a quantitative assessment, we have scheduled testing to measure the concentration of a broad range of inorganic and organic contaminants from soils across the site. The following table summarises the chemical testing scheduled as well as a rationale for the testing:

Table summarising scheduled testing

Position	Depth (m)	Strata/ medium	Targeted sampling?	Scheduled testing	Rationale
BH01	0.1	Made Ground	N	Suite 1 (soil)	General site coverage
BH05	0.1	Made Ground	N	Suite 17 (soil)	General site coverage
BH05	11.00	Made Ground	N	Suite 1 (soil)	General site coverage
BH08	12.00	Northampton Sand Formation	Y	Suite 1 (soil)	Within Cell 2 area from former landfill
BH09	0.1	Made Ground	Y	Asbestos screening Suite 1 (soil)	Within Cell 1 area from former landfill
BH09	7.00	Made Ground	Y	Suite 17 (soil)	Within Cell 1 area from former landfill
TP02	0.2	Made Ground	N	Asbestos screening	General site coverage
TP02	1.00	Made Ground	N	Suite 2 (leachate)	General site coverage
TP03	1.00	Made Ground	Y	Suite 17 (leachate) Suite 17 (soil)	Within former liquid waste ponds
TP03	2.00	Made Ground	Y	Suite 1 (soil)	Within former liquid waste ponds
TP04	0.2	Made Ground	N	Asbestos screening	General site coverage
TP05	1.00	Made Ground	N	Suite 1 (soil)	General site coverage
TP07	0.2	Made Ground	N	Asbestos screening	General site coverage
TP09	0.1	Made Ground	N	Suite 1 (soil)	General site coverage
TP09	0.2	Made Ground	N	Asbestos screening	General site coverage

TP10	2.00	Made Ground	Y	Suite 17 (leachate) Suite 17 (soil)	Within Cell 5 area from former landfill
TP13	0.2	Made Ground	N	Asbestos screening	General site coverage
TP14	2.00	Made Ground	Y	Suite 2 (leachate)	Within former liquid waste ponds
TP15	0.2	Made Ground	N	Asbestos screening	General site coverage
TP18	0.2	Made Ground	N	Asbestos screening	General site coverage
TP17	0.2	Made Ground	N	Asbestos screening	General site coverage
TP18	1.00	Made Ground	Y	Asbestos screening	Within Cell 5 area from former landfill
TP18	2.00	Made Ground	Y	Suite 1 (soil)	Within Cell 5 area from former landfill
TP19	1.00	Made Ground	Y	Asbestos screening Suite 1 (soil)	Within Cell 4 area from former landfill
TP20	0.2	Made Ground	N	Asbestos screening	General site coverage
TP21	0.2	Made Ground	N	Asbestos screening	General site coverage
TP21	1.00	Made Ground	Y	Suite 1 (soil)	Within Cell 1 area from former landfill
TP23	0.1	Made Ground	N	Asbestos screening	General site coverage
TP23	0.7	Made Ground	Y	Suite 17 (leachate) Suite 17 (soil)	Within Cell 1 area from former landfill
TP23	3.5	Made Ground	Y	Suite 1 (soil)	Within Cell 1 area from former landfill
TP25	2.5	Made Ground	Y	Suite 2 (leachate)	Within Cell 1 area from former landfill
TP27	0.1	Made Ground	N	Asbestos screening	General site coverage
TP18	1.00	Made Ground	Y	Asbestos Quantification	To quantify asbestos fibres, present within the soil
TP19	0.1	Made Ground	Y	Suite 17 (soil)	Within Cell 4 from former landfill
TP20	0.1	Made Ground	Y	Suite 17 (soil)	Within Cell 2 from former landfill
BH04	10.10	Water sample	N	QTSE 3088- water Suite 17 (water)	General site coverage
BH08	12.94	Water sample	Y	QTSE 3088-water Suite 17 (water)	Within Cell 2 from former landfill
BH08	14.14	Water sample	N	QTSE 3088- water Suite 17 (water)	General site coverage
BH09	10.44	Water sample	Y	QTSE 3088- water Suite 17 (water)	Within Cell 1 from former landfill
SP02	-	River water sample	Y	QTSE 3088- water Suite 17 (water)	Adjacent stream monitoring

Table 8.7.1

8.7.1.2 The results of laboratory determination of concentration of chemical contaminants are presented in Appendix D.

8.7.2 Criteria for assessment of test data – Human receptors

8.7.2.1 Assessment of laboratory test data has been carried out with reference to current nationally recognised documents listed in the final page of Appendix A. Due to changes in guidance on contaminated land, items 8-8 and item 10 in the document listing above have been withdrawn. In the absence of alternative guidance however we have used these documents. Where new guidance is available, this has been followed in preference to superseded guidance.

8.7.2.2 The Land Quality Management (LQM) and the Chartered Institute of Environmental Health (CIEH) have derived Suitable for Use Levels (S4ULs) which are presented in *'The LQM/CIEH S4ULs for Human Health Risk Assessment'* (2015). S4ULs have been used as a screening tool to assess the risks posed to the health of humans from exposure to soil contamination in relation to appropriate land uses. Where published S4ULs are not available, we have adopted C4SLs (Category 4 Screening Levels) produced by DEFRA or SGVs (Soil Guideline Values) as appropriate. In the absence of any of these criteria we have adopted Soil Screening Values (SSV) derived by Soiltechnics and by Atkins (SSV^{ATK}). The CLEA model used to derive SSVs has been used with toxicology data presented by the EA, LQM/CIEH and Atkins (in that order of preference). SSVs produced by Atkins are presented on their $ATRISK^{SOIL}$ website.

8.7.2.3 S4ULs, C4SLs, SGVs, SSVs and SSV^{ATK}s represent 'intervention values'; indications to an assessor that soil concentrations above these levels might present an unacceptable risk to the health of site users. These guideline values have been produced using conceptual exposure models, which use assumptions and are applied to differing end uses of land. If the values are exceeded, it does not necessarily imply there is an actual risk to health and site-specific circumstances should be taken into account. Conversely, where a critical pathway or chemical form of the contaminant has not been evaluated, a risk may be present even if the adopted guideline value has not been exceeded.

8.7.2.4 For evaluation of test data in relation to polycyclic aromatic hydrocarbon (PAH), phenols and total petroleum hydrocarbon (TPH) contamination, we have compared measured concentrations with corresponding S4ULs. The S4UL fractions are dependent on the Soil Organic Matter (SOM) content of the soils. We have adopted the relevant guideline values based on SOM testing.

8.7.2.5 We have followed procedures outlined by the CIEH to compare measured concentrations of metals and PAH contaminants against guideline values. TPH contamination results are compared directly with the relevant guideline values. The guidance presents an approach to data analysis and includes the examination of data for potential outliers, assessment of the normality of the test data and the calculation of a 95% Upper Confidence Limit (UCL). The UCL provides an estimate of the population mean, based on test data, with a 95% confidence that the actual mean does not exceed this value. The UCL is compared to the guideline value for the site.

8.7.2.6 As an initial and yet conservative assessment we have adopted a public open space land use for current and future users of the site, on the basis that the planning application is for development platform which could be temporarily utilised as open space prior to any sort of redevelopment. Notably, in the longer term, the site could be redeveloped for commercial/industrial use and so we have considered this aspect also in our assessment. . An industrial/commercial model has been adopted for construction operatives.

8.7.3 Criteria for assessment of test data – Vegetation

8.7.3.1 Guidance published by Forest Research in "*BPG Note 5 - Best Practice Guidance for Land Regeneration*" suggests that a residential without plant uptake or industrial/commercial CLEA model should be adopted for this receptor although specific guideline values are provided for copper and zinc at 130mg/kg and 300mg/kg respectively. As a practice we have adopted the industrial / commercial CLEA model for initial assessment of test data for vegetation.

8.7.4 Criteria for assessment of test data – Controlled waters

8.7.4.1 For interpretation of test data in relation to water receptors we have directly compared measured values with relevant screening values. Details of the source data and adopted threshold values are outlined on the summary tables in Appendix E.

8.7.4.2 Following our receptor assessment (outlined in Section 8.3.5 above), and in consideration of the pathways and migration potential for contaminants on site, the critical receptors for the site are considered to be the underlying Secondary A Aquifer and the nearby Willow Brook, and thus we have adopted surface waters and ground water as the critical receptors and these has been utilised within our assessment model in Appendix F.

8.7.5 Evaluation of test data – Human receptors

8.7.5.1 Inorganic and Organic (PAH) contaminants

8.7.5.1.1 Tables summarising and analysing test data are presented in Appendix E. The following table summarises the outcome of the analyses.

Table Summarising assessment of test data for Human receptors

Analysis tables	Receptor group	Critical receptor	CLEA model	Inorganic contaminants	Organic contaminants (PAH)
1 &2	Current and future site users (including off site receptors)	Recreational site users (possibly a child)	POSpark model (initial/ conservative assessment)	Cyanide (total) and Lead	No exceedances
3 & 4	Construction operatives	Adult	Industrial / commercial	Cyanide (total)	No exceedances

Table 8.7.5.1

8.7.5.1.2 With reference to Tables 1 to 9 in Appendix E, analysis of chemical test data with respect to critical receptors for current and future site uses, compared to a conservative Public Open Space land use model, indicates all measured concentrations of selected contaminants and 95 percentile upper confidence limits (UCL) are below relevant guideline values with the exception of cyanide (total) and lead, which are discussed below.

8.7.5.1.3 Elevated concentrations of cyanide (total) are associated with a sample of landfill material from BH09 at 7m depth and a shallow (0.1m depth) taken from TP09. The elevated lead concentration was also recorded in TP09 at 0.1m.

8.7.5.1.4 The highest, elevated concentration of cyanide was recorded in BH09, measured at 148mg/kg compared to a threshold value of 34mg/kg. At this location, we note that free cyanide (the more toxic form of cyanide) was measured at below detectable limits. In addition, the elevated concentration was taken from a sample located at 7m, within Cell 1 of the infilled landfill. Such levels are not unexpected. With the sample recorded at depth, and beneath surface capping layer, the recorded concentration, is not considered to present a significant risk of harm to identified human receptors.

8.7.5.1.5 In TP09, located at the eastern boundary of the site, the elevated concentration of cyanide was recorded at 79mg/kg (compared to threshold of 34mg/kg) whilst lead was measured at 5010mg/kg compared to the threshold of 1400mg/kg. Elsewhere lead concentrations ranged between 12-1010mg/kg but are generally below 500mg/kg. The chemical profile of the sample here is substantially different from elsewhere on site and contains significantly higher lead, cyanide and zinc concentrations compared to elsewhere, indicative of steel works waste. We note that the sample comprised dark grey, fine sand, reminiscent of blast furnace by-product. Based on testing and observations from across the site, this material is not substantially extensive near surface, but is present at depth across the site and within the landfill. The existing capping/near surface soils largely minimises the risk of harm to current users of the site. Following the introduction of a development platform/capping across the site, the risk to end users will be minimised further.

8.7.5.2 VOCs & SVOCs

8.7.5.2.1 Seven samples were scheduled for testing of volatile organic compounds (VOC) and semi-volatile organic compounds (sVOC). The majority of the test results produced results which are below the limits of detection for the test or below available threshold values. The following table summarises the contaminants and concentrations recorded, where published threshold values are not available.

Summary of Detected VOCs and/or SVOCs (published threshold unavailable)

Contaminant	Type	Location	Depth (m)	Limit of detection (mg/kg)	Concentration (mg/kg)
sec-Butylbenzene	VOC	TP23	0.70	<0.005	0.052
2-Methylnaphthalene	SVOC	BH05	0.10	<0.1	0.2
		BH09	7.00	<0.1	0.3
		TP10	2.00	<0.1	0.2
		TP19	0.10	<0.1	0.3
Carbazole	SVOC	TP10	2.00	<0.1	0.1

		TP19	0.10	<0.1	2
Dibenzofuran	SVOC	BH09	7.00	<0.1	0.2
		TP10	2.00	<0.1	0.1
		TP19	0.10	<0.1	2

Table 8.7.5.2

8.7.5.2.2 Five of the seven samples tested resulted in concentrations marginally above detectable limits. Such marginal concentrations were not concurrent with discernible odours or staining and are not considered to present a significant risk of harm to human receptors at the concentrations recorded.

8.7.5.3 Organic contaminants (petroleum hydrocarbons and MTBE)

8.7.5.3.1 None of the measured concentrations of TPH, BTEX or MTBE exceed the relevant guidelines, and thus are not considered to present a potential risk to human receptors. The following table summarises the outcome of the analysis.

Table summarising assessment of test data for Human receptors

Analysis table	Receptor group	Critical receptor	CLEA model	TPH/MTBE/BTEX contaminants
8	Current and future site users	POSpark adopted	POSpark adopted	No exceedances
9	Construction operatives	Adult	Industrial /commercial	No exceedances

Table 8.7.5.3

8.7.5.4 Asbestos

8.7.5.4.1 In addition to chemical testing, 15 samples of Made Ground were scheduled for determination of the presence/absence of asbestos. One of the samples, taken from TP18 at 1.0m(within landfill cell 5) produced a positive result with bundles of chrysotile fibres. Quantification recorded the asbestos was at a low concentration of 0.003%. Such a result is not unexpected. A defined 'capping layer' some 0.7m thick is present above the infill material in this location, and no asbestos has been recorded at shallow depth across the site, including in the sample from 0.2m in TP18. Details of the sample/test locations and test results for asbestos are summarised below.

Summary of asbestos identification and quantification analysis

Location	Depth (m)	Asbestos Identification	ACM Type	Quantification (%)
TP18	1.0	Chrysotile	Chrysotile present as bundles	0.003
TP02	0.2	No asbestos detected	-	-
TP04	0.2	No asbestos detected	-	-
TP07	0.2	No asbestos detected	-	-
TP09	0.2	No asbestos detected	-	-
TP13	0.2	No asbestos detected	-	-
TP15	0.2	No asbestos detected	-	-
TP16	0.2	No asbestos detected	-	-
TP17	0.2	No asbestos detected	-	-
TP19	1.0	No asbestos detected	-	-
TP20	0.2	No asbestos detected	-	-
TP21	0.2	No asbestos detected	-	-

TP23	0.1	No asbestos detected	-	-
TP27	0.1	No asbestos detected	-	-
BH09	0.1	No asbestos detected	-	-

Table 8.7.5.4

8.7.5.4.2 Thus, asbestos fibres do not appear to be prevalent within shallow soils. Whilst buried at depth, asbestos fibres do not pose a risk of becoming respirable and thus do not present a significant risk of harm to human receptors on site.

8.7.6 Evaluation of test data – Vegetation

8.7.6.1 Comparison of test data with guideline values is presented on Tables 5 and 6 in Appendix E. We note that, largely the result of the complexities of the effects of soil contamination on different plant species, there are not widely accepted thresholds for contamination with respect to vegetation. BGP5 threshold criteria have been published historically for zinc and copper, and we note that significant concentrations of zinc have been recorded across the site. Such concentrations are not unexpected and are associated with the former steel works waste. A single elevated concentration of total cyanide has also been recorded compared to a human threshold criteria for industrial site use (as described in 8.7.5.1.5), but again, the effect of such contamination on vegetation is a factor of the specific plant species.

8.7.6.2 It is difficult to quantify the phytotoxity of a contaminant as large variations exist between plant tolerances, soil effects and synergistic/antagonistic reactions between chemicals. With respect to current vegetation, this will be largely stripped/removed from site in order to prepare the development platform. Vegetation will however be retained in the south as part of the wildlife corridor and we further understand that this area will not be disturbed so as to maintain the ecological habitat. We therefore recommend that the findings of this report are provided to the ecologist for confirmation of the suitability of soils to remain in situ, and that this is the preferred strategy to retain the ecological habitats on site.

8.7.7 Evaluation of test data – Controlled waters

8.7.7.1 Inorganic contaminants

8.7.7.1.1 With reference to the laboratory test certificates and controlled waters screening sheets in Appendix E (Tables T7a and T7b), none of the measured concentrations of inorganic contaminants exceed recognised threshold values, with the exception of copper, lead, nickel and zinc.

8.7.7.1.2 When compared to AA_EQS threshold values, the majority of water samples taken from the site (both groundwater and surface water samples taken off site to the east) produced elevated concentrations of copper, lead, nickel and zinc. Notably, none of the leachate samples produced positive/significant results for these contaminants, indicating it could be indicative of the wider groundwater quality. We would note however that high zinc concentrations in particular have been identified within soils both on site and off site, attributable to the iron and steel works blast furnace waste.

8.7.7.1.3 To assess the groundwater quality in the wider area, for comparative purposes, we have reviewed available monitoring data undertaken and reported by the Environment Agency on the Water Quality Archive online portal (under EA open datasets and Open Government Licence v3.0). A number of monitoring points are present close to the site, including:

- Gretton Brook, with a sampling location 1km WNW from the site.
- Willow Brook, 600m SW of the site.
- Willow Brook, spring, 700m E of the site.

8.7.7.1.4 With reference to likely groundwater flow directions, Gretton Brook to the WNW and Willow Brook to the SW are considered to be representative of general groundwater conditions up hydraulic gradient from the site, whilst the spring at Willow Brook to the east is potentially representative of groundwater/receiving watercourse down hydraulic gradient from the site. Concentrations of the copper, lead, nickel and zinc are relatively consistent in groundwater samples on site compared to all three monitoring sites (where data is available). In addition, all of the recorded concentrations of copper, lead, nickel and zinc within groundwaters on site, whilst above the EQS thresholds, are well below UK DWS values. On the basis that groundwater and surface water samples taken from across the site and in the surrounding area show a similar chemical profile for these metals, as all values are below UK DWS thresholds and as no leachate tests from shallow soils on site presented positive results for these metals, we are of the opinion that concentrations of these metals in waters are not considered to present a significant risk to identified water receptors.

8.7.7.1.5 Elevated, leachable concentrations of mercury have been recorded in three of the six samples scheduled for testing. Recorded concentrations range between 0.06-0.64µg/l compared to a MAC-EQS of 0.07µg/l. Notably, no positive occurrence of mercury has been recorded in water samples taken from the site and all leachable concentrations are again below the UK DWS threshold of 1µg/l. We are thus of the opinion that the potentially leachable concentrations of mercury on site are not resulting in significant groundwater concentrations and thus are not considered to present a significant risk to identified water receptors.

8.7.7.1.6 Substantial concentrations of sulphate have been recorded within all 4 groundwater samples taken from the site, with all other samples (surface water/leachate) reporting lesser concentrations. Elevated groundwater samples have been recorded at concentrations of 1210-2560mg/l compared to an AA-EQS of 400mg/l. The four groundwater samples have been taken from across the site both toward the west and eastern extremes of the site and within the closed landfill. The most substantial concentrations are reportedly from BH04 and BH09 located outside the closed landfill and at the western and eastern peripheries of the site. With reference to wider area water quality (described in 8.7.8.1.3), sulphate concentrations have been recorded within Willow Brook some 700m to the east of the site at similar concentrations to those recorded on site (in the region of 500-3000mg/l). The concentrations of sulphate on site, whilst likely reflective of the broader Corby area, will required further observation/consideration.

8.7.7.1.7 Groundwater samples have also recorded substantial concentrations of ammonia/ammoniacal nitrogen. The table below indicates the recorded concentrations compared to surrounding site data:

Summary of ammoniacal nitrogen concentrations

Location	Surface or ground water (SW/GW)	Concentration range for ammoniacal nitrogen (mg/l)	Location on site/relative to the site
BH04	GW	5.0	Central eastern location
BH06	GW	3.3	Central area (landfill cell 2)
BH08	GW	190.0	Central western area of the site
BH09	GW	70.1	Southern area (landfill cell 1)
SP02	SW	0.3	Willow Brook, 70m east
Gretton Brook	GW	1-24	1km west-northwest (up hydraulic gradient)
Willow Brook	SW	0.3-5	600m southwest (up hydraulic gradient)
Pen Green	SW	10.6	620m southwest (up hydraulic gradient)
Willow Brook	SW	5-38	700m east (down hydraulic gradient)

Table 8.7.7.1

8.7.7.1.8 The table above indicates that the ammoniacal nitrogen concentrations in BH04 and BH06 located toward the east of the site are within the range of the surrounding area. Concentrations are substantially higher at BH08 and BH09 locations, both situated in the west of the site, only one of which is beneath the closed landfill. Based on the hydrogeological setting and groundwater flow directions (though based on a single round of testing), such concentrations could be attributable to migratory contamination from off site in the west or be a result of localised conditions which do not appear to be widespread in the east. The occurrence of ammonia and moreover ammoniacal nitrogen is not uncommon within landfills, and in reality, is likely a combination of migratory contamination, historic conditions and onsite landfilling.

8.7.7.1.9 An ammonia spring/outfall is located upstream in Willow Brook, some 700m east of the site. It is thought that the 'spring' is of masonry and pipework construction and was used as a direct outfall for ammonia from the former blast furnace settling ponds in the area, though the source has not been confirmed/traced. The contribution of ammonia/ammoniacal nitrogen from site conditions to surface waters within Willow Brook, is thus considered to be negligible compared to historic site uses and the wider surface water quality.

8.7.7.1.10 Positive occurrences of total cyanide have been recorded in all water samples taken from the site (groundwater and surface water), in the range of 8 to 188µg/l. Two of the six leachate samples produced a positive result for total cyanide. There is not a current EQS threshold for total cyanide, but all reported test results (water and leachates) fell below the UK DWS threshold of 50µg/l except one; the water sample taken from BH09 in the southwest.

8.7.7.2 Organic contaminants (polycyclic aromatic hydrocarbons)

8.7.7.2.1 With reference to Tables T7a and T7b in Appendix E, none of the reported concentrations of PAHs (leachates or water) have been recorded at significant concentrations or exceed relevant threshold criteria with the exception of recorded concentrations of fluoranthene. Such concentrations range between <0.01 to 0.06µg/l compared to an AA-EQS of 0.0063µg/l. Notably, 4 of the 5 exceedances have been reported as leachable concentrations, though have not been readily recorded within water samples, with only one positive occurrence in the water sample from BH06 (recorded at 0.01µg/l). None of the reported concentrations of PAHs exceed available drinking water thresholds.

8.7.7.3 Organic contaminants (total petroleum hydrocarbons)

8.7.7.3.1 None of the measured concentrations of TPH, BTEX, MTBE or trimethylbenzene exceed the relevant guidelines with the exception of a single, marginal concentration of the aliphatic carbon fraction EC>06-EC08 from BH08, with a reported concentration of 11µg/l compared to an initial screening EA threshold of 10µg/l. As no further elevated concentrations have been recorded on site within waters, we are of the opinion that soils on site do not present a significant risk of harm to water receptors by virtue of hydrocarbon contaminants.

8.7.7.4 Summary and conclusions

8.7.7.4.1 With respect to human receptors, none of the concentrations of contaminants recorded near surface on site are considered to present a significant risk of harm to current or proposed site users. The installation of a development platform above localised impacted soils situated at shallow depth will minimise the risk further. Consideration to the short-term generation of dusts during redevelopment and mitigation measures to limit this impact is strongly recommended.

8.7.7.4.2 Vegetation will be retained on site toward the south. Plant species have varying tolerances to chemicals in soils though we note that the existing vegetation does not appear to be detrimentally impacted and is growing wild. Further, chemical concentrations have not been reported at concentrations which indicate an immediate or significant risk to vegetation.

8.7.7.4.3 Leachable concentrations of chemicals from shallow soil samples are not considered to present an ongoing risk to existing surface or groundwater receptors. Furthermore, ground conditions toward the north and underlying the southern landfill cells, comprise largely cohesive type soils which will restrict the downward migration of leachate.

8.7.7.4.4 Significant concentrations of some heavy metals, sulphate and cyanide have been recorded within waters on site, compared to respective EQS threshold criteria, though concentrations largely remain below UK Drinking Water Standard thresholds. Notably, the recorded concentrations of metals, sulphate and cyanide are largely comparable to the wider Earlstree area water quality.

8.7.7.4.5 Concentrations of ammoniacal nitrogen are high toward the west of the site, potentially the result of a localised ground conditions, or resulting from historic ground conditions and/or possibly partly attributable to migratory contamination from the west. Such concentrations are not currently considered to present a significant risk of harm to the wider water network but further monitoring and observation of conditions during earthworks is recommended to ensure conditions are not exacerbated.

8.7.7.4.6 The installation of a development platform has the potential to induce leachate generation through consolidation of the fill material in the short term. We note however that soils on site were largely dry, with limited perched water in the Made Ground and were largely cohesive at depth, which will limit downward migration of induced leachate. Further, the southern section of the site (above the closed landfill) will receive less waste than the northern counterpart and will remain untouched in the area of the wildlife corridor. In the longer term, the platform and subsequent commercial development, will provide a further barrier to water infiltration and will divert surface water directly to attenuation ponds and then Willow Brook, thus preventing the infiltration and run-off pathways through contaminated soil.

8.7.7.4.7 Overall, the inclusion of development platform and subsequent potential for redevelopment will remove the vast majority of pathways between impacted soils and identified receptors. Careful consideration and mitigation measures to minimise the risk to construction operatives and off-site receptors during the early stages of site preparation in particular is required and mitigation measures to limit the exposure risk to such receptors is required.

8.7.7.4.8 Further monitoring data will increase the confidence in the above assessments, and we recommend that further rounds are undertaken to inform the risk analysis in due course.

8.8 Updated conceptual model

8.8.1 Having now completed analysis of laboratory testing, we can now update our conceptual model which is presented in Appendix F. Further, we have produced a schematic conceptual model for proposed conditions which presents a visual representation of the change in pathways and receptors following installation of the development platform. This is presented on Drawing 06.

8.8.2 Based on the conceptual model, most of the assessed risks are low and do not warrant remedial action with the exception of the risks to construction operatives and off site receptors during the initial earthworks phase, and the potential risk associated with water quality. Such risks exceed the low category and in our opinion require ongoing monitoring and/or mitigation measures during proposed earthworks to refine and minimise the risk.

8.8.3 We also note that the above conclusions and observations are based on a single monitoring round. Further sampling (say minimum of 3 rounds, to include the full suite of inorganic, organic and water quality parameters) is recommended to confirm the assessments made herein and refine the risk assessment if necessary.

8.9 Mitigation measures

8.9.1 Based on the above, though subject to further water monitoring on site as outlined in 8.8.3, the following action is likely to be recommended:-

a) Production of and adherence to an earthworks method statement, which includes measures to minimise dust generation and vehicle transportation of site soils onto roads. Such measures might include soil dampening during initial earthworks preparation phases, compulsory wheel washing and regular street cleaning.

b) Adoption of adequate hygiene precautions for construction operatives.

c) Acceptance of strictly inert material for the development platform to minimise the potential future risk of harm to ground and surface water receptors.

d) Ground and surface water monitoring throughout and following installation of the platform to confirm ground and surface water quality conditions are not exacerbated as a result of the works.

8.9.2 The extent, position, frequency and duration of water monitoring will be subject to consultation with the Environment Agency. Where anticipated conditions are exceeded, a contingency action plan will need to be in place to inform the Agency and produce and undertake appropriate remedial measures.

8.9.3 The earthworks method statement will be subject to review and acceptance by the Local Authority and Environment Agency. Again, we recommend a contingency action plan is in place prior to the onset of works.

8.10 Risk assessment summary and recommendations

8.10.1 Based on our assessments described above, we can provide the following summary and recommendations for each identified receptor.

8.10.2 Current site users

8.10.2.1 Based on current site use and localised nature of shallow soil contamination, we are of the opinion that the site represents a low risk of causing significant harm to the health of identified current users of the site.

8.10.3 End users

8.10.3.1 Following installation of an inert, development platform across the majority of the site together with maintenance of a wildlife corridor in the south, the site is considered to represent a low risk of causing harm to the health of future end users of the developed site.

8.10.4 Adjacent site users

8.10.4.1 Following production of and adherence to strict measures to minimise dust emissions during earthworks and from access roads onto site, we consider the risk of harm to adjacent site users to be low.

8.10.5 Construction operatives and other site investigators

8.10.5.1 The risk of damage to health of construction operatives and other site investigators is, in our opinion moderate and can be minimised by taking adequate hygiene precautions. Such precautions would include:-

- Wearing protective clothing particularly gloves to minimise ingestion from soil contaminated hands.
- Avoiding dust by dampening the soils during the earthworks.
- Wearing masks if processing produce dust.
- Any other measures detailed in the site specific works method statement

8.10.5.2 Guidance on safe working practices can be obtained from the following documents

- The Health and Safety Executive Publication *"Protection of Workers and the General Public during the Development of Contaminated Land"* (HMSO) and

- *"A Guide to Safer Working on Contaminated Sites"* (CIRIA Report 132).

8.10.5.3 In addition, reference should be made to the Health and Safety Executive. In all cases work shall be undertaken following the requirements of the Health and Safety at Work Act 1974 and regulations made under the Act including the COSHH regulations.

8.10.6 Controlled waters

8.10.6.1 The installation of a development platform is not considered to present a significant risk of exacerbating ground and surface water quality on or close to the site. Monitoring of the groundwater quality during and following the platform installation would be required to confirm this risk. A contingency action plan will be required in the event that conditions detrimentally change during works.

8.10.7 Vegetation

8.10.7.1 The risk of harm to vegetation which is to be retained on site within the wildlife corridor in the south as the result of proposed earthworks is considered low.

8.11 On Site Monitoring

8.11.1 We have attempted to identify the potential for chemical contamination on the site, however, areas, which have not been investigated at this stage, may exhibit higher levels of contamination. If such areas are exposed during site preparation works, we will be pleased to re-attend site to assess what action is required to allow the development of safely proceed.

9 Gaseous contamination

9.1	Legislative framework
9.2	General
9.3	Assessment of source of gases
9.4	Gas migration
9.5	Conceptual model
9.6	Development categorisation
9.7	Monitoring observations
9.8	Classification of site characteristic gas situation and summary of gas protective measures

9.1 Legislative framework

9.1.1 There is currently a complex mix of documentation relating to legislative and regulatory procedures on the issue of contamination and it is not considered a purpose of this report to discuss the detail of these regulations. Essentially, Government Policy is based on *'suitable for use approach',* which is relevant to both the current and proposed future use of land. For current use Part IIA of the Environmental Protection Act 1990 provides the regulatory regime (see Section 8.1 above). The presence of harmful soil gases could provide a 'source' in a 'pollutant linkage' allowing the regulator (Local Authority) to determine if there is a significant possibility of harm being caused to humans, buildings or the environment. Under such circumstances the regulator would determine the land as 'contaminated' under the provision of the Act requiring the remediation process to be implemented with the Environment Agency responsible for enforcement.

9.1.2 The Town and Country Planning (General Development Procedure) Order 1995, requires the planning authority to consult with the Environment Agency before granting planning permission for development on land within 250 metres of land which is being used for deposit of waste, (or has been at any time in the last 30 years) or has been notified to the planning authority for the purposes of that provision.

9.1.3 Building control bodies enforce compliance with the Building Regulations. Practical guidance is provided in Approved documents, one of which is Part C, '*Site preparation and resistance to contaminants and moisture'* which seeks to protect the health, safety and welfare of people in and around buildings and includes requirements for protection against harm from soil gas.

9.2 General

9.2.1 The following assessment relates to the potential for, and the effects of, gases generated by biodegradable matter. The potential for the development to be affected by radon gas is considered in Section 3 above. The principal ground gases are carbon dioxide (CO_2) and methane (CH_4). The following table provides a summary of the effects of these gases when mixed with air.

Significant gas concentrations in air		
Gas	**Concentration by volume**	**Consequence**
Methane	0.25%	Ventilation required in confined spaces
	5 - 15%	Potentially explosive when mixed with air
	30%	Asphyxiation
	75%	Death after 10 minutes
Carbon Dioxide	0.5%	8-hour long term exposure limit (LTEL) (HSE workplace limit)
	1.5%	15 min short term exposure limit (STEL) (HSE workplace limit)
	>3%	Breathing difficulties
	6 – 11%	Visual distortion, headaches, loss of consciousness, possible death
	>22%	Death likely to occur

Table 9.2.1

9.2.2 Following the current Building Regulations Approved Document C1, Section 2 '*Resistance to Contaminants*' (2004 incorporating 2010 and 2013 amendments) a risk assessment approach is required in relation to gaseous contamination based on the source-pathway-receptor conceptual model procedure. We have adopted procedures described in the following reference documents for investigation and assessments of risk of the development being affected by landfill type gases (permanent gases) and if appropriate the identification of mitigation measures.

- BS 10175:2011+A2:2017 *'Investigation of potentially contaminated sites- Code of Practice'*
- BS 8576:2013 '*Guidance on investigations for ground gas – Permanent gases and Volatile Organic Compounds (VOCs)'*
- BS 8485:2015+A1:2019 '*Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings'*
- CIRIA Report C665 '*Assessing risks posed by hazardous ground gases to buildings*' (2007)
- CL:AIRE Research Bulletin RB17 *'A pragmatic approach to ground gas risk assessment'* (November 2012)

Whilst we have followed the guidance and recommendations of BS 8576, we have used BS 8485:2015+A1:2019 to derive recommendations for protective works.

9.2.3 An assessment of the risk of the site being affected by ground gases is based on the following aspects:

a) Source of the gas
b) Investigation information
c) Migration feasibility
d) Sensitivity of the development and its location relative to the source

9.3 Assessment of source of gases

9.3.1 General sources

9.3.1.1 The following table summarises the common sources of ground gases and parameters affecting the generation of ground gases:

Source and control of gases	
Type	**Parameters affecting the rate of gassing**
Landfills	Portion of biodegradable material, rate reduces with time
Mineworkings	Flooding reduces rate of gassing
Dock silt	Portion of organic matter
Carbonate deposits	Ground / rainwater (acidic) reacts with some carbonates to produce carbon dioxide.
Made Ground	Thickness of Made Ground and proportion of degradable organic matter
Naturally deposited soils/rocks	Portion of organic matter

Table 9.3.1

9.3.1.2 The rate of decomposition in gas production is also related to atmospheric conditions, pH, temperature, and water content / infiltration.

9.3.1.3 As the site is not within a dockland environment or an area affected by mineworkings, and near surface soils do not exhibit high carbonate content, then potential gas sources are limited to landfills and/or soils with a high proportion of organic matter.

9.3.2 Landfill and infilled ground sources

9.3.2.1 Waste Management Paper 27 (1991) produced by the Department of the Environment '*Control of Landfill Gases'* contains the recommendation to avoid building within 50m of a landfill site actively producing large quantities of landfill type gases and to carry out site investigations within a zone 250m beyond the boundary of a landfill site.

9.3.2.2 Based on multiple sources (as described in Section 3), we are aware the site and surrounding area has been extensively quarried and infilled. The site itself comprises a former landfill site which includes Category A (solid inert), B (solid, semi inert), C (solid putrescible) and D (difficult waste). Liquid waste ponds were also present on site. The landfill operated until 2004 and does not have any landfill engineering features such as, liners, barriers or passive/active venting.

9.3.2.3 Landfill gas monitoring previously undertaken (ref section 3.12.4) has recorded generally low levels of methane (up to 2.5%) and fluctuating (though generally low) levels of carbon dioxide, with sporadic and infrequent, spike occurrences of up to 18%, but generally no more than 5%. On this basis, based on current information, the site is not considered to be "actively producing large quantities of landfill type gas" (as outlined in WM 27 – ref 6.3.2.1), however the potential and residual risk of ground gases requires further consideration.

9.3.3 Soil conditions

9.3.3.1 Ground conditions on site comprise a mixture landfill material and iron and steel works waste in excess of 16m thick, which contained noticeable organic matter such as decomposing wood, fabric, paper and fibrous material. Such soils have the potential to produce elevated quantities of carbon dioxide and/ or methane gas.

9.3.3.2 Based on the assessment of 'deep' geological conditions we are of the opinion that it is unlikely that the subject site would be affected by significant quantities of carbon dioxide and methane generated by natural soils/rocks at depth.

9.3.4 Source assessment summary

9.3.4.1 The following table summarises the possibility of a source of landfill type gases.

Source assessment summary

Potential source origin	Viability of source	Evidence
Landfills	Likely	Desk Study information Landfill on site and extending off site
Mineworkings	Unlikely	Desk Study information Geological conditions not amenable
Dock silt	Unlikely	Site remote from dockland environment
Carbonate deposits	Unlikely	Recorded and observed soil conditions do not indicate high concentrations of carbonates
Made Ground	Likely	Made Ground >16m thickness with TOC >5%
Naturally deposited Soils / rocks	Unlikely	Soils exposed in exploratory excavations did not exhibit high concentrations of organic matter

Table 9.3.4

9.3.4.2 Based on the above it there is a possibility of a source of potential landfill gases which may affect the subject site. On this basis, it is considered necessary to consider possible pathways for migration of ground gases from this potential source to the site.

9.4 Gas migration

9.4.1 Based on available data, we understand no engineering systems such as liners, barriers or passive/active gas venting was installed on site. Soil with the potential to generate landfill type gases have been identified on site and extending to the surface. The deposits are variable and will provide little resistance to vertical and lateral migration of landfill type gas. On this basis it is considered possible that the potential source of landfill type gases (identified in Section 9.3 above) will be occurring and that the site will naturally be venting to the atmosphere from surface in its current form.

9.4.2 The introduction of a potentially impermeable capping layer on site will limit the vertical migration pathway for gas migration. We would anticipate therefore a potential increase in lateral gas migration following redevelopment which requires further investigation and risk analysis.

9.5 Conceptual model

9.5.1 Based on the above, there is a potential source of landfill type gases, and a feasible migration pathway to the site via potentially permeable Made Ground. Our conceptual model is tabled below. On this evidence we are of the opinion that the site is at risk of being affected by ground gases (carbon dioxide / methane) sufficient to potentially cause harm to human end users of the site, construction operatives or indeed buildings. On this basis, we have installed monitoring standpipes in boreholes, and implemented a monitoring regime, generally following procedures described in BS8576:2013 to quantify the risk and, if appropriate, identify mitigation measures.

Conceptual model		
Potential source origin	**Potential pathway**	**Receptors at risk**
Landfills on site and extending off site	Vertical and lateral migration via imported fill materials and underlying fill.	End users Construction operatives
	Laterally via existing landfill material and natural soils	Adjacent site users and buildings

Table 9.5.1

9.6 Development categorisation

9.6.1 At the stage, it is proposed to construct a development platform on the site for potential, future, commercial/industrial redevelopment. A comprehensive and detailed risk analysis of gas potential and associated gas protection measures will be required in due course, including monitoring through the newly imported fill material. We have however undertaken a series of monitoring rounds on site to confirm the current gas levels on site, which are continuing to be monitored as part of the closed landfill permit agreement.

9.7 Monitoring observations

9.7.1 Seven new standpipes have thus been installed at the site in accordance with BS9576:2013, Section 9 (refer Drawing 08). Following BS8576:2013 (Figure 6) and CIRIA Report C665 (Tables 5.5a and 5.5b) we have assessed the site as medium risk of generation potential of source and have undertaken an initial 3 monitoring visits to confirm the gas concentrations.

9.7.2 We have thus obtained measurements of landfill type gases at atmospheric conditions in the range of 999mb to 1013mb and temperatures in the range of 21°C to 29°C. Essentially, we detected concentrations of methane in the range of 0.1 to 0.3% and concentrations of carbon dioxide measured in the range of 0.2% to 4.5%. Flow rates ranged between -0.5 and +0.2l/s. If flows were detected during our monitoring visits then these are recorded, but where no flow is detected then we have assumed flow at the detection limit of the monitoring equipment at 0.1l/s.

9.7.3 Gas monitoring results are summarised in Appendix G. Notably, concentrations are all within the anticipated range for the site and consistent with historic and ongoing monitoring of the landfill site.

9.8 Classification of site characteristic gas situation and summary of protection measures

9.8.1 Using test data and with reference to Table 4 of BS 8485:2015+A1:2019, the site would be classified as characteristic gas situation CS1.

9.8.2 Due to the relatively low levels of gasses record on site together with low flow rates, then the installation of new gas venting or protection measures alongside the installation of the development platform are not considered necessary at this stage.

9.8.3 With a characteristic situation of CS1, any new developments on site would not require specific gas protection. The importation of new inert material on site however will have the potential (albeit, likely low levels) to generate gases on site, so any future redevelopment will require monitoring within the newly installed fill to establish the site conditions and determine whether gas protection measures are required.

10 Further works

10.1	Further works
10.2	Landfill aftercare

10.1 Further works

10.1.1 Further groundwater monitoring is recommended to confirm and the refine the risk assessments made in Section 8. Subject to such monitoring, further actions are likely to be required to inform the redevelopment phase, and minimise the risk to identified receptors, including:-

a) Production of and adherence to an earthworks method statement, which includes measures to minimise dust generation and vehicle transportation of site soils onto roads. Such measures might include soil dampening during initial earthworks preparation phases, compulsory wheel washing and regular street cleaning.

b) Adoption of adequate hygiene precautions for construction operatives.

c) Acceptance of strictly inert material for the development platform to minimise the potential future risk of harm to ground and surface water receptors.

a) Ground and surface water monitoring throughout and following installation of the platform to confirm ground and surface water quality conditions are not exacerbated as a result of the works.

10.1.2 The extent, position, frequency and duration of water monitoring will be subject to consultation with the Environment Agency. Where anticipated conditions are exceeded, a contingency action plan will need to be in place to inform the Agency and produce and undertake appropriate remedial measures.

10.1.3 The earthworks method statement will be subject to review and acceptance by the Local Authority and Environment Agency. Again, we recommend a contingency action plan is in place prior to the onset of works.

10.2 Landfill aftercare

10.2.1 With reference to Paragraph 3.12.1, we note that North Brook Landfill Site (C17) is in definitive closure, and that ongoing reviews, water and gas monitoring and stability assessments are required, as outlined in Variation Notice number QP3799NL.

10.2.2 Aftercare for C17 is currently the responsibility of Tata Steel. During the construction of the new platform, Storefield will take over as Operator and undertake any necessary reviews, reports, monitoring and stability assessments required. Such works will be carried out in conjunction with the further works detailed above.

10.2.3 The existing monitoring infrastructure will be maintained where possible but if monitoring equipment is damaged or lost, it will be replaced as necessary, in discussion with the Environment Agency, following the protocols of the permit/variance notice. We note that the monitoring infrastructure is largely along the southern boundary, within the proposed ecological area and thus will remain largely unaffected by works on the wider site.

10.2.4 Following completion of the proposed land raise and associated works, the permit (and associated responsibilities) will be returned to Tata Steel. We understand it is proposed to surrender the license for C17 in due course, and that discussions and options for surrender are ongoing between Tata Steel and the Environment Agency.

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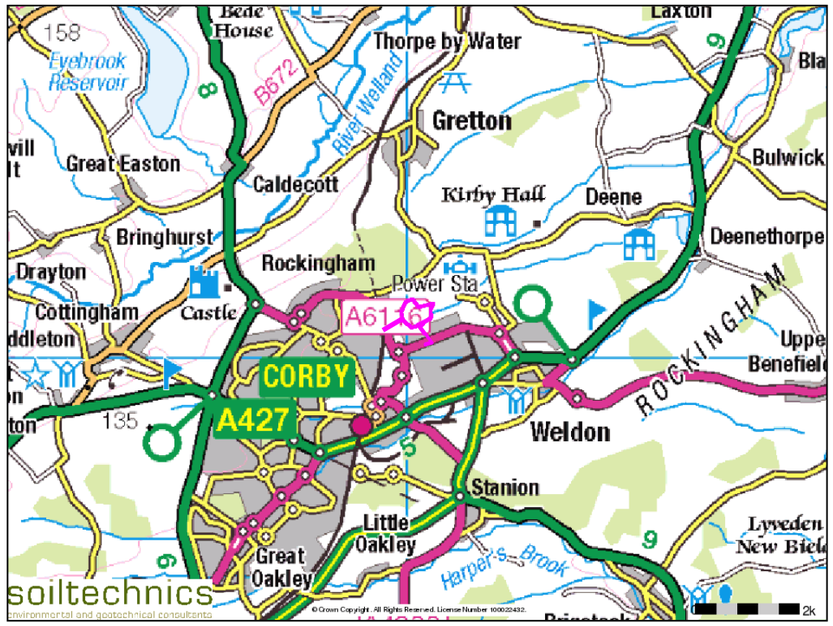
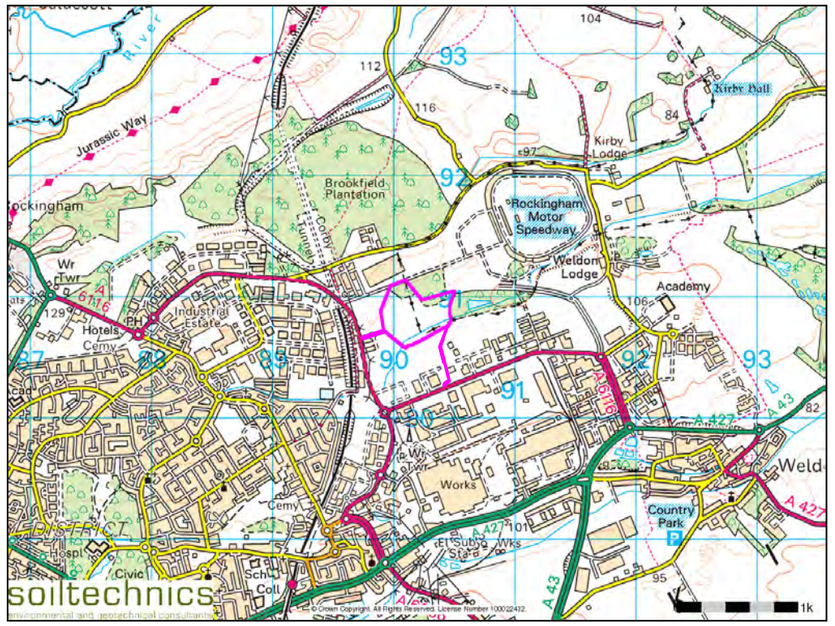
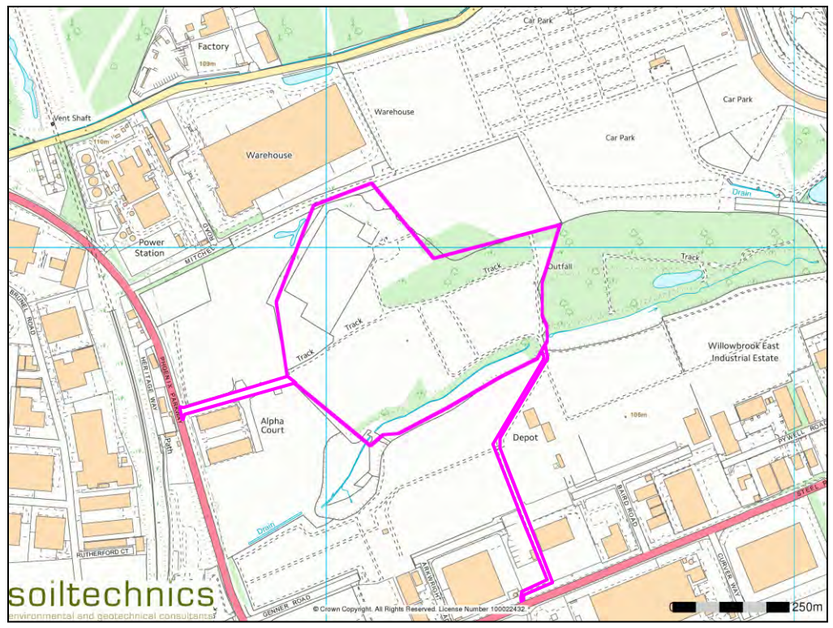


Neighbourhood extract from Ordnance Survey map



Town extract from Ordnance Survey map



Detail extract from Ordnance Survey map

Title	Scale	Drawing number
Site location plan	Not to scale	01

Rockingham Enterprise Area, Corby
STP3996D

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Industrial unit
Undeveloped land
Undeveloped land
To Rockingham Speedway
Mitchell Road
Proposed CNOR
(disused/under construction)
Roundabout
Former liquid waste ponds
Former turning/ parking area
Area inaccessible to topographic survey due to steep banks
Area inaccessible to topographic survey due to steep banks
Former access tracks
Woodland
(steep banks)
Woodland
Rough grassland
Former access tracks
Rough grassland
Soil mound
Cell 1
Cell 2
Cell 3
Cell 4
Cell 5
Entrance to site
Napier Road
Soil mound
Levels fall sharply towards Willow Brook
Access from Steel Road in the south
Retail/commercial
Rough grassland
Area inaccessible to topographic survey due to steep banks
Car park
Retail/commercial
Attenuation area
Car park
Car park
Willow Brook inaccessible to monitoring immediately southwest of the site

BH01 BH02 BH03 BH03a BH04 BH05 BH06 BH08 BH09
TP01 TP02 TP03 TP04 TP05 TP06 TP07 TP08 TP09 TP10 TP11 TP12 TP13 TP14 TP15 TP16 TP17 TP18 TP19 TP20 TP21 TP22 TP23 TP24 TP25 TP26 TP27
LG1 LG2 LG3 LG4 LG5 LG6 LG7 LG8 LG10 LG11
SP02
1 2 3 4 5 6 7 8 9 10

Key

- BH — Approximate location of proposed borehole formed by Cable and Tool percussive techniques
- TP — Approximate location of proposed trial pit excavation
- SP — Approximate location of proposed water sampling points
- Historic borehole
- Planning application boundary
- Area of site lying within Corby Borough Council
- Area of site lying within East Northampton Council
- 1 — Approximate location and orientation of photographic reference

Title	Scale	Drawing number
Plan showing existing site features and location of exploratory points	1:1250 at A1	02

Report Ref: STP3996D-G01
Revision: 01
September 2020

Rockingham Enterprise Area, Corby
STP3996D

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Potential for future development

Potential for future development

A

Ch 0m

B

Ch 0m

FFL 114
3000m²

FFL 113
3000m²

FFL 115
4000m²

Final phase
(potential retail/commercial use)

Final phase
(potential retail/commercial use)

Ecological offsetting

FFL 114.5
2000m²

FFL 112
2000m²

FFL 115
2000m²

FFL 109
2000m²

FFL 110
1500m²

FFL 110
3000m²

FFL 110
4000m²

Dry Attenuation Basin No. 2

FFL 110.5
2000m²

FFL 111
4000m²

Retained Open Mosaic Habitat

Potential land parcel for future development

Access from Phoenix Parkway

FFL 109
4000m²

Retained ecological habitat

Access from Steel Road

Dry Attenuation Basin No. 1

Potential land parcel for future development

A

B

Title	Scale	Drawing number
Plan showing potential development schematic and section locations	1:1500 at A1	03

Report Ref: STP3996D-G01
Revision: 01

September 2020

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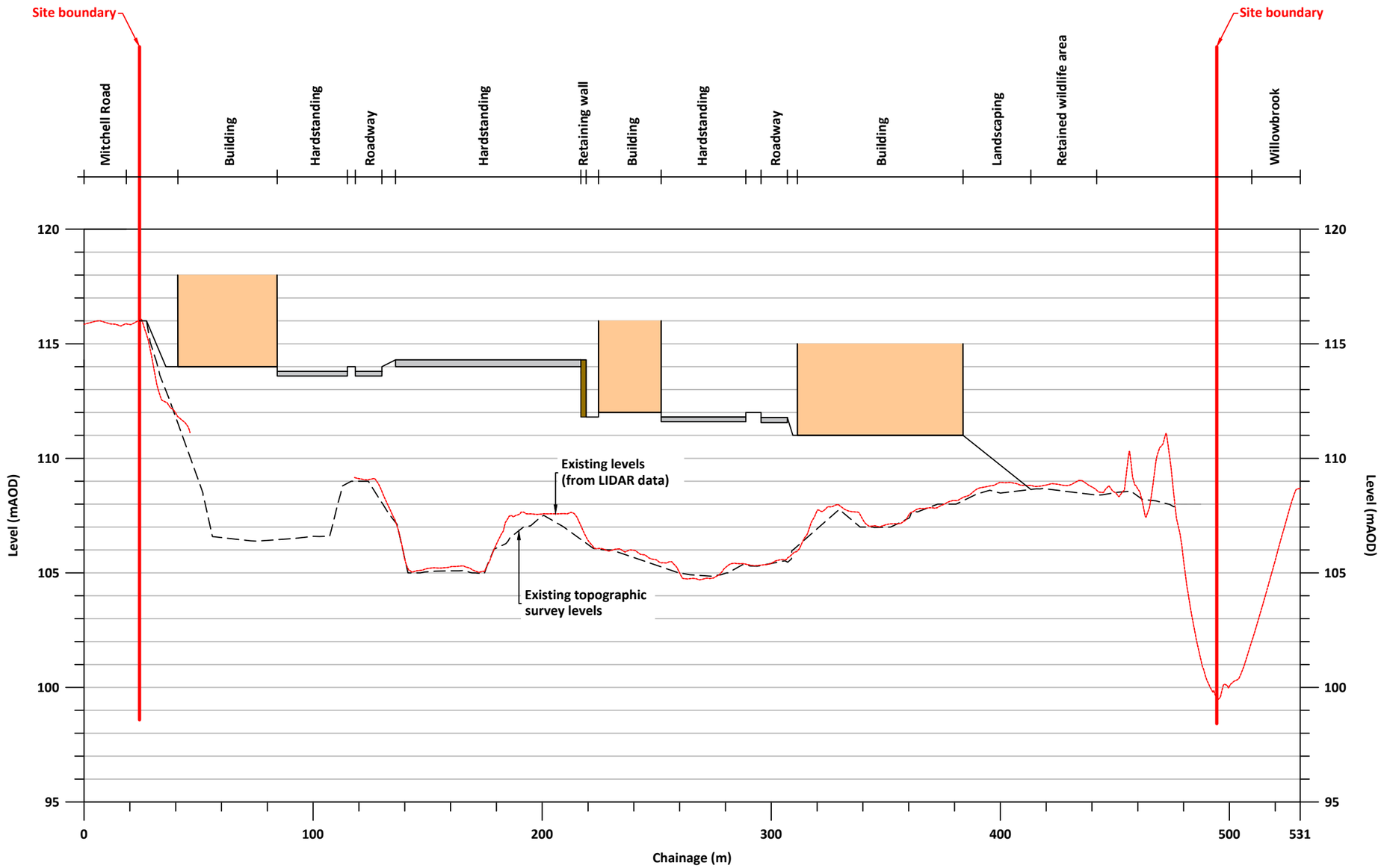

Notes

1. Section location indicated on Drawing 03
2. LIDAR data has been obtained from https://data.gov.uk/ (LIDAR Composite DSM - 25cm) licensed under the Open Government Licence v.3.0

Title	Scale	Drawing number
Section A-A indicating existing and potential proposed site levels	1:2000 at A3 (horizontal) 1:200 at A3 (vertical)	04a

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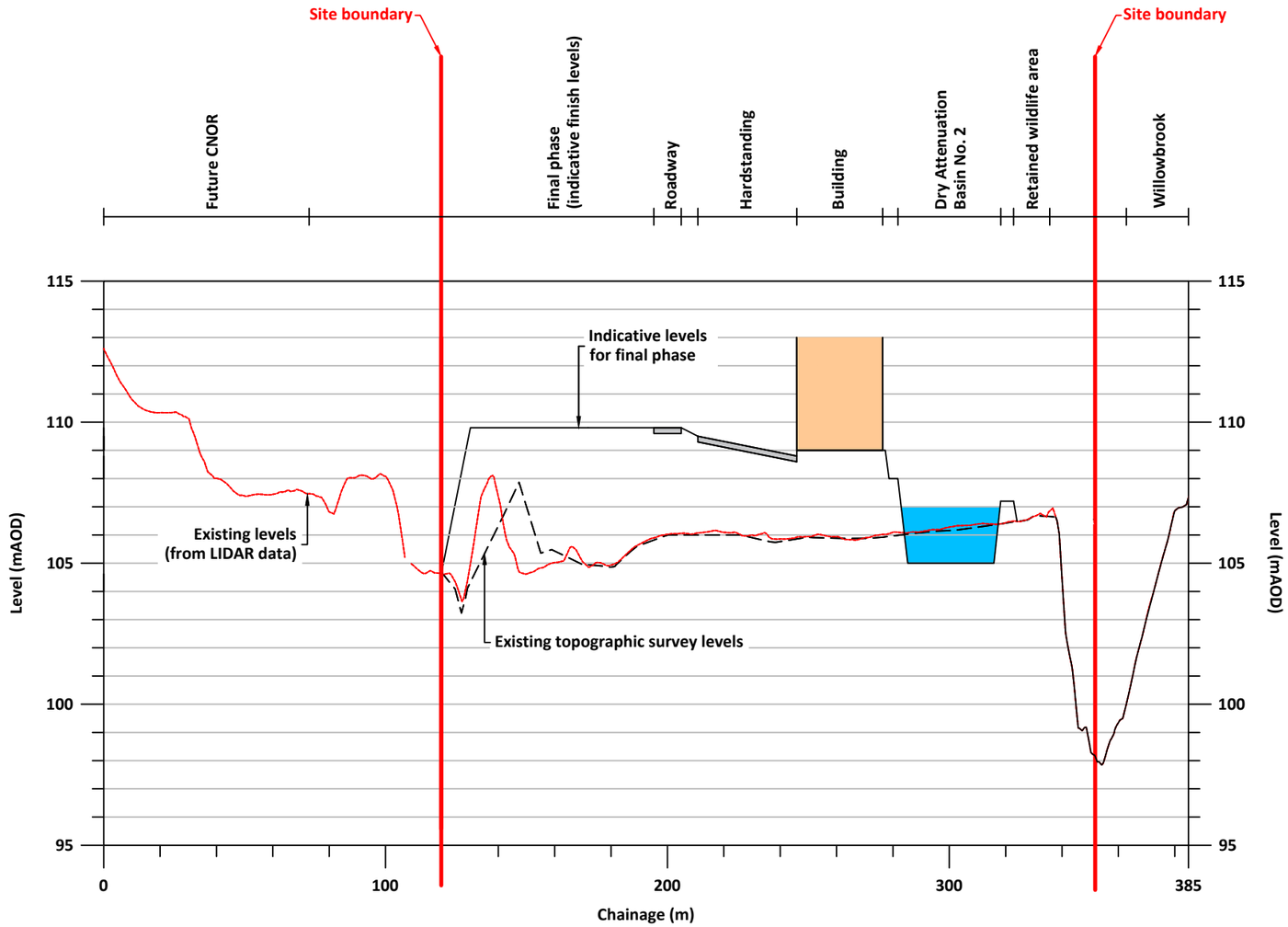

Notes

1. Section location indicated on Drawing 03
2. LIDAR data has been obtained from https://data.gov.uk/ (LIDAR Composite DSM - 25cm) licensed under the Open Government Licence v.3.0

Title	Scale	Drawing number
Section B-B indicating existing and potential proposed site levels	1:2000 at A3 (horizontal) 1:200 at A3 (vertical)	04b

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Sources

- S1 Former railway land
- S2 Previous tanks stored on site
- S3 Iron and steel works waste (on site)
- S4 Landfill site - including special waste and liquid waste
- S5 General Made Ground (off site)
- S6 Adjacent landfill sites (as above)
- S7 Industrial site - uses including metal fabricator
- S8 Localised hydrocarbon odours and staining

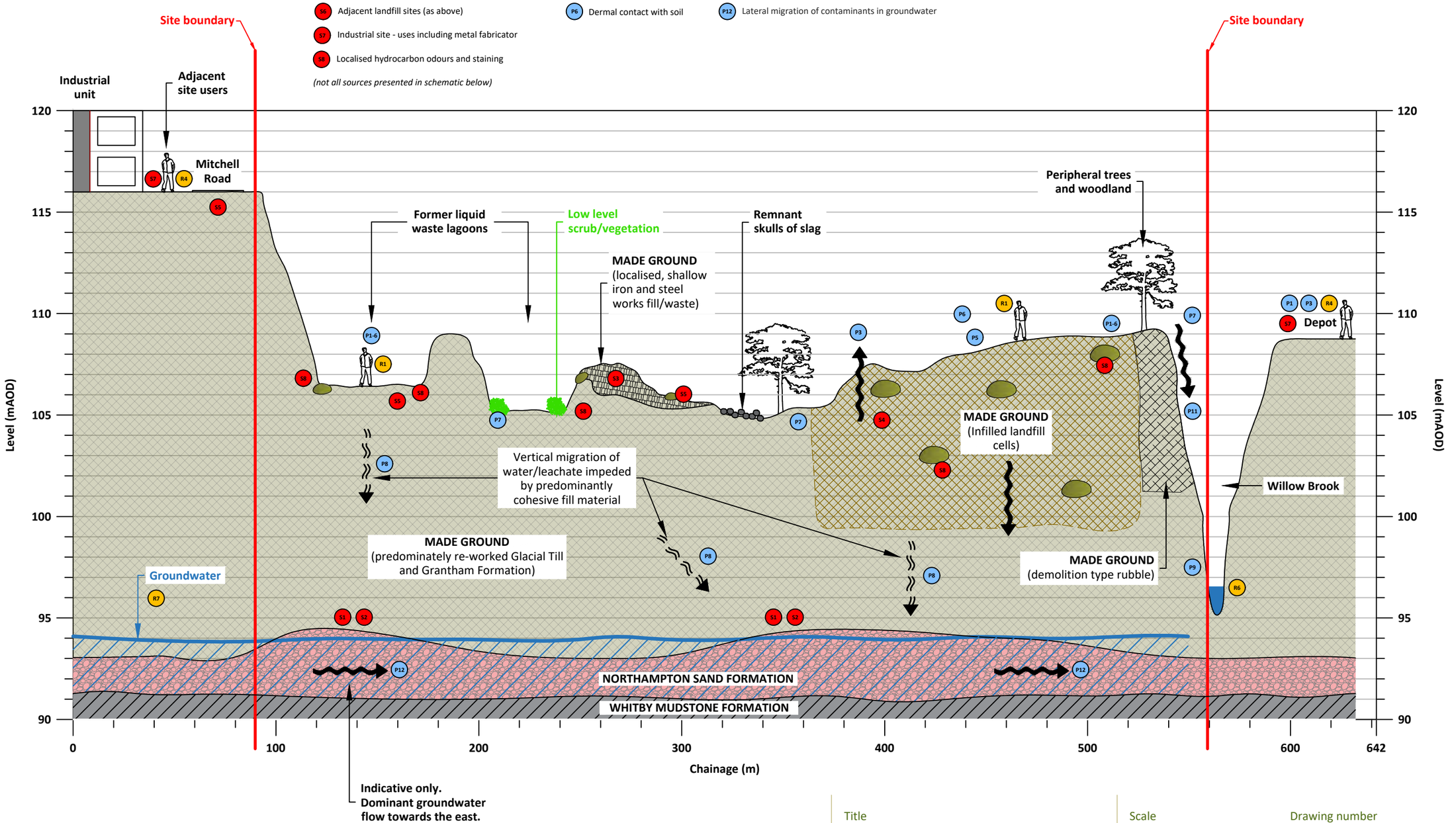
(not all sources presented in schematic below)

Pathways

- P1 Ingestion air-borne dusts
- P2 Ingestion of soil
- P3 Inhalation of air-borne dusts
- P4 Inhalation of vapours
- P5 Dermal contact with dust
- P6 Dermal contact with soil
- P7 Root uptake, deposition to shoots and foliage content
- P8 Percolation of water through contaminated soils
- P9 Saturation of contaminated soils by flood waters
- P10 Leachate generation during redevelopment
- P11 Near-surface water run-off through contaminated soils
- P12 Lateral migration of contaminants in groundwater

Receptors

- R1 Current site user
- R4 Off site human receptors
- R5 Site vegetation
- R6 Surface waters
- R7 Ground waters



Key

Localised staining and hydrocarbon and or solvent odours

Title	Scale	Drawing number
Schematic conceptual site model - existing	1:2000 at A3 (horizontal)	05

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Sources

- S1 Former railway land
- S2 Previous tanks stored on site
- S3 Iron and steel works waste (on site)
- S4 Landfill site - including special waste and liquid waste
- S5 General Made Ground (off site)
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(not all sources presented in schematic below)

Pathways

- P1 Ingestion air-borne dusts
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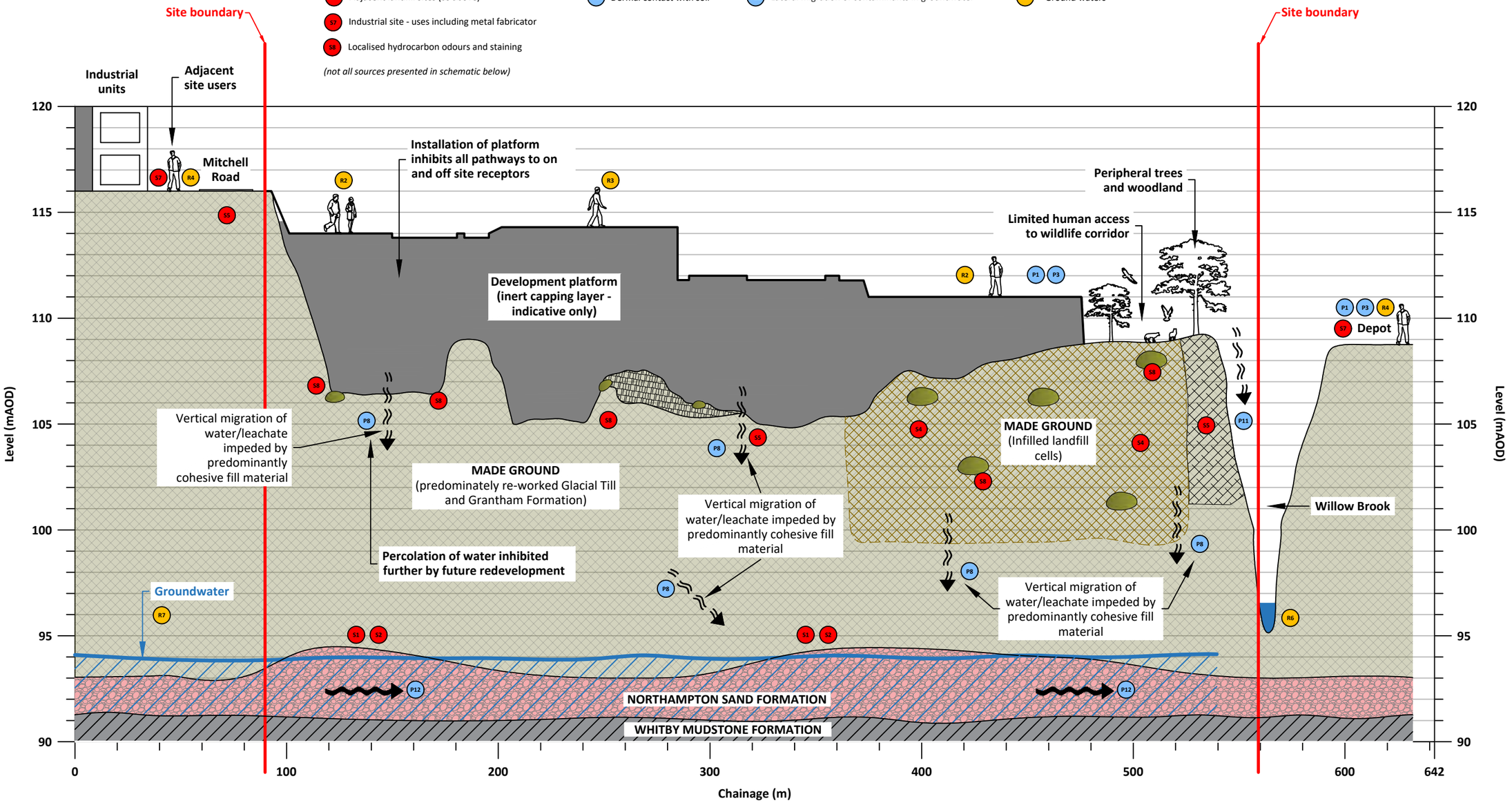
- P8 Percolation of water through contaminated soils
- P9 Saturation of contaminated soils by flood waters
- P10 Leachate generation during redevelopment
- P11 Near-surface water run-off through contaminated soils
- P12 Lateral migration of contaminants in groundwater

Receptors

- R2 Proposed site user
- R3 Construction operatives
- R4 Off site human receptors
- R5 Site vegetation
- R6 Surface waters
- R7 Ground waters



Key

Localised staining and hydrocarbon and or solvent odours

Title	Scale	Drawing number
Schematic conceptual site model - proposed	1:2000 at A3 (horizontal) 1:200 at A3 (vertical)	06

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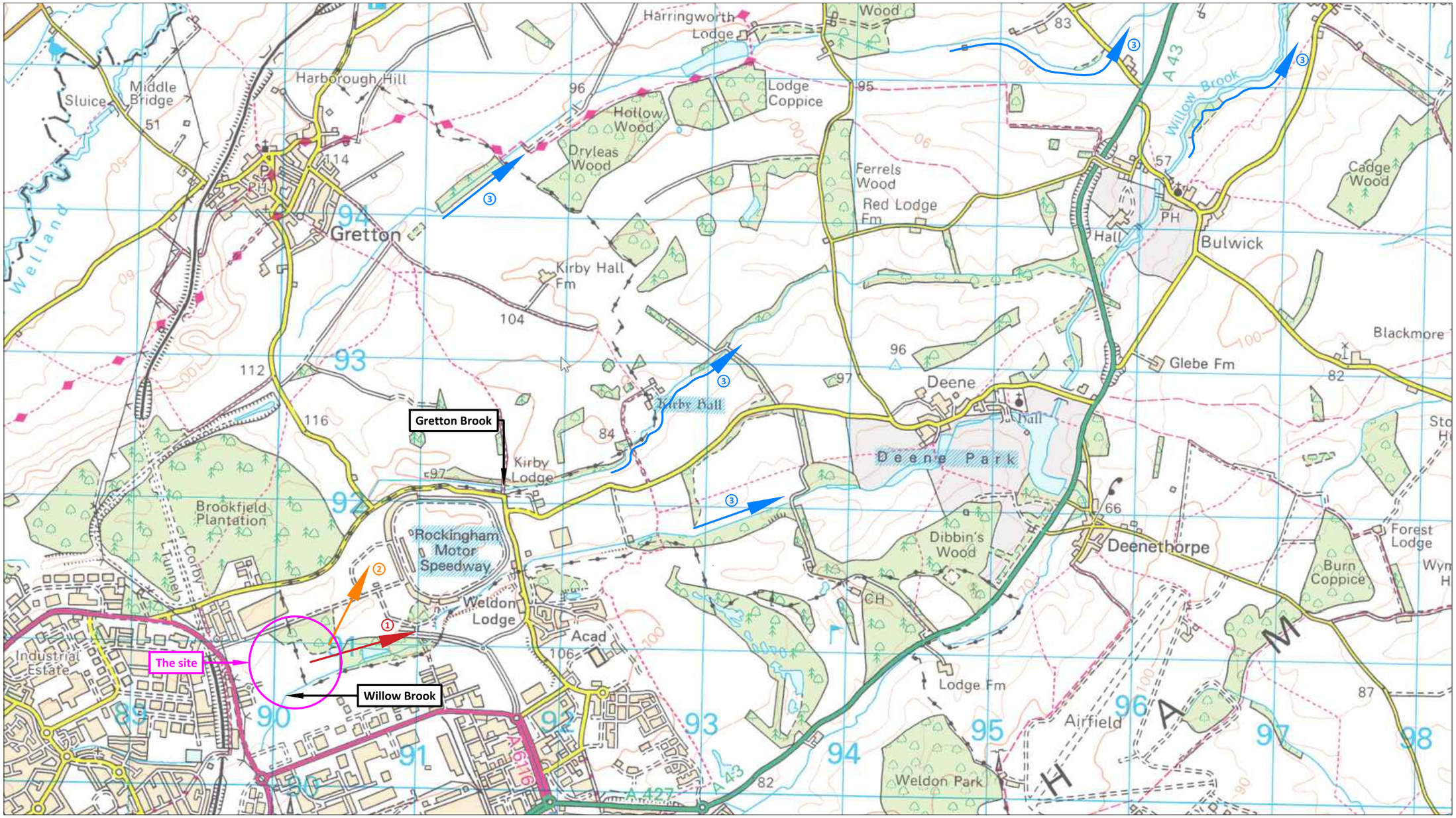

Key

① Dominant groundwater flow

② Potential localised groundwater flow direction toward the northeast

③ Surface water flow direction

Notes

1.Groundwater flow directions determined using groundwater level data from the site (ref Appendix L).
2. Dominant groundwater flow direction likely toward Willow Brook in the east.
3. Potential groundwater flow direction toward the northeast (ref Appendix L).
4. Based on level data obtained from the site and surrounding area, combined with groundwater levels recorded on site and review of Lidar and Ordnance Survey level data, we anticipate groundwater on site has the potential to be in direct connectivity with Willow Brook.
5. Willow Brook is a tributary of the River Nene.

Title	Scale	Drawing number
Topographic and hydrogeological setting	Not to scale	07

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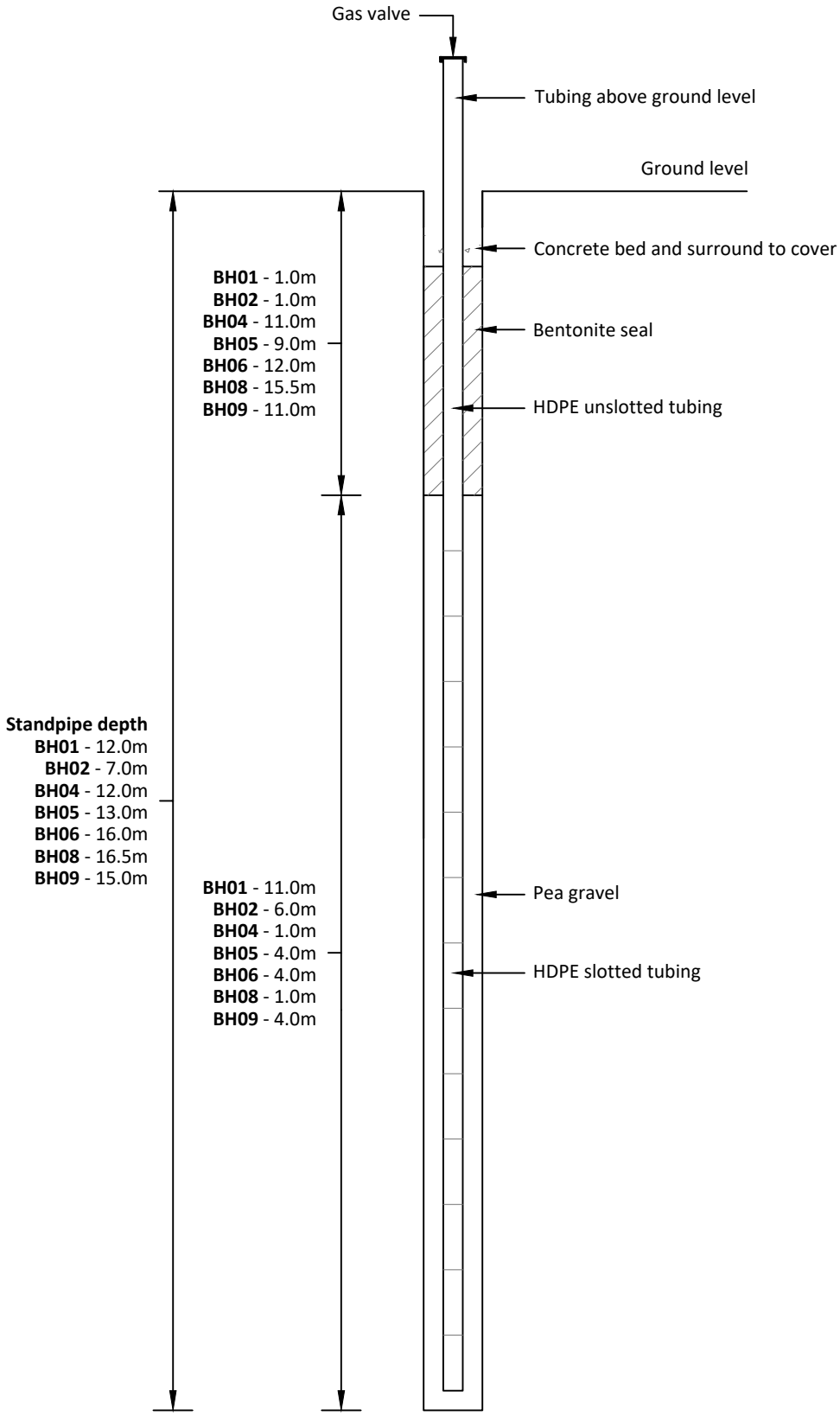

Title	Scale	Drawing number
Section showing construction of combined gas and water monitoring standpipe installed in boreholes	Not to scale	08

Definition of geo-environmental terms used in this report

Conceptual model
Textual and/or schematic hypothesis of the nature and sources of contamination, potential migration pathways (including description of the ground and groundwater) and potential receptors, developed on the basis of the information obtained from the investigatory process.

Contamination
Presence of a substance which is in, on or under land, and which has the potential to cause harm or to cause pollution of controlled water.

Controlled water
Inland freshwater (any lake, pond or watercourse above the freshwater limit), water contained in underground strata and any coastal water between the limit of highest tide or the freshwater line to the three mile limit of territorial waters.

Harm
Adverse effect on the health of living organisms, or other interference with ecological systems of which they form part, and, in the case of humans, including property.

Pathway
Mechanism or route by which a contaminant comes into contact with, or otherwise affects, a receptor.

Receptor
Persons, living organisms, ecological systems, controlled waters, atmosphere, structures and utilities that could be adversely affected by the contaminant(s).

Risk
Probability of the occurrence of, and magnitude of the consequences of, an unwanted adverse effect on a receptor.

Risk Assessment
Process of establishing, to the extent possible, the existence, nature and significance of risk.

Definition of environmental risk/hazard terms used in this report.

Based on CIRIA report C552 *'Contaminated land risk assessment – A guide to good practice'.*

Potential hazard severity definition

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.

Probability of risk definition

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.

Level of risk for potential hazard definition

Probability of risk	Potential severity			
	Severe	Medium	Mild	Minor
High Likelihood	Very high	High	Moderate	Low/Moderate
Likely	High	Moderate	Low/Moderate	Low
Low Likelihood	Moderate	Low/Moderate	Low	Very low
Unlikely	Low/Moderate	Low	Very low	Very low

Refer sheet 2 for definitions of 'very high' to 'low'

Definition of environmental risk/hazard terms used in this report.

Based on CIRIA report C552 '*Contaminated land risk assessment – A guide to good practice'.*

Risk classifications and likely action required:

Very high risk
High probability that severe harm could arise to a designated receptor from an identified hazard OR there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised is likely to result in substantial liability. Urgent investigation and remediation are likely to be required.

High risk
Harm is likely to arise to a designated receptor from an identified hazard. This risk, if realised, is likely to result in substantial liability. Urgent investigation is required and remedial works may be necessary in the short term and are likely over the long term.

Moderate risk
It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is likely that the harm would be relatively mild. Investigation is normally required to clarify risks and to determine potential liability. Some remedial works may be required in the long term.

Low risk
It is possible that harm could arise to a designated receptor from an identified hazard but it is likely that this harm, if realised, would at worst normally be mild.

Very low risk
It is a low possibility that harm could arise to a designated receptor. On the event of such harm being realised it is not likely to be severe.

List of documents used in assessment of chemical contamination

No.	Title	Publication reference / publisher
1	Human health toxicological assessment of contaminants in soil	EA Science Report – SC050021/SR2
2	Updated technical background to the CLEA model	EA Science Report – SC050021/SR3
3	CLEA Software (Version 1.03 beta) Handbook	EA Science Report - SC050021/SR4
4	Guidance on comparing Soil Contamination Data with a Critical Concentration	CIEH
5	The LQM/CIEH S4ULs for Human Health Risk Assessment (2015)	LQM/CIEH
6	Assessment of Risks to Human Health from Land Contamination: An overview of the development of soil guideline values and related research	R&D Publication, Contaminated Land Report CLR 7
7	Contaminants of Soil: Collation of Toxicological Data and Intake Values for Humans	R&D Publication, Contaminated Land Report CLR 9
8	The Contaminated Land Exposure Assessment Model (CLEA): Technical Basis and Algorithms	R&D Publication, Contaminated Land Report CLR 10
9	Model Procedures for the Management of Land Contamination	R&D Publication, Contaminated Land Report CLR 11
10	Contaminants in Soil: Collection of Toxicological Data and Intake Values for Human Values	R&D Publications, Tox. 6
11	Soil Guideline Values for Contamination (2002)	R&D Publications, SGV 10
12	Soil Guideline Values (2009)	EA Science Reports – SC050021
13	Atkins ATRISK^{SOIL} (2011)	http://www.atrisksoil.co.uk
14	Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination (September 2014)	CL:AIRE

CIEH	Chartered institute of Environmental Health
LQM	Land Quality Management
EA	Environment Agency
CL:AIRE	Contaminated Land: Applications in Real Environments

Testing suite summary

Table summarising testing suites		
Suite	**Parameters**	**Medium**
Suite 1	Arsenic, beryllium, boron, cadmium, chromium (total and VI), copper, lead, mercury, nickel, selenium, vanadium zinc, cyanide (free, total and complex), organic matter content, PAH (16 speciated), pH, phenol (total), TOC	Soil
Suite 2	Arsenic, boron (water soluble), beryllium, cadmium, chromium (total), copper, lead, mercury, nickel, selenium, vanadium, zinc, cyanide (free, total and complex, PAH (16 speciated), pH, phenol (total), sulfate (water soluble), sulfide, nitrate	Leachate
Suite 3	Arsenic, boron (water soluble), beryllium, cadmium, chromium (total), copper, lead, mercury, nickel, selenium, vanadium, zinc, cyanide (free, total and complex, PAH (16 speciated), pH, phenol (total), sulfate (water soluble), sulfide, nitrate	Water
Suite 4	TPH Texas Banding Aliphatic/Aromatic Split, PAH (16 speciated), TOC	Soil
Suite 5	TPH Texas Banding Aliphatic/Aromatic Split, PAH (16 speciated)	Leachate
Suite 6	TPH Texas Banding Aliphatic/Aromatic Split, PAH (16 speciated)	Water
Suite 7	TPH Texas Banding Aliphatic/Aromatic Split, TOC, organic matter	Soil
Suite 8	Sulphur (total), sulphate (water and acid soluble), pH	Soil
Suite 9	Sulphate, ammoniacal nitrogen, dissolved magnesium, pH	Water
Suite 10	VOC, SVOC, TOC, organic matter	Soil
Suite 11	VOC, SVOC	Leachate
Suite 12	VOC, SVOC	Water
Suite 13	Organotins dibutyltin/ tributyl-tin/tetrabutyltin/triphenyl-tin, Tetraethyl-lead/tetramethyl-lead	Soil
Suite 14	Organotin	Leachate
Suite 15	Organotin	Water
Suite 16	TPH Texas Banding Aliphatic/Aromatic Split, BTEX, VOC, SVOC	Soil, water, leachate
Suite 17	TPH Texas Banding Aliphatic/Aromatic Split, BTEX, SVOC, VOC, arsenic, boron (water soluble), beryllium, cadmium, chromium (total), copper, lead, mercury, nickel, selenium, vanadium, zinc, cyanide (free, total and complex, pH, phenol (total), sulfate (water soluble), sulfide, nitrate	Soil, water, leachate
Concrete BRE suite	pH, sulphate (water and acid soluble), magnesium (water soluble), ammonia (water soluble), chloride, nitrate	Soil

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Key to legends

Composite materials, soils and lithology

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

Note: Composite soil types are signified by combined symbols.

Key to 'test results' and 'sampling' columns

Test result

Depth	Records depth that the test was carried out (i.e.: at 2.10m or between 2.10m and 2.55m)
Result	PP – Pocket penetrometer result reported as an equivalent undrained shear strength (kN/m²) by applying a factor of 50. SV – Hand held shear vane result reported as an undrained shear strength (kN/m²). Where multiple readings are taken at the same level the average value is shown on the log. * Signifies that instrument limit reached.

Sampling

From (m) To (m)	Records depth of sampling	
Type	D	Disturbed sample
	B	Bulk disturbed sample
	ES	Environmental sample
	W	Water sample
	U	Undisturbed thick-walled sample 100mm diameter sampler
	UT	Undisturbed thin walled sample 100mm diameter sampler
	UTF	Failed undisturbed sample

Water observations

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

Water level observed after specified delay in drilling

Water strike

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [medium dense] reddish brown gravelly fine to medium SAND. Gravel consists of limestone, brick and sandstone. (MADE GROUND)							0.20		ES
Soft to firm creamish brown mottled grey sandy gravelly CLAY. Gravel consists of limestone. (MADE GROUND)	0.30						1.00		ES
							2.00		ES
							3.00		ES
TRIAL PIT TERMINATED AT 3.50m	3.50								

Notes Trial pit sides remained upright and stable upon completion.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 14/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP01**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [medium dense] reddish black gravelly fine to medium SAND. Gravel consists of brick, slag, timber, limestone and metal. (MADE GROUND)							0.20		ES
	0.90						1.00		ES
[Medium dense] creamish brown mottled grey very clayey gravelly fine to coarse SAND. Gravel consists of limestone. (MADE GROUND)							2.00		ES
							3.00		ES
TRIAL PIT TERMINATED AT 3.50m	3.50								

Notes Trial pit sides remained upright and stable upon completion.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 14/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP02**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto soft to firm grey mottled creamish brown sandy gravelly CLAY. Gravel consists of limestone. (MADE GROUND)							0.20		ES
	0.50								
[Medium dense] creamish brown mottled grey very clayey gravelly fine to coarse SAND. Gravel consists of limestone. (MADE GROUND)							1.00		ES
							2.00		ES
	2.50								
Firm grey mottled creamish brown sandy gravelly CLAY. Gravel consists of limestone. (MADE GROUND)							3.00		ES
	3.50								
TRIAL PIT TERMINATED AT 3.50m									

Notes Trial pit sides remained upright and stable upon completion.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 14/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP03**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto firm grey sandy gravelly CLAY. Gravel consists of limestone and flint. (MADE GROUND)							0.20		ES
							1.00		ES
[Medium dense] creamish brown mottled grey clayey gravelly fine to coarse SAND. Gravel consists of limestone. (MADE GROUND)	1.80						2.00		ES
...between 1.8m and 3.5m depth, pockets of firm grey clay throughout.									
							3.00		ES
TRIAL PIT TERMINATED AT 3.50m	3.50								

Notes Trial pit sides remained upright and stable upon completion.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 14/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP04**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto reddish brown gravelly fine to medium SAND with fine rootlets throughout. Gravel consists of limestone and slag. (MADE GROUND)							0.20		ES
Firm grey mottled creamish brown slightly gravelly sandy CLAY. Gravel consists of limestone and slag. (MADE GROUND)	0.30						1.00		ES
[Medium dense] creamish brown slightly clayey gravelly fine to coarse SAND with pockets of stiff grey clay throughout. Gravel consists of limestone. (MADE GROUND)	1.50						2.00		ES
							3.00		ES
TRIAL PIT TERMINATED AT 3.50m	3.50								

Notes Trial pit sides remained upright and stable upon completion.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 13/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP05**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto medium dense dark grey gravelly fine to medium SAND. Gravel consists of limestone and slag. (MADE GROUND)							0.20		ES
...from 0.5m depth, becoming brick red in colour.							0.55		ES
...between 0.6m and 0.8m depth, strong hydrocarbon odour.									
Soft to firm creamish brown grey sandy gravelly CLAY. Gravel consists of limestone. (MADE GROUND)	0.80						1.00		ES
[Medium dense] creamish brown slightly gravelly fine to coarse SAND with pockets of stiff grey clay throughout. Gravel consists of limestone. (MADE GROUND)	1.50						2.00		ES
Firm grey mottled creamish brown sandy gravelly CLAY. Gravel consists of limestone. (MADE GROUND)	3.00						3.50		ES
...at 3m depth, limestone slabs present.									
TRIAL PIT TERMINATED AT 4.00m	4.00								

Notes Trial pit sides remained upright and stable upon completion. Strong hydrocarbon odour between 0.6m and 0.8m depth.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 13/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP06**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [medium dense] brown gravelly fine to medium SAND. Gravel consists of igneous rock, brick, timber and occasional limestone and slag. (MADE GROUND)							0.20		ES
[Medium dense] creamish brown gravelly fine to coarse SAND. Gravel consists of limestone. (MADE GROUND)	0.50						1.00		ES
...at 1.5m depth, metal pipe present.									
Firm brown sandy gravelly CLAY. Gravel consists of occasional limestone and flint. (MADE GROUND)	2.00						2.50		ES
							3.50		ES
TRIAL PIT TERMINATED AT 4.00m	4.00								

Notes Slight collapse of the trial pit sides from surface to approximately 0.5m depth, extending pit edges up to 100mm on each side.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 10/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP07**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [medium dense] brown gravelly fine to medium SAND with fine rootlets. Gravel consists of sandstone. (MADE GROUND)							0.20		ES
[Medium dense] creamish brown slightly gravelly fine to coarse SAND. Gravel consists of limestone. (MADE GROUND)	0.50						1.00		ES
Firm to stiff grey slightly gravelly sandy CLAY. Gravel consists of ash. (MADE GROUND)	1.20						2.00		ES
...at 2.9m depth, layer of limestone slabs.							2.80		ES
TRIAL PIT TERMINATED AT 3.00m	3.00								

Notes Trial pit sides remained upright and stable upon completion.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 13/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP08**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [medium dense] dark grey gravelly fine to medium SAND with fine rootlets throughout. Gravel consists of flint. (MADE GROUND)							0.10		ES
							0.20		ES
[Medium dense] creamish brown slightly gravelly fine to coarse SAND. Gravel consists of limestone. (MADE GROUND)	0.70								
							1.00		ES
							2.00		ES
							3.00		ES
...at 3.2m depth, slab of limestone.									
TRIAL PIT TERMINATED AT 4.00m	4.00								

Notes Trial pit sides remained upright and stable upon completion.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 13/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP09**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [medium dense] brown gravelly fine to medium SAND. Gravel consists of flint, timber, concrete and brick. (MADE GROUND)							0.20		ES
[Medium dense] brown gravelly fine to coarse SAND. Gravel consists of timber, flint, concrete and brick. Strong hydrocarbon odour throughout. (MADE GROUND)	0.50						1.00		ES
Soft to firm brown dark grey sandy gravelly CLAY. Gravel consists of brick, glass, plastic, timber and metal. Strong hydrocarbon odour throughout. (MADE GROUND)	1.50						2.00		ES
Stiff creamish brown sandy gravelly CLAY. Gravel consists of flint, timber, brick and tiles. (MADE GROUND)	2.40								
TRIAL PIT TERMINATED AT 2.50m	2.50						3.00		ES

Notes Trial pit sides remained upright and stable upon completion.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 13/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP10**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [medium dense] dark grey brown slightly clayey gravelly fine to medium SAND. Gravel consists of limestone. (MADE GROUND)							0.20		ES
[Medium dense] creamish brown slightly clayey gravelly fine to coarse SAND. Gravel consists of limestone. (MADE GROUND)	0.90						1.00		ES
Stiff grey mottled creamish orange CLAY. (MADE GROUND)	1.90						2.00		ES
							3.00		ES
TRIAL PIT TERMINATED AT 3.50m	3.50								

Notes Slight collapse of trial pit sides from surface to approximately 0.5m depth, extending pit edges by up to 100mm on each side.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 13/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP11**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [loose becoming medium dense] dark grey gravelly fine to medium SAND. Gravel consists of slag, brick, concrete and timber. (MADE GROUND)							0.20		ES
...at 0.5m depth, railway sleeper.									
...from 1m depth, strong hydrocarbon odour.							1.00		ES
							2.00		ES
TRIAL PIT TERMINATED AT 2.50m	2.50								

Notes Slight collapse of trial pit sides from surface to approximately 1m depth, extending pit edges up to 300mm on each side. Trial pit terminated due to strong hydrocarbon odour from 1m depth.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 13/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP12**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [dense] dark grey sandy GRAVEL. Gravel consists of slag and sandstone. (MADE GROUND)							0.20		ES
[Medium dense] reddish brown gravelly fine to coarse SAND. Gravel consists of slag, sandstone and brick. (MADE GROUND)	0.80						1.00		ES
Stiff grey mottled creamish brown slightly gravelly sandy CLAY. Gravel consists of flint. (MADE GROUND)	2.00						2.00		ES
TRIAL PIT TERMINATED AT 3.00m	3.00								

Notes Trial pit sides beginning to collapse upon completion.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 13/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations Relatively fast inflow of water observed at 2m depth. Water filled the pit to 1.5m depth in 20 minutes.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP13**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [medium dense] creamish brown clayey gravelly fine to medium SAND with pockets of firm grey clay throughout. Gravel consists of limestone. (MADE GROUND)							0.20		ES
	0.80								
Firm grey sandy gravelly CLAY. Gravel consists of limestone. (MADE GROUND)							1.00		ES
	1.50								
[Medium dense] creamish brown very clayey gravelly fine to coarse SAND with pockets of firm grey clay throughout. Gravel consists of limestone. (MADE GROUND)							2.00		ES
							3.00		ES
	3.50								
TRIAL PIT TERMINATED AT 3.50m									

Notes Trial pit sides remained upright and stable upon completion.	**Title** Trial pit record	**Dimensions (w x l)** 3.00m x 1.00m	**Date(s)** 14/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP14**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [medium dense] brown slightly clayey gravelly fine to medium SAND. Gravel consists of sandstone and occasional limestone. (MADE GROUND)							0.20		ES
	0.80								
[Medium dense] creamish brown slightly clayey gravelly fine to coarse SAND with occasional pockets of dark grey clay throughout. Gravel consists of limestone. (MADE GROUND)							1.00		ES
	1.80								
[Medium dense] red brown gravelly fine to coarse SAND. Gravel consists of igneous rock. (MADE GROUND)							2.00		ES
...from 3m depth, becoming clayey gravelly fine to coarse SAND.							3.00		ES
	3.10								
TRIAL PIT TERMINATED AT 3.10m									

Notes Trial pit sides remained upright and stable upon completion. Trial pit terminated due to obstruction.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 14/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP15**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [medium dense] dark brown and grey gravelly fine to medium SAND. Gravel consists of slag and sandstone. (MADE GROUND)							0.20		ES
[Medium dense] brown slightly clayey gravelly fine to coarse SAND. Gravel consists of glass, slag and clinker. (MADE GROUND)	0.30						1.00		ES
Firm creamish brown sandy gravelly CLAY. Gravel consists of brick and sandstone. (MADE GROUND)	1.50						2.00		ES
[Medium dense] reddish brown gravelly fine to coarse SAND. Gravel consists of sandstone. (MADE GROUND)	2.80						2.80		ES
...between 3.5m and 3.8m depth, becoming sandy GRAVEL.									
[Medium dense] creamish brown SAND. (MADE GROUND)	3.80						4.00		ES
TRIAL PIT TERMINATED AT 4.20m	4.20								

Notes Trial pit sides remained upright and stable upon completion.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 14/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP16**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [medium dense] creamish brown slightly clayey gravelly fine to medium SAND. Gravel consists of limestone and slag. (MADE GROUND)							0.20		ES
Firm creamish brown sandy gravelly CLAY. Gravel consists of limestone. (MADE GROUND)	1.10						1.50		ES
[Medium dense] dark brown slightly clayey gravelly fine to coarse SAND with pockets of firm grey silty CLAY throughout. Gravel consists of chalk. (MADE GROUND)	2.00						2.20		ES
							3.00		ES
TRIAL PIT TERMINATED AT 3.50m	3.50								

Notes Slight collapse of the trial pit sides from surface to approximately 1m depth, extending pit edges by up to 200mm on each side.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 13/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP17**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [medium dense] brown slightly clayey gravelly fine to medium SAND. Gravel consists of concrete, brick, plastic, glass, fabric, metal and timber. (MADE GROUND)							0.20		ES
	0.70								
[Medium dense] brown black gravelly fine to coarse SAND. Gravel consists of brick, metal, concrete, plastic, metal pipes, clinker and ash. (MADE GROUND)							1.00		ES
							2.00		ES
							3.00		ES
TRIAL PIT TERMINATED AT 3.50m	3.50								

Notes Trial pit sides remained upright and stable upon completion.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 10/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP18**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto firm brown sandy gravelly CLAY with frequent fine rootlets. Gravel consists of brick and flint. (MADE GROUND)							0.10		ES
							0.20		ES
...from 0.8m depth, becoming grey in colour and ash material present.							1.00		ES
Firm creamish brown sandy gravelly CLAY. Gravel consists of brick, flint and limestone. (MADE GROUND)	2.00						2.00		ES
[Medium dense] black gravelly fine to coarse SAND. Gravel consists of ash, clinker and flint. (MADE GROUND)	3.00						3.00		ES
							3.80		ES
TRIAL PIT TERMINATED AT 4.00m	4.00								

Notes Trial pit sides remained upright and stable upon completion.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 10/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP19**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [medium dense] brown slightly clayey gravelly fine to medium SAND. Gravel consists of plastic, concrete, brick, metal, rope, flint and timber. (MADE GROUND)							0.10 0.20		ES ES
							1.00		ES
Very soft orange sandy gravelly CLAY. Gravel consists of ash, timber, plastic and concrete. Strong hydrocarbon odour throughout. (MADE GROUND)	1.90						2.00		ES
[Medium dense] brown clayey gravelly fine to coarse SAND. Gravel consists of ash, plastic, glass and timber. (MADE GROUND)	2.60						3.00		ES
TRIAL PIT TERMINATED AT 3.20m	3.20								

Notes Trial pit sides remained upright and stable upon completion. Trial pit terminated due to concrete obstruction. Strong hydrocarbon odour from 1.9m depth.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 13/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP20**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [medium dense] brown clayey gravelly fine to medium SAND. Gravel consists of concrete, brick, metal and plastic. (MADE GROUND)							0.20		ES
Soft red sandy gravelly CLAY. Gravel consists of plastic, ironstone, concrete, brick, timber, fabric and occasional clinker and ash. (MADE GROUND)	0.80						1.00		ES
Soft to firm brown sandy gravelly CLAY. Gravel consists of limestone, concrete, brick, metal, plastic and fabric. Strong hydrocarbon odour throughout. (MADE GROUND)	1.10						1.50		ES
							2.00		ES
TRIAL PIT TERMINATED AT 2.30m	2.30								

Notes Trial pit sides remained upright and stable upon completion. Trial pit terminated due to metal obstruction. Strong hydrocarbon odour from 1.10m depth.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 09/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP21**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
[Medium dense] dark greyish light brown gravelly fine to medium SAND. Gravel consists of concrete, brick, plastic and timber. (MADE GROUND)							0.20		ES
Soft black sandy gravelly CLAY. Gravel consists of ash and clinker. (MADE GROUND)	1.10						1.10		ES
							2.00		ES
							2.80		ES
TRIAL PIT TERMINATED AT 3.00m	3.00								

Notes
Slight collapse of the trial pit sides from surface to approximately 0.5m depth, extending pit sides by up to 100mm on each side. Strong hydrocarbon odour from 1.10m depth.

Groundwater observations
No groundwater encountered.

Title Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 09/07/2020
Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Level (m OD) -	**Compiled by** KD	**Revision** 0
Co-ordinates -	**Checked by** SD	**TP22**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [medium dense] brown clayey gravelly fine to medium SAND. Gravel consists of brick, slag and sandstone. (MADE GROUND)							0.10		ES
...at 0.7m depth, grey and blue sandy CLAY. Very strong hydrocarbon odour.							0.70		ES
							1.50		ES
...at 2m depth, concrete slabs present.									
[Medium dense] reddish brown gravelly fine to coarse SAND. Gravel consists of concrete, metal, slag, timber, fabric and wire. (MADE GROUND)	2.60						2.50		ES
							3.50		ES
TRIAL PIT TERMINATED AT 4.00m	4.00								

Notes Trial pit sides remained upright and stable upon completion. Strong hydrocarbon odour from 0.70m depth.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 09/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision**
	Co-ordinates -	**Checked by** SD	**TP23**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Brown gravelly fine to medium SAND with frequent fine rootlets. (MADE GROUND)	0.20						0.10		ES
Soft to firm greyish brown sandy gravelly CLAY. Gravel consists of plastic, brick, metal, fabric, timber, metal, wire, black piping and concrete. Strong hydrocarbon odour throughout. (MADE GROUND)							0.70		ES
...from 0.2m depth, becoming strong hydrocarbon odour.							1.50		ES
							2.50		ES
TRIAL PIT TERMINATED AT 3.00m	3.00								

Notes Trial pit sides remained upright and stable upon completion. Strong hydrocarbon odour from 0.2m depth.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 09/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision**
	Co-ordinates -	**Checked by** SD	**TP24**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [medium dense] slightly clayey gravelly fine to medium SAND. Gravel consists of limestone and concrete. (MADE GROUND)							0.20		ES
[Medium dense] reddish brown dark grey gravelly fine to coarse SAND. Gravel consists of clinker, slag, limestone, brick, concrete and plastic. (MADE GROUND)	0.30						0.60		ES
							1.50		ES
							2.50		ES
TRIAL PIT TERMINATED AT 3.00m	3.00								

Notes Trial pit sides remained upright and stable upon completion. Trial pit terminated due to concrete obstruction.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 09/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP25**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [medium dense] grey gravelly fine to coarse SAND with large cobbles of concrete. Gravel consists of brick, concrete, igneous rock, metal, plastic and flint. (MADE GROUND)							0.90		ES
							1.00		ES
							2.00		ES
...from 2.8m depth, becoming slightly clayey.							3.00		ES
	3.20								
TRIAL PIT TERMINATED AT 3.20m									

Notes Trial pit sides remained upright and stable upon completion. Trial pit terminated due to concrete obstruction.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 09/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision** 0
	Co-ordinates -	**Checked by** SD	**TP26**

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STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
Grass onto [medium dense] orangish brown slightly clayey gravelly fine to medium SAND. Gravel consists of concrete, brick, metal and flint. (MADE GROUND)							0.10		ES
	0.80						0.90		ES
[Medium dense] reddish brown gravelly fine to medium SAND. Gravel consists of concrete. (MADE GROUND)									
	1.40						1.50		ES
[Medium dense] orangish brown gravelly fine to coarse SAND. (MADE GROUND)									
	2.50						2.60		ES
Soft to firm grey mottled black sandy gravelly CLAY. Gravel consists of ash, clinker and timber. (MADE GROUND)									
	3.50						3.50		ES
TRIAL PIT TERMINATED AT 3.50m									

Notes Trial pit sides remained upright and stable upon completion. Slight collapse of the trial pit sides from surface to approximately 0.5m depth, extending pit edges by up to 200mm on one side.	**Title** Trial pit record	**Dimensions (w x l)** 4.00m x 1.00m	**Date(s)** 09/07/2020
	Method Machine excavator	**Logged by** RT	**Sheet number** Sheet 1 of 1
Groundwater observations No groundwater encountered.	**Level (m OD)** -	**Compiled by** KD	**Revision**
	Co-ordinates -	**Checked by** SD	**TP27**

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Key to legends

Composite materials, soils and lithology							
	Topsoil		Made Ground		Boulders		Chalk
	Clay		Coal		Cobbles		Concrete
	Gravel		Limestone		Mudstone		Peat
	Sand		Sandstone		Silt		Siltstone

Note: Composite soil types are signified by combined symbols.

Key to 'test results' and 'sampling' columns

Test result		
Depth		Records depth that the test was carried out (i.e.: at 2.10m or between 2.10m and 2.55m)
Result		PP – Pocket penetrometer result reported as an equivalent undrained shear strength (kN/m²) by applying a factor of 50. SV – Hand held shear vane result reported as an undrained shear strength (kN/m²). Where multiple readings are taken at the same level the average value is shown on the log. * Signifies that instrument limit reached.
		SPT – Standard Penetration Test result (N value) (uncorrected)[1,2,3] SPT(c) – Standard Penetration Test result (solid cone) (N value) (uncorrected)[1,2,3]
		UT – Undisturbed sample 100mm diameter sampler with number of blows of driving equipment required to obtain sample

Sampling		
From (m) To (m)		Records depth of sampling
Type	D	Disturbed sample
	B	Bulk disturbed sample
	ES	Environmental sample
	W	Water sample
	U	Undisturbed thick-walled sample 100mm diameter sampler
	UT	Undisturbed thin walled sample 100mm diameter sampler
	UTF	Failed undisturbed sample

Note 1: Seating blows recorded in brackets.

Note 2: Casing depth records depth of casing when SPT or SPT(c) was carried out.

Note 3: Water depth records depth of water when SPT or SPT(c) was carried out.

Water observations

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

Water level observed after specified delay in drilling

Water strike

Installation details

	Gravel filter		Bentonite
	Slotted pipe		Unslotted pipe
	Arisings		Grout
	Extensometer magnet		Vibrating wire piezometer

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INSTALL	STRATA DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING TYPE / DEPTH (m)	SPT TESTING RESULT	SPT TESTING CASING DEPTH (m)	SPT TESTING WATER LEVEL (m)	OTHER IN SITU TESTING TYPE / DEPTH (m)	OTHER IN SITU TESTING RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Brown gravelly fine to medium SAND. Gravel consists of sandstone and limestone. (MADE GROUND)	0.10	109.03									0.10		ES
												0.50		ES
	Soft to firm grey mottled creamish brown slightly sandy slightly gravelly CLAY. Gravel consists of limestone and sandstone. (MADE GROUND)											1.00		ES
												2.00		ES
												3.00		ES
												4.00		ES
												5.00		ES
												6.00		ES
												7.00		ES
												8.00		ES
												9.00		ES
												10.00		ES
												11.00		ES
	BOREHOLE TERMINATED AT 12.00m	12.00	97.13											

Notes
Inspection pit excavated to 1.2m depth. Borehole terminated due to sandstone obstruction.

Groundwater observations
No groundwater encountered.

Chiselling details		Drilling details	
Depth (m)	Duration (hh:mm)	Diameter	Base depth (m)
8.70 - 8.90 11.70 - 11.80	01:00 00:45	220	12.00

Water added details		Casing details	
Depth (m)	Water Added (l)	Diameter	Base depth (m)
		220	6.00

Title
Borehole record

Date(s)
23/07/2020

Method
Cable tool percussion

Logged by
RT

Sheet number
Sheet 1 of 1

Level (m OD)
109.13

Compiled by
KD

Revision
0

Co-ordinates
-

Checked by
SD

BH01

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STP3966D

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INSTALL	STRATA DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING TYPE / DEPTH (m)	SPT TESTING RESULT	SPT TESTING CASING DEPTH (m)	SPT TESTING WATER LEVEL (m)	OTHER IN SITU TESTING TYPE / DEPTH (m)	OTHER IN SITU TESTING RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Grass onto creamish brown slightly clayey gravelly fine to medium SAND. Gravel consists of limestone and slag. (MADE GROUND)	0.10	106.89									0.50		ES
	Firm brownish grey slightly sandy slightly gravelly CLAY. Gravel consists of sandstone. (MADE GROUND)											1.00		ES
												2.00		ES
												3.00		ES
												4.00		ES
												5.00		ES
												6.00		ES
	BOREHOLE TERMINATED AT 7.00m	7.00	99.99									7.00		ES

Notes
Inspection pit excavated to 1.2m depth. Borehole terminated due to sandstone obstruction.

Groundwater observations
No groundwater encountered.

Chiselling details		Drilling details	
Depth (m)	Duration (hh:mm)	Diameter	Base depth (m)
		220	7.00

Water added details		Casing details	
Depth (m)	Water Added (l)	Diameter	Base depth (m)
		220	6.00

Title
Borehole record

Date(s)
21/07/2020

Method
Cable tool percussion

Logged by
RT

Sheet number
Sheet 1 of 1

Level (m OD)
106.99

Compiled by
KD

Revision
0

Co-ordinates
-

Checked by
SD

BH02

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INSTALL	STRATA				WATER STRIKES	SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Grass onto creamish brown slightly clayey gravelly fine to medium SAND. Gravel consists of limestone and slag. (MADE GROUND)	0.10	105.16									0.50		ES
	Firm grey mottled brown slightly sandy slightly gravelly CLAY. Gravel consists of limestone and brick. (MADE GROUND)											1.00		ES
												2.00		ES
												3.00		ES
												4.00		ES
												5.00		ES
												6.00		ES
												7.00		ES
												8.00		ES
												9.00		ES
												10.00		ES
												11.00		ES
												12.00		ES
	Weak dark grey SANDSTONE. (PROBABLE NORTHAMPTON SAND FORMATION)	12.70	92.56									13.00		ES
	BOREHOLE TERMINATED AT 14.10m	14.10	91.16									14.00		ES

Notes
Inspection pit excavated to 1.2m depth. Borehole terminated due to cable snapping and tools stuck in ground.

Groundwater observations
No groundwater encountered.

Chiselling details		Drilling details	
Depth (m)	Duration (hh:mm)	Diameter	Base depth (m)
13.70 - 14.10	02:00	220	14.00

Water added details		Casing details	
Depth (m)	Water Added (l)	Diameter	Base depth (m)
		220	3.00

Title
Borehole record

Date(s)
14/07/2020 - 15/07/2020

Method
Cable tool percussion

Logged by
RT

Sheet number
Sheet 1 of 1

Level (m OD)
105.26

Compiled by
KD

Revision
0

Co-ordinates
-

Checked by
SD

BH03

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INSTALL	STRATA				WATER STRIKES	SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Grass onto creamish brown slightly clayey gravelly fine to medium SAND. Gravel consists of limestone and slag. (MADE GROUND)	0.10	105.20											
	Firm grey mottled brown slightly sandy slightly gravelly CLAY. Gravel consists of limestone and brick. (MADE GROUND)													
	Weak dark grey SANDSTONE. (PROBABLE NORTHAMPTON SAND FORMATION)	12.70	92.60											
	BOREHOLE TERMINATED AT 14.00m	14.00	91.30											

Notes
Inspection pit excavated to 1.2m depth. Borehole terminated due to sandstone obstruction.

Groundwater observations
No groundwater encountered.

Chiselling details		Drilling details	
Depth (m)	Duration (hh:mm)	Diameter	Base depth (m)
		220	14.00

Water added details		Casing details	
Depth (m)	Water Added (l)	Diameter	Base depth (m)
		220	14.00

Title
Borehole record

Date(s)
16/07/2020 - 21/07/2020

Method
Cable tool percussion

Logged by
RT

Sheet number
Sheet 1 of 1

Level (m OD)
105.30

Compiled by
KD

Revision
0

Co-ordinates
-

Checked by
SD

BH03a

Rockingham Enterprise Area, Corby
STP3966D

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INSTALL	STRATA DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING TYPE / DEPTH (m)	SPT RESULT	SPT CASING DEPTH (m)	SPT WATER LEVEL (m)	OTHER IN SITU TESTING TYPE / DEPTH (m)	OTHER IN SITU RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Dark brown slightly clayey gravelly fine to medium SAND. Gravel consists of slag. (MADE GROUND)											0.50		ES
	...from 0m depth, organic odour observed.	0.60	102.79									1.00		ES
	Creamish brown mottled grey very clayey gravelly fine to coarse SAND. Gravel consists of sandstone. (MADE GROUND)											2.00		ES
	...from 0.6m depth, pockets of firm grey clay.											3.00		ES
												4.00		ES
												5.00		ES
												6.00		ES
	Soft to firm brown grey mottled creamish brown slightly sandy slightly gravelly CLAY. Gravel consists of sandstone. (MADE GROUND)	7.20	96.19									7.00		ES
												8.00		ES
												9.00		ES
												10.00		ES
												10.10		W
												11.00		ES
	Brown clayey gravelly fine to coarse SAND. Gravel consists of sandstone. (PROBABLE NORTHAMPTON SAND FORMATION)	11.90	91.49									12.00		ES
	BOREHOLE TERMINATED AT 12.30m	12.30	91.09											

Notes
Inspection pit excavated to 1.2m depth. Borehole terminated due to sandstone obstruction.

Chiselling details

Depth (m)	Duration (hh:mm)
8.20 - 8.40	01:00
12.20 - 12.30	01:00

Drilling details

Diameter	Base depth (m)
220	7.00
170	12.30

Groundwater observations
Groundwater strike at 11m depth, filling borehole to 11.6m in 5 minutes, 11.4m in 10 minutes, 11.2m in 15 minutes and 11.2m in 20 minutes.

Water added details

Depth (m)	Water Added (l)

Casing details

Diameter	Base depth (m)
220	6.00
170	12.00

Title
Borehole record

Date(s)
23/07/2020

Method
Cable tool percussion

Logged by
RT

Sheet number
Sheet 1 of 1

Level (m OD)
103.39

Compiled by
KD

Revision
0

Co-ordinates
-

Checked by
SD

BH04

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INSTALL	STRATA DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING TYPE / DEPTH (m)	SPT TESTING RESULT	SPT TESTING CASING DEPTH (m)	SPT TESTING WATER LEVEL (m)	OTHER IN SITU TESTING TYPE / DEPTH (m)	OTHER IN SITU TESTING RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Grass onto brown gravelly fine to medium SAND. Gravel consists of concrete and brick. (MADE GROUND)											0.10		ES
												0.50		ES
												1.00		ES
	CONCRETE.	1.30	105.30											
	(MADE GROUND)	1.50	105.10											
	Soft brownish grey slightly sandy slightly gravelly CLAY. Gravel consists of concrete, brick and plastic. (MADE GROUND)											2.00		ES
												3.00		ES
	Brownish grey clayey gravelly fine to medium SAND. Gravel consists of concrete and brick. (MADE GROUND)	3.20	103.40											
												4.00		ES
												5.00		ES
												6.00		ES
												7.00		ES
												8.00		ES
												9.00		ES
												10.00		ES
												11.00		ES
	Firm to stiff red brown slightly sandy CLAY. (MADE GROUND)	11.80	94.80									12.00		ES
		12.20	94.40									12.50		ES
	Orangish brown gravelly medium to coarse SAND. Gravel consists of ferruginous sandstone and ironstone. (PROBABLE NORTHAMPTON SAND FORMATION)	12.80	93.80									13.00		D
	Stiff grey silty CLAY. (WHITBY MUDSTONE FORMATION)	13.00	93.60											
	BOREHOLE TERMINATED AT 13.00m													

Notes
Inspection pit excavated to 1.2m depth.

Chiselling details

Depth (m)	Duration (hh:mm)
1.30 - 1.50	01:00

Drilling details

Diameter	Base depth (m)
220	12.00
170	13.00

Groundwater observations
Groundwater strike at 12.2m depth, filling borehole to m in 5 minutes, m in 10 minutes, m in 15 minutes and 11m in 20 minutes. Sealed off with casing at 13.2m.

Water added details

Depth (m)	Water Added (l)

Casing details

Diameter	Base depth (m)
220	6.00
170	12.80

Title
Borehole record

Date(s)
09/07/2020 - 13/07/2020

Method
Cable tool percussion

Logged by
RT

Sheet number
Sheet 1 of 1

Level (m OD)
106.60

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KD

Revision
0

Co-ordinates
-

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BH05

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INSTALL	STRATA DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING TYPE / DEPTH (m)	SPT TESTING RESULT	SPT TESTING CASING DEPTH (m)	SPT TESTING WATER LEVEL (m)	OTHER IN SITU TESTING TYPE / DEPTH (m)	OTHER IN SITU TESTING RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Grass onto gravelly fine to medium SAND with many rootlets throughout. Gravel consists of slag. (MADE GROUND)	0.10	106.89											
	CONCRETE. (MADE GROUND)	0.40	106.59									0.50		ES
	Brownish grey gravelly SAND. Gravel consists of concrete, brick, tile, glass, metal, voids and paper. (MADE GROUND)											1.00		ES
												2.00		ES
												3.00		ES
	CONCRETE. (MADE GROUND)	3.90	103.09									4.00		ES
	Soft grey slightly sandy slightly gravelly CLAY. Gravel consists of brick and slag. (MADE GROUND)	4.20	102.79									5.00		ES
												6.00		ES
												7.00		ES
												8.00		ES
	Grey gravelly fine to medium SAND. Gravel consists of brick. (MADE GROUND)	8.80	98.19									9.00		ES
	Soft grey slightly sandy CLAY. (MADE GROUND)	10.00	96.99									10.00		ES
												11.00		ES
	Orangish brown clayey gravelly medium to coarse SAND. Gravel consists of ironstone and ferruginous sandstone. (PROBABLE NORTHAMPTON SAND FORMATION)	12.20	94.79									12.00		ES
												12.50		ES
												12.94		W
		14.50	92.49											

CONTINUED ON NEXT SHEET

Notes

Chiselling details

Depth (m)	Duration (hh:mm)

Drilling details

Diameter	Base depth (m)
220	12.00
170	16.00

Groundwater observations

Groundwater strike at 13.2m filling borehole to 12m in 5 minutes, 11.9m in 10 minutes, 11.8m in 15 minutes and 11.6m after 20 minutes. Borehole sealed off at 15.5m.

Water added details

Depth (m)	Water Added (l)

Casing details

Diameter	Base depth (m)
220	6.00
170	15.00

Title
Borehole record

Date(s)
13/07/2020 - 14/07/2020

Method
Cable tool percussion

Logged by
RT

Sheet number
Sheet 1 of 2

Level (m OD)
106.99

Compiled by
KD

Revision
0

Co-ordinates
-

Checked by
SD

BH06

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INSTALL	STRATA: DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING: TYPE / DEPTH (m)	SPT TESTING: RESULT	SPT TESTING: CASING DEPTH (m)	SPT TESTING: WATER LEVEL (m)	OTHER IN SITU TESTING: TYPE / DEPTH (m)	OTHER IN SITU TESTING: RESULT	SAMPLING: FROM (m)	SAMPLING: TO (m)	SAMPLING: TYPE
	Weak dark grey SANDSTONE. (NORTHAMPTON SAND FORMATION)	15.10	91.89											
	Stiff grey silty CLAY. (WHITBY MUDSTONE FORMATION)	16.00	90.99											
	BOREHOLE TERMINATED AT 16.00m													

Notes

Chiselling details

Depth (m)	Duration (hh:mm)
14.80 - 15.10	01:00

Drilling details

Diameter	Base depth (m)
220	12.00
170	16.00

Groundwater observations

Groundwater strike at 13.2m filling borehole to 12m in 5 minutes, 11.9m in 10 minutes, 11.8m in 15 minutes and 11.6m after 20 minutes. Borehole sealed off at 15.5m.

Water added details

Depth (m)	Water Added (l)

Casing details

Diameter	Base depth (m)
220	6.00
170	15.00

Title
Borehole record

Date(s)
13/07/2020 - 14/07/2020

Method
Cable tool percussion

Logged by
RT

Sheet number
Sheet 2 of 2

Level (m OD)
106.99

Compiled by
KD

Revision
0

Co-ordinates
-

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BH06

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INSTALL	STRATA				WATER STRIKES	SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Grass onto dark brown clayey gravelly fine to medium SAND. Gravel consists of brick and slag. (MADE GROUND)	0.60	108.33									0.50		ES
	Soft to firm grey mottled creamish brown slightly sandy slightly gravelly CLAY. Gravel consists of sandstone. (MADE GROUND)											1.00		ES
												2.00		ES
												3.00		ES
												4.00		ES
												5.00		ES
												6.00		ES
												7.00		ES
												8.00		ES
												9.00		ES
												10.00		ES
												11.00		ES
												12.00		ES
												13.00		ES
												14.00		ES
												14.41		W

CONTINUED ON NEXT SHEET

Notes
Inspection pit excavated to 1.2m depth.

Chiselling details

Depth (m)	Duration (hh:mm)
10.20 - 10.40	01:00
13.70 - 14.00	01:00

Drilling details

Diameter	Base depth (m)
220	14.00
170	16.50

Groundwater observations
Groundwater strike at 15.2m depth, filling borehole to 15m in 5 minutes, 14.8m in 10 minutes, 14.8m in 15 minutes and 14.7m in 20 minutes.

Water added details

Depth (m)	Water Added (l)

Casing details

Diameter	Base depth (m)
220	6.00
170	16.00

Title
Borehole record

Date(s)
24/07/2020

Method
Cable tool percussion

Logged by
RT

Sheet number
Sheet 1 of 2

Level (m OD)
108.93

Compiled by
KD

Revision
0

Co-ordinates
-

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BH08

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INSTALL	STRATA: DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING: TYPE / DEPTH (m)	SPT TESTING: RESULT	SPT TESTING: CASING DEPTH (m)	SPT TESTING: WATER LEVEL (m)	OTHER IN SITU TESTING: TYPE / DEPTH (m)	OTHER IN SITU TESTING: RESULT	SAMPLING: FROM (m)	SAMPLING: TO (m)	SAMPLING: TYPE
	Soft to firm grey sandy CLAY. (MADE GROUND)	15.20	93.73		▼							15.00		ES
												16.00		ES
	BOREHOLE TERMINATED AT 16.50m	16.50	92.43											

Notes
Inspection pit excavated to 1.2m depth.

Groundwater observations
Groundwater strike at 15.2m depth, filling borehole to 15m in 5 minutes, 14.8m in 10 minutes, 14.8m in 15 minutes and 14.7m in 20 minutes.

Chiselling details		Drilling details	
Depth (m)	Duration (hh:mm)	Diameter	Base depth (m)
		220	14.00
		170	16.50

Water added details		Casing details	
Depth (m)	Water Added (l)	Diameter	Base depth (m)
		220	6.00
		170	16.00

Title
Borehole record

Date(s)
24/07/2020

Method
Cable tool percussion

Logged by
RT

Sheet number
Sheet 2 of 2

Level (m OD)
108.93

Compiled by
KD

Revision
0

Co-ordinates
-

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BH08

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INSTALL	STRATA: DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING: TYPE / DEPTH (m)	SPT TESTING: RESULT	SPT TESTING: CASING DEPTH (m)	SPT TESTING: WATER LEVEL (m)	OTHER IN SITU TESTING: TYPE / DEPTH (m)	OTHER IN SITU TESTING: RESULT	SAMPLING: FROM (m)	SAMPLING: TO (m)	SAMPLING: TYPE
	Grass onto brown gravelly fine to medium SAND with frequent rootlets. Gravel consists of concrete. (MADE GROUND)	0.10	108.45									0.10		ES
												0.50		ES
	Soft brown slightly sandy slightly gravelly CLAY. Gravel consists of timber, brick, concrete, ash, fabric and plastic. (MADE GROUND)	0.80	107.75									1.00		ES
	Coarse FILL comprised of crushed bricks and concrete. (MADE GROUND)	2.10	106.45									2.00		ES
	CONCRETE. (MADE GROUND)	2.30	106.25											
	Soft black slightly sandy slightly gravelly CLAY. Gravel consists of brick, concrete, ash, clinker, fabric and timber. (MADE GROUND)											3.00		ES
												4.00		ES
												5.00		ES
	Very soft grey slightly sandy slightly gravelly CLAY. Gravel consists of brick, concrete, timber and fabric. (MADE GROUND)	6.10	102.45									6.00		ES
												7.00		ES
												8.00		ES
												9.00		ES
	Orangish brown slightly clayey gravelly medium to coarse SAND. Gravel consists of ironstone and ferruginous sandstone. (PROBABLE MADE GROUND)	9.70	98.85									9.70		D
												9.80		ES
												10.44		W
												11.00		D
	Stiff grey silty CLAY.	14.10	94.45											

CONTINUED ON NEXT SHEET

Notes
Inspection pit excavated to 1.2m depth.

Chiselling details

Depth (m)	Duration (hh:mm)
2.10 - 2.30	01:00
10.80 - 11.10	01:00

Drilling details

Diameter	Base depth (m)
220	13.00
170	15.00

Groundwater observations
Groundwater strike at 13.1m depth, filling borehole to 11.2m in 5 minutes, 10.7m in 10 minutes, 9.2m in 15 minutes and 9.1m in 20 minutes. Sealed off with casing at 13.1m.

Water added details

Depth (m)	Water Added (l)

Casing details

Diameter	Base depth (m)
220	10.50
170	14.50

Title
Borehole record

Date(s)
08/07/2020 - 10/07/2020

Method
Cable tool percussion

Logged by
RT

Sheet number
Sheet 1 of 2

Level (m OD)
108.55

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KD

Revision
0

Co-ordinates
-

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BH09

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INSTALL	STRATA				WATER STRIKES	SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	(WHITBY MUDSTONE FORMATION)	15.00	93.55									15.00		D
	BOREHOLE TERMINATED AT 15.00m													

Notes
Inspection pit excavated to 1.2m depth.

Chiselling details

Depth (m)	Duration (hh:mm)

Drilling details

Diameter	Base depth (m)
220	13.00
170	15.00

Groundwater observations
Groundwater strike at 13.1m depth, filling borehole to 11.2m in 5 minutes, 10.7m in 10 minutes, 9.2m in 15 minutes and 9.1m in 20 minutes. Sealed off with casing at 13.1m.

Water added details

Depth (m)	Water Added (l)

Casing details

Diameter	Base depth (m)
220	10.50
170	14.50

Title
Borehole record

Date(s)
08/07/2020 - 10/07/2020

Method
Cable tool percussion

Logged by
RT

Sheet number
Sheet 2 of 2

Level (m OD)
108.55

Compiled by
KD

Revision
0

Co-ordinates
-

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SD

BH09

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DETS Ltd
Unit 1
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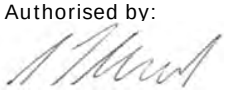
Rose Lane
Lenham Heath
Kent
ME17 2JN
t: 01622 850410

DETS Report No: 20-07994

Site Reference:	Rockingham Enterprise Area, Corby
Project / Job Ref:	STP3966-D-1
Order No:	POR008311
Sample Receipt Date:	20/07/2020
Sample Scheduled Date:	20/07/2020
Report Issue Number:	1
Reporting Date:	28/07/2020

Authorised by:



Dave Ashworth
Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

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DETS Ltd
Unit 1, Rose Lane Industrial Estate
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Lenham Heath
Maidstone
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4480

Soil Analysis Certificate						
DETS Report No: 20-07994	Date Sampled	13/07/20	13/07/20	13/07/20	13/07/20	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0511.0012	BH0612.0013	BH097.008	TP020.201	TP031.002
Project / Job Ref: STP3966-D-1	Additional Refs	BH05	BH06	BH09	TP02	TP03
Order No: POR008311	Depth (m)	11.00	12.00	7.00	0.20	1.00
Reporting Date: 28/07/2020	DETS Sample No	487800	487801	487802	487803	487805

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025				Not Detected	
Sample Matrix (S)	Material Type	N/a	NONE					
Asbestos Type (S)	PLM Result	N/a	ISO17025					
pH	pH Units	N/a	MCERTS	7.4	7.8	7.6		7.7
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	148		< 2
Complex Cyanide	mg/kg	< 2	NONE	< 2	< 2	148		< 2
Free Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2		< 2
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS			567		1710
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS			0.57		1.71
Sulphide	mg/kg	< 5	NONE			< 5		< 5
Organic Matter	%	< 0.1	MCERTS	1.6	1.5	2.9		1.1
Loss on Ignition @ 450°C	%	< 0.01	NONE	3.20	2.20			
Water Soluble Nitrate (2:1) as NO_3	mg/kg	< 3	MCERTS			< 3		< 3
Water Soluble Nitrate (2:1) as NO_3	mg/l	< 1.5	MCERTS			< 1.5		< 1.5
Arsenic (As)	mg/kg	< 2	MCERTS	60	63	66		28
Beryllium (Be)	mg/kg	< 0.5	MCERTS	< 0.5	0.8	3.8		< 0.5
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	2.7		< 1
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	0.3	0.3	5.8		< 0.2
Chromium (Cr)	mg/kg	< 2	MCERTS	22	28	136		23
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2	< 2		< 2
Copper (Cu)	mg/kg	< 4	MCERTS	11	14	38		18
Lead (Pb)	mg/kg	< 3	MCERTS	20	21	1010		15
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1		< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	26	33	33		28
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3		< 3
Vanadium (V)	mg/kg	< 1	MCERTS	47	53	253		30
Zinc (Zn)	mg/kg	< 3	MCERTS	68	86	5030		59
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2		< 2

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Samples Descriptions page describes if the test is performed on the dried or as-received portion
Subcontracted analysis (S)

DETS Ltd
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4480

Soil Analysis Certificate						
DETS Report No: 20-07994	Date Sampled	13/07/20	13/07/20	13/07/20	13/07/20	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP032.003	TP040.201	TP051.002	TP070.201	TP090.201
Project / Job Ref: STP3966-D-1	Additional Refs	TP03	TP04	TP05	TP07	TP09
Order No: POR008311	Depth (m)	2.00	0.20	1.00	0.20	0.20
Reporting Date: 28/07/2020	DETS Sample No	487807	487808	487809	487810	487811

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025		Not Detected		Not Detected	Not Detected
Sample Matrix (S)	Material Type	N/a	NONE					
Asbestos Type (S)	PLM Result	N/a	ISO17025					
pH	pH Units	N/a	MCERTS	8.0		8.0		
Total Cyanide	mg/kg	< 2	NONE	< 2		< 2		
Complex Cyanide	mg/kg	< 2	NONE	< 2		< 2		
Free Cyanide	mg/kg	< 2	NONE	< 2		< 2		
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS					
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS					
Sulphide	mg/kg	< 5	NONE					
Organic Matter	%	< 0.1	MCERTS	1		0.7		
Loss on Ignition @ 450°C	%	< 0.01	NONE	2		2.20		
Water Soluble Nitrate (2:1) as NO_3	mg/kg	< 3	MCERTS					
Water Soluble Nitrate (2:1) as NO_3	mg/l	< 1.5	MCERTS					
Arsenic (As)	mg/kg	< 2	MCERTS	21		17		
Beryllium (Be)	mg/kg	< 0.5	MCERTS	< 0.5		< 0.5		
W/S Boron	mg/kg	< 1	NONE	< 1		< 1		
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	< 0.2		< 0.2		
Chromium (Cr)	mg/kg	< 2	MCERTS	20		18		
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2		< 2		
Copper (Cu)	mg/kg	< 4	MCERTS	16		15		
Lead (Pb)	mg/kg	< 3	MCERTS	13		12		
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1		< 1		
Nickel (Ni)	mg/kg	< 3	MCERTS	21		20		
Selenium (Se)	mg/kg	< 2	MCERTS	< 3		< 3		
Vanadium (V)	mg/kg	< 1	MCERTS	34		32		
Zinc (Zn)	mg/kg	< 3	MCERTS	51		42		
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2		< 2		

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Samples Descriptions page describes if the test is performed on the dried or as-received portion
Subcontracted analysis (S)

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

4480

Soil Analysis Certificate						
DETS Report No: 20-07994	Date Sampled	13/07/20	13/07/20	13/07/20	13/07/20	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP093.004	TP102.003	TP130.201	TP150.201	TP160.201
Project / Job Ref: STP3966-D-1	Additional Refs	TP09	TP10	TP13	TP15	TP16
Order No: POR008311	Depth (m)	3.00	2.00	0.20	0.20	0.20
Reporting Date: 28/07/2020	DETS Sample No	487812	487813	487815	487817	487818

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025			Not Detected	Not Detected	Not Detected
Sample Matrix (S)	Material Type	N/a	NONE					
Asbestos Type (S)	PLM Result	N/a	ISO17025					
pH	pH Units	N/a	MCERTS	8.1	8.0			
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2			
Complex Cyanide	mg/kg	< 2	NONE	< 2	< 2			
Free Cyanide	mg/kg	< 2	NONE	< 2	< 2			
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS		357			
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS		0.36			
Sulphide	mg/kg	< 5	NONE		< 5			
Organic Matter	%	< 0.1	MCERTS	0.6	1.8			
Loss on Ignition @ 450°C	%	< 0.01	NONE	1.40				
Water Soluble Nitrate (2:1) as NO_3	mg/kg	< 3	MCERTS		5			
Water Soluble Nitrate (2:1) as NO_3	mg/l	< 1.5	MCERTS		2.3			
Arsenic (As)	mg/kg	< 2	MCERTS	34	40			
Beryllium (Be)	mg/kg	< 0.5	MCERTS	< 0.5	1.4			
W/S Boron	mg/kg	< 1	NONE	1.5	4.2			
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	< 0.2	< 0.2			
Chromium (Cr)	mg/kg	< 2	MCERTS	12	90			
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2			
Copper (Cu)	mg/kg	< 4	MCERTS	5	29			
Lead (Pb)	mg/kg	< 3	MCERTS	25	101			
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1			
Nickel (Ni)	mg/kg	< 3	MCERTS	10	67			
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3			
Vanadium (V)	mg/kg	< 1	MCERTS	25	163			
Zinc (Zn)	mg/kg	< 3	MCERTS	113	676			
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2			

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Subcontracted analysis (S)

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Soil Analysis Certificate						
DETS Report No: 20-07994	Date Sampled	13/07/20	13/07/20	13/07/20	13/07/20	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP170.201	TP181.002	TP182.003	TP191.002	TP200.201
Project / Job Ref: STP3966-D-1	Additional Refs	TP17	TP18	TP18	TP19	TP20
Order No: POR008311	Depth (m)	0.20	1.00	2.00	1.00	0.20
Reporting Date: 28/07/2020	DETS Sample No	487819	487820	487821	487822	487823

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected	Detected		Not Detected	Not Detected
Sample Matrix (S)	Material Type	N/a	NONE		Chrysotile Present as bundles			
Asbestos Type (S)	PLM Result	N/a	ISO17025		Chrysotile			
pH	pH Units	N/a	MCERTS			7.7	7.8	
Total Cyanide	mg/kg	< 2	NONE			< 2	< 2	
Complex Cyanide	mg/kg	< 2	NONE			< 2	< 2	
Free Cyanide	mg/kg	< 2	NONE			< 2	< 2	
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS					
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS					
Sulphide	mg/kg	< 5	NONE					
Organic Matter	%	< 0.1	MCERTS			2	1.2	
Loss on Ignition @ 450°C	%	< 0.01	NONE			2.90	2.40	
Water Soluble Nitrate (2:1) as NO_3	mg/kg	< 3	MCERTS					
Water Soluble Nitrate (2:1) as NO_3	mg/l	< 1.5	MCERTS					
Arsenic (As)	mg/kg	< 2	MCERTS			7	16	
Beryllium (Be)	mg/kg	< 0.5	MCERTS			0.8	< 0.5	
W/S Boron	mg/kg	< 1	NONE			3.3	< 1	
Cadmium (Cd)	mg/kg	< 0.2	MCERTS			< 0.2	< 0.2	
Chromium (Cr)	mg/kg	< 2	MCERTS			97	32	
Chromium (hexavalent)	mg/kg	< 2	NONE			< 2	< 2	
Copper (Cu)	mg/kg	< 4	MCERTS			66	19	
Lead (Pb)	mg/kg	< 3	MCERTS			86	28	
Mercury (Hg)	mg/kg	< 1	MCERTS			< 1	< 1	
Nickel (Ni)	mg/kg	< 3	MCERTS			64	19	
Selenium (Se)	mg/kg	< 2	MCERTS			< 3	< 3	
Vanadium (V)	mg/kg	< 1	MCERTS			47	49	
Zinc (Zn)	mg/kg	< 3	MCERTS			976	148	
Total Phenols (monohydric)	mg/kg	< 2	NONE			< 2	< 2	

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Samples Descriptions page describes if the test is performed on the dried or as-received portion
Subcontracted analysis (S)

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Soil Analysis Certificate						
DETS Report No: 20-07994	Date Sampled	13/07/20	13/07/20	13/07/20	13/07/20	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP210.201	TP211.002	TP230.101	TP230.702	TP233.505
Project / Job Ref: STP3966-D-1	Additional Refs	TP21	TP21	TP23	TP23	TP23
Order No: POR008311	Depth (m)	0.20	1.00	0.10	0.70	3.50
Reporting Date: 28/07/2020	DETS Sample No	487824	487825	487826	487827	487829

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected		Not Detected		
Sample Matrix (S)	Material Type	N/a	NONE					
Asbestos Type (S)	PLM Result	N/a	ISO17025					
pH	pH Units	N/a	MCERTS		7.4		8.0	8.3
Total Cyanide	mg/kg	< 2	NONE		< 2		< 2	5
Complex Cyanide	mg/kg	< 2	NONE		< 2		< 2	5
Free Cyanide	mg/kg	< 2	NONE		< 2		< 2	< 2
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS				948	
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS				0.95	
Sulphide	mg/kg	< 5	NONE				69	
Organic Matter	%	< 0.1	MCERTS		1.2		1.7	1.7
Loss on Ignition @ 450°C	%	< 0.01	NONE		2.30			4.60
Water Soluble Nitrate (2:1) as NO_3	mg/kg	< 3	MCERTS				< 3	
Water Soluble Nitrate (2:1) as NO_3	mg/l	< 1.5	MCERTS				< 1.5	
Arsenic (As)	mg/kg	< 2	MCERTS		6		22	72
Beryllium (Be)	mg/kg	< 0.5	MCERTS		0.7		< 0.5	1.1
W/S Boron	mg/kg	< 1	NONE		1.4		1	1.7
Cadmium (Cd)	mg/kg	< 0.2	MCERTS		< 0.2		< 0.2	< 0.2
Chromium (Cr)	mg/kg	< 2	MCERTS		92		29	117
Chromium (hexavalent)	mg/kg	< 2	NONE		< 2		< 2	< 2
Copper (Cu)	mg/kg	< 4	MCERTS		51		13	10
Lead (Pb)	mg/kg	< 3	MCERTS		211		16	106
Mercury (Hg)	mg/kg	< 1	MCERTS		< 1		< 1	1.7
Nickel (Ni)	mg/kg	< 3	MCERTS		48		18	43
Selenium (Se)	mg/kg	< 2	MCERTS		< 3		< 3	< 3
Vanadium (V)	mg/kg	< 1	MCERTS		40		44	234
Zinc (Zn)	mg/kg	< 3	MCERTS		5360		72	609
Total Phenols (monohydric)	mg/kg	< 2	NONE		< 2		< 2	< 2

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Subcontracted analysis (S)

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UKAS TESTING 4480

Soil Analysis Certificate						
DETS Report No: 20-07994	Date Sampled	13/07/20				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP270.101				
Project / Job Ref: STP3966-D-1	Additional Refs	TP27				
Order No: POR008311	Depth (m)	0.10				
Reporting Date: 28/07/2020	DETS Sample No	487831				

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected				
Sample Matrix (S)	Material Type	N/a	NONE					
Asbestos Type (S)	PLM Result	N/a	ISO17025					
pH	pH Units	N/a	MCERTS					
Total Cyanide	mg/kg	< 2	NONE					
Complex Cyanide	mg/kg	< 2	NONE					
Free Cyanide	mg/kg	< 2	NONE					
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS					
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS					
Sulphide	mg/kg	< 5	NONE					
Organic Matter	%	< 0.1	MCERTS					
Loss on Ignition @ 450°C	%	< 0.01	NONE					
Water Soluble Nitrate (2:1) as NO_3	mg/kg	< 3	MCERTS					
Water Soluble Nitrate (2:1) as NO_3	mg/l	< 1.5	MCERTS					
Arsenic (As)	mg/kg	< 2	MCERTS					
Beryllium (Be)	mg/kg	< 0.5	MCERTS					
W/S Boron	mg/kg	< 1	NONE					
Cadmium (Cd)	mg/kg	< 0.2	MCERTS					
Chromium (Cr)	mg/kg	< 2	MCERTS					
Chromium (hexavalent)	mg/kg	< 2	NONE					
Copper (Cu)	mg/kg	< 4	MCERTS					
Lead (Pb)	mg/kg	< 3	MCERTS					
Mercury (Hg)	mg/kg	< 1	MCERTS					
Nickel (Ni)	mg/kg	< 3	MCERTS					
Selenium (Se)	mg/kg	< 2	MCERTS					
Vanadium (V)	mg/kg	< 1	MCERTS					
Zinc (Zn)	mg/kg	< 3	MCERTS					
Total Phenols (monohydric)	mg/kg	< 2	NONE					

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Samples Descriptions page describes if the test is performed on the dried or as-received portion
Subcontracted analysis (S)

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Soil Analysis Certificate - Speciated PAHs							
DETS Report No: 20-07994	Date Sampled	13/07/20	13/07/20	13/07/20	13/07/20	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0511.0012	BH0612.0013	BH097.008	TP031.002	TP032.003
Project / Job Ref: STP3966-D-1	Additional Refs	BH05	BH06	BH09	TP03	TP03
Order No: POR008311	Depth (m)	11.00	12.00	7.00	1.00	2.00
Reporting Date: 28/07/2020	DETS Sample No	487800	487801	487802	487805	487807

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.30	< 0.1	< 0.1
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.24	< 0.1	< 0.1
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6

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Soil Analysis Certificate - Speciated PAHs							
DETS Report No: 20-07994	Date Sampled	13/07/20	13/07/20	13/07/20	13/07/20	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP051.002	TP093.004	TP102.003	TP182.003	TP191.002
Project / Job Ref: STP3966-D-1	Additional Refs	TP05	TP09	TP10	TP18	TP19
Order No: POR008311	Depth (m)	1.00	3.00	2.00	2.00	1.00
Reporting Date: 28/07/2020	DETS Sample No	487809	487812	487813	487821	487822

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.18	< 0.1	< 0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.31	< 0.1	0.22
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	1.62	1.24	3.25
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.58	0.26	1.66
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	1.78	3.08	5.68
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	1.37	2.73	4.83
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.58	1.32	2.20
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.57	1.43	2.44
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.49	2.05	2.37
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.15	0.63	0.72
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.31	1.50	2.05
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.19	1.35	1.16
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	0.21	0.22
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.16	1.57	1.09
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	8.3	17.4	27.9

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Soil Analysis Certificate - Speciated PAHs							
DETS Report No: 20-07994	Date Sampled	13/07/20	13/07/20	13/07/20		
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied		
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP211.002	TP230.702	TP233.505		
Project / Job Ref: STP3966-D-1	Additional Refs	TP21	TP23	TP23		
Order No: POR008311	Depth (m)	1.00	0.70	3.50		
Reporting Date: 28/07/2020	DETS Sample No	487825	487827	487829		

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.11		
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	0.29	< 0.1		
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	0.86	< 0.1		
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	0.55	0.82		
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	0.53	0.23		
Fluoranthene	mg/kg	< 0.1	MCERTS	0.90	2.60	2.06		
Pyrene	mg/kg	< 0.1	MCERTS	0.82	2.93	2		
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.37	0.84	1.35		
Chrysene	mg/kg	< 0.1	MCERTS	0.35	0.74	1.27		
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.50	1	2.33		
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	0.32	0.71		
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	0.35	0.82	1.85		
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	0.24	0.45	1.30		
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.23		
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	0.26	0.43	1.22		
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	3.8	12.4	15.5		

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Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 20-07994	Date Sampled	13/07/20	13/07/20	13/07/20	13/07/20	
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH097.008	TP031.002	TP102.003	TP230.702	
Project / Job Ref: STP3966-D-1	Additional Refs	BH09	TP03	TP10	TP23	
Order No: POR008311	Depth (m)	7.00	1.00	2.00	0.70	
Reporting Date: 28/07/2020	DETS Sample No	487802	487805	487813	487827	

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Aliphatic >C6 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	14	
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	9	< 2	< 2	159	
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	14	< 3	< 3	923	
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	< 3	950	
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	< 10	< 10	191	
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	23	< 21	< 21	2238	
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Aromatic >C7 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	28	
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	< 2	< 2	309	
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	< 3	509	
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	< 10	< 10	< 10	150	
Aromatic (C5 - C35)	mg/kg	< 21	NONE	< 21	< 21	< 21	996	
Total >C5 - C35	mg/kg	< 42	NONE	< 42	< 42	< 42	3234	

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Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 20-07994	Date Sampled	13/07/20	13/07/20	13/07/20	13/07/20	
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH097.008	TP031.002	TP102.003	TP230.702	
Project / Job Ref: STP3966-D-1	Additional Refs	BH09	TP03	TP10	TP23	
Order No: POR008311	Depth (m)	7.00	1.00	2.00	0.70	
Reporting Date: 28/07/2020	DETS Sample No	487802	487805	487813	487827	

Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	

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Soil Analysis Certificate - Volatile Organic Compounds (VOC)						
DETS Report No: 20-07994	Date Sampled	13/07/20	13/07/20	13/07/20	13/07/20	
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH097.008	TP031.002	TP102.003	TP230.702	
Project / Job Ref: STP3966-D-1	Additional Refs	BH09	TP03	TP10	TP23	
Order No: POR008311	Depth (m)	7.00	1.00	2.00	0.70	
Reporting Date: 28/07/2020	DETS Sample No	487802	487805	487813	487827	

Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Chloromethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Chloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Bromomethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Trichlorofluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Chloroform	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Bromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1,1-Trichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1-Dichloropropene	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Carbon Tetrachloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Trichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Dibromomethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
TAME	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
trans-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
1,3-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Tetrachloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Dibromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2-Dibromoethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Chlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Ethyl Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
m,p-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
o-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	
Styrene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Bromoform	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	8	
1,1,2,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2,3-Trichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
n-Propylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
Bromobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
2-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,3,5-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
sec-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	52	
p-Isopropyltoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
n-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	
,2-Dibromo-3-chloropropane	ug/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	

DETS Ltd
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Soil Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 20-07994	Date Sampled	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH097.008
Project / Job Ref: STP3966-D-1	Additional Refs	BH09
Order No: POR008311	Depth (m)	7.00
Reporting Date: 28/07/2020	DETS Sample No	487802

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/kg	< 10	< 10
2	N/a	N/a	µg/kg	< 10	< 10
3	N/a	N/a	µg/kg	< 10	< 10
4	N/a	N/a	µg/kg	< 10	< 10
5	N/a	N/a	µg/kg	< 10	< 10

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 20-07994	Date Sampled	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP031.002
Project / Job Ref: STP3966-D-1	Additional Refs	TP03
Order No: POR008311	Depth (m)	1.00
Reporting Date: 28/07/2020	DETS Sample No	487805

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/kg	< 10	< 10
2	N/a	N/a	µg/kg	< 10	< 10
3	N/a	N/a	µg/kg	< 10	< 10
4	N/a	N/a	µg/kg	< 10	< 10
5	N/a	N/a	µg/kg	< 10	< 10

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 20-07994	Date Sampled	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP102.003
Project / Job Ref: STP3966-D-1	Additional Refs	TP10
Order No: POR008311	Depth (m)	2.00
Reporting Date: 28/07/2020	DETS Sample No	487813

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/kg	< 10	< 10
2	N/a	N/a	µg/kg	< 10	< 10
3	N/a	N/a	µg/kg	< 10	< 10
4	N/a	N/a	µg/kg	< 10	< 10
5	N/a	N/a	µg/kg	< 10	< 10

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 20-07994	Date Sampled	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP230.702
Project / Job Ref: STP3966-D-1	Additional Refs	TP23
Order No: POR008311	Depth (m)	0.70
Reporting Date: 28/07/2020	DETS Sample No	487827

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/kg	< 10	< 10
2	N/a	N/a	µg/kg	< 10	< 10
3	N/a	N/a	µg/kg	< 10	< 10
4	N/a	N/a	µg/kg	< 10	< 10
5	N/a	N/a	µg/kg	< 10	< 10

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Semi Volatile Organic Compounds (SVOC)						
DETS Report No: 20-07994	Date Sampled	13/07/20	13/07/20	13/07/20	13/07/20	
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH097.008	TP031.002	TP102.003	TP230.702	
Project / Job Ref: STP3966-D-1	Additional Refs	BH09	TP03	TP10	TP23	
Order No: POR008311	Depth (m)	7.00	1.00	2.00	0.70	
Reporting Date: 28/07/2020	DETS Sample No	487802	487805	487813	487827	

Determinand	Unit	RL	Accreditation					
Phenol	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
1,2,4-Trichlorobenzene	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1	< 0.1	
2-Nitrophenol	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Nitrobenzene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
0-Cresol	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
bis(2-chloroethoxy)methane	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
bis(2-chloroethyl)ether	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
2,4-Dichlorophenol	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
2-Chlorophenol	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1	< 0.1	
1,3-Dichlorobenzene	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1	< 0.1	
1,4-Dichlorobenzene	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1	< 0.1	
1,2-Dichlorobenzene	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1	< 0.1	
2,4-Dimethylphenol	mg/kg	< 0.15	ISO17025	< 0.15	< 0.15	< 0.15	< 0.15	
Isophorone	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Hexachloroethane	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
p-Cresol	mg/kg	< 0.15	MCERTS	< 0.15	< 0.15	< 0.15	< 0.15	
2,4,6-Trichlorophenol	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
2,4,5-Trichlorophenol	mg/kg	< 0.15	MCERTS	< 0.15	< 0.15	< 0.15	< 0.15	
2-Nitroaniline	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
4-Chloro-3-methylphenol	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2-Methylnaphthalene	mg/kg	< 0.1	MCERTS	0.3	< 0.1	0.2	< 0.1	
Hexachlorocyclopentadiene	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Hexachlorobutadiene	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1	< 0.1	
2,6-Dinitrotoluene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Dimethyl phthalate	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2-Chloronaphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
4-Chloroanaline	mg/kg	< 0.15	NONE	< 0.15	< 0.15	< 0.15	< 0.15	
4-Nitrophenol	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
4-Chlorophenyl phenyl ether	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
3-Nitroaniline	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
4-Nitroaniline	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
4-Bromophenyl phenyl ether	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Hexachlorobenzene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
2,4-Dinitrotoluene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Diethyl phthalate	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Dibenzofuran	mg/kg	< 0.1	MCERTS	0.2	< 0.1	0.1	< 0.1	
Azobenzene	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Dibutyl phthalate	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1	< 0.1	
Carbazole	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	0.1	< 0.1	
bis(2-ethylhexyl)phthalate	mg/kg	< 0.15	MCERTS	< 0.15	< 0.15	< 0.15	< 0.15	
Benzyl butyl phthalate	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	
Di-n-octyl phthalate	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	

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Soil Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 20-07994	Date Sampled	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH097.008
Project / Job Ref: STP3966-D-1	Additional Refs	BH09
Order No: POR008311	Depth (m)	7.00
Reporting Date: 28/07/2020	DETS Sample No	487802

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	mg/kg	< 0.1	< 0.1
2	N/a	N/a	mg/kg	< 0.1	< 0.1
3	N/a	N/a	mg/kg	< 0.1	< 0.1
4	N/a	N/a	mg/kg	< 0.1	< 0.1
5	N/a	N/a	mg/kg	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 20-07994	Date Sampled	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP031.002
Project / Job Ref: STP3966-D-1	Additional Refs	TP03
Order No: POR008311	Depth (m)	1.00
Reporting Date: 28/07/2020	DETS Sample No	487805

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	mg/kg	< 0.1	< 0.1
2	N/a	N/a	mg/kg	< 0.1	< 0.1
3	N/a	N/a	mg/kg	< 0.1	< 0.1
4	N/a	N/a	mg/kg	< 0.1	< 0.1
5	N/a	N/a	mg/kg	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 20-07994	Date Sampled	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP102.003
Project / Job Ref: STP3966-D-1	Additional Refs	TP10
Order No: POR008311	Depth (m)	2.00
Reporting Date: 28/07/2020	DETS Sample No	487813

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	mg/kg	< 0.1	< 0.1
2	N/a	N/a	mg/kg	< 0.1	< 0.1
3	N/a	N/a	mg/kg	< 0.1	< 0.1
4	N/a	N/a	mg/kg	< 0.1	< 0.1
5	N/a	N/a	mg/kg	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

DETS Ltd
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Soil Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 20-07994	Date Sampled	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP230.702
Project / Job Ref: STP3966-D-1	Additional Refs	TP23
Order No: POR008311	Depth (m)	0.70
Reporting Date: 28/07/2020	DETS Sample No	487827

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	mg/kg	< 0.1	< 0.1
2	N/a	N/a	mg/kg	< 0.1	< 0.1
3	N/a	N/a	mg/kg	< 0.1	< 0.1
4	N/a	N/a	mg/kg	< 0.1	< 0.1
5	N/a	N/a	mg/kg	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

DETS Ltd
Unit 1, Rose Lane Industrial Estate
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Tel : 01622 850410

UKAS TESTING
4480

Leachate Analysis Certificate						
DETS Report No: 20-07994	Date Sampled	13/07/20	13/07/20	13/07/20	13/07/20	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP021.002	TP031.002	TP102.003	TP142.003	TP230.702
Project / Job Ref: STP3966-D-1	Additional Refs	TP02	TP03	TP10	TP14	TP23
Order No: POR008311	Depth (m)	1.00	1.00	2.00	2.00	0.70
Reporting Date: 28/07/2020	DETS Sample No	487804	487806	487814	487816	487828

Determinand	Unit	RL	Accreditation					
pH	pH Units	N/a	ISO17025	8.3	8.0	8.0	8.5	8.2
Total Cyanide	ug/l	< 5	NONE	< 5	< 5	15	< 5	< 5
Complex Cyanide	ug/l	< 5	NONE	< 5	< 5	15	< 5	< 5
Free Cyanide	ug/l	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Sulphate as SO_4	mg/l	< 1	ISO17025	6	102	26	9	84
Sulphide	mg/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nitrate as NO_3	mg/l	< 0.5	ISO17025	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Arsenic	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Beryllium	ug/l	< 3	ISO17025	< 3	< 3	< 3	< 3	< 3
Boron	ug/l	< 5	ISO17025	27	14	277	8	56
Cadmium	ug/l	< 0.4	ISO17025	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chromium (hexavalent)	ug/l	< 20	NONE		< 20	< 20		< 20
Copper	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Lead	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Mercury	ug/l	< 0.05	ISO17025	0.64	0.28	0.18	0.07	0.06
Nickel	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Selenium	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Vanadium	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Zinc	ug/l	< 2	ISO17025	< 2	< 2	< 2	< 2	< 2
Total Phenols (monohydric)	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10

Subcontracted analysis (S)

DETS Ltd
Unit 1, Rose Lane Industrial Estate
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Tel : 01622 850410

UKAS TESTING
4480

Leachate Analysis Certificate						
DETS Report No: 20-07994	Date Sampled	13/07/20				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP252.504				
Project / Job Ref: STP3966-D-1	Additional Refs	TP25				
Order No: POR008311	Depth (m)	2.50				
Reporting Date: 28/07/2020	DETS Sample No	487830				

Determinand	Unit	RL	Accreditation					
pH	pH Units	N/a	ISO17025	8.0				
Total Cyanide	ug/l	< 5	NONE	36				
Complex Cyanide	ug/l	< 5	NONE	36				
Free Cyanide	ug/l	< 5	NONE	< 5				
Sulphate as SO_4	mg/l	< 1	ISO17025	315				
Sulphide	mg/l	< 0.1	NONE	< 0.1				
Nitrate as NO_3	mg/l	< 0.5	ISO17025	< 0.5				
Arsenic	ug/l	< 5	ISO17025	< 5				
Beryllium	ug/l	< 3	ISO17025	< 3				
Boron	ug/l	< 5	ISO17025	392				
Cadmium	ug/l	< 0.4	ISO17025	< 0.4				
Chromium	ug/l	< 5	ISO17025	< 5				
Chromium (hexavalent)	ug/l	< 20	NONE					
Copper	ug/l	< 5	ISO17025	< 5				
Lead	ug/l	< 5	ISO17025	< 5				
Mercury	ug/l	< 0.05	ISO17025	0.06				
Nickel	ug/l	< 5	ISO17025	< 5				
Selenium	ug/l	< 5	ISO17025	< 5				
Vanadium	ug/l	< 5	ISO17025	< 5				
Zinc	ug/l	< 2	ISO17025	5				
Total Phenols (monohydric)	ug/l	< 10	NONE	< 10				

Subcontracted analysis (S)

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Leachate Analysis Certificate - Speciated PAH							
DETS Report No: 20-07994	Date Sampled	13/07/20	13/07/20	13/07/20	13/07/20	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP021.002	TP031.002	TP102.003	TP142.003	TP230.702
Project / Job Ref: STP3966-D-1	Additional Refs	TP02	TP03	TP10	TP14	TP23
Order No: POR008311	Depth (m)	1.00	1.00	2.00	2.00	0.70
Reporting Date: 28/07/2020	DETS Sample No	487804	487806	487814	487816	487828

Determinand	Unit	RL	Accreditation					
Naphthalene	ug/l	< 0.01	NONE	< 0.01	0.02	< 0.01	< 0.01	< 0.01
Acenaphthylene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	ug/l	< 0.01	NONE	< 0.01	0.03	0.09	0.05	0.07
Fluorene	ug/l	< 0.01	NONE	< 0.01	0.02	0.07	< 0.01	0.05
Phenanthrene	ug/l	< 0.01	NONE	0.08	0.07	0.13	0.09	0.05
Anthracene	ug/l	< 0.01	NONE	0.03	0.03	0.04	0.03	0.02
Fluoranthene	ug/l	< 0.01	NONE	< 0.01	0.03	0.06	< 0.01	0.02
Pyrene	ug/l	< 0.01	NONE	< 0.01	0.02	0.03	< 0.01	0.02
Benzo(a)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	ug/l	< 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
Total EPA-16 PAHs	ug/l	< 0.01	NONE	0.11	0.22	0.42	0.17	0.23

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Leachate Analysis Certificate - Speciated PAH							
DETS Report No: 20-07994	Date Sampled	13/07/20					
Soiltechnics Ltd	Time Sampled	None Supplied					
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP252.504					
Project / Job Ref: STP3966-D-1	Additional Refs	TP25					
Order No: POR008311	Depth (m)	2.50					
Reporting Date: 28/07/2020	DETS Sample No	487830					

Determinand	Unit	RL	Accreditation					
Naphthalene	ug/l	< 0.01	NONE	< 0.01				
Acenaphthylene	ug/l	< 0.01	NONE	< 0.01				
Acenaphthene	ug/l	< 0.01	NONE	< 0.01				
Fluorene	ug/l	< 0.01	NONE	< 0.01				
Phenanthrene	ug/l	< 0.01	NONE	0.06				
Anthracene	ug/l	< 0.01	NONE	0.02				
Fluoranthene	ug/l	< 0.01	NONE	0.06				
Pyrene	ug/l	< 0.01	NONE	0.04				
Benzo(a)anthracene	ug/l	< 0.01	NONE	< 0.01				
Chrysene	ug/l	< 0.01	NONE	< 0.01				
Benzo(b)fluoranthene	ug/l	< 0.01	NONE	< 0.01				
Benzo(k)fluoranthene	ug/l	< 0.01	NONE	< 0.01				
Benzo(a)pyrene	ug/l	< 0.01	NONE	< 0.01				
Indeno(1,2,3-cd)pyrene	ug/l	< 0.01	NONE	< 0.01				
Dibenz(a,h)anthracene	ug/l	< 0.01	NONE	< 0.01				
Benzo(ghi)perylene	ug/l	< 0.008	NONE	< 0.008				
Total EPA-16 PAHs	ug/l	< 0.01	NONE	0.18				

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Leachate Analysis Certificate - TPH CWG Banded						
DETS Report No: 20-07994	Date Sampled	13/07/20	13/07/20	13/07/20		
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied		
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP031.002	TP102.003	TP230.702		
Project / Job Ref: STP3966-D-1	Additional Refs	TP03	TP10	TP23		
Order No: POR008311	Depth (m)	1.00	2.00	0.70		
Reporting Date: 28/07/2020	DETS Sample No	487806	487814	487828		

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	ug/l	< 10	NONE	< 10	< 10	< 10		
Aliphatic >C6 - C8	ug/l	< 10	NONE	< 10	< 10	< 10		
Aliphatic >C8 - C10	ug/l	< 10	NONE	< 10	< 10	< 10		
Aliphatic >C10 - C12	ug/l	< 10	NONE	< 10	< 10	< 10		
Aliphatic >C12 - C16	ug/l	< 10	NONE	< 10	< 10	< 10		
Aliphatic >C16 - C21	ug/l	< 10	NONE	< 10	< 10	< 10		
Aliphatic >C21 - C34	ug/l	< 10	NONE	< 10	< 10	< 10		
Aliphatic (C5 - C34)	ug/l	< 70	NONE	< 70	< 70	< 70		
Aromatic >C5 - C7	ug/l	< 10	NONE	< 10	< 10	< 10		
Aromatic >C7 - C8	ug/l	< 10	NONE	< 10	< 10	< 10		
Aromatic >C8 - C10	ug/l	< 10	NONE	< 10	< 10	< 10		
Aromatic >C10 - C12	ug/l	< 10	NONE	< 10	< 10	< 10		
Aromatic >C12 - C16	ug/l	< 10	NONE	< 10	< 10	< 10		
Aromatic >C16 - C21	ug/l	< 10	NONE	< 10	< 10	< 10		
Aromatic >C21 - C35	ug/l	< 10	NONE	< 10	< 10	< 10		
Aromatic (C5 - C35)	ug/l	< 70	NONE	< 70	< 70	< 70		
Total >C5 - C35	ug/l	< 140	NONE	< 140	< 140	< 140		

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Leachate Analysis Certificate - BTEX / MTBE							
DETS Report No: 20-07994	Date Sampled	13/07/20	13/07/20	13/07/20			
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied			
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP031.002	TP102.003	TP230.702			
Project / Job Ref: STP3966-D-1	Additional Refs	TP03	TP10	TP23			
Order No: POR008311	Depth (m)	1.00	2.00	0.70			
Reporting Date: 28/07/2020	DETS Sample No	487806	487814	487828			

Determinand	Unit	RL	Accreditation					
Benzene	ug/l	< 1	ISO17025	< 1	< 1	< 1		
Toluene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Ethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
p & m-xylene	ug/l	< 10	ISO17025	< 10	< 10	< 10		
o-xylene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
MTBE	ug/l	< 10	ISO17025	< 10	< 10	< 10		

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Leachate Analysis Certificate - Volatile Organic Compounds (VOC)						
DETS Report No: 20-07994	Date Sampled	13/07/20	13/07/20	13/07/20		
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied		
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP031.002	TP102.003	TP230.702		
Project / Job Ref: STP3966-D-1	Additional Refs	TP03	TP10	TP23		
Order No: POR008311	Depth (m)	1.00	2.00	0.70		
Reporting Date: 28/07/2020	DETS Sample No	487806	487814	487828		

Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Vinyl Chloride	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Chloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Chloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Bromomethane	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Trichlorofluoromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5		
1,1-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
MTBE	ug/l	< 10	ISO17025	< 10	< 10	< 10		
trans-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
1,1-Dichloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5		
cis-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
2,2-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Chloroform	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Bromochloromethane	ug/l	< 10	ISO17025	< 10	< 10	< 10		
1,1,1-Trichloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5		
1,1-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Carbon Tetrachloride	ug/l	< 5	ISO17025	< 5	< 5	< 5		
1,2-Dichloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10		
Benzene	ug/l	< 1	ISO17025	< 1	< 1	< 1		
1,2-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Trichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Bromodichloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Dibromomethane	ug/l	< 5	ISO17025	< 5	< 5	< 5		
TAME	ug/l	< 5	ISO17025	< 5	< 5	< 5		
cis-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Toluene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
trans-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
1,1,2-Trichloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10		
1,3-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Tetrachloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Dibromochloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5		
1,2-Dibromoethane	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Chlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
1,1,1,2-Tetrachloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Ethyl Benzene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
m,p-Xylene	ug/l	< 10	ISO17025	< 10	< 10	< 10		
o-Xylene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Styrene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Bromoform	ug/l	< 10	ISO17025	< 10	< 10	< 10		
Isopropylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
1,1,2,2-Tetrachloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10		
1,2,3-Trichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5		
n-Propylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
Bromobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
2-Chlorotoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
1,3,5-Trimethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
4-Chlorotoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
tert-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
1,2,4-Trimethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
sec-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
p-Isopropyltoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
1,3-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
1,4-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
n-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
1,2-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5		
,2-Dibromo-3-chloropropane	ug/l	< 10	ISO17025	< 10	< 10	< 10		
Hexachlorobutadiene	ug/l	< 5	ISO17025	< 5	< 5	< 5		

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Leachate Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 20-07994	Date Sampled	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP031.002
Project / Job Ref: STP3966-D-1	Additional Refs	TP03
Order No: POR008311	Depth (m)	1.00
Reporting Date: 28/07/2020	DETS Sample No	487806

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Leachate Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 20-07994	Date Sampled	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP102.003
Project / Job Ref: STP3966-D-1	Additional Refs	TP10
Order No: POR008311	Depth (m)	2.00
Reporting Date: 28/07/2020	DETS Sample No	487814

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Leachate Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 20-07994	Date Sampled	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP230.702
Project / Job Ref: STP3966-D-1	Additional Refs	TP23
Order No: POR008311	Depth (m)	0.70
Reporting Date: 28/07/2020	DETS Sample No	487828

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Leachate Analysis Certificate - Semi Volatile Organic Compounds (SVOC)						
DETS Report No: 20-07994	Date Sampled	13/07/20	13/07/20	13/07/20		
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied		
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP031.002	TP102.003	TP230.702		
Project / Job Ref: STP3966-D-1	Additional Refs	TP03	TP10	TP23		
Order No: POR008311	Depth (m)	1.00	2.00	0.70		
Reporting Date: 28/07/2020	DETS Sample No	487806	487814	487828		

Determinand	Unit	RL	Accreditation					
Phenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
1,2,4-Trichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
2-Nitrophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
Nitrobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
0-Cresol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
bis(2-chloroethoxy)methane	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
bis(2-chloroethyl)ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
2,4-Dichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
2-Chlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
1,3-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
1,4-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
1,2-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
2,4-Dimethylphenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
Isophorone	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
Hexachloroethane	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
p-Cresol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
2,4,6-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
2,4,5-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
2-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
4-Chloro-3-methylphenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
2-Methylnaphthalene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
Hexachlorocyclopentadiene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
Hexachlorobutadiene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
2,6-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
Dimethyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
2-Chloronaphthalene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
4-Chloroanaline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
4-Nitrophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
4-Chlorophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
3-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
4-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
4-Bromophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
Hexachlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
2,4-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
Diethyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
Dibenzofuran	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
Azobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
Dibutyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
Carbazole	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
bis(2-ethylhexyl)phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
Benzyl butyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
Di-n-octyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1		

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Leachate Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 20-07994	Date Sampled	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP031.002
Project / Job Ref: STP3966-D-1	Additional Refs	TP03
Order No: POR008311	Depth (m)	1.00
Reporting Date: 28/07/2020	DETS Sample No	487806

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Leachate Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 20-07994	Date Sampled	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP102.003
Project / Job Ref: STP3966-D-1	Additional Refs	TP10
Order No: POR008311	Depth (m)	2.00
Reporting Date: 28/07/2020	DETS Sample No	487814

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Leachate Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 20-07994	Date Sampled	13/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP230.702
Project / Job Ref: STP3966-D-1	Additional Refs	TP23
Order No: POR008311	Depth (m)	0.70
Reporting Date: 28/07/2020	DETS Sample No	487828

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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4480

Soil Analysis Certificate - Sample Descriptions
DETS Report No: 20-07994
Soiltechnics Ltd
Site Reference: Rockingham Enterprise Area, Corby
Project / Job Ref: STP3966-D-1
Order No: POR008311
Reporting Date: 28/07/2020

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
487800	BH0511.0012	BH05	11.00	12.9	Brown sandy clay with stones
487801	BH0612.0013	BH06	12.00	13.7	Brown loamy sand
487802	BH097.008	BH09	7.00	46.4	Black loamy clay
487805	TP031.002	TP03	1.00	13.4	Brown sandy clay
487807	TP032.003	TP03	2.00	12.6	Brown sandy clay
487809	TP051.002	TP05	1.00	12.5	Brown loamy sand
487812	TP093.004	TP09	3.00	9.8	Brown sandy clay
487813	TP102.003	TP10	2.00	15.1	Brown loamy sand with stones
487821	TP182.003	TP18	2.00	10.6	Black loamy sand with brick and concrete
487822	TP191.002	TP19	1.00	9.2	Brown sandy clay with stones
487825	TP211.002	TP21	1.00	46.4	Red clay with stones
487827	TP230.702	TP23	0.70	13.1	Brown loamy sand with stones and concrete
487829	TP233.505	TP23	3.50	10.1	Brown loamy sand with stones and brick

Moisture content is part of procedure E003 & is not an accredited test

Insufficient Sample I/S

Unsuitable Sample U/S

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Soil Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 20-07994
Soiltechnics Ltd
Site Reference: Rockingham Enterprise Area, Corby
Project / Job Ref: STP3966-D-1
Order No: POR008311
Reporting Date: 28/07/2020

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E004
Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR	Sulphide	Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

D Dried
AR As Received

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Water Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 20-07994
Soiltechnics Ltd
Site Reference: Rockingham Enterprise Area, Corby
Project / Job Ref: STP3966-D-1
Order No: POR008311
Reporting Date: 28/07/2020

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Water	UF	Alkalinity	Determination of alkalinity by titration against hydrochloric acid using bromocresol green as the end point	E103
Water	UF	BTEX	Determination of BTEX by headspace GC-MS	E101
Water	F	Cations	Determination of cations by filtration followed by ICP-MS	E102
Water	UF	Chemical Oxygen Demand (COD)	Determination using a COD reactor followed by colorimetry	E112
Water	F	Chloride	Determination of chloride by filtration & analysed by ion chromatography	E109
Water	F	Chromium - Hexavalent	Determination of hexavalent chromium by acidification, addition of 1,5 diphenylcarbazide followed by	E116
Water	UF	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E115
Water	UF	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through liquid:liquid extraction with cyclohexane	E111
Water	F	Diesel Range Organics (C10 - C24)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	Dissolved Organic Content (DOC)	Determination of DOC by filtration followed by low heat with persulphate addition followed by IR dete	E110
Water	UF	Electrical Conductivity	Determination of electrical conductivity by electrometric measurement	E123
Water	F	EPH (C10 – C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E104
Water	F	Fluoride	Determination of Fluoride by filtration & analysed by ion chromatography	E109
Water	F	Hardness	Determination of Ca and Mg by ICP-MS followed by calculation	E102
Leachate	F	Leachate Preparation - NRA	Based on National Rivers Authority leaching test 1994	E301
Leachate	F	Leachate Preparation - WAC	Based on BS EN 12457 Pt1, 2, 3	E302
Water	F	Metals	Determination of metals by filtration followed by ICP-MS	E102
Water	F	Mineral Oil (C10 - C40)	Determination of liquid:liquid extraction with hexane followed by GI-FID	E104
Water	F	Nitrate	Determination of nitrate by filtration & analysed by ion chromatography	E109
Water	UF	Monohydric Phenol	Determination of phenols by distillation followed by colorimetry	E121
Water	F	PAH - Speciated (EPA 16)	Determination of PAH compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E105
Water	F	PCB - 7 Congeners	Determination of PCB compounds by concentration through SPE cartridge, collection in dichlorometha	E108
Water	UF	Petroleum Ether Extract (PEE)	Gravimetrically determined through liquid:liquid extraction with petroleum ether	E111
Water	UF	pH	Determination of pH by electrometric measurement	E107
Water	F	Phosphate	Determination of phosphate by filtration & analysed by ion chromatography	E109
Water	UF	Redox Potential	Determination of redox potential by electrometric measurement	E113
Water	F	Sulphate (as SO4)	Determination of sulphate by filtration & analysed by ion chromatography	E109
Water	UF	Sulphide	Determination of sulphide by distillation followed by colorimetry	E118
Water	F	SVOC	Determination of semi-volatile organic compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E106
Water	UF	Toluene Extractable Matter (TEM)	Gravimetrically determined through liquid:liquid extraction with toluene	E111
Water	UF	Total Organic Carbon (TOC)	Low heat with persulphate addition followed by IR detection	E110
Water	F	TPH CWG (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C35. C5 to C8 by headspace GC-MS	E104
Water	F	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C44. C5 to C8 by headspace GC-MS	E104
Water	UF	VOCs	Determination of volatile organic compounds by headspace GC-MS	E101
Water	UF	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E101

Key

F Filtered
UF Unfiltered

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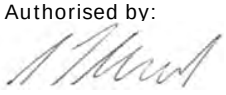
DETS Report No: 20-08627

Site Reference:	Rockingham Enterprise Area, Corby
Project / Job Ref:	STP3966D-D4
Order No:	POR008382
Sample Receipt Date:	03/08/2020
Sample Scheduled Date:	03/08/2020
Report Issue Number:	1
Reporting Date:	07/08/2020

Authorised by:



Dave Ashworth
Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

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UKAS TESTING 4480

Soil Analysis Certificate						
DETS Report No: 20-08627	Date Sampled	30/07/20	30/07/20	30/07/20	30/07/20	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH010.104	BH050.103	BH090.106	TP090.101	TP190.105
Project / Job Ref: STP3966D-D4	Additional Refs	BH01	BH05	BH09	TP09	TP19
Order No: POR008382	Depth (m)	0.10	0.10	0.10	0.10	0.10
Reporting Date: 07/08/2020	DETS Sample No	490645	490646	490647	490648	490649

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025			Not Detected		
pH	pH Units	N/a	MCERTS	8.2	7.7	7.7	8.1	7.9
Total Cyanide	mg/kg	< 2	NONE	< 2	9	14	79	14
Complex Cyanide	mg/kg	< 2	NONE	< 2	9	14	79	7
Free Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	7
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS		60			93
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS		0.06			0.09
Sulphide	mg/kg	< 5	NONE		18			16
Organic Matter	%	< 0.1	MCERTS	4.7	9.4	3.3	3.8	7.9
Loss on Ignition @ 450°C	%	< 0.01	NONE	7.40		8.70	9.20	
Water Soluble Nitrate (2:1) as NO_3	mg/kg	< 3	MCERTS		76			79
Water Soluble Nitrate (2:1) as NO_3	mg/l	< 1.5	MCERTS		38.1			39.4
Arsenic (As)	mg/kg	< 2	MCERTS	19	22	96	79	28
Beryllium (Be)	mg/kg	< 0.5	MCERTS	2	2.4	3.4	3.8	2.3
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	3.8	1.6	< 1
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	< 0.2	< 0.2	< 0.2	9.2	0.7
Chromium (Cr)	mg/kg	< 2	MCERTS	338	76	153	120	72
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Copper (Cu)	mg/kg	< 4	MCERTS	150	61	60	43	97
Lead (Pb)	mg/kg	< 3	MCERTS	63	138	491	5010	420
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	17	17	51	34	20
Selenium (Se)	mg/kg	< 2	MCERTS	< 3	< 3	< 3	< 3	< 3
Vanadium (V)	mg/kg	< 1	MCERTS	924	118	320	273	126
Zinc (Zn)	mg/kg	< 3	MCERTS	463	6280	4820	24000	4050
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	3	< 2	< 2	2.8

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Samples Descriptions page describes if the test is performed on the dried or as-received portion
Subcontracted analysis (S)

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4480

Soil Analysis Certificate						
DETS Report No: 20-08627	Date Sampled	30/07/20				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP200.102				
Project / Job Ref: STP3966D-D4	Additional Refs	TP20				
Order No: POR008382	Depth (m)	0.10				
Reporting Date: 07/08/2020	DETS Sample No	490650				

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025					
pH	pH Units	N/a	MCERTS	7.7				
Total Cyanide	mg/kg	< 2	NONE	< 2				
Complex Cyanide	mg/kg	< 2	NONE	< 2				
Free Cyanide	mg/kg	< 2	NONE	< 2				
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS	29				
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS	0.03				
Sulphide	mg/kg	< 5	NONE	< 5				
Organic Matter	%	< 0.1	MCERTS	4.7				
Loss on Ignition @ 450°C	%	< 0.01	NONE					
Water Soluble Nitrate (2:1) as NO_3	mg/kg	< 3	MCERTS	55				
Water Soluble Nitrate (2:1) as NO_3	mg/l	< 1.5	MCERTS	27.4				
Arsenic (As)	mg/kg	< 2	MCERTS	22				
Beryllium (Be)	mg/kg	< 0.5	MCERTS	1.5				
W/S Boron	mg/kg	< 1	NONE	< 1				
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	< 0.2				
Chromium (Cr)	mg/kg	< 2	MCERTS	36				
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2				
Copper (Cu)	mg/kg	< 4	MCERTS	70				
Lead (Pb)	mg/kg	< 3	MCERTS	95				
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1				
Nickel (Ni)	mg/kg	< 3	MCERTS	19				
Selenium (Se)	mg/kg	< 2	MCERTS	< 3				
Vanadium (V)	mg/kg	< 1	MCERTS	63				
Zinc (Zn)	mg/kg	< 3	MCERTS	427				
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2				

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Samples Descriptions page describes if the test is performed on the dried or as-received portion
Subcontracted analysis (S)

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Tel : 01622 850410

Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 20-08627	Date Sampled	30/07/20	30/07/20	30/07/20	30/07/20	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH010.104	BH050.103	BH090.106	TP090.101	TP190.105
Project / Job Ref: STP3966D-D4	Additional Refs	BH01	BH05	BH09	TP09	TP19
Order No: POR008382	Depth (m)	0.10	0.10	0.10	0.10	0.10
Reporting Date: 07/08/2020	DETS Sample No	490645	490646	490647	490648	490649

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.13	< 0.1	< 0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	0.19	< 0.1	< 0.1	0.24
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	0.14	< 0.1	< 0.1	0.19
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	0.12	< 0.1	0.16
Phenanthrene	mg/kg	< 0.1	MCERTS	0.10	5.22	0.72	0.43	1.95
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	1.01	0.11	< 0.1	0.56
Fluoranthene	mg/kg	< 0.1	MCERTS	0.24	12.60	0.62	0.43	7.58
Pyrene	mg/kg	< 0.1	MCERTS	0.24	11.70	0.53	0.30	7.63
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.17	7.09	0.12	< 0.1	5.68
Chrysene	mg/kg	< 0.1	MCERTS	0.23	4.81	0.17	< 0.1	4.29
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.37	8.16	0.11	< 0.1	9.15
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.11	2.28	< 0.1	< 0.1	2.28
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	0.22	4.88	< 0.1	< 0.1	5.18
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	0.20	4.77	< 0.1	< 0.1	5.87
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	0.53	< 0.1	< 0.1	0.67
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	0.17	3.21	< 0.1	< 0.1	4.04
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	2	66.6	2.6	< 1.6	55.5

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Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 20-08627	Date Sampled	30/07/20				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP200.102				
Project / Job Ref: STP3966D-D4	Additional Refs	TP20				
Order No: POR008382	Depth (m)	0.10				
Reporting Date: 07/08/2020	DETS Sample No	490650				

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1				
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1				
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1				
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1				
Phenanthrene	mg/kg	< 0.1	MCERTS	0.50				
Anthracene	mg/kg	< 0.1	MCERTS	0.15				
Fluoranthene	mg/kg	< 0.1	MCERTS	2.24				
Pyrene	mg/kg	< 0.1	MCERTS	2.23				
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	1.43				
Chrysene	mg/kg	< 0.1	MCERTS	1.32				
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	2.81				
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.77				
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	1.94				
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	1.45				
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	0.15				
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	1.02				
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	16				

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Soil Analysis Certificate - TPH CWG Banded							
DETS Report No: 20-08627	Date Sampled	30/07/20	30/07/20	30/07/20		
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied		
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH050.103	TP190.105	TP200.102		
Project / Job Ref: STP3966D-D4	Additional Refs	BH05	TP19	TP20		
Order No: POR008382	Depth (m)	0.10	0.10	0.10		
Reporting Date: 07/08/2020	DETS Sample No	490646	490649	490650		

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01		
Aliphatic >C6 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05		
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2		
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2		
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3	< 3	< 3		
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	5	< 3		
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	60	99	< 10		
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	60	104	< 21		
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01		
Aromatic >C7 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05		
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2		
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2		
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	2	3	< 2		
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	58	49	8		
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	119	225	31		
Aromatic (C5 - C35)	mg/kg	< 21	NONE	179	276	39		
Total >C5 - C35	mg/kg	< 42	NONE	240	380	< 42		

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Soil Analysis Certificate - BTEX / MTBE							
DETS Report No: 20-08627	Date Sampled	30/07/20	30/07/20	30/07/20		
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied		
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH050.103	TP190.105	TP200.102		
Project / Job Ref: STP3966D-D4	Additional Refs	BH05	TP19	TP20		
Order No: POR008382	Depth (m)	0.10	0.10	0.10		
Reporting Date: 07/08/2020	DETS Sample No	490646	490649	490650		

Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2		
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2		
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2		
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2		
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5		

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Soil Analysis Certificate - Volatile Organic Compounds (VOC)						
DETS Report No: 20-08627	Date Sampled	30/07/20	30/07/20	30/07/20		
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied		
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH050.103	TP190.105	TP200.102		
Project / Job Ref: STP3966D-D4	Additional Refs	BH05	TP19	TP20		
Order No: POR008382	Depth (m)	0.10	0.10	0.10		
Reporting Date: 07/08/2020	DETS Sample No	490646	490649	490650		

Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Vinyl Chloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Chloromethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10		
Chloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Bromomethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10		
Trichlorofluoromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,1-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
trans-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,1-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
cis-1,2-Dichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
2,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Chloroform	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Bromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,1,1-Trichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,1-Dichloropropene	ug/kg	< 10	MCERTS	< 10	< 10	< 10		
Carbon Tetrachloride	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,2-Dichloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2		
1,2-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Trichloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Bromodichloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Dibromomethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
TAME	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
cis-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
trans-1,3-Dichloropropene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,1,2-Trichloroethane	ug/kg	< 10	MCERTS	< 10	< 10	< 10		
1,3-Dichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Tetrachloroethene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Dibromochloromethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,2-Dibromoethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Chlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,1,1,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Ethyl Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2		
m,p-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2		
o-Xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2		
Styrene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Bromoform	ug/kg	< 10	MCERTS	< 10	< 10	< 10		
Isopropylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,1,2,2-Tetrachloroethane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,2,3-Trichloropropane	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
n-Propylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
Bromobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
2-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,3,5-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
4-Chlorotoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
tert-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,2,4-Trimethylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
sec-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
p-Isopropyltoluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,3-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,4-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
n-Butylbenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
1,2-Dichlorobenzene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		
,2-Dibromo-3-chloropropane	ug/kg	< 10	MCERTS	< 10	< 10	< 10		
Hexachlorobutadiene	ug/kg	< 5	MCERTS	< 5	< 5	< 5		

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Soil Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 20-08627	Date Sampled	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH050.103
Project / Job Ref: STP3966D-D4	Additional Refs	BH05
Order No: POR008382	Depth (m)	0.10
Reporting Date: 07/08/2020	DETS Sample No	490646

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/kg	< 10	< 10
2	N/a	N/a	µg/kg	< 10	< 10
3	N/a	N/a	µg/kg	< 10	< 10
4	N/a	N/a	µg/kg	< 10	< 10
5	N/a	N/a	µg/kg	< 10	< 10

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 20-08627	Date Sampled	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP190.105
Project / Job Ref: STP3966D-D4	Additional Refs	TP19
Order No: POR008382	Depth (m)	0.10
Reporting Date: 07/08/2020	DETS Sample No	490649

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/kg	< 10	< 10
2	N/a	N/a	µg/kg	< 10	< 10
3	N/a	N/a	µg/kg	< 10	< 10
4	N/a	N/a	µg/kg	< 10	< 10
5	N/a	N/a	µg/kg	< 10	< 10

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 20-08627	Date Sampled	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP200.102
Project / Job Ref: STP3966D-D4	Additional Refs	TP20
Order No: POR008382	Depth (m)	0.10
Reporting Date: 07/08/2020	DETS Sample No	490650

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/kg	< 10	< 10
2	N/a	N/a	µg/kg	< 10	< 10
3	N/a	N/a	µg/kg	< 10	< 10
4	N/a	N/a	µg/kg	< 10	< 10
5	N/a	N/a	µg/kg	< 10	< 10

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Semi Volatile Organic Compounds (SVOC)						
DETS Report No: 20-08627	Date Sampled	30/07/20	30/07/20	30/07/20		
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied		
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH050.103	TP190.105	TP200.102		
Project / Job Ref: STP3966D-D4	Additional Refs	BH05	TP19	TP20		
Order No: POR008382	Depth (m)	0.10	0.10	0.10		
Reporting Date: 07/08/2020	DETS Sample No	490646	490649	490650		

Determinand	Unit	RL	Accreditation					
Phenol	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
1,2,4-Trichlorobenzene	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1		
2-Nitrophenol	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
Nitrobenzene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
0-Cresol	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
bis(2-chloroethoxy)methane	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
bis(2-chloroethyl)ether	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
2,4-Dichlorophenol	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
2-Chlorophenol	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1		
1,3-Dichlorobenzene	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1		
1,4-Dichlorobenzene	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1		
1,2-Dichlorobenzene	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1		
2,4-Dimethylphenol	mg/kg	< 0.15	ISO17025	< 0.15	< 0.15	< 0.15		
Isophorone	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
Hexachloroethane	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
p-Cresol	mg/kg	< 0.15	MCERTS	< 0.15	< 0.15	< 0.15		
2,4,6-Trichlorophenol	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
2,4,5-Trichlorophenol	mg/kg	< 0.15	MCERTS	< 0.15	< 0.15	< 0.15		
2-Nitroaniline	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
4-Chloro-3-methylphenol	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
2-Methylnaphthalene	mg/kg	< 0.1	MCERTS	0.2	0.3	< 0.1		
Hexachlorocyclopentadiene	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
Hexachlorobutadiene	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1		
2,6-Dinitrotoluene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
Dimethyl phthalate	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
2-Chloronaphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
4-Chloroanaline	mg/kg	< 0.15	NONE	< 0.15	< 0.15	< 0.15		
4-Nitrophenol	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
4-Chlorophenyl phenyl ether	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
3-Nitroaniline	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
4-Nitroaniline	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
4-Bromophenyl phenyl ether	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
Hexachlorobenzene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
2,4-Dinitrotoluene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
Diethyl phthalate	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
Dibenzofuran	mg/kg	< 0.1	MCERTS	< 0.1	2	< 0.1		
Azobenzene	mg/kg	< 0.1	NONE	< 0.1	< 0.1	< 0.1		
Dibutyl phthalate	mg/kg	< 0.1	ISO17025	< 0.1	< 0.1	< 0.1		
Carbazole	mg/kg	< 0.1	ISO17025	< 0.1	2	< 0.1		
bis(2-ethylhexyl)phthalate	mg/kg	< 0.15	MCERTS	< 0.15	< 0.15	< 0.15		
Benzyl butyl phthalate	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
Di-n-octyl phthalate	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		

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Soil Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 20-08627	Date Sampled	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH050.103
Project / Job Ref: STP3966D-D4	Additional Refs	BH05
Order No: POR008382	Depth (m)	0.10
Reporting Date: 07/08/2020	DETS Sample No	490646

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	mg/kg	< 0.1	< 0.1
2	N/a	N/a	mg/kg	< 0.1	< 0.1
3	N/a	N/a	mg/kg	< 0.1	< 0.1
4	N/a	N/a	mg/kg	< 0.1	< 0.1
5	N/a	N/a	mg/kg	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 20-08627	Date Sampled	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP190.105
Project / Job Ref: STP3966D-D4	Additional Refs	TP19
Order No: POR008382	Depth (m)	0.10
Reporting Date: 07/08/2020	DETS Sample No	490649

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	mg/kg	< 0.1	< 0.1
2	N/a	N/a	mg/kg	< 0.1	< 0.1
3	N/a	N/a	mg/kg	< 0.1	< 0.1
4	N/a	N/a	mg/kg	< 0.1	< 0.1
5	N/a	N/a	mg/kg	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Soil Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 20-08627	Date Sampled	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	TP200.102
Project / Job Ref: STP3966D-D4	Additional Refs	TP20
Order No: POR008382	Depth (m)	0.10
Reporting Date: 07/08/2020	DETS Sample No	490650

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	mg/kg	< 0.1	< 0.1
2	N/a	N/a	mg/kg	< 0.1	< 0.1
3	N/a	N/a	mg/kg	< 0.1	< 0.1
4	N/a	N/a	mg/kg	< 0.1	< 0.1
5	N/a	N/a	mg/kg	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Maidstone
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Soil Analysis Certificate - Sample Descriptions
DETS Report No: 20-08627
Soiltechnics Ltd
Site Reference: Rockingham Enterprise Area, Corby
Project / Job Ref: STP3966D-D4
Order No: POR008382
Reporting Date: 07/08/2020

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
490645	BH010.104	BH01	0.10	2.4	Brown sandy gravel with stones and concrete
490646	BH050.103	BH05	0.10	9.6	Black loamy sand with stones and vegetation
490647	BH090.106	BH09	0.10	3.4	Brown loamy sand with vegetation
490648	TP090.101	TP09	0.10	22.8	Black loamy sand with vegetation
490649	TP190.105	TP19	0.10	1.9	Brown loamy sand with vegetation
490650	TP200.102	TP20	0.10	7.7	Brown loamy sand with stones and vegetation

Moisture content is part of procedure E003 & is not an accredited test
Insufficient Sample I/S
Unsuitable Sample U/S

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Soil Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 20-08627
Soiltechnics Ltd
Site Reference: Rockingham Enterprise Area, Corby
Project / Job Ref: STP3966D-D4
Order No: POR008382
Reporting Date: 07/08/2020

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E004
Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR	Sulphide	Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

D Dried
AR As Received

Alexa Band
Soiltechnics Ltd
White Lodge
Cedar Barn
Walgrave
NN6 9PY

DETS Ltd
Unit 1
Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Kent
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DETS Report No: 20-08629

Site Reference:	Rockingham Enterprise Area, Corby
Project / Job Ref:	STP3966D-D5
Order No:	POR008389
Sample Receipt Date:	03/08/2020
Sample Scheduled Date:	03/08/2020
Report Issue Number:	1
Reporting Date:	12/08/2020

Authorised by:

Kevin Old
General Manager

Dates of laboratory activities for each tested analyte are available upon request.

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UKAS TESTING
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Water Analysis Certificate						
DETS Report No: 20-08629	Date Sampled	30/07/20	30/07/20	30/07/20	30/07/20	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.1009	BH0612.9408	BH0814.4107	BH0910.4410	SP020.011
Project / Job Ref: STP3966D-D5	Additional Refs	BH04	BH06	BH08	BH09	SP02
Order No: POR008389	Depth (m)	10.10	12.94	14.41	10.44	0.00
Reporting Date: 12/08/2020	DETS Sample No	490652	490653	490654	490655	490656

Determinand	Unit	RL	Accreditation					
pH	pH Units	N/a	ISO17025	7.6	7.4	6.9	7.3	8.3
Total Cyanide	ug/l	< 5	NONE	11	30	8	188	14
Complex Cyanide	ug/l	< 5	NONE	11	30	8	188	14
Free Cyanide	ug/l	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Sulphate as SO_4	mg/l	< 1	ISO17025	2560	1210	2010	1640	60
Sulphide	mg/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ammoniacal Nitrogen as NH_4	ug/l	< 50	NONE	4990	3340	190000	70100	324
Ammonia as NH_4	ug/l	< 50	NONE	4990	3340	190000	70100	324
Chloride	mg/l	< 1	ISO17025	56	332	394	98	55
Nitrate as NO_3	mg/l	< 0.5	ISO17025	< 0.5	< 0.5	< 0.5	< 0.5	4.9
Nitrite as NO_2	mg/l	< 0.5	NONE	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Phosphate as PO_4	mg/l	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Fluoride	mg/l	< 0.5	ISO17025	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Total Organic Carbon (TOC)	mg/l	< 0.1	NONE	10.7	10	8.2	16.4	13.3
Chemical Oxygen Demand	mg/l	< 5	NONE	20	18	94	33	6
Biological Oxygen Demand	mg/l	< 5	NONE	32	< 5	< 5	< 5	< 5
Total Suspended Solids	mg/l	< 5	NONE	3150	6670	25700	3550	25
Carbonate (Alkalinity as $CaCO_3$)	mg/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Arsenic (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Beryllium (dissolved)	ug/l	< 3	ISO17025	< 3	< 3	< 3	< 3	< 3
Boron (dissolved)	ug/l	< 5	ISO17025	251	952	258	1180	68
Cadmium (dissolved)	ug/l	< 0.4	ISO17025	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Chromium (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chromium (hexavalent)	ug/l	< 20	NONE	< 20	< 20	< 20	< 20	< 20
Copper (dissolved)	ug/l	< 5	ISO17025	17	11	11	12	11
Lead (dissolved)	ug/l	< 5	ISO17025	8	< 5	5	5	< 5
Mercury (dissolved)	ug/l	< 0.05	ISO17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	ug/l	< 5	ISO17025	10	13	14	9	< 5
Selenium (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Vanadium (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Zinc (dissolved)	ug/l	< 2	ISO17025	63	75	65	49	60
Total Phenols (monohydric)	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10

Subcontracted analysis (S)
Insufficient sample I/S
Unsuitable Sample U/S

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Water Analysis Certificate - Speciated PAH						
DETS Report No: 20-08629	Date Sampled	30/07/20	30/07/20	30/07/20	30/07/20	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.1009	BH0612.9408	BH0814.4107	BH0910.4410	SP020.011
Project / Job Ref: STP3966D-D5	Additional Refs	BH04	BH06	BH08	BH09	SP02
Order No: POR008389	Depth (m)	10.10	12.94	14.41	10.44	0.00
Reporting Date: 12/08/2020	DETS Sample No	490652	490653	490654	490655	490656

Determinand	Unit	RL	Accreditation					
Naphthalene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	ug/l	< 0.01	NONE	< 0.01	0.01	< 0.01	< 0.01	< 0.01
Pyrene	ug/l	< 0.01	NONE	< 0.01	0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	ug/l	< 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
Total EPA-16 PAHs	ug/l	< 0.01	NONE	< 0.01	0.02	< 0.01	< 0.01	< 0.01

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Water Analysis Certificate - TPH CWG Banded						
DETS Report No: 20-08629	Date Sampled	30/07/20	30/07/20	30/07/20	30/07/20	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.1009	BH0612.9408	BH0814.4107	BH0910.4410	SP020.011
Project / Job Ref: STP3966D-D5	Additional Refs	BH04	BH06	BH08	BH09	SP02
Order No: POR008389	Depth (m)	10.10	12.94	14.41	10.44	0.00
Reporting Date: 12/08/2020	DETS Sample No	490652	490653	490654	490655	490656

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C6 - C8	ug/l	< 10	NONE	< 10	< 10	11	< 10	< 10
Aliphatic >C8 - C10	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C10 - C12	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C12 - C16	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C16 - C21	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C21 - C34	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34)	ug/l	< 70	NONE	< 70	< 70	< 70	< 70	< 70
Aromatic >C5 - C7	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C7 - C8	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C8 - C10	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C10 - C12	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C12 - C16	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C16 - C21	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C21 - C35	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35)	ug/l	< 70	NONE	< 70	< 70	< 70	< 70	< 70
Total >C5 - C35	ug/l	< 140	NONE	< 140	< 140	< 140	< 140	< 140

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Water Analysis Certificate - BTEX / MTBE							
DETS Report No: 20-08629	Date Sampled	30/07/20	30/07/20	30/07/20	30/07/20	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.1009	BH0612.9408	BH0814.4107	BH0910.4410	SP020.011
Project / Job Ref: STP3966D-D5	Additional Refs	BH04	BH06	BH08	BH09	SP02
Order No: POR008389	Depth (m)	10.10	12.94	14.41	10.44	0.00
Reporting Date: 12/08/2020	DETS Sample No	490652	490653	490654	490655	490656

Determinand	Unit	RL	Accreditation					
Benzene	ug/l	< 1	ISO17025	< 1	< 1	< 1	< 1	< 1
Toluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
p & m-xylene	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
o-xylene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
MTBE	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10

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Water Analysis Certificate - Volatile Organic Compounds (VOC)						
DETS Report No: 20-08629	Date Sampled	30/07/20	30/07/20	30/07/20	30/07/20	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.1009	BH0612.9408	BH0814.4107	BH0910.4410	SP020.011
Project / Job Ref: STP3966D-D5	Additional Refs	BH04	BH06	BH08	BH09	SP02
Order No: POR008389	Depth (m)	10.10	12.94	14.41	10.44	0.00
Reporting Date: 12/08/2020	DETS Sample No	490652	490653	490654	490655	490656

Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Vinyl Chloride	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromomethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Trichlorofluoromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
MTBE	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
trans-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
cis-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	11	< 5	< 5
2,2-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chloroform	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
1,1,1-Trichloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Carbon Tetrachloride	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
Benzene	ug/l	< 1	ISO17025	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Trichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromodichloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Dibromomethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
TAME	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Toluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1,2-Trichloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
1,3-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Tetrachloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Dibromochloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2-Dibromoethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1,1,2-Tetrachloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Ethyl Benzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
m,p-Xylene	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
o-Xylene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Styrene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromoform	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
Isopropylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1,2,2-Tetrachloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
1,2,3-Trichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
n-Propylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
2-Chlorotoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,3,5-Trimethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
4-Chlorotoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
tert-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2,4-Trimethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
sec-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
p-Isopropyltoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,3-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,4-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
n-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
,2-Dibromo-3-chloropropane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
Hexachlorobutadiene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 20-08629	Date Sampled	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.1009
Project / Job Ref: STP3966D-D5	Additional Refs	BH04
Order No: POR008389	Depth (m)	10.10
Reporting Date: 12/08/2020	DETS Sample No	490652

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 20-08629	Date Sampled	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.9408
Project / Job Ref: STP3966D-D5	Additional Refs	BH06
Order No: POR008389	Depth (m)	12.94
Reporting Date: 12/08/2020	DETS Sample No	490653

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 20-08629	Date Sampled	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0814.4107
Project / Job Ref: STP3966D-D5	Additional Refs	BH08
Order No: POR008389	Depth (m)	14.41
Reporting Date: 12/08/2020	DETS Sample No	490654

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 20-08629	Date Sampled	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0910.4410
Project / Job Ref: STP3966D-D5	Additional Refs	BH09
Order No: POR008389	Depth (m)	10.44
Reporting Date: 12/08/2020	DETS Sample No	490655

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 20-08629	Date Sampled	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	SP020.011
Project / Job Ref: STP3966D-D5	Additional Refs	SP02
Order No: POR008389	Depth (m)	0.00
Reporting Date: 12/08/2020	DETS Sample No	490656

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds (SVOC)						
DETS Report No: 20-08629	Date Sampled	30/07/20	30/07/20	30/07/20	30/07/20	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.1009	BH0612.9408	BH0814.4107	BH0910.4410	SP020.011
Project / Job Ref: STP3966D-D5	Additional Refs	BH04	BH06	BH08	BH09	SP02
Order No: POR008389	Depth (m)	10.10	12.94	14.41	10.44	0.00
Reporting Date: 12/08/2020	DETS Sample No	490652	490653	490654	490655	490656

Determinand	Unit	RL	Accreditation					
Phenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitrophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nitrobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
0-Cresol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-chloroethoxy)methane	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-chloroethyl)ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Isophorone	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachloroethane	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
p-Cresol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dimethyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloroanaline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diethyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibutyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-ethylhexyl)phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl butyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 20-08629	Date Sampled	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.1009
Project / Job Ref: STP3966D-D5	Additional Refs	BH04
Order No: POR008389	Depth (m)	10.10
Reporting Date: 12/08/2020	DETS Sample No	490652

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione	94	µg/l	< 0.1	0.3
2	Butyl citrate	91	µg/l	< 0.1	0.6
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 20-08629	Date Sampled	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.9408
Project / Job Ref: STP3966D-D5	Additional Refs	BH06
Order No: POR008389	Depth (m)	12.94
Reporting Date: 12/08/2020	DETS Sample No	490653

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 20-08629	Date Sampled	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0814.4107
Project / Job Ref: STP3966D-D5	Additional Refs	BH08
Order No: POR008389	Depth (m)	14.41
Reporting Date: 12/08/2020	DETS Sample No	490654

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 20-08629	Date Sampled	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0910.4410
Project / Job Ref: STP3966D-D5	Additional Refs	BH09
Order No: POR008389	Depth (m)	10.44
Reporting Date: 12/08/2020	DETS Sample No	490655

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 20-08629	Date Sampled	30/07/20
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	SP020.011
Project / Job Ref: STP3966D-D5	Additional Refs	SP02
Order No: POR008389	Depth (m)	0.00
Reporting Date: 12/08/2020	DETS Sample No	490656

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 20-08629
Soiltechnics Ltd
Site Reference: Rockingham Enterprise Area, Corby
Project / Job Ref: STP3966D-D5
Order No: POR008389
Reporting Date: 12/08/2020

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Water	UF	Alkalinity	Determination of alkalinity by titration against hydrochloric acid using bromocresol green as the end point	E103
Water	UF	BTEX	Determination of BTEX by headspace GC-MS	E101
Water	F	Cations	Determination of cations by filtration followed by ICP-MS	E102
Water	UF	Chemical Oxygen Demand (COD)	Determination using a COD reactor followed by colorimetry	E112
Water	F	Chloride	Determination of chloride by filtration & analysed by ion chromatography	E109
Water	F	Chromium - Hexavalent	Determination of hexavalent chromium by acidification, addition of 1,5 diphenylcarbazide followed by	E116
Water	UF	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E115
Water	UF	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through liquid:liquid extraction with cyclohexane	E111
Water	F	Diesel Range Organics (C10 - C24)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	Dissolved Organic Content (DOC)	Determination of DOC by filtration followed by low heat with persulphate addition followed by IR dete	E110
Water	UF	Electrical Conductivity	Determination of electrical conductivity by electrometric measurement	E123
Water	F	EPH (C10 – C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E104
Water	F	Fluoride	Determination of Fluoride by filtration & analysed by ion chromatography	E109
Water	F	Hardness	Determination of Ca and Mg by ICP-MS followed by calculation	E102
Leachate	F	Leachate Preparation - NRA	Based on National Rivers Authority leaching test 1994	E301
Leachate	F	Leachate Preparation - WAC	Based on BS EN 12457 Pt1, 2, 3	E302
Water	F	Metals	Determination of metals by filtration followed by ICP-MS	E102
Water	F	Mineral Oil (C10 - C40)	Determination of liquid:liquid extraction with hexane followed by GI-FID	E104
Water	F	Nitrate	Determination of nitrate by filtration & analysed by ion chromatography	E109
Water	UF	Monohydric Phenol	Determination of phenols by distillation followed by colorimetry	E121
Water	F	PAH - Speciated (EPA 16)	Determination of PAH compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E105
Water	F	PCB - 7 Congeners	Determination of PCB compounds by concentration through SPE cartridge, collection in dichlorometha	E108
Water	UF	Petroleum Ether Extract (PEE)	Gravimetrically determined through liquid:liquid extraction with petroleum ether	E111
Water	UF	pH	Determination of pH by electrometric measurement	E107
Water	F	Phosphate	Determination of phosphate by filtration & analysed by ion chromatography	E109
Water	UF	Redox Potential	Determination of redox potential by electrometric measurement	E113
Water	F	Sulphate (as SO4)	Determination of sulphate by filtration & analysed by ion chromatography	E109
Water	UF	Sulphide	Determination of sulphide by distillation followed by colorimetry	E118
Water	F	SVOC	Determination of semi-volatile organic compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E106
Water	UF	Toluene Extractable Matter (TEM)	Gravimetrically determined through liquid:liquid extraction with toluene	E111
Water	UF	Total Organic Carbon (TOC)	Low heat with persulphate addition followed by IR detection	E110
Water	F	TPH CWG (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C35. C5 to C8 by headspace GC-MS	E104
Water	F	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C44. C5 to C8 by headspace GC-MS	E104
Water	UF	VOCs	Determination of volatile organic compounds by headspace GC-MS	E101
Water	UF	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E101

Key

F Filtered
UF Unfiltered

Alexa Band
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Cedar Barn
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DETS Report No: 20-09147

Site Reference:	Rockingham Enterprise Are, Corby
Project / Job Ref:	STP3966D-D3
Order No:	POR008459
Sample Receipt Date:	13/08/2020
Sample Scheduled Date:	13/08/2020
Report Issue Number:	1
Reporting Date:	19/08/2020

Authorised by:

Kevin Old
General Manager

Dates of laboratory activities for each tested analyte are available upon request.

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Soil Analysis Certificate							
DETS Report No: 20-09147	Date Sampled	13/07/20					
Soiltechnics Ltd	Time Sampled	None Supplied					
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	TP181.002					
Project / Job Ref: STP3966D-D3	Additional Refs	TP18					
Order No: POR008459	Depth (m)	1.00					
Reporting Date: 19/08/2020	DETS Sample No	492531					

Determinand	Unit	RL	Accreditation					
Asbestos Quantification (S)	%	< 0.001	ISO17025	0.003				

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Samples Descriptions page describes if the test is performed on the dried or as-received portion
Subcontracted analysis (S)

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 20-09147
Soiltechnics Ltd
Site Reference: Rockingham Enterprise Are, Corby
Project / Job Ref: STP3966D-D3
Order No: POR008459
Reporting Date: 19/08/2020

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E004
Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR	Sulphide	Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

D Dried
AR As Received

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

Adopted Model: POSpark
Receptor: Current site user

Test procedure			Summary of test data					Initial comparison	Outlier test					Normality test			UCL	
Contaminant	Guideline source	Guideline value mg/kg	No. of tests	Min. mg/kg	Max. mg/kg	Mean mg/kg	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth	Concentration mg/kg	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean mg/kg	Contaminant
Arsenic	S4UL	170	19	6.0	96.0	37.8	0	Mean value below guideline	y	0				not normal	not normal	n	64.3	**Arsenic**
Beryllium	S4UL	63	19	0.5	3.8	1.4	0	Mean value below guideline	y	0				not normal	not normal	n	2.6	**Beryllium**
Boron	S4UL	46000	19	1.0	4.2	1.6	0	Mean value below guideline	y	0				not normal	not normal	n	2.7	**Boron**
Cadmium	S4UL	532	19	0.2	9.2	1.0	0	Mean value below guideline	n	0				not normal	not normal	n	3.4	**Cadmium**
Chromium (III)	S4UL	33000	19	12.0	338.0	79.5	0	Mean value below guideline	n	0				not normal	not normal	n	156.6	**Chromium (III)**
Copper	S4UL	44000	19	5.0	150.0	41.4	0	Mean value below guideline	n	0				not normal	not normal	n	78.3	**Copper**
Cyanide (total)	ATK*	34	19	2.0	148.0	15.5	2	Mean value below guideline	n	1	BH09	7	148					Cyanide (total)
Cyanide (total)	ATK*	34	18	2.0	79.0	8.2	1	Mean value below guideline	n	0				not normal	not normal	n	26.8	**Cyanide (total)**
Lead	C4SL	1400	19	12.0	5010.0	414.8	1	Mean value below guideline	n	1	TP09	0.1	5010					Lead
Lead	C4SL	1400	18	12.0	1010.0	159.5	0	Mean value below guideline	n	0				not normal	not normal	n	419.5	**Lead**
Mercury#	S4UL	30	19	1.0	1.7	1.0	0	Mean value below guideline	n	0				not normal	not normal	n	1.2	**Mercury#**
Nickel	S4UL	3400	19	10.0	67.0	30.9	0	Mean value below guideline	y	0				not normal	not normal	n	47.5	**Nickel**
Selenium	S4UL	1800	19	3.0	3.0	3.0	0	Mean value below guideline	y	0				not normal	not normal	n	3.0	**Selenium**
Vanadium	S4UL	5000	19	25.0	924.0	151.3	0	Mean value below guideline	n	0				not normal	not normal	n	361.1	**Vanadium**
Zinc	S4UL	170000	19	42.0	24000.0	2806.8	0	Mean value below guideline	n	0				not normal	not normal	n	8394.2	**Zinc**

S4UL	Suitable for Use Level as published by LQM/CIEH
C4SL	Category 4 Screening Level
C4SL (lower) (upper)	Category 4 Screening Level for Lead at lower or upper bound of range
ATK	Soil Screening Value derived by Atkins
BPG5	Guideline from BPG Note 5 as published by Forest Research
#	Assumed to be elemental mercury as initial screening value

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

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

Adopted model: POSpark
Receptor: Current site user

Test procedure			Summary of test data					Initial Screening	Outlier test				Normality test			UCL	
Contaminant	Guideline source	Guideline value* mg/kg	No. of tests	Min. mg/kg	Max. mg/kg	Mean mg/kg	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth / Concentration mg/kg	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean mg/kg	Contaminant
Acenaphthene	S4UL	29000	19	0.1	0.3	0.1	0	Mean value below guideline	n	0			not normal	not normal	n	0.2	**Acenaphthene**
Acenaphthylene	S4UL	29000	19	0.1	0.2	0.1	0	Mean value below guideline	n	0			not normal	not normal	n	0.1	**Acenaphthylene**
Anthracene	S4UL	150000	19	0.1	1.7	0.3	0	Mean value below guideline	n	0			not normal	not normal	n	0.7	**Anthracene**
Benzo(a)anthracene	S4UL	49	19	0.1	7.1	1.2	0	Mean value below guideline	n	0			not normal	not normal	n	3.1	**Benzo(a)anthracene**
Benzo(a)pyrene	S4UL	11	19	0.1	5.2	1.1	0	Mean value below guideline	n	0			not normal	not normal	n	2.6	**Benzo(a)pyrene**
Benzo(b)fluoranthene	S4UL	13	19	0.1	9.2	1.6	0	Mean value below guideline	n	0			not normal	not normal	n	4.2	**Benzo(b)fluoranthene**
Benzo(g,h,i)perylene	S4UL	1400	19	0.1	4.0	0.7	0	Mean value below guideline	n	0			not normal	not normal	n	1.9	**Benzo(g,h,i)perylene**
Benzo(k)fluoranthene	S4UL	370	19	0.1	2.3	0.5	0	Mean value below guideline	n	0			not normal	not normal	n	1.2	**Benzo(k)fluoranthene**
Chrysene	S4UL	93	19	0.1	4.8	1.0	0	Mean value below guideline	n	0			not normal	not normal	n	2.4	**Chrysene**
Dibenzo(a,h)anthracene	S4UL	1.1	19	0.1	0.7	0.2	0	Mean value below guideline	n	0			not normal	not normal	n	0.3	**Dibenzo(a,h)anthracene**
Fluoranthene	S4UL	6300	19	0.1	12.6	2.1	0	Mean value below guideline	n	0			not normal	not normal	n	5.4	**Fluoranthene**
Fluorene	S4UL	20000	19	0.1	0.9	0.2	0	Mean value below guideline	n	0			not normal	not normal	n	0.3	**Fluorene**
Indeno(1,2,3-cd)pyrene	S4UL	150	19	0.1	5.9	0.9	0	Mean value below guideline	n	0			not normal	not normal	n	2.6	**Indeno(1,2,3-cd)pyrene**
Naphthalene	S4UL	1200	19	0.1	0.2	0.1	0	Mean value below guideline	n	0			not normal	not normal	n	0.1	**Naphthalene**
Phenanthrene	S4UL	6200	19	0.1	5.2	0.9	0	Mean value below guideline	n	0			not normal	not normal	n	2.2	**Phenanthrene**
Phenols	S4UL	760	19	2.0	3.0	2.1	0	Mean value below guideline	n	0			not normal	not normal	n	2.4	**Phenols**
Pyrene	S4UL	15000	19	0.1	11.7	2.0	0	Mean value below guideline	n	0			not normal	not normal	n	5.1	**Pyrene**

Notes

S4UL	Suitable for Use Level as published by LQM/CIEH
C4SL	Category 4 Screening Level
SGV	Soil Guideline Value as published by the Environment Agency 2009
SSV	Soil Screening Value as derived by Soiltechnics
ATK	Soil Screening Value derived by Atkins
*	Assuming a SOM of 1%

Title: Analysis of test data in relation to concentrations of organic chemical contaminants.
Table number: 2

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

Adopted Model: Industrial/Commercial
Receptor: Construction operative

Test procedure			Summary of test data					Initial comparison	Outlier test					Normality test			UCL	
Contaminant	Guideline source	Guideline value mg/kg	No. of tests	Min. mg/kg	Max. mg/kg	Mean mg/kg	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth	Concentration mg/kg	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean mg/kg	Contaminant
Arsenic	S4UL	640	19	6.0	96.0	37.8	0	Mean value below guideline	y	0				not normal	not normal	n	64.3	**Arsenic**
Beryllium	S4UL	12	19	0.5	3.8	1.4	0	Mean value below guideline	y	0				not normal	not normal	n	2.6	**Beryllium**
Boron	S4UL	240000	19	1.0	4.2	1.6	0	Mean value below guideline	y	0				not normal	not normal	n	2.7	**Boron**
Cadmium	S4UL	190	19	0.2	9.2	1.0	0	Mean value below guideline	n	0				not normal	not normal	n	3.4	**Cadmium**
Chromium (III)	S4UL	8600	19	12.0	338.0	79.5	0	Mean value below guideline	n	0				not normal	not normal	n	156.6	**Chromium (III)**
Copper	S4UL	68000	19	5.0	150.0	41.4	0	Mean value below guideline	n	0				not normal	not normal	n	78.3	**Copper**
Cyanide (total)	ATK	34	19	2.0	148.0	15.5	2	Mean value below guideline	n	1	BH09	7	148		not normal	n	52.1	Cyanide (total)
Cyanide (total)	ATK	34	18	2.0	79.0	8.2	1	Mean value below guideline	n	0				not normal	not normal	n	26.8	**Cyanide (total)**
Lead	C4SL	6000	19	12.0	5010.0	414.8	0	Mean value below guideline	n	0				not normal	not normal	n	1554.7	**Lead**
Mercury#	S4UL	58	19	1.0	1.7	1.0	0	Mean value below guideline	n	0				not normal	not normal	n	1.2	**Mercury#**
Nickel	S4UL	980	19	10.0	67.0	30.9	0	Mean value below guideline	y	0				not normal	not normal	n	47.5	**Nickel**
Selenium	S4UL	12000	19	3.0	3.0	3.0	0	Mean value below guideline	y	0				not normal	not normal	n	3.0	**Selenium**
Vanadium	S4UL	9000	19	25.0	924.0	151.3	0	Mean value below guideline	n	0				not normal	not normal	n	361.1	**Vanadium**
Zinc	S4UL	730000	19	42.0	24000	2806.8	0	Mean value below guideline	n	0				not normal	not normal	n	8394.2	**Zinc**

S4UL	Suitable for Use Level as published by LQM/CIEH
C4SL	Category 4 Screening Level
C4SL (lower) (upper)	Category 4 Screening Level for Lead at lower or upper bound of range
ATK	Soil Screening Value derived by Atkins
BPG5	Guideline from BPG Note 5 as published by Forest Research
#	Assumed to be elemental mercury as initial screening value

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

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

Adopted model: Construction operatives
Receptor: Construction operative

Test procedure			Summary of test data					Initial Screening	Outlier test				Normality test			UCL	
Contaminant	Guideline source	Guideline value* mg/kg	No. of tests	Min. mg/kg	Max. mg/kg	Mean mg/kg	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth / Concentration mg/kg	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean mg/kg	Contaminant
Acenaphthene	S4UL	84000	19	0.1	0.3	0.1	0	Mean value below guideline	n	0			not normal	not normal	n	0.2	**Acenaphthene**
Acenaphthylene	S4UL	83000	19	0.1	0.2	0.1	0	Mean value below guideline	n	0			not normal	not normal	n	0.1	**Acenaphthylene**
Anthracene	S4UL	520000	19	0.1	1.7	0.3	0	Mean value below guideline	n	0			not normal	not normal	n	0.7	**Anthracene**
Benzo(a)anthracene	S4UL	170	19	0.1	7.1	1.2	0	Mean value below guideline	n	0			not normal	not normal	n	3.1	**Benzo(a)anthracene**
Benzo(a)pyrene	S4UL	35	19	0.1	5.2	1.1	0	Mean value below guideline	n	0			not normal	not normal	n	2.6	**Benzo(a)pyrene**
Benzo(b)fluoranthene	S4UL	44	19	0.1	9.2	1.6	0	Mean value below guideline	n	0			not normal	not normal	n	4.2	**Benzo(b)fluoranthene**
Benzo(g,h,i)perylene	S4UL	3900	19	0.1	4.0	0.7	0	Mean value below guideline	n	0			not normal	not normal	n	1.9	**Benzo(g,h,i)perylene**
Benzo(k)fluoranthene	S4UL	1200	19	0.1	2.3	0.5	0	Mean value below guideline	n	0			not normal	not normal	n	1.2	**Benzo(k)fluoranthene**
Chrysene	S4UL	350	19	0.1	4.8	1.0	0	Mean value below guideline	n	0			not normal	not normal	n	2.4	**Chrysene**
Dibenzo(a,h)anthracene	S4UL	3.5	19	0.1	0.7	0.2	0	Mean value below guideline	n	0			not normal	not normal	n	0.3	**Dibenzo(a,h)anthracene**
Fluoranthene	S4UL	23000	19	0.1	12.6	2.1	0	Mean value below guideline	n	0			not normal	not normal	n	5.4	**Fluoranthene**
Fluorene	S4UL	63000	19	0.1	0.9	0.2	0	Mean value below guideline	n	0			not normal	not normal	n	0.3	**Fluorene**
Indeno(1,2,3-cd)pyrene	S4UL	500	19	0.1	5.9	0.9	0	Mean value below guideline	n	0			not normal	not normal	n	2.6	**Indeno(1,2,3-cd)pyrene**
Naphthalene	S4UL	190	19	0.1	0.2	0.1	0	Mean value below guideline	n	0			not normal	not normal	n	0.1	**Naphthalene**
Phenanthrene	S4UL	22000	19	0.1	5.2	0.9	0	Mean value below guideline	n	0			not normal	not normal	n	2.2	**Phenanthrene**
Phenols	S4UL	760	19	2.0	3.0	2.1	0	Mean value below guideline	n	0			not normal	not normal	n	2.4	**Phenols**
Pyrene	S4UL	54000	19	0.1	11.7	2.0	0	Mean value below guideline	n	0			not normal	not normal	n	5.1	**Pyrene**

Notes

S4UL	Suitable for Use Level as published by LQM/CIEH
C4SL	Category 4 Screening Level
SGV	Soil Guideline Value as published by the Environment Agency 2009
SSV	Soil Screening Value as derived by Soiltechnics
ATK	Soil Screening Value derived by Atkins
*	Assuming a SOM of 1%

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

Adopted Model: Industrial/Commercial and BPG5
Receptor: Vegetation

Test procedure			Summary of test data					Initial comparison	Outlier test					Normality test			UCL	
Contaminant	Guideline source	Guideline value mg/kg	No. of tests	Min. mg/kg	Max. mg/kg	Mean mg/kg	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth	Concentration mg/kg	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean mg/kg	Contaminant
Arsenic	S4UL	640	19	6.0	96.0	37.8	0	Mean value below guideline	y	0				not normal	not normal	n	64.3	**Arsenic**
Beryllium	S4UL	12	19	0.5	3.8	1.4	0	Mean value below guideline	y	0				not normal	not normal	n	2.6	**Beryllium**
Boron	S4UL	240000	19	1.0	4.2	1.6	0	Mean value below guideline	y	0				not normal	not normal	n	2.7	**Boron**
Cadmium	S4UL	190	19	0.2	9.2	1.0	0	Mean value below guideline	n	0				not normal	not normal	n	3.4	**Cadmium**
Chromium (III)	S4UL	8600	19	12.0	338.0	79.5	0	Mean value below guideline	n	0				not normal	not normal	n	156.6	**Chromium (III)**
Copper	BPG5	130	19	5.0	150.0	41.4	1	Mean value below guideline	n	0				not normal	not normal	n	78.3	**Copper**
Cyanide (total)	ATK	34	19	2.0	148.0	15.5	2	Mean value below guideline	n	1	BH09	7	148					Cyanide (total)
Cyanide (total)	ATK	34	18	2.0	79.0	8.2	1	Mean value below guideline	n	0				not normal	not normal	n	26.8	**Cyanide (total)**
Lead	C4SL	6000	19	12.0	5010.0	414.8	0	Mean value below guideline	n	0				not normal	not normal	n	1554.7	**Lead**
Mercury#	S4UL	58	19	1.0	1.7	1.0	0	Mean value below guideline	n	0				not normal	not normal	n	1.2	**Mercury#**
Nickel	S4UL	980	19	10.0	67.0	30.9	0	Mean value below guideline	y	0				not normal	not normal	n	47.5	**Nickel**
Selenium	S4UL	12000	19	3.0	3.0	3.0	0	Mean value below guideline	y	0				not normal	not normal	n	3.0	**Selenium**
Vanadium	S4UL	9000	19	25.0	924.0	151.3	0	Mean value below guideline	n	0				not normal	not normal	n	361.1	**Vanadium**
Zinc	BPG5	300	19	42.0	24000	2806.8	11	Mean value above guideline								n	8394.2	**Zinc**

S4UL	Suitable for Use Level as published by LQM/CIEH
C4SL	Category 4 Screening Level
C4SL (lower) (upper)	Category 4 Screening Level for Lead at lower or upper bound of range
ATK	Soil Screening Value derived by Atkins
BPG5	Guideline from BPG Note 5 as published by Forest Research
#	Assumed to be elemental mercury as initial screening value

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

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

Adopted model: Industrial/Commercial and BPG5
Receptor: Vegetation

Test procedure			Summary of test data					Initial Screening	Outlier test				Normality test			UCL	
Contaminant	Guideline source	Guideline value* mg/kg	No. of tests	Min. mg/kg	Max. mg/kg	Mean mg/kg	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth / Concentration mg/kg	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean mg/kg	Contaminant
Acenaphthene	S4UL	84000	19	0.1	0.3	0.1	0	Mean value below guideline	n	0			not normal	not normal	n	0.2	**Acenaphthene**
Acenaphthylene	S4UL	83000	19	0.1	0.2	0.1	0	Mean value below guideline	n	0			not normal	not normal	n	0.1	**Acenaphthylene**
Anthracene	S4UL	520000	19	0.1	1.7	0.3	0	Mean value below guideline	n	0			not normal	not normal	n	0.7	**Anthracene**
Benzo(a)anthracene	S4UL	170	19	0.1	7.1	1.2	0	Mean value below guideline	n	0			not normal	not normal	n	3.1	**Benzo(a)anthracene**
Benzo(a)pyrene	S4UL	35	19	0.1	5.2	1.1	0	Mean value below guideline	n	0			not normal	not normal	n	2.6	**Benzo(a)pyrene**
Benzo(b)fluoranthene	S4UL	44	19	0.1	9.2	1.6	0	Mean value below guideline	n	0			not normal	not normal	n	4.2	**Benzo(b)fluoranthene**
Benzo(g,h,i)perylene	S4UL	3900	19	0.1	4.0	0.7	0	Mean value below guideline	n	0			not normal	not normal	n	1.9	**Benzo(g,h,i)perylene**
Benzo(k)fluoranthene	S4UL	1200	19	0.1	2.3	0.5	0	Mean value below guideline	n	0			not normal	not normal	n	1.2	**Benzo(k)fluoranthene**
Chrysene	S4UL	350	19	0.1	4.8	1.0	0	Mean value below guideline	n	0			not normal	not normal	n	2.4	**Chrysene**
Dibenzo(a,h)anthracene	S4UL	3.5	19	0.1	0.7	0.2	0	Mean value below guideline	n	0			not normal	not normal	n	0.3	**Dibenzo(a,h)anthracene**
Fluoranthene	S4UL	23000	19	0.1	12.6	2.1	0	Mean value below guideline	n	0			not normal	not normal	n	5.4	**Fluoranthene**
Fluorene	S4UL	63000	19	0.1	0.9	0.2	0	Mean value below guideline	n	0			not normal	not normal	n	0.3	**Fluorene**
Indeno(1,2,3-cd)pyrene	S4UL	500	19	0.1	5.9	0.9	0	Mean value below guideline	n	0			not normal	not normal	n	2.6	**Indeno(1,2,3-cd)pyrene**
Naphthalene	S4UL	190	19	0.1	0.2	0.1	0	Mean value below guideline	n	0			not normal	not normal	n	0.1	**Naphthalene**
Phenanthrene	S4UL	22000	19	0.1	5.2	0.9	0	Mean value below guideline	n	0			not normal	not normal	n	2.2	**Phenanthrene**
Phenols	S4UL	760	19	2.0	3.0	2.1	0	Mean value below guideline	n	0			not normal	not normal	n	2.4	**Phenols**
Pyrene	S4UL	54000	19	0.1	11.7	2.0	0	Mean value below guideline	n	0			not normal	not normal	n	5.1	**Pyrene**

Notes

S4UL	Suitable for Use Level as published by LQM/CIEH
C4SL	Category 4 Screening Level
SGV	Soil Guideline Value as published by the Environment Agency 2009
SSV	Soil Screening Value as derived by Soiltechnics
ATK	Soil Screening Value derived by Atkins
*	Assuming a SOM of 1%

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

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Controlled water screening sheet

Scenario

Receptor	Surface water
Surface water type	Inland freshwater
Hydrometric Area	Nene
Are bioavailability parameters known?	No

Contaminant	Guideline source	Guideline value (µg/l)	Maximum recorded value (µg/l)	Location	BH04	BH06	BH08	BH09	SP02	TP02	TP03
				Depth (m)	10.1	12.94	14.41	10.44	0	1	1
				Sample Type	W	W	W	W	W	ES	ES
				Type	Water	Water	Water	Water	Water	Leachate	Leachate
Inorganics - Metals											
Arsenic	AA-EQS	50	<LoD		< 5	< 5	< 5	< 5	< 5	< 5	< 5
Boron	AA-EQS	2000	1180		251	952	258	1180	68	27	14
Cadmium	AA-EQS	0.08	<LoD		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Chromium (total)	N/A	N/A	<LoD		<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD
Chromium (III)	AA-EQS	4.7	<LoD		< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chromium (VI)	AA-EQS	3.4	<LoD		< 20	< 20	< 20	< 20	< 20		< 20
Copper	AA-EQS	1	17		17	11	11	12	11	< 5	< 5
Lead	AA-EQS	1.2	8		8	< 5	5	5	< 5	< 5	< 5
Mercury	MAC-EQS	0.07	0.64		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.64	0.28
Nickel	AA-EQS	4	14		10	13	14	9	< 5	< 5	< 5
Selenium	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5	< 5	< 5
Vanadium	AA-EQS	20	<LoD		< 5	< 5	< 5	< 5	< 5	< 5	< 5
Zinc	AA-EQS	14.9	75		63	75	65	49	60	< 2	< 2
Inorganics - Miscellaneous											
pH	N/A	N/A	8.5		7.6	7.4	6.9	7.3	8.3	8.3	8
Cyanide - Total	N/A	N/A	188		11	30	8	188	14	< 5	< 5
Cyanide - Free	AA-EQS	1	<LoD		< 5	< 5	< 5	< 5	< 5	< 5	< 5
Ammonia (as N)	N/A	N/A	190000		4990	3340	190000	70100	324		
Nitrate (as NO3)	N/A	N/A	4900		< 500	< 500	< 500	< 500	4900	< 500	< 500
Sulphate	AA-EQS	400000	2560000		2560000	1210000	2010000	1640000	60000	6000	102000
Organics - PAH & Phenol											
Naphthalene	AA-EQS	2	0.02		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.02
Acenaphthylene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	N/A	N/A	0.09		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.03
Fluorene	N/A	N/A	0.07		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.02
Phenanthrene	N/A	N/A	0.13		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.08	0.07
Anthracene	AA-EQS	0.1	0.04		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.03	0.03
Fluoranthene	AA-EQS	0.0063	0.06		< 0.01	0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.03
Pyrene	N/A	N/A	0.04		< 0.01	0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.02
Benzo(a)anthracene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	AA-EQS	0.00017	<LoD		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	N/A	N/A	<LoD		< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
PAH (sum of 4)	N/A	N/A	<LoD		<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD
Phenol	AA-EQS	7.7	<LoD		< 10	< 10	< 10	< 10	< 10	< 10	< 10
Organics - BTEX & MTBE											
Benzene	AA-EQS	10	<LoD		< 1	< 1	< 1	< 1	< 1		< 1
Toluene	AA-EQS	74	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Ethylbenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Xylene (m and p, o)	AA-EQS	30	<LoD		<LoD	<LoD	<LoD	<LoD	<LoD		<LoD
o-Xylene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
m & p-xylene	N/A	N/A	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
MTBE	N/A	N/A	<LoD		< 10	< 10	< 10	< 10	< 10		< 10

Key
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Controlled water screening sheet

Scenario

Receptor	Surface water
Surface water type	Inland freshwater
Hydrometric Area	Nene
Are bioavailability parameters known?	No

Contaminant	Guideline source	Guideline value (µg/l)	Maximum recorded value (µg/l)	Location	TP10	TP14	TP23	TP25
				Depth (m)	2	2	0.7	2.5
				Sample Type	ES	ES	ES	ES
				Type	Leachate	Leachate	Leachate	Leachate
Inorganics - Metals								
Arsenic	AA-EQS	50	<LoD		< 5	< 5	< 5	< 5
Boron	AA-EQS	2000	1180		277	8	56	392
Cadmium	AA-EQS	0.08	<LoD		< 0.4	< 0.4	< 0.4	< 0.4
Chromium (total)	N/A	N/A	<LoD		<LoD	<LoD	<LoD	<LoD
Chromium (III)	AA-EQS	4.7	<LoD		< 5	< 5	< 5	< 5
Chromium (VI)	AA-EQS	3.4	<LoD		< 20		< 20	
Copper	AA-EQS	1	17		< 5	< 5	< 5	< 5
Lead	AA-EQS	1.2	8		< 5	< 5	< 5	< 5
Mercury	MAC-EQS	0.07	0.64		0.18	0.07	0.06	0.06
Nickel	AA-EQS	4	14		< 5	< 5	< 5	< 5
Selenium	N/A	N/A	<LoD		< 5	< 5	< 5	< 5
Vanadium	AA-EQS	20	<LoD		< 5	< 5	< 5	< 5
Zinc	AA-EQS	14.9	75		< 2	< 2	< 2	5
Inorganics - Miscellaneous								
pH	N/A	N/A	8.5		8	8.5	8.2	8
Cyanide - Total	N/A	N/A	188		15	< 5	< 5	36
Cyanide - Free	AA-EQS	1	<LoD		< 5	< 5	< 5	< 5
Ammonia (as N)	N/A	N/A	190000					
Nitrate (as NO3)	N/A	N/A	4900		< 500	< 500	< 500	< 500
Sulphate	AA-EQS	400000	2560000		26000	9000	84000	315000
Organics - PAH & Phenol								
Naphthalene	AA-EQS	2	0.02		< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	N/A	N/A	0.09		0.09	0.05	0.07	< 0.01
Fluorene	N/A	N/A	0.07		0.07	< 0.01	0.05	< 0.01
Phenanthrene	N/A	N/A	0.13		0.13	0.09	0.05	0.06
Anthracene	AA-EQS	0.1	0.04		0.04	0.03	0.02	0.02
Fluoranthene	AA-EQS	0.0063	0.06		0.06	< 0.01	0.02	0.06
Pyrene	N/A	N/A	0.04		0.03	< 0.01	0.02	0.04
Benzo(a)anthracene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	AA-EQS	0.00017	<LoD		< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	N/A	N/A	<LoD		< 0.008	< 0.008	< 0.008	< 0.008
PAH (sum of 4)	N/A	N/A	<LoD		<LoD	<LoD	<LoD	<LoD
Phenol	AA-EQS	7.7	<LoD		< 10	< 10	< 10	< 10
Organics - BTEX & MTBE								
Benzene	AA-EQS	10	<LoD		< 1		< 1	
Toluene	AA-EQS	74	<LoD		< 5		< 5	
Ethylbenzene	N/A	N/A	<LoD		< 5		< 5	
Xylene (m and p, o)	AA-EQS	30	<LoD		<LoD		<LoD	
o-Xylene	N/A	N/A	<LoD		< 5		< 5	
m & p-xylene	N/A	N/A	<LoD		< 10		< 10	
MTBE	N/A	N/A	<LoD		< 10		< 10	

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Controlled water screening sheet

Scenario

Receptor	Surface water
Surface water type	Inland freshwater
Hydrometric Area	Nene
Are bioavailability parameters known?	No

Contaminant	Guideline source	Guideline value (µg/l)	Maximum recorded value (µg/l)	Location	BH04	BH06	BH08	BH09	SP02	TP02	TP03
				Depth (m)	10.1	12.94	14.41	10.44	0	1	1
				Sample Type	W	W	W	W	W	ES	ES
				Type	Water	Water	Water	Water	Water	Leachate	Leachate
Organics - TPH CWG											
EC05-EC06 Aliphatic	EA	10	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>06-EC08 Aliphatic	EA	10	11		< 10	< 10	11	< 10	< 10		< 10
EC>08-EC10 Aliphatic	EA	10	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>10-EC12 Aliphatic	EA	10	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>12-EC16 Aliphatic	EA	10	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>16-EC21 Aliphatic	EA	10	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>21-EC35 Aliphatic	EA	10	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC05-EC06 Aromatic (benzene)	AA-EQS	10	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>06-EC08 Aromatic (toluene)	AA-EQS	74	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>08-EC10 Aromatic	EA	10	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>10-EC12 Aromatic	EA	10	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>12-EC16 Aromatic	EA	10	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>16-EC21 Aromatic	EA	10	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>21-EC35 Aromatic	EA	10	<LoD		< 10	< 10	< 10	< 10	< 10		< 10

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Controlled water screening sheet

Scenario

Receptor	Surface water
Surface water type	Inland freshwater
Hydrometric Area	Nene
Are bioavailability parameters known?	No

Contaminant	Guideline source	Guideline value (µg/l)	Maximum recorded value (µg/l)	Location	TP10	TP14	TP23	TP25
				Depth (m)	2	2	0.7	2.5
				Sample Type	ES	ES	ES	ES
				Type	Leachate	Leachate	Leachate	Leachate
Organics - TPH CWG								
EC05-EC06 Aliphatic	EA	10	<LoD		< 10		< 10	
EC>06-EC08 Aliphatic	EA	10	11		< 10		< 10	
EC>08-EC10 Aliphatic	EA	10	<LoD		< 10		< 10	
EC>10-EC12 Aliphatic	EA	10	<LoD		< 10		< 10	
EC>12-EC16 Aliphatic	EA	10	<LoD		< 10		< 10	
EC>16-EC21 Aliphatic	EA	10	<LoD		< 10		< 10	
EC>21-EC35 Aliphatic	EA	10	<LoD		< 10		< 10	
EC05-EC06 Aromatic (benzene)	AA-EQS	10	<LoD		< 10		< 10	
EC>06-EC08 Aromatic (toluene)	AA-EQS	74	<LoD		< 10		< 10	
EC>08-EC10 Aromatic	EA	10	<LoD		< 10		< 10	
EC>10-EC12 Aromatic	EA	10	<LoD		< 10		< 10	
EC>12-EC16 Aromatic	EA	10	<LoD		< 10		< 10	
EC>16-EC21 Aromatic	EA	10	<LoD		< 10		< 10	
EC>21-EC35 Aromatic	EA	10	<LoD		< 10		< 10	

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				Depth (m)	10.1	12.94	14.41	10.44	0	1	1
				Sample Type	W	W	W	W	W	ES	ES
				Type	Water	Water	Water	Water	Water	Leachate	Leachate
Organics - VOCs											
PCE & TCE (sum of)	N/A	N/A	<LoD		<LoD	<LoD	<LoD	<LoD	<LoD		<LoD
Trihalomethanes (sum of)	N/A	N/A	<LoD		<LoD	<LoD	<LoD	<LoD	<LoD		<LoD
1,1,1,2-Tetrachloroethane	AA-EQS	140	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,1,1-Trichloroethane	AA-EQS	100	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,1,2,2-Tetrachloroethane	AA-EQS	140	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
1,1,2-Trichloroethane	AA-EQS	400	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
1,1-Dichloroethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,1-Dichloroethene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,1-Dichloropropene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,2,3-Trichloropropane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,2,4-Trimethylbenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,2-Dibromo-3-chloropropane	N/A	N/A	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
1,2-Dibromoethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,2-Dichlorobenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,2-Dichloroethane	AA-EQS	10	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
1,2-Dichloropropane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,3,5-Trimethylbenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,3-Dichlorobenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,3-Dichloropropane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,4-Dichlorobenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
2,2-Dichloropropane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
2-Chlorotoluene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
4-Chlorotoluene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Benzene	AA-EQS	10	<LoD		< 1	< 1	< 1	< 1	< 1		< 1
Bromobenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Bromochloromethane	N/A	N/A	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
Bromodichloromethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Bromoform	N/A	N/A	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
Bromomethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Carbon Tetrachloride	AA-EQS	12	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Chlorobenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Chloroethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Chloroform	AA-EQS	2.5	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Chloromethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
cis-1,2-Dichloroethene	N/A	N/A	11		< 5	< 5	11	< 5	< 5		< 5
cis-1,3-Dichloropropene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Dibromochloromethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Dibromomethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Dichlorodifluoromethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Ethylbenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Hexachlorobutadiene	MAC-EQS	0.6	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Isopropylbenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
m & p-xylene	AA-EQS	30	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
MTBE	N/A	N/A	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
n-Butylbenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
n-Propylbenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
o-Xylene	AA-EQS	30	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
p-Isopropyltoluene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
sec-Butylbenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Styrene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
TAME	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
tert-Butylbenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Tetrachloroethene	AA-EQS	10	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Toluene	AA-EQS	74	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
trans-1,2-Dichloroethene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
trans-1,3-Dichloropropene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Trichloroethene	AA-EQS	10	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Trichlorofluoromethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Vinyl Chloride	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5

Key

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Controlled water screening sheet

Scenario

Receptor	Surface water
Surface water type	Inland freshwater
Hydrometric Area	Nene
Are bioavailability parameters known?	No

Contaminant	Guideline source	Guideline value (µg/l)	Maximum recorded value (µg/l)	Location	TP10	TP14	TP23	TP25
				Depth (m)	2	2	0.7	2.5
				Sample Type	ES	ES	ES	ES
				Type	Leachate	Leachate	Leachate	Leachate
Organics - VOCs								
PCE & TCE (sum of)	N/A	N/A	<LoD		<LoD		<LoD	
Trihalomethanes (sum of)	N/A	N/A	<LoD		<LoD		<LoD	
1,1,1,2-Tetrachloroethane	AA-EQS	140	<LoD		< 5		< 5	
1,1,1-Trichloroethane	AA-EQS	100	<LoD		< 5		< 5	
1,1,2,2-Tetrachloroethane	AA-EQS	140	<LoD		< 10		< 10	
1,1,2-Trichloroethane	AA-EQS	400	<LoD		< 10		< 10	
1,1-Dichloroethane	N/A	N/A	<LoD		< 5		< 5	
1,1-Dichloroethene	N/A	N/A	<LoD		< 5		< 5	
1,1-Dichloropropene	N/A	N/A	<LoD		< 5		< 5	
1,2,3-Trichloropropane	N/A	N/A	<LoD		< 5		< 5	
1,2,4-Trimethylbenzene	N/A	N/A	<LoD		< 5		< 5	
1,2-Dibromo-3-chloropropane	N/A	N/A	<LoD		< 10		< 10	
1,2-Dibromoethane	N/A	N/A	<LoD		< 5		< 5	
1,2-Dichlorobenzene	N/A	N/A	<LoD		< 5		< 5	
1,2-Dichloroethane	AA-EQS	10	<LoD		< 10		< 10	
1,2-Dichloropropane	N/A	N/A	<LoD		< 5		< 5	
1,3,5-Trimethylbenzene	N/A	N/A	<LoD		< 5		< 5	
1,3-Dichlorobenzene	N/A	N/A	<LoD		< 5		< 5	
1,3-Dichloropropane	N/A	N/A	<LoD		< 5		< 5	
1,4-Dichlorobenzene	N/A	N/A	<LoD		< 5		< 5	
2,2-Dichloropropane	N/A	N/A	<LoD		< 5		< 5	
2-Chlorotoluene	N/A	N/A	<LoD		< 5		< 5	
4-Chlorotoluene	N/A	N/A	<LoD		< 5		< 5	
Benzene	AA-EQS	10	<LoD		< 1		< 1	
Bromobenzene	N/A	N/A	<LoD		< 5		< 5	
Bromochloromethane	N/A	N/A	<LoD		< 10		< 10	
Bromodichloromethane	N/A	N/A	<LoD		< 5		< 5	
Bromoform	N/A	N/A	<LoD		< 10		< 10	
Bromomethane	N/A	N/A	<LoD		< 5		< 5	
Carbon Tetrachloride	AA-EQS	12	<LoD		< 5		< 5	
Chlorobenzene	N/A	N/A	<LoD		< 5		< 5	
Chloroethane	N/A	N/A	<LoD		< 5		< 5	
Chloroform	AA-EQS	2.5	<LoD		< 5		< 5	
Chloromethane	N/A	N/A	<LoD		< 5		< 5	
cis-1,2-Dichloroethene	N/A	N/A	11		< 5		< 5	
cis-1,3-Dichloropropene	N/A	N/A	<LoD		< 5		< 5	
Dibromochloromethane	N/A	N/A	<LoD		< 5		< 5	
Dibromomethane	N/A	N/A	<LoD		< 5		< 5	
Dichlorodifluoromethane	N/A	N/A	<LoD		< 5		< 5	
Ethylbenzene	N/A	N/A	<LoD		< 5		< 5	
Hexachlorobutadiene	MAC-EQS	0.6	<LoD		< 5		< 5	
Isopropylbenzene	N/A	N/A	<LoD		< 5		< 5	
m & p-xylene	AA-EQS	30	<LoD		< 10		< 10	
MTBE	N/A	N/A	<LoD		< 10		< 10	
n-Butylbenzene	N/A	N/A	<LoD		< 5		< 5	
n-Propylbenzene	N/A	N/A	<LoD		< 5		< 5	
o-Xylene	AA-EQS	30	<LoD		< 5		< 5	
p-Isopropyltoluene	N/A	N/A	<LoD		< 5		< 5	
sec-Butylbenzene	N/A	N/A	<LoD		< 5		< 5	
Styrene	N/A	N/A	<LoD		< 5		< 5	
TAME	N/A	N/A	<LoD		< 5		< 5	
tert-Butylbenzene	N/A	N/A	<LoD		< 5		< 5	
Tetrachloroethene	AA-EQS	10	<LoD		< 5		< 5	
Toluene	AA-EQS	74	<LoD		< 5		< 5	
trans-1,2-Dichloroethene	N/A	N/A	<LoD		< 5		< 5	
trans-1,3-Dichloropropene	N/A	N/A	<LoD		< 5		< 5	
Trichloroethene	AA-EQS	10	<LoD		< 5		< 5	
Trichlorofluoromethane	N/A	N/A	<LoD		< 5		< 5	
Vinyl Chloride	N/A	N/A	<LoD		< 5		< 5	

Key
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Controlled water screening sheet

Scenario

Receptor	Surface water
Surface water type	Inland freshwater
Hydrometric Area	Nene
Are bioavailability parameters known?	No

Contaminant	Guideline source	Guideline value (µg/l)	Maximum recorded value (µg/l)	Location	BH04	BH06	BH08	BH09	SP02	TP02	TP03
				Depth (m)	10.1	12.94	14.41	10.44	0	1	1
				Sample Type	W	W	W	W	W	ES	ES
				Type	Water	Water	Water	Water	Water	Leachate	Leachate
Organics - SVOCs											
Dichlorobenzenes (sum of)	AA-EQS	20	<LoD		<LoD	<LoD	<LoD	<LoD	<LoD		<LoD
Trichlorobenzenes (sum of)	AA-EQS	0.4	<LoD		<LoD	<LoD	<LoD	<LoD	<LoD		<LoD
1,2,4-Trichlorobenzene	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
1,2-Dichlorobenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,3-Dichlorobenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,4-Dichlorobenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
2,4,5-Trichlorophenol	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2,4,6-Trichlorophenol	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2,4-Dichlorophenol	AA-EQS	4.2	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2,4-Dimethylphenol	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2,4-Dinitrotoluene	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2,6-Dinitrotoluene	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2-Chloronaphthalene	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2-Chlorophenol	AA-EQS	50	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2-Methylnaphthalene	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2-Nitroaniline	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2-Nitrophenol	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
3-Nitroaniline	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
4-Bromophenyl phenyl ether	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
4-Chloro-3-methylphenol	AA-EQS	40	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
4-Chloroaniline	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
4-Chlorophenyl phenyl ether	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
4-Nitroaniline	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
4-Nitrophenol	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Azobenzene	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Benzyl butyl phthalate	AA-EQS	7.5	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
bis(2-chloroethoxy)methane	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
bis(2-chloroethyl)ether	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
bis(2-ethylhexyl)phthalate	AA-EQS	1.3	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Carbazole	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Dibenzofuran	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Dibutyl phthalate	AA-EQS	8	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Diethyl phthalate	AA-EQS	200	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Dimethyl phthalate	AA-EQS	800	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Di-n-octyl phthalate	AA-EQS	20	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Hexachlorobenzene	MAC-EQS	0.05	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Hexachlorobutadiene	MAC-EQS	0.6	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Hexachlorocyclopentadiene	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Hexachloroethane	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Isophorone	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Nitrobenzene	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
o-Cresol	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
p-Cresol	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Phenol	AA-EQS	7.7	<LoD		< 10	< 10	< 10	< 10	< 10	< 10	< 10

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Controlled water screening sheet

Scenario

Receptor	Surface water
Surface water type	Inland freshwater
Hydrometric Area	Nene
Are bioavailability parameters known?	No

Contaminant	Guideline source	Guideline value (µg/l)	Maximum recorded value (µg/l)	Location	TP10	TP14	TP23	TP25
				Depth (m)	2	2	0.7	2.5
				Sample Type	ES	ES	ES	ES
				Type	Leachate	Leachate	Leachate	Leachate
Organics - SVOCs								
Dichlorobenzenes (sum of)	AA-EQS	20	<LoD		<LoD		<LoD	
Trichlorobenzenes (sum of)	AA-EQS	0.4	<LoD		<LoD		<LoD	
1,2,4-Trichlorobenzene	N/A	N/A	<LoD		< 0.1		< 0.1	
1,2-Dichlorobenzene	N/A	N/A	<LoD		< 5		< 5	
1,3-Dichlorobenzene	N/A	N/A	<LoD		< 5		< 5	
1,4-Dichlorobenzene	N/A	N/A	<LoD		< 5		< 5	
2,4,5-Trichlorophenol	N/A	N/A	<LoD		< 0.1		< 0.1	
2,4,6-Trichlorophenol	N/A	N/A	<LoD		< 0.1		< 0.1	
2,4-Dichlorophenol	AA-EQS	4.2	<LoD		< 0.1		< 0.1	
2,4-Dimethylphenol	N/A	N/A	<LoD		< 0.1		< 0.1	
2,4-Dinitrotoluene	N/A	N/A	<LoD		< 0.1		< 0.1	
2,6-Dinitrotoluene	N/A	N/A	<LoD		< 0.1		< 0.1	
2-Chloronaphthalene	N/A	N/A	<LoD		< 0.1		< 0.1	
2-Chlorophenol	AA-EQS	50	<LoD		< 0.1		< 0.1	
2-Methylnaphthalene	N/A	N/A	<LoD		< 0.1		< 0.1	
2-Nitroaniline	N/A	N/A	<LoD		< 0.1		< 0.1	
2-Nitrophenol	N/A	N/A	<LoD		< 0.1		< 0.1	
3-Nitroaniline	N/A	N/A	<LoD		< 0.1		< 0.1	
4-Bromophenyl phenyl ether	N/A	N/A	<LoD		< 0.1		< 0.1	
4-Chloro-3-methylphenol	AA-EQS	40	<LoD		< 0.1		< 0.1	
4-Chloroaniline	N/A	N/A	<LoD		< 0.1		< 0.1	
4-Chlorophenyl phenyl ether	N/A	N/A	<LoD		< 0.1		< 0.1	
4-Nitroaniline	N/A	N/A	<LoD		< 0.1		< 0.1	
4-Nitrophenol	N/A	N/A	<LoD		< 0.1		< 0.1	
Azobenzene	N/A	N/A	<LoD		< 0.1		< 0.1	
Benzyl butyl phthalate	AA-EQS	7.5	<LoD		< 0.1		< 0.1	
bis(2-chloroethoxy)methane	N/A	N/A	<LoD		< 0.1		< 0.1	
bis(2-chloroethyl)ether	N/A	N/A	<LoD		< 0.1		< 0.1	
bis(2-ethylhexyl)phthalate	AA-EQS	1.3	<LoD		< 0.1		< 0.1	
Carbazole	N/A	N/A	<LoD		< 0.1		< 0.1	
Dibenzofuran	N/A	N/A	<LoD		< 0.1		< 0.1	
Dibutyl phthalate	AA-EQS	8	<LoD		< 0.1		< 0.1	
Diethyl phthalate	AA-EQS	200	<LoD		< 0.1		< 0.1	
Dimethyl phthalate	AA-EQS	800	<LoD		< 0.1		< 0.1	
Di-n-octyl phthalate	AA-EQS	20	<LoD		< 0.1		< 0.1	
Hexachlorobenzene	MAC-EQS	0.05	<LoD		< 0.1		< 0.1	
Hexachlorobutadiene	MAC-EQS	0.6	<LoD		< 5		< 5	
Hexachlorocyclopentadiene	N/A	N/A	<LoD		< 0.1		< 0.1	
Hexachloroethane	N/A	N/A	<LoD		< 0.1		< 0.1	
Isophorone	N/A	N/A	<LoD		< 0.1		< 0.1	
Nitrobenzene	N/A	N/A	<LoD		< 0.1		< 0.1	
o-Cresol	N/A	N/A	<LoD		< 0.1		< 0.1	
p-Cresol	N/A	N/A	<LoD		< 0.1		< 0.1	
Phenol	AA-EQS	7.7	<LoD		< 10	< 10	< 10	< 10

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Controlled water screening sheet

Scenario

Receptor	Drinking water
Surface water type	N/A
Hydrometric Area	N/A

Contaminant	Guideline source	Guideline value (µg/l)	Maximum recorded value (µg/l)	Location	BH04	BH06	BH08	BH09	SP02	TP02	TP03
				Depth (m)	10.1	12.94	14.41	10.44	0	1	1
				Sample Type	W	W	W	W	W	ES	ES
				Type	Water	Water	Water	Water	Water	Leachate	Leachate
Inorganics - Metals											
Arsenic	UK DWS	10	<LoD		< 5	< 5	< 5	< 5	< 5	< 5	< 5
Boron	UK DWS	1000	1180		251	952	258	1180	68	27	14
Cadmium	UK DWS	5	<LoD		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Chromium (total)	UK DWS	50	<LoD		<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD
Chromium (III)	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chromium (VI)	N/A	N/A	<LoD		< 20	< 20	< 20	< 20	< 20		< 20
Copper	UK DWS	2000	17		17	11	11	12	11	< 5	< 5
Lead	UK DWS	10	8		8	< 5	5	5	< 5	< 5	< 5
Mercury	UK DWS	1	0.64		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.64	0.28
Nickel	UK DWS	20	14		10	13	14	9	< 5	< 5	< 5
Selenium	UK DWS	10	<LoD		< 5	< 5	< 5	< 5	< 5	< 5	< 5
Vanadium	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5	< 5	< 5
Zinc	Int. DWS	3000	75		63	75	65	49	60	< 2	< 2
Inorganics - Miscellaneous											
pH	N/A	N/A	8.5		7.6	7.4	6.9	7.3	8.3	8.3	8
Cyanide - Total	UK DWS	50	188		11	30	8	188	14	< 5	< 5
Cyanide - Free	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5	< 5	< 5
Ammonia (as N)	N/A	N/A	190000		4990	3340	190000	70100	324		
Nitrate (as NO3)	UK DWS	50000	4900		< 500	< 500	< 500	< 500	4900	< 500	< 500
Sulphate	UK DWS	250000	2560000		2560000	1210000	2010000	1640000	60000	6000	102000
Organics - PAH & Phenol											
Naphthalene	N/A	N/A	0.02		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.02
Acenaphthylene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	N/A	N/A	0.09		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.03
Fluorene	N/A	N/A	0.07		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.02
Phenanthrene	N/A	N/A	0.13		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.08	0.07
Anthracene	N/A	N/A	0.04		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.03	0.03
Fluoranthene	N/A	N/A	0.06		< 0.01	0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.03
Pyrene	N/A	N/A	0.04		< 0.01	0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.02
Benzo(a)anthracene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	UK DWS	0.01	<LoD		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	N/A	N/A	<LoD		< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
PAH (sum of 4)	UK DWS	0.1	<LoD		<LoD	<LoD	<LoD	<LoD	<LoD	<LoD	<LoD
Phenol	N/A	N/A	<LoD		< 10	< 10	< 10	< 10	< 10	< 10	< 10
Organics - BTEX & MTBE											
Benzene	UK DWS	1	<LoD		< 1	< 1	< 1	< 1	< 1		< 1
Toluene	Int. DWS	700	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Ethylbenzene	Int. DWS	300	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Xylene (m and p, o)	Int. DWS	500	<LoD		<LoD	<LoD	<LoD	<LoD	<LoD		<LoD
o-Xylene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
m & p-xylene	N/A	N/A	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
MTBE	Int. DWS	15	<LoD		< 10	< 10	< 10	< 10	< 10		< 10

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Controlled water screening sheet

Scenario

Receptor	Drinking water
Surface water type	N/A
Hydrometric Area	N/A

Contaminant	Guideline source	Guideline value (µg/l)	Maximum recorded value (µg/l)	Location	TP10	TP14	TP23	TP25
				Depth (m)	2	2	0.7	2.5
				Sample Type	ES	ES	ES	ES
				Type	Leachate	Leachate	Leachate	Leachate
Inorganics - Metals								
Arsenic	UK DWS	10	<LoD		< 5	< 5	< 5	< 5
Boron	UK DWS	1000	1180		277	8	56	392
Cadmium	UK DWS	5	<LoD		< 0.4	< 0.4	< 0.4	< 0.4
Chromium (total)	UK DWS	50	<LoD		<LoD	<LoD	<LoD	<LoD
Chromium (III)	N/A	N/A	<LoD		< 5	< 5	< 5	< 5
Chromium (VI)	N/A	N/A	<LoD		< 20		< 20	
Copper	UK DWS	2000	17		< 5	< 5	< 5	< 5
Lead	UK DWS	10	8		< 5	< 5	< 5	< 5
Mercury	UK DWS	1	0.64		0.18	0.07	0.06	0.06
Nickel	UK DWS	20	14		< 5	< 5	< 5	< 5
Selenium	UK DWS	10	<LoD		< 5	< 5	< 5	< 5
Vanadium	N/A	N/A	<LoD		< 5	< 5	< 5	< 5
Zinc	Int. DWS	3000	75		< 2	< 2	< 2	5
Inorganics - Miscellaneous								
pH	N/A	N/A	8.5		8	8.5	8.2	8
Cyanide - Total	UK DWS	50	188		15	< 5	< 5	36
Cyanide - Free	N/A	N/A	<LoD		< 5	< 5	< 5	< 5
Ammonia (as N)	N/A	N/A	190000					
Nitrate (as NO3)	UK DWS	50000	4900		< 500	< 500	< 500	< 500
Sulphate	UK DWS	250000	2560000		26000	9000	84000	315000
Organics - PAH & Phenol								
Naphthalene	N/A	N/A	0.02		< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	N/A	N/A	0.09		0.09	0.05	0.07	< 0.01
Fluorene	N/A	N/A	0.07		0.07	< 0.01	0.05	< 0.01
Phenanthrene	N/A	N/A	0.13		0.13	0.09	0.05	0.06
Anthracene	N/A	N/A	0.04		0.04	0.03	0.02	0.02
Fluoranthene	N/A	N/A	0.06		0.06	< 0.01	0.02	0.06
Pyrene	N/A	N/A	0.04		0.03	< 0.01	0.02	0.04
Benzo(a)anthracene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	UK DWS	0.01	<LoD		< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	N/A	N/A	<LoD		< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	N/A	N/A	<LoD		< 0.008	< 0.008	< 0.008	< 0.008
PAH (sum of 4)	UK DWS	0.1	<LoD		<LoD	<LoD	<LoD	<LoD
Phenol	N/A	N/A	<LoD		< 10	< 10	< 10	< 10
Organics - BTEX & MTBE								
Benzene	UK DWS	1	<LoD		< 1		< 1	
Toluene	Int. DWS	700	<LoD		< 5		< 5	
Ethylbenzene	Int. DWS	300	<LoD		< 5		< 5	
Xylene (m and p, o)	Int. DWS	500	<LoD		<LoD		<LoD	
o-Xylene	N/A	N/A	<LoD		< 5		< 5	
m & p-xylene	N/A	N/A	<LoD		< 10		< 10	
MTBE	Int. DWS	15	<LoD		< 10		< 10	

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Controlled water screening sheet

Scenario

Receptor	Drinking water
Surface water type	N/A
Hydrometric Area	N/A

Contaminant	Guideline source	Guideline value (µg/l)	Maximum recorded value (µg/l)	Location	BH04	BH06	BH08	BH09	SP02	TP02	TP03
				Depth (m)	10.1	12.94	14.41	10.44	0	1	1
				Sample Type	W	W	W	W	W	ES	ES
				Type	Water	Water	Water	Water	Water	Leachate	Leachate
Organics - TPH CWG											
EC05-EC06 Aliphatic	WHO	15000	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>06-EC08 Aliphatic	WHO	15000	11		< 10	< 10	11	< 10	< 10		< 10
EC>08-EC10 Aliphatic	WHO	300	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>10-EC12 Aliphatic	WHO	300	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>12-EC16 Aliphatic	WHO	300	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>16-EC21 Aliphatic	N/A	N/A	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>21-EC35 Aliphatic	N/A	N/A	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC05-EC06 Aromatic (benzene)	UK DWS	1	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>06-EC08 Aromatic (toluene)	Int. DWS	700	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>08-EC10 Aromatic	WHO	300	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>10-EC12 Aromatic	WHO	90	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>12-EC16 Aromatic	WHO	90	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>16-EC21 Aromatic	WHO	90	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
EC>21-EC35 Aromatic	WHO	90	<LoD		< 10	< 10	< 10	< 10	< 10		< 10

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Controlled water screening sheet

Scenario

Receptor	Drinking water
Surface water type	N/A
Hydrometric Area	N/A

Contaminant	Guideline source	Guideline value (µg/l)	Maximum recorded value (µg/l)	Location	TP10	TP14	TP23	TP25
				Depth (m)	2	2	0.7	2.5
				Sample Type	ES	ES	ES	ES
				Type	Leachate	Leachate	Leachate	Leachate
Organics - TPH CWG								
EC05-EC06 Aliphatic	WHO	15000	<LoD		< 10		< 10	
EC>06-EC08 Aliphatic	WHO	15000	11		< 10		< 10	
EC>08-EC10 Aliphatic	WHO	300	<LoD		< 10		< 10	
EC>10-EC12 Aliphatic	WHO	300	<LoD		< 10		< 10	
EC>12-EC16 Aliphatic	WHO	300	<LoD		< 10		< 10	
EC>16-EC21 Aliphatic	N/A	N/A	<LoD		< 10		< 10	
EC>21-EC35 Aliphatic	N/A	N/A	<LoD		< 10		< 10	
EC05-EC06 Aromatic (benzene)	UK DWS	1	<LoD		< 10		< 10	
EC>06-EC08 Aromatic (toluene)	Int. DWS	700	<LoD		< 10		< 10	
EC>08-EC10 Aromatic	WHO	300	<LoD		< 10		< 10	
EC>10-EC12 Aromatic	WHO	90	<LoD		< 10		< 10	
EC>12-EC16 Aromatic	WHO	90	<LoD		< 10		< 10	
EC>16-EC21 Aromatic	WHO	90	<LoD		< 10		< 10	
EC>21-EC35 Aromatic	WHO	90	<LoD		< 10		< 10	

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Controlled water screening sheet

Scenario

Receptor	Drinking water
Surface water type	N/A
Hydrometric Area	N/A

Contaminant	Guideline source	Guideline value (µg/l)	Maximum recorded value (µg/l)	Location	BH04	BH06	BH08	BH09	SP02	TP02	TP03
				Depth (m)	10.1	12.94	14.41	10.44	0	1	1
				Sample Type	W	W	W	W	W	ES	ES
				Type	Water	Water	Water	Water	Water	Leachate	Leachate
Organics - VOCs											
PCE & TCE (sum of)	UK DWS	10	<LoD		<LoD	<LoD	<LoD	<LoD	<LoD		<LoD
Trihalomethanes (sum of)	UK DWS	100	<LoD		<LoD	<LoD	<LoD	<LoD	<LoD		<LoD
1,1,1,2-Tetrachloroethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,1,1-Trichloroethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,1,2,2-Tetrachloroethane	N/A	N/A	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
1,1,2-Trichloroethane	N/A	N/A	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
1,1-Dichloroethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,1-Dichloroethene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,1-Dichloropropene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,2,3-Trichloropropane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,2,4-Trimethylbenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,2-Dibromo-3-chloropropane	Int. DWS	1	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
1,2-Dibromoethane	Int. DWS	0.4	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,2-Dichlorobenzene	Int. DWS	1000	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,2-Dichloroethane	UK DWS	3	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
1,2-Dichloropropane	Int. DWS	40	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,3,5-Trimethylbenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,3-Dichlorobenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,3-Dichloropropane	Int. DWS	20	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,4-Dichlorobenzene	Int. DWS	300	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
2,2-Dichloropropane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
2-Chlorotoluene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
4-Chlorotoluene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Benzene	UK DWS	1	<LoD		< 1	< 1	< 1	< 1	< 1		< 1
Bromobenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Bromochloromethane	N/A	N/A	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
Bromodichloromethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Bromoform	N/A	N/A	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
Bromomethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Carbon Tetrachloride	UK DWS	3	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Chlorobenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Chloroethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Chloroform	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Chloromethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
cis-1,2-Dichloroethene	Int. DWS	50	11		< 5	< 5	11	< 5	< 5		< 5
cis-1,3-Dichloropropene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Dibromochloromethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Dibromomethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Dichlorodifluoromethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Ethylbenzene	Int. DWS	300	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Hexachlorobutadiene	Int. DWS	0.6	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Isopropylbenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
m & p-xylene	Int. DWS	500	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
MTBE	Int. DWS	15	<LoD		< 10	< 10	< 10	< 10	< 10		< 10
n-Butylbenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
n-Propylbenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
o-Xylene	Int. DWS	500	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
p-Isopropyltoluene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
sec-Butylbenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Styrene	Int. DWS	20	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
TAME	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
tert-Butylbenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Tetrachloroethene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Toluene	Int. DWS	700	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
trans-1,2-Dichloroethene	Int. DWS	50	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
trans-1,3-Dichloropropene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Trichloroethene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Trichlorofluoromethane	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Vinyl Chloride	UK DWS	0.5	<LoD		< 5	< 5	< 5	< 5	< 5		< 5

Key
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Controlled water screening sheet

Scenario

Receptor	Drinking water
Surface water type	N/A
Hydrometric Area	N/A

Contaminant	Guideline source	Guideline value (µg/l)	Maximum recorded value (µg/l)	Location	TP10	TP14	TP23	TP25
				Depth (m)	2	2	0.7	2.5
				Sample Type	ES	ES	ES	ES
				Type	Leachate	Leachate	Leachate	Leachate
Organics - VOCs								
PCE & TCE (sum of)	UK DWS	10	<LoD		<LoD		<LoD	
Trihalomethanes (sum of)	UK DWS	100	<LoD		<LoD		<LoD	
1,1,1,2-Tetrachloroethane	N/A	N/A	<LoD		< 5		< 5	
1,1,1-Trichloroethane	N/A	N/A	<LoD		< 5		< 5	
1,1,2,2-Tetrachloroethane	N/A	N/A	<LoD		< 10		< 10	
1,1,2-Trichloroethane	N/A	N/A	<LoD		< 10		< 10	
1,1-Dichloroethane	N/A	N/A	<LoD		< 5		< 5	
1,1-Dichloroethene	N/A	N/A	<LoD		< 5		< 5	
1,1-Dichloropropene	N/A	N/A	<LoD		< 5		< 5	
1,2,3-Trichloropropane	N/A	N/A	<LoD		< 5		< 5	
1,2,4-Trimethylbenzene	N/A	N/A	<LoD		< 5		< 5	
1,2-Dibromo-3-chloropropane	Int. DWS	1	<LoD		< 10		< 10	
1,2-Dibromoethane	Int. DWS	0.4	<LoD		< 5		< 5	
1,2-Dichlorobenzene	Int. DWS	1000	<LoD		< 5		< 5	
1,2-Dichloroethane	UK DWS	3	<LoD		< 10		< 10	
1,2-Dichloropropane	Int. DWS	40	<LoD		< 5		< 5	
1,3,5-Trimethylbenzene	N/A	N/A	<LoD		< 5		< 5	
1,3-Dichlorobenzene	N/A	N/A	<LoD		< 5		< 5	
1,3-Dichloropropane	Int. DWS	20	<LoD		< 5		< 5	
1,4-Dichlorobenzene	Int. DWS	300	<LoD		< 5		< 5	
2,2-Dichloropropane	N/A	N/A	<LoD		< 5		< 5	
2-Chlorotoluene	N/A	N/A	<LoD		< 5		< 5	
4-Chlorotoluene	N/A	N/A	<LoD		< 5		< 5	
Benzene	UK DWS	1	<LoD		< 1		< 1	
Bromobenzene	N/A	N/A	<LoD		< 5		< 5	
Bromochloromethane	N/A	N/A	<LoD		< 10		< 10	
Bromodichloromethane	N/A	N/A	<LoD		< 5		< 5	
Bromoform	N/A	N/A	<LoD		< 10		< 10	
Bromomethane	N/A	N/A	<LoD		< 5		< 5	
Carbon Tetrachloride	UK DWS	3	<LoD		< 5		< 5	
Chlorobenzene	N/A	N/A	<LoD		< 5		< 5	
Chloroethane	N/A	N/A	<LoD		< 5		< 5	
Chloroform	N/A	N/A	<LoD		< 5		< 5	
Chloromethane	N/A	N/A	<LoD		< 5		< 5	
cis-1,2-Dichloroethene	Int. DWS	50	11		< 5		< 5	
cis-1,3-Dichloropropene	N/A	N/A	<LoD		< 5		< 5	
Dibromochloromethane	N/A	N/A	<LoD		< 5		< 5	
Dibromomethane	N/A	N/A	<LoD		< 5		< 5	
Dichlorodifluoromethane	N/A	N/A	<LoD		< 5		< 5	
Ethylbenzene	Int. DWS	300	<LoD		< 5		< 5	
Hexachlorobutadiene	Int. DWS	0.6	<LoD		< 5		< 5	
Isopropylbenzene	N/A	N/A	<LoD		< 5		< 5	
m & p-xylene	Int. DWS	500	<LoD		< 10		< 10	
MTBE	Int. DWS	15	<LoD		< 10		< 10	
n-Butylbenzene	N/A	N/A	<LoD		< 5		< 5	
n-Propylbenzene	N/A	N/A	<LoD		< 5		< 5	
o-Xylene	Int. DWS	500	<LoD		< 5		< 5	
p-Isopropyltoluene	N/A	N/A	<LoD		< 5		< 5	
sec-Butylbenzene	N/A	N/A	<LoD		< 5		< 5	
Styrene	Int. DWS	20	<LoD		< 5		< 5	
TAME	N/A	N/A	<LoD		< 5		< 5	
tert-Butylbenzene	N/A	N/A	<LoD		< 5		< 5	
Tetrachloroethene	N/A	N/A	<LoD		< 5		< 5	
Toluene	Int. DWS	700	<LoD		< 5		< 5	
trans-1,2-Dichloroethene	Int. DWS	50	<LoD		< 5		< 5	
trans-1,3-Dichloropropene	N/A	N/A	<LoD		< 5		< 5	
Trichloroethene	N/A	N/A	<LoD		< 5		< 5	
Trichlorofluoromethane	N/A	N/A	<LoD		< 5		< 5	
Vinyl Chloride	UK DWS	0.5	<LoD		< 5		< 5	

Key
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Controlled water screening sheet

Scenario

Receptor	Drinking water
Surface water type	N/A
Hydrometric Area	N/A

Contaminant	Guideline source	Guideline value (µg/l)	Maximum recorded value (µg/l)	Location	BH04	BH06	BH08	BH09	SP02	TP02	TP03
				Depth (m)	10.1	12.94	14.41	10.44	0	1	1
				Sample Type	W	W	W	W	W	ES	ES
				Type	Water	Water	Water	Water	Water	Leachate	Leachate
Organics - SVOCs											
Dichlorobenzenes (sum of)	N/A	N/A	<LoD		<LoD	<LoD	<LoD	<LoD	<LoD		<LoD
Trichlorobenzenes (sum of)	N/A	N/A	<LoD		<LoD	<LoD	<LoD	<LoD	<LoD		<LoD
1,2,4-Trichlorobenzene	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
1,2-Dichlorobenzene	Int. DWS	1000	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,3-Dichlorobenzene	N/A	N/A	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
1,4-Dichlorobenzene	Int. DWS	300	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
2,4,5-Trichlorophenol	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2,4,6-Trichlorophenol	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2,4-Dichlorophenol	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2,4-Dimethylphenol	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2,4-Dinitrotoluene	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2,6-Dinitrotoluene	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2-Chloronaphthalene	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2-Chlorophenol	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2-Methylnaphthalene	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2-Nitroaniline	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
2-Nitrophenol	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
3-Nitroaniline	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
4-Bromophenyl phenyl ether	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
4-Chloro-3-methylphenol	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
4-Chloroaniline	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
4-Chlorophenyl phenyl ether	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
4-Nitroaniline	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
4-Nitrophenol	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Azobenzene	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Benzyl butyl phthalate	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
bis(2-chloroethoxy)methane	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
bis(2-chloroethyl)ether	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
bis(2-ethylhexyl)phthalate	Int. DWS	8	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Carbazole	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Dibenzofuran	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Dibutyl phthalate	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Diethyl phthalate	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Dimethyl phthalate	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Di-n-octyl phthalate	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Hexachlorobenzene	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Hexachlorobutadiene	Int. DWS	0.6	<LoD		< 5	< 5	< 5	< 5	< 5		< 5
Hexachlorocyclopentadiene	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Hexachloroethane	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Isophorone	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Nitrobenzene	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
o-Cresol	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
p-Cresol	N/A	N/A	<LoD		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1
Phenol	N/A	N/A	<LoD		< 10	< 10	< 10	< 10	< 10	< 10	< 10

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Controlled water screening sheet

Scenario

Receptor	Drinking water
Surface water type	N/A
Hydrometric Area	N/A

Contaminant	Guideline source	Guideline value (µg/l)	Maximum recorded value (µg/l)	Location	TP10	TP14	TP23	TP25
				Depth (m)	2	2	0.7	2.5
				Sample Type	ES	ES	ES	ES
				Type	Leachate	Leachate	Leachate	Leachate
Organics - SVOCs								
Dichlorobenzenes (sum of)	N/A	N/A	<LoD		<LoD		<LoD	
Trichlorobenzenes (sum of)	N/A	N/A	<LoD		<LoD		<LoD	
1,2,4-Trichlorobenzene	N/A	N/A	<LoD		< 0.1		< 0.1	
1,2-Dichlorobenzene	Int. DWS	1000	<LoD		< 5		< 5	
1,3-Dichlorobenzene	N/A	N/A	<LoD		< 5		< 5	
1,4-Dichlorobenzene	Int. DWS	300	<LoD		< 5		< 5	
2,4,5-Trichlorophenol	N/A	N/A	<LoD		< 0.1		< 0.1	
2,4,6-Trichlorophenol	N/A	N/A	<LoD		< 0.1		< 0.1	
2,4-Dichlorophenol	N/A	N/A	<LoD		< 0.1		< 0.1	
2,4-Dimethylphenol	N/A	N/A	<LoD		< 0.1		< 0.1	
2,4-Dinitrotoluene	N/A	N/A	<LoD		< 0.1		< 0.1	
2,6-Dinitrotoluene	N/A	N/A	<LoD		< 0.1		< 0.1	
2-Chloronaphthalene	N/A	N/A	<LoD		< 0.1		< 0.1	
2-Chlorophenol	N/A	N/A	<LoD		< 0.1		< 0.1	
2-Methylnaphthalene	N/A	N/A	<LoD		< 0.1		< 0.1	
2-Nitroaniline	N/A	N/A	<LoD		< 0.1		< 0.1	
2-Nitrophenol	N/A	N/A	<LoD		< 0.1		< 0.1	
3-Nitroaniline	N/A	N/A	<LoD		< 0.1		< 0.1	
4-Bromophenyl phenyl ether	N/A	N/A	<LoD		< 0.1		< 0.1	
4-Chloro-3-methylphenol	N/A	N/A	<LoD		< 0.1		< 0.1	
4-Chloroaniline	N/A	N/A	<LoD		< 0.1		< 0.1	
4-Chlorophenyl phenyl ether	N/A	N/A	<LoD		< 0.1		< 0.1	
4-Nitroaniline	N/A	N/A	<LoD		< 0.1		< 0.1	
4-Nitrophenol	N/A	N/A	<LoD		< 0.1		< 0.1	
Azobenzene	N/A	N/A	<LoD		< 0.1		< 0.1	
Benzyl butyl phthalate	N/A	N/A	<LoD		< 0.1		< 0.1	
bis(2-chloroethoxy)methane	N/A	N/A	<LoD		< 0.1		< 0.1	
bis(2-chloroethyl)ether	N/A	N/A	<LoD		< 0.1		< 0.1	
bis(2-ethylhexyl)phthalate	Int. DWS	8	<LoD		< 0.1		< 0.1	
Carbazole	N/A	N/A	<LoD		< 0.1		< 0.1	
Dibenzofuran	N/A	N/A	<LoD		< 0.1		< 0.1	
Dibutyl phthalate	N/A	N/A	<LoD		< 0.1		< 0.1	
Diethyl phthalate	N/A	N/A	<LoD		< 0.1		< 0.1	
Dimethyl phthalate	N/A	N/A	<LoD		< 0.1		< 0.1	
Di-n-octyl phthalate	N/A	N/A	<LoD		< 0.1		< 0.1	
Hexachlorobenzene	N/A	N/A	<LoD		< 0.1		< 0.1	
Hexachlorobutadiene	Int. DWS	0.6	<LoD		< 5		< 5	
Hexachlorocyclopentadiene	N/A	N/A	<LoD		< 0.1		< 0.1	
Hexachloroethane	N/A	N/A	<LoD		< 0.1		< 0.1	
Isophorone	N/A	N/A	<LoD		< 0.1		< 0.1	
Nitrobenzene	N/A	N/A	<LoD		< 0.1		< 0.1	
o-Cresol	N/A	N/A	<LoD		< 0.1		< 0.1	
p-Cresol	N/A	N/A	<LoD		< 0.1		< 0.1	
Phenol	N/A	N/A	<LoD		< 10	< 10	< 10	< 10

Key
EQS = Environmental Quality Standards, from "*The Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015*", supplemented by operational values from the Environment Agency, updated online 2017. AA = Annual average, MAC = Maximum allowable concentration.
PNEC = Predicted no effect concentration. Obtained using the UKTAG Metals Bioavailbiliy Assessment Tools (M-BAT), 2013 (Cu, No, Mn, Zn) & 2015 (Pb).
EA = "*Petroleum Hydrocarbons in Groundwater: Supplementary Guidance for Hydrogeological Risk Assessment*", Environment Agency, 2009.
USEPA = "*Technical Guide for Addressing Petroleum Vapor Intrusion at Leaking Underground Storage Tank Sites*", USEPA, 2015.

UK DWS = UK drinking water standards, from "*The Water Supply (Water Quality) Regulations 2018*".
Int. DWS = International "*Guidelines for drinking water quality*", World Health Organisation, 2017.
WHO = "*Petroleum products in drinking-water*", World Health Organisation, 2008.
ST = Soiltechnics value based on 80% of aqueous solubility limit, to a minimum of 10µg/l.
EA, USEPA and ST values are indicative values only and not harm related.

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Summary of petroleum hydrocarbon test results

Model: **POSpark** (Current users)

BTEX (Red highlights indicate exceedance of guideline value)

Indicator	unit	S4UL (mg/kg)	Concentration BH05 0.10	BH09 7.00	TP03 1.00	TP10 2.00	TP19 0.10	TP20 0.10	TP23 0.70
Benzene	mg/kg	90	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Toluene	mg/kg	87000	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	mg/kg	17000	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
o-Xylene	mg/kg	17000	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
m,p-Xylene	mg/kg	17000	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002

Hydrocarbon banding (Red highlights indicate exceedance of guideline value)

Fraction	unit	S4UL (mg/kg)	Concentration BH05 0.10	BH09 7.00	TP03 1.00	TP10 2.00	TP19 0.10	TP20 0.10	TP23 0.70
Aliphatic									
EC 5 - 6	mg/kg	95000	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
EC >6 - 8	mg/kg	150000	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
EC >8 - 10	mg/kg	14000	< 2	< 2	< 2	< 2	< 2	< 2	14
EC >10 - 12	mg/kg	21000	< 2	9	< 2	< 2	< 2	< 2	159
EC >12 - 16	mg/kg	25000	< 3	14	< 3	< 3	< 3	< 3	923
EC >16 - 35	mg/kg	450000	60	0	0	0	104	0	1141
EC >35 - 44	mg/kg	450000							
Aromatic									
EC 5 - 7 (benzene)	mg/kg	76000	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
EC >7 - 8 (toluene)	mg/kg	87000	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
EC >8 - 10	mg/kg	7200	< 2	< 2	< 2	< 2	< 2	< 2	< 2
EC >10 - 12	mg/kg	9200	< 2	< 2	< 2	< 2	< 2	< 2	28
EC >12 - 16	mg/kg	10000	2	< 2	< 2	< 2	3	< 2	309
EC >16 - 21	mg/kg	7600	58	< 3	< 3	< 3	49	8	509
EC >21 - 35	mg/kg	7800	119	< 10	< 10	< 10	225	31	150
EC >35 - 44	mg/kg	7800							
Total petroleum hydrocarbons			240	< 42	< 42	< 42	380	< 42	3234

Title	Table number
Comparison of measured concentrations of petroleum hydrocarbons with guideline values.	8

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Summary of petroleum hydrocarbon test results

Model: **Industrial/Commercial**

BTEX (Red highlights indicate exceedance of guideline value)

Indicator	unit	S4UL (mg/kg)	Concentration BH05 0.10	BH09 7.00	TP03 1.00	TP10 2.00	TP19 0.10	TP20 0.10	TP23 0.70
Benzene	mg/kg	27	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Toluene	mg/kg	56000	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ethylbenzene	mg/kg	5700	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
o-Xylene	mg/kg	6600	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
m,p-Xylene	mg/kg	5900	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002

Hydrocarbon banding (Red highlights indicate exceedance of guideline value)

Fraction	unit	S4UL (mg/kg)	Concentration BH05 0.10	BH09 7.00	TP03 1.00	TP10 2.00	TP19 0.10	TP20 0.10	TP23 0.70
Aliphatic									
EC 5 - 6	mg/kg	3200	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
EC >6 - 8	mg/kg	7800	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
EC >8 - 10	mg/kg	2000	< 2	< 2	< 2	< 2	< 2	< 2	14
EC >10 - 12	mg/kg	9700	< 2	9	< 2	< 2	< 2	< 2	159
EC >12 - 16	mg/kg	59000	< 3	14	< 3	< 3	< 3	< 3	923
EC >16 - 35	mg/kg	1600000	60	0	0	0	104	0	1141
EC >35 - 44	mg/kg	1600000							
Aromatic									
EC 5 - 7 (benzene)	mg/kg	26000	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
EC >7 - 8 (toluene)	mg/kg	56000	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
EC >8 - 10	mg/kg	3500	< 2	< 2	< 2	< 2	< 2	< 2	< 2
EC >10 - 12	mg/kg	16000	< 2	< 2	< 2	< 2	< 2	< 2	28
EC >12 - 16	mg/kg	36000	2	< 2	< 2	< 2	3	< 2	309
EC >16 - 21	mg/kg	28000	58	< 3	< 3	< 3	49	8	509
EC >21 - 35	mg/kg	28000	119	< 10	< 10	< 10	225	31	150
EC >35 - 44	mg/kg	28000							
Total petroleum hydrocarbons			240	< 42	< 42	< 42	380	< 42	3234

Title	Table number
Comparison of measured concentrations of petroleum hydrocarbons with guideline values.	9

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Initial Conceptual Model

Current site use Public Open Space (in industrial setting)
Proposed site use commercial/industrial

Source	Pathway												Receptor		Risk assessment to CIRIA C552	
	Humans						Vegetation	Water							Consequence of risk occurring via most likely pathway	Risk
	Ingestion of air-borne dusts	Ingestion of soil	Ingestion of vegetables and soil attached to vegetables	Inhalation of air-borne dusts	Inhalation of vapours	Dermal contact with soil and dust	Root uptake, deposition to shoots and foliage contact	Percolation of water through contaminated soils	Near-surface water run-off through contaminated soils	Saturation of contaminated soils by flood waters	Lateral groundwater flow	Induced leachate generation				
Onsite																
Railway land (S1)	Low likelihood	Unlikely	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Current site users	Child	Minor	Very low
	Low likelihood	Low likelihood	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Proposed site users	Adult	Minor	Very low
	Low likelihood	Low likelihood	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Construction operatives	Adult	Minor	Very low
	Low likelihood	Low likelihood	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Off site receptors (during redevelopment)	Adult	Minor	Very low
	-	-	-	-	-	-	Low likelihood	-	-	-	-	-	Vegetation (current and proposed)	-	Minor	Very low
	-	-	-	-	-	-	-	Low likelihood	Unlikely	Unlikely	Likely	Unlikely	Water (current)	-	Mild	Low
	-	-	-	-	-	-	-	Low likelihood	Unlikely	Unlikely	Likely	Unlikely	Water (proposed)	-	Mild	Low
Tanks (S2)	Low likelihood	Low likelihood	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Current site users	Child	Minor	Very low
	Low likelihood	Unlikely	Unlikely	Unlikely	Low likelihood	Unlikely	-	-	-	-	-	-	Proposed site users	Adult	Minor	Very low
	Low likelihood	Low likelihood	Unlikely	Low likelihood	Likely	Low likelihood	-	-	-	-	-	-	Construction operatives	Adult	Minor	Low
	Unlikely	Unlikely	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Off site receptors (during redevelopment)	Adult	Minor	Very low
	-	-	-	-	-	-	Likely	-	-	-	-	-	Vegetation (current and proposed)	-	Mild	Low/moderate
	-	-	-	-	-	-	-	Low likelihood	Unlikely	Unlikely	Likely	Low likelihood	Water (current)	-	Mild	Low
	-	-	-	-	-	-	-	Low likelihood	Unlikely	Unlikely	Likely	Low likelihood	Water (proposed)	-	Mild	Low
Iron and Steel works waste (including slag/flue dust/slurry waste) (S3)	Likely	Low likelihood	Unlikely	Low likelihood	Low likelihood	Likely	-	-	-	-	-	-	Current site users	Child	Medium	Moderate
	Likely	Unlikely	Unlikely	Unlikely	Low likelihood	Low likelihood	-	-	-	-	-	-	Proposed site users	Adult	Medium	Moderate
	Likely	Likely	Unlikely	Likely	Likely	Likely	-	-	-	-	-	-	Construction operatives	Adult	Medium	Moderate
	Likely	Unlikely	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Off site receptors (during redevelopment)	Adult	Mild	Low/moderate
	-	-	-	-	-	-	Likely	-	-	-	-	-	Vegetation (current and proposed)	-	Minor	Low
	-	-	-	-	-	-	-	Low likelihood	Likely	Unlikely	Likely	Unlikely	Water (current)	-	Medium	Moderate
	-	-	-	-	-	-	-	Low likelihood	Low likelihood	Unlikely	Likely	Low likelihood	Water (proposed)	-	Medium	Low/moderate
Landfill site including special waste and liquid waste (S4)	Likely	Low likelihood	Unlikely	Low likelihood	Low likelihood	Likely	-	-	-	-	-	Likely	Current site users	Child	Medium	Moderate
	Low likelihood	Unlikely	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Proposed site users	Adult	Medium	Low/moderate
	Likely	Likely	Unlikely	Likely	Likely	Likely	-	-	-	-	-	-	Construction operatives	Adult	Medium	Moderate
	Likely	Unlikely	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Off site receptors (during redevelopment)	Adult	Mild	Low/moderate
	-	-	-	-	-	-	Likely	-	-	-	-	-	Vegetation (current and proposed)	-	Mild	Low/moderate
	-	-	-	-	-	-	-	Likely	Likely	Unlikely	Likely	Unlikely	Water (current)	-	Medium	Moderate
	-	-	-	-	-	-	-	Low likelihood	Low likelihood	Unlikely	Likely	Likely	Water (proposed)	-	Medium	Moderate
Made Ground across the site, outside the landfill (S5)	Likely	Low likelihood	Unlikely	Low likelihood	Low likelihood	Likely	-	-	-	-	-	-	Current site users	Child	Medium	Moderate
	Low likelihood	Unlikely	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	Likely	Proposed site users	Adult	Mild	Low
	Likely	Likely	Unlikely	Likely	Likely	Likely	-	-	-	-	-	-	Construction operatives	Adult	Medium	Moderate
	Likely	Unlikely	Unlikely	Likely	Likely	Likely	-	-	-	-	-	-	Off site receptors (during redevelopment)	Adult	Mild	Low/moderate
	-	-	-	-	-	-	Likely	-	-	-	-	-	Vegetation (current and proposed)	-	Mild	Low/moderate
	-	-	-	-	-	-	-	Likely	Likely	Unlikely	Likely	Unlikely	Water (current)	-	Medium	Moderate
	-	-	-	-	-	-	-	Low likelihood	Low likelihood	Unlikely	Likely	Likely	Water (proposed)	-	Medium	Moderate
Localised hydrocarbon odours and staining (S8)	Low likelihood	Low likelihood	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Current site users	Child	Mild	Low
	Unlikely	Unlikely	Unlikely	Low likelihood	Low likelihood	Unlikely	-	-	-	-	-	-	Proposed site users	Adult	Mild	Low
	Likely	Likely	Unlikely	Likely	Likely	Likely	-	-	-	-	-	-	Construction operatives	Adult	Medium	Moderate
	Unlikely	Unlikely	Unlikely	Unlikely	Unlikely	Unlikely	-	-	-	-	-	-	Off site receptors (during redevelopment)	Adult	Mild	Very low
	-	-	-	-	-	-	Likely	-	-	-	-	-	Vegetation (current and proposed)	-	Mild	Low/moderate
	-	-	-	-	-	-	-	Low likelihood	Likely	Unlikely	Likely	Unlikely	Water (current)	-	Medium	Moderate
	-	-	-	-	-	-	-	Low likelihood	Low likelihood	Unlikely	Likely	Low likelihood	Water (proposed)	-	Medium	Low/moderate

Adjacent sites																
Iron and Steel works waste (S3)	Low likelihood	Unlikely	Unlikely	Low likelihood	Unlikely	Low likelihood	-	-	-	-	-	-	Current site users	Child	Mild	Low
	Low likelihood	Unlikely	Unlikely	Low likelihood	Unlikely	Low likelihood	-	-	-	-	-	-	Proposed site users	Adult	Mild	Low
	Low likelihood	Unlikely	Unlikely	Low likelihood	Unlikely	Low likelihood	-	-	-	-	-	-	Construction operatives	Adult	Mild	Low
	-	-	-	-	-	-	Unlikely	-	-	-	-	-	Vegetation (current and proposed)	-	Minor	Very low
	-	-	-	-	-	-	-	Low likelihood	Low likelihood	Unlikely	Likely	Unlikely	Water (current and proposed)	-	Mild	Low
Landfill sites (S6)	Low likelihood	Unlikely	Unlikely	Low likelihood	Unlikely	Low likelihood	-	-	-	-	-	-	Current site users	Child	Mild	Low
	Low likelihood	Unlikely	Unlikely	Low likelihood	Unlikely	Low likelihood	-	-	-	-	-	-	Proposed site users	Adult	Mild	Low
	Low likelihood	Unlikely	Unlikely	Low likelihood	Unlikely	Low likelihood	-	-	-	-	-	-	Construction operatives	Adult	Mild	Low
	-	-	-	-	-	-	Unlikely	-	-	-	-	-	Vegetation (current and proposed)	-	Minor	Very low
	-	-	-	-	-	-	-	Low likelihood	Low likelihood	Unlikely	Likely	Unlikely	Water (current and proposed)	-	Mild	Low
Industrial site uses including metal fabricator (S7)	Low likelihood	Unlikely	Unlikely	Low likelihood	Unlikely	Unlikely	-	-	-	-	-	-	Current site users	Child	Mild	Low
	Low likelihood	Unlikely	Unlikely	Low likelihood	Unlikely	Unlikely	-	-	-	-	-	-	Proposed site users	Adult	Mild	Low
	Low likelihood	Unlikely	Unlikely	Low likelihood	Unlikely	Unlikely	-	-	-	-	-	-	Construction operatives	Adult	Mild	Low
	-	-	-	-	-	-	Unlikely	-	-	-	-	-	Vegetation (current and proposed)	-	Minor	Very low
	-	-	-	-	-	-	-	Low likelihood	Low likelihood	Unlikely	Likely	Unlikely	Water (current and proposed)	-	Mild	Low

Title

Initial Conceptual Site Model

Table number

1

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Updated Conceptual Model

Current site use Public Open Space (in industrial setting)
Proposed site use commercial/industrial

Source	Pathway												Receptor		Risk assessment to CIRIA C552	
	Humans						Vegetation	Water							Consequence of risk occurring via most likely pathway	Risk
	Ingestion of air-borne dusts	Ingestion of soil	Ingestion of vegetables and soil attached to vegetables	Inhalation of air-borne dusts	Inhalation of vapours	Dermal contact with soil and dust	Root uptake, deposition to shoots and foliage contact	Percolation of water through contaminated soils	Near-surface water run-off through contaminated soils	Saturation of contaminated soils by flood waters	Lateral groundwater flow	Induced leachate generation				
Onsite																
Railway land (S1)	Low likelihood	Unlikely	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Current site users	Child	Minor	Very low
	Low likelihood	Low likelihood	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Proposed site users	Adult	Minor	Very low
	Low likelihood	Low likelihood	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Construction operatives	Adult	Minor	Very low
	Low likelihood	Low likelihood	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Off site receptors (during redevelopment)	Adult	Minor	Very low
	-	-	-	-	-	-	Low likelihood	-	-	-	-	-	Vegetation (current and proposed)	-	Minor	Very low
	-	-	-	-	-	-	-	Low likelihood	Unlikely	Unlikely	Likely	Unlikely	Water (current)	-	Mild	Low
	-	-	-	-	-	-	-	Low likelihood	Unlikely	Unlikely	Likely	Unlikely	Water (proposed)	-	Mild	Low
Tanks (S2)	Low likelihood	Low likelihood	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Current site users	Child	Minor	Very low
	Low likelihood	Unlikely	Unlikely	Unlikely	Low likelihood	Unlikely	-	-	-	-	-	-	Proposed site users	Adult	Minor	Very low
	Low likelihood	Low likelihood	Unlikely	Low likelihood	Likely	Low likelihood	-	-	-	-	-	-	Construction operatives	Adult	Minor	Low
	Unlikely	Unlikely	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Off site receptors (during redevelopment)	Adult	Minor	Very low
	-	-	-	-	-	-	Likely	-	-	-	-	-	Vegetation (current and proposed)	-	Minor	Low
	-	-	-	-	-	-	-	Low likelihood	Unlikely	Unlikely	Likely	Low likelihood	Water (current)	-	Mild	Low
	-	-	-	-	-	-	-	Low likelihood	Unlikely	Unlikely	Likely	Low likelihood	Water (proposed)	-	Mild	Low
Iron and Steel works waste (including slag/flue dust/slurry waste) (S3)	Likely	Low likelihood	Unlikely	Low likelihood	Low likelihood	Likely	-	-	-	-	-	-	Current site users	Child	Minor	Low
	Likely	Unlikely	Unlikely	Unlikely	Low likelihood	Low likelihood	-	-	-	-	-	-	Proposed site users	Adult	Minor	Low
	Likely	Likely	Unlikely	Likely	Likely	Likely	-	-	-	-	-	-	Construction operatives	Adult	Mild	Low/moderate
	Likely	Unlikely	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Off site receptors (during redevelopment)	Adult	Mild	Low/moderate
	-	-	-	-	-	-	Likely	-	-	-	-	-	Vegetation (current and proposed)	-	Minor	Low
	-	-	-	-	-	-	-	Low likelihood	Likely	Unlikely	Likely	Unlikely	Water (current)	-	Mild	Low/moderate
	-	-	-	-	-	-	-	Low likelihood	Low likelihood	Unlikely	Likely	Low likelihood	Water (proposed)	-	Minor	Very low
Landfill site including special waste and liquid waste (S4)	Likely	Low likelihood	Unlikely	Low likelihood	Low likelihood	Likely	-	-	-	-	-	Likely	Current site users	Child	Minor	Low
	Low likelihood	Unlikely	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Proposed site users	Adult	Minor	Very low
	Likely	Likely	Unlikely	Likely	Likely	Likely	-	-	-	-	-	-	Construction operatives	Adult	Mild	Low/moderate
	Likely	Unlikely	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Off site receptors (during redevelopment)	Adult	Mild	Low/moderate
	-	-	-	-	-	-	Likely	-	-	-	-	-	Vegetation (current and proposed)	-	Mild	Low/moderate
	-	-	-	-	-	-	-	Likely	Likely	Unlikely	Likely	Unlikely	Water (current)	-	Minor	Low
	-	-	-	-	-	-	-	Low likelihood	Low likelihood	Unlikely	Likely	Likely	Water (proposed)	-	Minor	Low
Made Ground across the site, outside the landfill (S5)	Likely	Low likelihood	Unlikely	Low likelihood	Low likelihood	Likely	-	-	-	-	-	-	Current site users	Child	Minor	Low
	Low likelihood	Unlikely	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	Likely	Proposed site users	Adult	Minor	Very low
	Likely	Likely	Unlikely	Likely	Likely	Likely	-	-	-	-	-	-	Construction operatives	Adult	Mild	Low/moderate
	Likely	Unlikely	Unlikely	Likely	Likely	Likely	-	-	-	-	-	-	Off site receptors (during redevelopment)	Adult	Mild	Low/moderate
	-	-	-	-	-	-	Likely	-	-	-	-	-	Vegetation (current and proposed)	-	Minor	Low
	-	-	-	-	-	-	-	Likely	Likely	Unlikely	Likely	Unlikely	Water (current)	-	Minor	Low
	-	-	-	-	-	-	-	Low likelihood	Low likelihood	Unlikely	Likely	Likely	Water (proposed)	-	Minor	Low
Localised hydrocarbon odours and staining (S8)	Low likelihood	Low likelihood	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	-	-	Current site users	Child	Mild	Low
	Unlikely	Unlikely	Unlikely	Low likelihood	Low likelihood	Unlikely	-	-	-	-	-	-	Proposed site users	Adult	Mild	Low
	Likely	Likely	Unlikely	Likely	Likely	Likely	-	-	-	-	-	-	Construction operatives	Adult	Mild	Low/moderate
	Unlikely	Unlikely	Unlikely	Unlikely	Unlikely	Unlikely	-	-	-	-	-	-	Off site receptors (during redevelopment)	Adult	Mild	Very low
	-	-	-	-	-	-	Likely	-	-	-	-	-	Vegetation (current and proposed)	-	Minor	Low
	-	-	-	-	-	-	-	Low likelihood	Likely	Unlikely	Likely	Unlikely	Water (current)	-	Minor	Low
	-	-	-	-	-	-	-	Low likelihood	Low likelihood	Unlikely	Likely	Low likelihood	Water (proposed)	-	Mild	Low

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Adjacent sites																
Iron and Steel works waste (S3)	Low likelihood	Unlikely	Unlikely	Low likelihood	Unlikely	Low likelihood	-	-	-	-	-	-	Current site users	Child	Mild	Low
	Low likelihood	Unlikely	Unlikely	Low likelihood	Unlikely	Low likelihood	-	-	-	-	-	-	Proposed site users	Adult	Mild	Low
	Low likelihood	Unlikely	Unlikely	Low likelihood	Unlikely	Low likelihood	-	-	-	-	-	-	Construction operatives	Adult	Mild	Low
	-	-	-	-	-	-	Unlikely	-	-	-	-	-	Vegetation (current and proposed)	-	Minor	Very low
	-	-	-	-	-	-	-	Low likelihood	Low likelihood	Unlikely	Likely	Unlikely	Water (current and proposed)	-	Mild	Low
Landfill sites (S6)	Low likelihood	Unlikely	Unlikely	Low likelihood	Unlikely	Low likelihood	-	-	-	-	-	-	Current site users	Child	Mild	Low
	Low likelihood	Unlikely	Unlikely	Low likelihood	Unlikely	Low likelihood	-	-	-	-	-	-	Proposed site users	Adult	Mild	Low
	Low likelihood	Unlikely	Unlikely	Low likelihood	Unlikely	Low likelihood	-	-	-	-	-	-	Construction operatives	Adult	Mild	Low
	-	-	-	-	-	-	Unlikely	-	-	-	-	-	Vegetation (current and proposed)	-	Minor	Very low
	-	-	-	-	-	-	-	Low likelihood	Low likelihood	Unlikely	Likely	Unlikely	Water (current and proposed)	-	Mild	Low
Industrial site uses including metal fabricator (S7)	Low likelihood	Unlikely	Unlikely	Low likelihood	Unlikely	Unlikely	-	-	-	-	-	-	Current site users	Child	Mild	Low
	Low likelihood	Unlikely	Unlikely	Low likelihood	Unlikely	Unlikely	-	-	-	-	-	-	Proposed site users	Adult	Mild	Low
	Low likelihood	Unlikely	Unlikely	Low likelihood	Unlikely	Unlikely	-	-	-	-	-	-	Construction operatives	Adult	Mild	Low
	-	-	-	-	-	-	Unlikely	-	-	-	-	-	Vegetation (current and proposed)	-	Minor	Very low
	-	-	-	-	-	-	-	Low likelihood	Low likelihood	Unlikely	Likely	Unlikely	Water (current and proposed)	-	Mild	Low

Title

Updated Conceptual Site Model

Table number

2

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Summary insitu gas monitoring results

	Methane, CH_4 (%v/v) Chg		Carbon dioxide, CO_2 (%v/v) Chg		Oxygen, O_2 (%v/v)		Carbon Monoxide	Hydrogen Sulphide	Balance	Lower explosive limit	Gas flow (q)	Peak hazardous gas flow rate Qhgs		Steady hazardous gas flow rate Qhgs		Indicative CIRIA Characteristic Situation
	Peak	Steady	Peak	Steady	Minimum	Average	(ppm)	(ppm)	(%v/v)	(% LEL)	(l/Hr)	CH_4	CO_2	CH_4	CO_2	
Worst case scenario	0.3	0.3	4.5	4.5	1.7	1.7	21.0	1.0	97.0	6.0	0.2	0.00	0.01	0.00	0.01	ONE
Average site scenario	0.1	0.0	1.6	1.5	14.6	15.0	2.6	0.4	83.4	0.9	0.0	0.00	0.00	0.00	0.00	ONE

Additonal considerations

Notes

1) The gas analyser is capable of measuring flow to an accuracy of 0.1l/h. Below this value the analyser records zero flow. Adopting a precautionary approach we have used a flow rate of 0.1l/h when the analyser records zero with this flow rate used to determine the gas screening value.

2) Atmospheric temperature (*) data sourced from local weather station data.

3) Gas Screening Value (GSV) derived by multiplying the gas concentration (%) by the steady flow rate (l/h).

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Detailed insitu gas monitoring results

Location	Pipe Ref.	Date / Time of Reading	Instrument	Atmospheric pressure (mB)		Atmospheric Temperature (°C)	Methane, CH_4 (%v/v) Chg		Carbon dioxide, CO_2 (%v/v) Chg		Oxygen, O_2 (%v/v)		Carbon Monoxide	Hydrogen Sulphide	Balance	Lower explosive limit	Gas flow (q)	Peak hazardous gas flow rate Qhgs		Steady hazardous gas flow rate Qhgs		Indicative CIRIA Characteristic Situation	Potentially explosive
							Peak	Steady	Peak	Steady	Minimum	Average	(ppm)	(ppm)	(%v/v)	(% LEL)	(l/Hr)	CH_4	CO_2	CH_4	CO_2		
BH01	1	30/07/2020 11:12:00	GA5000	1013	falling	22*	0	0	2.2	2.2	17.2	17.2	1	0	80.6	0	0	0.00	0.00	0.00	0.00	ONE	NO
BH01	1	11/08/2020 15:46:00	GA5000	1005	steady	29*	0	0	4.5	4.5	13.2	13.4	2	1	82.1	0	0.1	0.00	0.00	0.00	0.00	ONE	NO

Lauren Wenham

From: Woodcock, Michael <michael.woodcock@environment-agency.gov.uk>
Sent: 25 February 2020 10:40
To: Sarah Drage
Cc: Alex Gratrix
Subject: RE: Proposed Land Restoration; Rockingham Enterprise Area

Hi Sarah

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Consideration of surface water upstream/downstream samples.
Consideration should be given to how many rounds of sampling would represent seasonal changes.
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4. Refer to the contaminated land pages on GOV.UK for more information.

If you need any further advice we can send you details of our charging scheme if it applies to this site.

Regards
Michael

Michael Woodcock BSc.(Hons) MCIWEM C.WEM C.Env SiLC
Technical Specialist - Groundwater & Contaminated Land

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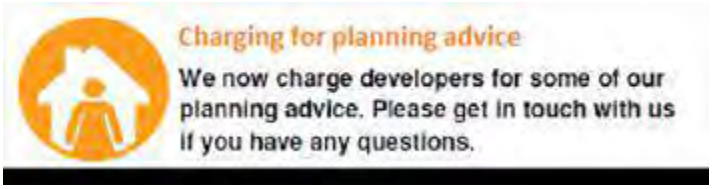

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Or email LNplanning@environment-agency.gov.uk

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Sent: 17 February 2020 10:24
To: Woodcock, Michael <michael.woodcock@environment-agency.gov.uk>
Cc: Alex Gratrix <Alex.Gratrix@corby.gov.uk>
Subject: RE: Proposed Land Restoration; Rockingham Enterprise Area

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Many thanks

Sarah

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From: Woodcock, Michael <michael.woodcock@environment-agency.gov.uk>
Sent: 14 February 2020 15:41
To: Sarah Drage <Sarah.Drage@soiltechnics.net>
Cc: Alex Gratrix <Alex.Gratrix@corby.gov.uk>
Subject: RE: Proposed Land Restoration; Rockingham Enterprise Area

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If you require a quote for chargeable work please can you send details to LNplanning@environment-agency.gov.uk and cc me in. They will be able to set up an agreement.

I look forward to hearing from you and have a good weekend.

Regards
Michael

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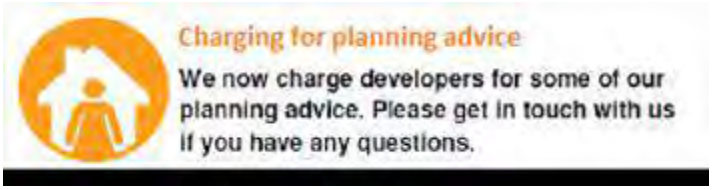

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Or email LNplanning@environment-agency.gov.uk

From: Sarah Drage [mailto:Sarah.Drage@soiltechnics.net]
Sent: 14 February 2020 12:56
To: Woodcock, Michael <michael.woodcock@environment-agency.gov.uk>
Subject: Proposed Land Restoration; Rockingham Enterprise Area

Good Afternoon Michael,

We have been asked to put a proposal together for a ground investigation for the proposed landfill restoration in Corby, south of Mitchell Road. Alex Gratix has advised that you would be the consulting officer who will be dealing with this so I am writing with an outline of our investigation proposal and invitation to attend a meeting to discuss the proposals if convenient.

I understand you may be familiar with the site and you may be aware that it is proposed to provide an engineered development platform across the site to support a future employment park. An Environmental Impact Assessment is being produced by Wardell Armstrong.

Since commencing preliminary investigations, we have located some old borehole records in our archived files. Works were actually carried out by Soiltechnics on behalf of Corus Tubes, though were monitored and maintained by others. It was 'before my time' and by a different name and client so I wasn't aware these existed until now! Unfortunately, we no longer have the paper file (which includes the chemical test data) as the files are too old, but the logs remain on our archived server, so I have included for information.

The logs confirm a Made Ground thickness extending to between approximately 12 and 14m, comprising assorted wastes associated with the Steel Works, including sludge waste, demolition wastes and blast furnace slag. This overlies a Northampton Sand Formation derived soil of around 1m thick, with Whitby Mudstone below. Variable horizons of water were recorded, considered to comprise locally perched water with the more consistent groundwater horizon at depth, atop the Whitby Mudstone.

We have put together a proposal for investigation to confirm conditions across the site, to account for on and off site uses, and enable groundwater collection and monitoring to inform the longer-term risk assessment. The investigation comprises 9 boreholes across the site which will all have water monitoring standpipes, and a series of more shallow trial pits to confirm residual surface conditions. Soil and groundwater samples will be tested for a series of inorganic and organic contaminants including heavy metals, PAHs, asbestos, and as appropriate VOCs/SVOCs/TPHs.

I have attached historic logs and a proposed investigation location plan, which also outlines historical records and the extent of the closed, permitted landfill.

Both Alex Gratix and myself have availability to attend a meeting on Thursday 27th February. Are you available also? If there are any fees associated with such a meeting, please let me know.

Please do give me a call if you want to discuss anything.

Many thanks

Sarah

Sarah Drage B.Sc. (Hons)., MIEnvSc., FGS | **Director**
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Please consider the environment before printing this e-mail.

From: Alex Gratrix <Alex.Gratrix@corby.gov.uk>
Sent: 10 February 2020 12:44
To: Sarah Drage <Sarah.Drage@soiltechnics.net>
Subject: RE: Proposed Land Restoration; Rockingham Enterprise Area

Hi Sarah

Yes, it's me.

Kind regards

Alex

From: Sarah Drage [mailto:Sarah.Drage@soiltechnics.net]
Sent: 10 February 2020 12:23
To: Alex Gratrix <Alex.Gratrix@corby.gov.uk>
Subject: Proposed Land Restoration; Rockingham Enterprise Area

Good Morning Alex,

We have been asked to put a proposal of investigation together for the above site. I understand you have been involved with some of the pre-app/scoping discussions and accordingly, I was hoping to gain your requirements and opinion on our proposal for a Phase 2 investigation. I have attached a site location/boundary for ease of reference.

Can you please confirm if it is yourself who will be looking at this site, and if you are happy for me to send across our proposal for comment?

Alternatively, are you able to confirm who will be dealing with it at your end so we can direct information to the appropriate person?

We are concurrently seeking permission from the EA to investigate within the closed, but permitted side of the landfill in the south.

Look forward to hearing from you

Thanks

Sarah

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Lauren Wenham

From: Woodcock, Michael <michael.woodcock@environment-agency.gov.uk>
Sent: 25 February 2020 10:40
To: Sarah Drage
Cc: Alex Gratrix
Subject: RE: Proposed Land Restoration; Rockingham Enterprise Area

Hi Sarah

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If you need any further advice we can send you details of our charging scheme if it applies to this site.

Regards
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Michael Woodcock BSc.(Hons) MCIWEM C.WEM C.Env SiLC
Technical Specialist - Groundwater & Contaminated Land

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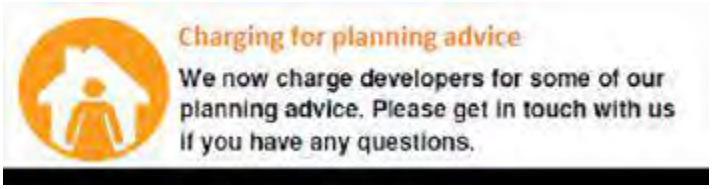

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Cc: Alex Gratrix <Alex.Gratrix@corby.gov.uk>
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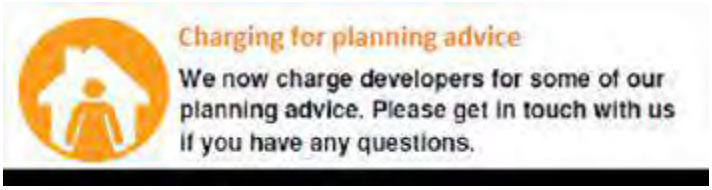

More information is available at:
https://www.gov.uk/government/publications/planning-advice-environment-agency-standard-terms-and-conditions
Or email LNplanning@environment-agency.gov.uk

From: Sarah Drage [mailto:Sarah.Drage@soiltechnics.net]
Sent: 14 February 2020 12:56
To: Woodcock, Michael <michael.woodcock@environment-agency.gov.uk>
Subject: Proposed Land Restoration; Rockingham Enterprise Area

Good Afternoon Michael,

We have been asked to put a proposal together for a ground investigation for the proposed landfill restoration in Corby, south of Mitchell Road. Alex Gratix has advised that you would be the consulting officer who will be dealing with this so I am writing with an outline of our investigation proposal and invitation to attend a meeting to discuss the proposals if convenient.

I understand you may be familiar with the site and you may be aware that it is proposed to provide an engineered development platform across the site to support a future employment park. An Environmental Impact Assessment is being produced by Wardell Armstrong.

Since commencing preliminary investigations, we have located some old borehole records in our archived files. Works were actually carried out by Soiltechnics on behalf of Corus Tubes, though were monitored and maintained by others. It was 'before my time' and by a different name and client so I wasn't aware these existed until now! Unfortunately, we no longer have the paper file (which includes the chemical test data) as the files are too old, but the logs remain on our archived server, so I have included for information.

The logs confirm a Made Ground thickness extending to between approximately 12 and 14m, comprising assorted wastes associated with the Steel Works, including sludge waste, demolition wastes and blast furnace slag. This overlies a Northampton Sand Formation derived soil of around 1m thick, with Whitby Mudstone below. Variable horizons of water were recorded, considered to comprise locally perched water with the more consistent groundwater horizon at depth, atop the Whitby Mudstone.

We have put together a proposal for investigation to confirm conditions across the site, to account for on and off site uses, and enable groundwater collection and monitoring to inform the longer-term risk assessment. The investigation comprises 9 boreholes across the site which will all have water monitoring standpipes, and a series of more shallow trial pits to confirm residual surface conditions. Soil and groundwater samples will be tested for a series of inorganic and organic contaminants including heavy metals, PAHs, asbestos, and as appropriate VOCs/SVOCs/TPHs.

I have attached historic logs and a proposed investigation location plan, which also outlines historical records and the extent of the closed, permitted landfill.

Both Alex Gratix and myself have availability to attend a meeting on Thursday 27th February. Are you available also? If there are any fees associated with such a meeting, please let me know.

Please do give me a call if you want to discuss anything.

Many thanks

Sarah

Sarah Drage B.Sc. (Hons)., MIEnvSc., FGS | **Director**
m 07881 956 919 | t 01604 781877 | w www.soiltechnics.net

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From: Alex Gratrix <Alex.Gratrix@corby.gov.uk>
Sent: 10 February 2020 12:44
To: Sarah Drage <Sarah.Drage@soiltechnics.net>
Subject: RE: Proposed Land Restoration; Rockingham Enterprise Area

Hi Sarah

Yes, it's me.

Kind regards

Alex

From: Sarah Drage [mailto:Sarah.Drage@soiltechnics.net]
Sent: 10 February 2020 12:23
To: Alex Gratrix <Alex.Gratrix@corby.gov.uk>
Subject: Proposed Land Restoration; Rockingham Enterprise Area

Good Morning Alex,

We have been asked to put a proposal of investigation together for the above site. I understand you have been involved with some of the pre-app/scoping discussions and accordingly, I was hoping to gain your requirements and opinion on our proposal for a Phase 2 investigation. I have attached a site location/boundary for ease of reference.

Can you please confirm if it is yourself who will be looking at this site, and if you are happy for me to send across our proposal for comment?

Alternatively, are you able to confirm who will be dealing with it at your end so we can direct information to the appropriate person?

We are concurrently seeking permission from the EA to investigate within the closed, but permitted side of the landfill in the south.

Look forward to hearing from you

Thanks

Sarah

Sarah Drage B.Sc. (Hons)., MIEnvSc., FGS | **Director**
m 07881 956 919 | t 01604 781877 | w www.soiltechnics.net

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Envirocheck® Report:

Datasheet

Order Details:

Order Number:
118207619_1_1

Customer Reference:
STP3966D

National Grid Reference:
490190, 290880

Slice:
A

Site Area (Ha):
21.24

Search Buffer (m):
1000

Site Details:

Rockingham Enterprise Area

Client Details:

Ms R Brown
Soiltechnics
Cedar Barn
White Lodge
Walgrave
Northampton
NN6 9PY

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

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1		Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 2		4	2	12
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls	pg 6			6	
Integrated Pollution Prevention And Control	pg 7			8	4
Local Authority Integrated Pollution Prevention And Control	pg 10			1	1
Local Authority Pollution Prevention and Controls	pg 10			10	22
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 15	Yes			
Pollution Incidents to Controlled Waters	pg 15	1	1	9	21
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality	pg 20	2			
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 21		1		5
Water Abstractions	pg 21				(*1)
Water Industry Act Referrals	pg 22			1	
Groundwater Vulnerability	pg 22	Yes	n/a	n/a	n/a
Drift Deposits			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 22	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences	pg 22	Yes	Yes	n/a	n/a
Flooding from Rivers or Sea without Defences	pg 22	Yes	Yes	n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
Detailed River Network Lines	pg 23	Yes	Yes	Yes	n/a
Detailed River Network Offline Drainage	pg 25	Yes	Yes	Yes	n/a

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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	pg 26	1			
Historical Landfill Sites	pg 26	5	3	1	1
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)	pg 28	2			
Licensed Waste Management Facilities (Locations)	pg 28	2	2	4	7
Local Authority Landfill Coverage	pg 31	3	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 32	2	1	3	3
Potentially Infilled Land (Water)	pg 32			1	1
Registered Landfill Sites	pg 32	1		4	2
Registered Waste Transfer Sites	pg 35			1	1
Registered Waste Treatment or Disposal Sites	pg 35	3		1	1
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)	pg 38			2	
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)	pg 38			1	
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

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Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 39	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 39	Yes		Yes	Yes
BGS Recorded Mineral Sites	pg 41	3	1	2	4
BGS Urban Soil Chemistry	pg 43		Yes	Yes	Yes
BGS Urban Soil Chemistry Averages	pg 46	Yes			
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					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 46	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 47	Yes		n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 47	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 47	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards				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
Industrial Land Use					
Contemporary Trade Directory Entries	pg 48		3	52	187
Fuel Station Entries					
Points of Interest - Commercial Services	pg 70		1	14	40
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 76			13	18
Points of Interest - Public Infrastructure	pg 78	3	2		1
Points of Interest - Recreational and Environmental	pg 79				2
Gas Pipelines	pg 79			1	
Underground Electrical Cables					

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Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland					
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones	pg 80	1			
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A10NE (N)	234	2	490000 291350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A10NW (NW)	244	2	489850 291300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A6NW (W)	246	2	489650 290850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A7SW (S)	271	2	490250 290350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A7SW (S)	292	2	490300 290350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A10SW (W)	293	2	489600 290879
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A10SW (W)	294	2	489600 290900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A6NW (W)	317	2	489600 290700
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A7SW (SE)	319	2	490450 290400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A6SE (S)	332	2	490190 290250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A6NW (SW)	340	2	489600 290600
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A7SE (SE)	347	2	490600 290450
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A6SE (S)	389	2	490000 290200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A7SE (SE)	413	2	490550 290350
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A7SW (SE)	431	2	490500 290300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A7SE (SE)	441	2	490700 290400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A7SW (S)	448	2	490350 290200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A7SW (S)	450	2	490450 290250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A3NW (S)	455	2	490250 290150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A7SW (S)	495	2	490450 290200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	**Discharge Consents** Operator: Corus Tubes Property Type: Undefined Or Other Location: Corby Steel Works, Corby, Nn17 Authority: Environment Agency, Anglian Region Catchment Area: Willow Brook Reference: Pr5nf232 Permit Version: 1 Effective Date: 16th January 1963 Issued Date: 16th January 1963 Revocation Date: 24th March 1992 Discharge Type: Trade Effluent Discharge Environment: Freshwater Stream/River Receiving Water: Willow Brook (Central Stream) **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 10m	A7NE (E)	129	3	490600 290820
1	**Discharge Consents** Operator: British Steel Fao Mr R Murdoch Property Type: Undefined Or Other Location: Corby Steel Works Authority: Environment Agency, Anglian Region Catchment Area: Willow Brook Reference: Pr5nf232 Permit Version: 1 Effective Date: 16th January 1963 Issued Date: 16th January 1963 Revocation Date: 24th March 1992 Discharge Type: Trade Effluent Discharge Environment: Freshwater Stream/River Receiving Water: Willow Brook (Central Stream) **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 10m	A7NE (E)	129	3	490600 290820
2	**Discharge Consents** Operator: Greatline Developments Ltd Property Type: MINERAL/GRAVEL EXTRACTION/QUARRYING Location: Deene Quarry, Gretton Brook Rd Entrance, Corby Authority: Environment Agency, Anglian Region Catchment Area: Willow Brook Reference: Prnnf09590 Permit Version: 1 Effective Date: 19th November 1993 Issued Date: 19th November 1993 Revocation Date: 23rd August 2006 Discharge Type: Trade Effluent Discharge-Site Drainage Discharge Environment: Freshwater Stream/River Receiving Water: Gretton Brook **Status: Consent revoked: Discharge ceased (Water Resources Act 1991, Schedule 10 & 6)** Positional Accuracy: Located by supplier to within 100m	A10NE (N)	163	3	490100 291300
3	**Discharge Consents** Operator: British Steel Fao Mr R Murdoch Property Type: Undefined Or Other Location: Corby Steel Works Authority: Environment Agency, Anglian Region Catchment Area: Willow Brook Reference: Pr5nf232 Permit Version: 1 Effective Date: 16th January 1963 Issued Date: 16th January 1963 Revocation Date: 24th March 1992 Discharge Type: Trade Discharge - Process Water Discharge Environment: Freshwater Stream/River Receiving Water: Willow Brook (Central Stream) **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 10m	A7NE (E)	180	3	490650 290850

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	**Discharge Consents** Operator: Brian Geoffrey Warne Property Type: Not Supplied Location: Garage And Workshop At Phoenix Park, Corby Authority: Environment Agency, Anglian Region Catchment Area: Not Supplied Reference: Pr5lf5101 Permit Version: 1 Effective Date: 25th November 1985 Issued Date: 25th November 1985 Revocation Date: 1st October 1996 Discharge Type: Unknown Discharge Environment: Onto Land Receiving Water: Land **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A10SW (W)	294	3	489600 290900
4	**Discharge Consents** Operator: Messrs J B Rubber (Corby) Ltd Property Type: WWTW (NOT WATER CO) (NOT STP AT A PRIVATE PREMISES) Location: Heritage Way Off Phoenix Parkway, Corby, Northants, Nn17 1qt Authority: Environment Agency, Anglian Region Catchment Area: Not Supplied Reference: Prnlf02380 Permit Version: 1 Effective Date: 22nd March 1990 Issued Date: 22nd March 1990 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: Land **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 10m	A10SW (W)	315	3	489580 290920
5	**Discharge Consents** Operator: Corby Power Ltd Property Type: Not Supplied Location: Corby Power Station Gretton Brook Rd, Corby, Northants, Nn17 5qt Authority: Environment Agency, Anglian Region Catchment Area: Not Given Reference: Prnnf04268 Permit Version: 1 Effective Date: 18th April 1991 Issued Date: 18th April 1991 Revocation Date: 26th February 1996 Discharge Type: Discharge Of Other Matter-Surface Water Discharge Environment: Freshwater Stream/River Receiving Water: Gretton Brook **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A10NW (NW)	507	3	489580 291410
6	**Discharge Consents** Operator: Corby Borough Council Property Type: Domestic Property (Multiple) Location: Phoenix Parkway, Phoenix Park, Corby, Northamptonshire, Nn17 5dt Authority: Environment Agency, Anglian Region Catchment Area: Willow Brook Reference: Npswqd005751 Permit Version: 1 Effective Date: 8th December 2008 Issued Date: 8th December 2008 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Gretton Brook **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A9NE (W)	612	3	489360 291200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	**Discharge Consents** Operator: Anglian Water Services Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: Pen Green Lane Sps, Corby, Northants, Nn17 1bw Authority: Environment Agency, Anglian Region Catchment Area: Not Given Reference: Aw5nf1708 Permit Version: 1 Effective Date: 23rd July 1987 Issued Date: 23rd July 1987 Revocation Date: 4th February 1999 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: Northern Stream Of Willow Broo **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A2NW (SW)	628	3	489650 290130
8	**Discharge Consents** Operator: Anglian Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Corby 13 Sws, Corby, Nn17 1bw Authority: Environment Agency, Anglian Region Catchment Area: Not Given Reference: Aw5nf1011 Permit Version: 1 Effective Date: 19th September 1984 Issued Date: 19th September 1984 Revocation Date: 4th October 2016 Discharge Type: Discharge Of Other Matter-Surface Water Discharge Environment: Freshwater Stream/River Receiving Water: Willow Brook Northern Stream **Status: Surrendered under EPR 2010** Positional Accuracy: Located by supplier to within 100m	A2NW (SW)	658	3	489590 290140
8	**Discharge Consents** Operator: Anglian Water Services Limited Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY) Location: Pen Green Lane Sps, Corby, Northants, Nn17 1bw Authority: Environment Agency, Anglian Region Catchment Area: Willow Brook Reference: Aw5nf1708 Permit Version: 2 Effective Date: 15th February 1999 Issued Date: 15th February 1999 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Pumping Station - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Northern Stream Of Willow Broo **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 10m	A2NW (SW)	682	3	489552 290140
9	**Discharge Consents** Operator: Anglian Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Pen Green Sws, Earlstree Ind Est, Corby, Nn17 1df Authority: Environment Agency, Anglian Region Catchment Area: Willow Brook Reference: Awnnf13353 Permit Version: 1 Effective Date: 5th September 1996 Issued Date: 5th September 1996 Revocation Date: Not Supplied Discharge Type: Trade Discharges - Site Drainage (Contam Surface Water, Not Tips) Discharge Environment: Freshwater Stream/River Receiving Water: Northern Stream Willow Brook **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A1NE (SW)	806	3	489370 290130

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
10	**Discharge Consents** Operator: Hope Construction Materials Limited Property Type: MAKING OF GLASS/CERAMICS/CEMENT/CUTTING STONE Location: Gretton Brook Road, Corby, Northamptonshire, Nn17 4ba Authority: Environment Agency, Anglian Region Catchment Area: Willow Brook Reference: Npswqd005847 Permit Version: 1 Effective Date: 9th September 2009 Issued Date: 9th September 2009 Revocation Date: Not Supplied Discharge Type: Trade Effluent Discharge-Site Drainage Discharge Environment: Freshwater Stream/River Receiving Water: Gretton Brook **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A9SW (W)	855	3	489087 291169
11	**Discharge Consents** Operator: Corby Borough Council Property Type: Domestic Property (Single) Location: Gretton Brook Road Site, Gretton Brook Road, Corby, Northamptonshire, Nn17 4ba Authority: Environment Agency, Anglian Region Catchment Area: Willow Brook Reference: Npswqd005750 Permit Version: 1 Effective Date: 8th December 2008 Issued Date: 8th December 2008 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Gretton Brook **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A15NE (N)	867	3	490602 291909
12	**Discharge Consents** Operator: Anglian Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Corby 23 Sws, Pilot Road, Corby, Northants, Nn17 5yf Authority: Environment Agency, Anglian Region Catchment Area: Not Given Reference: Aw5nf1020 Permit Version: 1 Effective Date: 19th September 1984 Issued Date: 19th September 1984 Revocation Date: Not Supplied Discharge Type: Discharge Of Other Matter-Surface Water Discharge Environment: Freshwater Stream/River Receiving Water: Willow Brook Southern Stream **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A2SE (S)	928	3	490060 289650
13	**Discharge Consents** Operator: Anglian Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Corby 22 Sws, Pilot Road, Corby, Northants, Nn17 5yf Authority: Environment Agency, Anglian Region Catchment Area: Not Given Reference: Aw5nf1019 Permit Version: 1 Effective Date: 19th September 1984 Issued Date: 19th September 1984 Revocation Date: Not Supplied Discharge Type: Discharge Of Other Matter-Surface Water Discharge Environment: Freshwater Stream/River Receiving Water: Willow Brook Southern Stream **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A2SE (S)	959	3	490030 289620

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
13	**Discharge Consents** Operator: Anglian Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Corby 21 Sws, Pilot Road, Corby, Northants, Nn17 5yf Authority: Environment Agency, Anglian Region Catchment Area: Not Given Reference: Aw5nf1018 Permit Version: 1 Effective Date: 19th September 1984 Issued Date: 19th September 1984 Revocation Date: Not Supplied Discharge Type: Discharge Of Other Matter-Surface Water Discharge Environment: Freshwater Stream/River Receiving Water: Willow Brook Southern Stream **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A2SE (S)	990	3	490020 289590
14	**Discharge Consents** Operator: Anglian Water Services Limited Property Type: REAL ESTATE ACTIVITIES/BUYING/SELLING/RENTING Location: Earlstrees E.Ind Est, Corby, Nn17 Authority: Environment Agency, Anglian Region Catchment Area: Not Given Reference: Pr5nf5029 Permit Version: 1 Effective Date: 8th February 1985 Issued Date: 8th February 1985 Revocation Date: Not Supplied Discharge Type: Discharge Of Other Matter-Surface Water Discharge Environment: Freshwater Stream/River Receiving Water: Trib Willow Brook **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A1NW (SW)	969	3	489150 290130
15	**Prosecutions Relating to Controlled Waters** Location: Gretton Brook, Earlstrees Industrial Estate, Corby, Nn17 4ba Prosecution Text: Waste vegetable liquid, incorrectly stored, entered a nearby watercourse Prosecution Act: Wra91 S85(1) Hearing Date: 16th March 2005 Verdict: Guilty Fine: 20000 Cost: 1688 Positional Accuracy: Manually positioned within the geographical locality	A9SW (W)	804	3	489138 291160
16	**Integrated Pollution Controls** Name: Corby Power Ltd Location: Mitchell Road, Phoenix Parkway, CORBY, Northamptonshire, NN17 5QT Authority: Environment Agency, Anglian Region Permit Reference: Br6155 Dated: 14th June 2002 Process Type: IPC minor (non-substantial) variation to previous variation Description: 1.3 A (B) Combustion processes within the Fuel & Power Industry **Status: Authorisation superseded by a substantial or non substantial variationSuperseded** Positional Accuracy: Automatically positioned to the address	A10SW (NW)	369	3	489596 291136
16	**Integrated Pollution Controls** Name: Corby Power Ltd Location: Mitchell Road, Phoenix Parkway, CORBY, Northamptonshire, NN17 5QT Authority: Environment Agency, Anglian Region Permit Reference: BD7227 Dated: 24th November 1998 Process Type: IPC minor (non-substantial) variation to previous variation Description: 1.3 A (B) Combustion processes within the Fuel & Power Industry **Status: Authorisation superseded by a substantial or non substantial variationSuperseded** Positional Accuracy: Automatically positioned to the address	A10SW (NW)	369	3	489596 291136
16	**Integrated Pollution Controls** Name: Corby Power Ltd Location: Mitchell Road, Phoenix Parkway, CORBY, Northamptonshire, NN17 5QT Authority: Environment Agency, Anglian Region Permit Reference: AW8661 Dated: 20th December 1996 Process Type: IPC minor (non-substantial) variation to previous variation Description: 1.3 A (B) Combustion processes within the Fuel & Power Industry **Status: Authorisation superseded by a substantial or non substantial variationSuperseded** Positional Accuracy: Automatically positioned to the address	A10SW (NW)	369	3	489596 291136

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
16	**Integrated Pollution Controls** Name: Corby Power Ltd Location: Mitchell Road, Phoenix Parkway, CORBY, Northamptonshire, NN17 5QT Authority: Environment Agency, Anglian Region Permit Reference: AR1655 Dated: 25th September 1995 Process Type: IPC minor (non-substantial) variation to previous variation Description: 1.3 A (B) Combustion processes within the Fuel & Power Industry **Status: Authorisation superseded by a substantial or non substantial variationSuperseded** Positional Accuracy: Automatically positioned to the address	A10SW (NW)	369	3	489596 291136
16	**Integrated Pollution Controls** Name: Corby Power Ltd Location: Mitchell Road, Phoenix Parkway, CORBY, Northamptonshire, NN17 5QT Authority: Environment Agency, Anglian Region Permit Reference: AG6621 Dated: 23rd December 1992 Process Type: IPC new application Description: 1.3 A (B) Combustion processes within the Fuel & Power Industry **Status: Authorisation superseded by a substantial or non substantial variationSuperseded** Positional Accuracy: Automatically positioned to the address	A10SW (NW)	369	3	489596 291136
16	**Integrated Pollution Controls** Name: Corby Power Ltd Location: Mitchell Road, CORBY, Northamptonshire, NN17 5QT Authority: Environment Agency, Anglian Region Permit Reference: By3533 Dated: 19th November 2004 Process Type: IPC minor (non-substantial) variation to previous variation Description: 1.3 A (B) Combustion processes within the Fuel & Power Industry **Status: Revoked - Now IPPC** Positional Accuracy: Automatically positioned to the address	A10SW (NW)	375	3	489591 291141
17	**Integrated Pollution Prevention And Control** Name: Storefield Plant Rushton Ltd Location: Gretton Bio-Diesel Epr/Mp3738lz, Bio-Diesel Plant, Gretton Brook Road,,Earlstrees Industrial Estate, CORBY, Northamptonshire, NN17 4BA Authority: Environment Agency, Anglian Region Permit Reference: MP3738LZ Original Permit Ref: Mp3738lz Effective Date: 8th September 2006 **Status: Effective** Application Type: Application App. Sub Type: New Positional Accuracy: Manually positioned to the road within the address or location Activity Code: 4.1 A(1) (A) (II) Activity Description: Organic Chemicals; Oxygen Containing Compounds Eg Alcohols Primary Activity: Y	A10NE (NW)	298	3	489894 291378
18	**Integrated Pollution Prevention And Control** Name: Corby Power Limited Location: Corby Power Station Epr/Lp3833lm, Corby Power Station, Mitchell Road,Phoenix Parkway,, CORBY, Northamptonshire, NN17 5QT Authority: Environment Agency, Anglian Region Permit Reference: AP3838AV Original Permit Ref: Lp3833lm Effective Date: 1st January 2016 **Status: Effective** Application Type: Variation App. Sub Type: Standard Positional Accuracy: Automatically positioned to the address Activity Code: 1.1 A(1) (A) Activity Description: Combustion; Any Fuel Greater Or Equal To 50Mw Primary Activity: Y Activity Code: 1.1 A(1) (A) Activity Description: Combustion; Any Fuel Greater Or Equal To 50Mw Primary Activity: N	A10SW (NW)	375	3	489591 291141

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
18	**Integrated Pollution Prevention And Control** Name: Corby Power Limited Location: Corby Power Station Epr/Lp3833lm, Corby Power Station, Mitchell Road,Phoenix Parkway,, CORBY, Northamptonshire, NN17 5QT Authority: Environment Agency, Anglian Region Permit Reference: WP3636CK Original Permit Ref: Lp3833lm Effective Date: 22nd January 2013 **Status: Superseded By Variation** Application Type: Variation App. Sub Type: Simple Standard Variation Positional Accuracy: Automatically positioned to the address Activity Code: 1.1 A(1) (A) Activity Description: Combustion; Any Fuel Greater Or Equal To 50Mw Primary Activity: Y Activity Code: 1.1 A(1) (A) Activity Description: Combustion; Any Fuel Greater Or Equal To 50Mw Primary Activity: N	A10SW (NW)	375	3	489591 291141
18	**Integrated Pollution Prevention And Control** Name: Corby Power Limited Location: Corby Power Station Epr/Lp3833lm, Corby Power Station, Mitchell Road,Phoenix Parkway,, CORBY, Northamptonshire, NN17 5QT Authority: Environment Agency, Anglian Region Permit Reference: LP3836UR Original Permit Ref: Lp3833lm Effective Date: 30th July 2007 **Status: Superseded By Variation** Application Type: Variation App. Sub Type: Minor Positional Accuracy: Automatically positioned to the address Activity Code: 1.1 A(1) (A) Activity Description: Combustion; Any Fuel Greater Or Equal To 50Mw Primary Activity: Y Activity Code: 1.1 A(1) (A) Activity Description: Combustion; Any Fuel Greater Or Equal To 50Mw Primary Activity: N	A10SW (NW)	375	3	489591 291141
18	**Integrated Pollution Prevention And Control** Name: Corby Power Limited Location: Corby Power Station Epr/Lp3833lm, Corby Power Station, Mitchell Road,Phoenix Parkway,, CORBY, Northamptonshire, NN17 5QT Authority: Environment Agency, Anglian Region Permit Reference: LP3833LM Original Permit Ref: Lp3833lm Effective Date: 15th March 2007 **Status: Superseded By Variation** Application Type: Application App. Sub Type: New Positional Accuracy: Automatically positioned to the address Activity Code: 1.1 A(1) (A) Activity Description: Combustion; Any Fuel Greater Or Equal To 50Mw Primary Activity: Y Activity Code: 1.1 A(1) (A) Activity Description: Combustion; Any Fuel Greater Or Equal To 50Mw Primary Activity: N	A10SW (NW)	375	3	489591 291141
18	**Integrated Pollution Prevention And Control** Name: National Grid Gas Plc Location: Corby Power Station Epr/Xp3338lv, Corby Power Station, Mitchell Road,,, Corby, NN17 5QT Authority: Environment Agency, Anglian Region Permit Reference: XP3338LV Original Permit Ref: Xp3338lv Effective Date: 18th December 2006 **Status: Effective** Application Type: Application App. Sub Type: New Positional Accuracy: Manually positioned to the address or location Activity Code: 1.2 B (A) Activity Description: Gasification, Liquifac. & Refining; Odorising Natural Gas/Lpg (Unless Related To 1.2 Part A) Primary Activity: Y	A10SW (NW)	376	3	489590 291140

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
19	**Integrated Pollution Prevention And Control** Name: Epr Corby Limited Location: Corby Biofuel Power Station, Pheonix Park Way, Corby, NN17 5DT Authority: Environment Agency, Anglian Region Permit Reference: ZP3232LM Original Permit Ref: Bj6887ir Effective Date: 12th May 2006 **Status: Surrender Effective** Application Type: Surrender App. Sub Type: Installation never operated Positional Accuracy: Manually positioned within the geographical locality Activity Code: 1.1 A(1) (B) (III) Activity Description: Combustion; Waste Derived Fuel Greater Or Equal To 3Mw But Less Than 50Mw Primary Activity: Y	A9SE (W)	387	3	489518 290979
20	**Integrated Pollution Prevention And Control** Name: Clean Power (Uk) Limited Location: Corby Energy Recovery Centre, Willowbrook East Industrial Est, Shelton Road,,, Corby, Northamptonshire, NN17 5XH Authority: Environment Agency, Anglian Region Permit Reference: DP3039ET Original Permit Ref: Dp3039et Effective Date: Not Supplied **Status: Valid** Application Type: Application App. Sub Type: New Positional Accuracy: Located by supplier to within 10m Activity Code: 5.4 A(1) a) (i) Activity Description: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING BIOLOGICAL TREATMENT Primary Activity: N Activity Code: 5.1 A(1) (A) Activity Description: THE INCINERATION OF HAZARDOUS WASTE IN AN INCINERATION OR CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 10 TONNES PER DAY Primary Activity: Y	A8NW (E)	439	3	490910 290830
21	**Integrated Pollution Prevention And Control** Name: Adm Milling Ltd Location: 9, Brunel Road, Earlstrees Industrial Estate, CORBY, Northamptonshire, NN17 4SL Authority: Environment Agency, Anglian Region Permit Reference: Bm9661ih Original Permit Ref: Bm9661ih Effective Date: 22nd September 2005 **Status: Effective** Application Type: Application App. Sub Type: New Positional Accuracy: Automatically positioned to the address Activity Code: 6.8 A(1) (D) (II) Activity Description: Animal, Vegetable & Food; Treating Etc. Vegetable Raw Materials For Food Greater Than 300T/Day Primary Activity: Y	A9SE (W)	578	3	489326 290992
22	**Integrated Pollution Prevention And Control** Name: Verdant Bioproducts Ltd Location: 11 Whittle Road Epr/Up3337wj, Unit 11, 5 Whittle Road,,, Corby, Northants, NN17 5OX Authority: Environment Agency, Anglian Region Permit Reference: AP3432RZ Original Permit Ref: Up3337wj Effective Date: 25th January 2016 **Status: Surrender Effective** Application Type: Surrender App. Sub Type: Whole Positional Accuracy: Located by supplier to within 10m Activity Code: 4.1 A(1) (A) (VIII) Activity Description: Organic Chemicals; Plastic Materials Eg Polymers Primary Activity: Y	A2SE (S)	863	3	489930 289730

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
22	**Integrated Pollution Prevention And Control** Name: Verdant Bioproducts Limited Location: 11 Whittle Road, 11, Whittle Road,,, Corby, Northamptonshire, NN17 5DX Authority: Environment Agency, Anglian Region Permit Reference: UP3337WJ Original Permit Ref: Up3337wj Effective Date: 20th May 2015 **Status:** **Superseded By Variation** Application Type: Application App. Sub Type: New Positional Accuracy: Located by supplier to within 10m Activity Code: 4.1 A(1) (A) (VIII) Activity Description: Organic Chemicals; Plastic Materials Eg Polymers Primary Activity: Y	A2SE (S)	863	3	489930 289730
22	**Integrated Pollution Prevention And Control** Name: Epr Corby Limited Location: Corby Biofuel Power Station, Pheonix Park Way, Corby, Northamptonshire, NN17 5DT Authority: Environment Agency, Anglian Region Permit Reference: Bj6887ir Original Permit Ref: Bj6887ir Effective Date: 26th June 2002 **Status:** **Superseded By Variation** Application Type: Application App. Sub Type: New Positional Accuracy: Manually positioned to the road within the address or location Activity Code: 1.1 A(1) (B) (III) Activity Description: Combustion; Waste Derived Fuel Greater Or Equal To 3Mw But Less Than 50Mw Primary Activity: Y	A2SE (S)	867	3	489978 289718
23	**Local Authority Integrated Pollution Prevention And Control** Name: Euromax Coated Products Ltd Location: Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 2JW Authority: Corby Borough Council, Environmental Health Department Permit Reference: PA2-2 Dated: Not Supplied Process Type: Other Activities Description: PG6/13 **Status:** **Not Supplied** Positional Accuracy: Manually positioned to the address or location	A5NE (W)	441	4	489494 290598
24	**Local Authority Integrated Pollution Prevention And Control** Name: Premier Galvanising (Corby) Location: Davey Road, Corby, Northamptonshire, NN17 5XZ Authority: Corby Borough Council, Environmental Health Department Permit Reference: PA2-3 Dated: Not Supplied Process Type: Production and Processing of Metals Description: PG2/2 **Status:** **Not Supplied** Positional Accuracy: Manually positioned to the road within the address or location	A3SW (S)	777	4	490312 289831
25	**Local Authority Pollution Prevention and Controls** Name: Heritage Stone Location: Heritage Way, Phoenix Parkway, CORBY, Northamptonshire, NN17 Authority: Corby Borough Council, Environmental Health Department Permit Reference: Not Given Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG3/1Blending, packing, loading and use of bulk cement **Status:** **Authorisation revokedRevoked** Positional Accuracy: Manually positioned to the road within the address or location	A6NW (W)	273	4	489652 290659
26	**Local Authority Pollution Prevention and Controls** Name: Eurofleet Location: Arwright Road, Corby, NN17 5AE Authority: Corby Borough Council, Environmental Health Department Permit Reference: Not Supplied Dated: 20th March 2001 Process Type: Local Authority Air Pollution Control Description: PG6/34 Respraying of road vehicles **Status:** **Authorised** Positional Accuracy: Manually positioned to the road within the address or location	A7SW (S)	322	4	490225 290283

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
27	**Local Authority Pollution Prevention and Controls** Name: Ccfs (2) Limited 1, 3 & 4 Location: Baird Road, Willowbrook North Industrial Estate, Corby, Northamptonshire, NN17 5AE Authority: Corby Borough Council, Environmental Health Department Permit Reference: P9/4 Dated: 10th September 1996 Process Type: Local Authority Air Pollution Control Description: PG6/34 Respraying of road vehicles **Status:** **Authorised** Positional Accuracy: Manually positioned to the address or location	A7SW (SE)	348	4	490494 290393
28	**Local Authority Pollution Prevention and Controls** Name: Corby Power Ltd Location: Mitchell Road, Willowbrook North, CORBY, Northamptonshire, NN17 Authority: Corby Borough Council, Environmental Health Department Permit Reference: 950140 Dated: 14th June 1995 Process Type: Local Authority Air Pollution Control Description: PG5/4 General waste incineration processes under 1 tonne an hour **Status:** **Authorisation revokedRevoked** Positional Accuracy: Automatically positioned to the address	A10SW (NW)	375	4	489591 291141
28	**Local Authority Pollution Prevention and Controls** Name: Corby Power Ltd Location: Phoenix Park Way, CORBY, Northamptonshire, NN17 5QT Authority: Corby Borough Council, Environmental Health Department Permit Reference: AF0725 Dated: 1st April 1992 Process Type: Application under SI 318, 1989 The Control of Industrial Air Pollution (Registration of Works) Regulations 1989 Description: Processes registered under S. 9 of the Alkali Act 1906 and S. 5 of the Health & Safety at Work Act 1974 **Status:** **Authorisation revokedRevoked** Positional Accuracy: Automatically positioned to the address	A10SW (NW)	375	4	489591 291141
29	**Local Authority Pollution Prevention and Controls** Name: Benteler Automotive Location: Baird Road, Willowbrook North Industrial Estate, Corby, NN17 5BB Authority: Corby Borough Council, Environmental Health Department Permit Reference: P31 Dated: 17th April 2008 Process Type: Local Authority Pollution Prevention and Control Description: PG6/23 Coating of metal and plastic **Status:** **Permitted** Positional Accuracy: Manually positioned to the address or location	A7SE (SE)	428	4	490759 290467
30	**Local Authority Pollution Prevention and Controls** Name: Transco Location: Phoenix Parkway, CORBY, Northamptonshire, NN Authority: Corby Borough Council, Environmental Health Department Permit Reference: Es/Epa/Wmw/041 Dated: 7th September 1998 Process Type: Local Authority Air Pollution Control Description: PG1/15 Odourising natural gas & liquified petroleum gas **Status:** **Authorised** Positional Accuracy: Manually positioned to the road within the address or location	A6SW (SW)	434	4	489808 290251
31	**Local Authority Pollution Prevention and Controls** Name: Euramax Coated Products Ltd Location: Brunel Road, Earlstrees Industrial Estate, CORBY, Northamptonshire, NN17 Authority: Corby Borough Council, Environmental Health Department Permit Reference: PA2-2 Dated: 5th October 1993 Process Type: Local Authority Air Pollution Control Description: PG6/13 Coil coating processes **Status:** **Transferred to LAIPPC** Positional Accuracy: Manually positioned to the address or location	A5NE (W)	441	4	489494 290598
32	**Local Authority Pollution Prevention and Controls** Name: Ennstone Johnston Ltd Location: Gretton Brook Road, Corby, NN17 4BA Authority: Corby Borough Council, Environmental Health Department Permit Reference: P36 Dated: 30th April 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG3/1Blending, packing, loading and use of bulk cement **Status:** **Permitted** Positional Accuracy: Manually positioned to the address or location	A10NW (NW)	463	4	489639 291409

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
32	**Local Authority Pollution Prevention and Controls** Name: Ennstone Johnston Ltd Location: Gretton Brook Road, Corby, NN17 4BA Authority: Corby Borough Council, Environmental Health Department Permit Reference: P35 Dated: 13th April 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG3/15 Mineral drying and roadstone coating processes **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A10NW (NW)	463	4	489639 291409
33	**Local Authority Pollution Prevention and Controls** Name: Morgan Technical Ceramics Certech Ltd Location: 92 C & D Brunel Road, Earlstree Industrial Estate, Corby, Nn17 4jw Authority: Corby Borough Council, Environmental Health Department Permit Reference: P38 Dated: 31st March 2008 Process Type: Local Authority Pollution Prevention and Control Description: PG3/2 Manufacture of heavy clay goods and refractory goods **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A5NE (SW)	554	4	489396 290534
34	**Local Authority Pollution Prevention and Controls** Name: Dulmison Location: Macadam Road, Earlstrees Industrial Estate, CORBY, Northamptonshire, NN17 4JN Authority: Corby Borough Council, Environmental Health Department Permit Reference: es/epa/dj/019 Dated: 1st April 1994 Process Type: Local Authority Air Pollution Control Description: PG2/6 Aluminium and aluminium alloy processes **Status: Authorised** Positional Accuracy: Automatically positioned to the address	A5NE (W)	608	4	489339 290533
35	**Local Authority Pollution Prevention and Controls** Name: Recticel Ltd Location: 83-84 Manton Road, Corby, Nn17 4jl Authority: Corby Borough Council, Environmental Health Department Permit Reference: P17/3 Dated: 21st August 1996 Process Type: Local Authority Air Pollution Control Description: PG6/32 Adhesive coating **Status: Authorised** Positional Accuracy: Manually positioned to the address or location	A5NE (W)	647	4	489271 290672
36	**Local Authority Pollution Prevention and Controls** Name: Weldon Plant Ltd Location: Pywell Road, Willowbrook East Industrial Estate, Corby, Nn17 5xj Authority: Corby Borough Council, Environmental Health Department Permit Reference: P37 Dated: 25th April 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG3/16 Mobile screening and crushing processes **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A8NW (E)	653	4	491092 290598
37	**Local Authority Pollution Prevention and Controls** Name: Recticel Automotive Uk Location: Fleming Road, Manton Road, Earlstrees Industrial Estate, CORBY, Northamptonshire, NN17 4SW Authority: Corby Borough Council, Environmental Health Department Permit Reference: P15(Es/Epa/Dnj/024) Dated: 22nd October 1993 Process Type: Local Authority Air Pollution Control Description: PG6/32 Adhesive coating **Status: Authorised** Positional Accuracy: Manually positioned to the address or location	A5NE (W)	663	4	489247 290722
38	**Local Authority Pollution Prevention and Controls** Name: DeclonK J & K Regan Location: 83-84 Manton Road, Earlstree Industrial Estate, CORBY, Northamptonshire, NN17 2JG Authority: Corby Borough Council, Environmental Health Department Permit Reference: Es/Epa/Dj/010 Dated: 22nd October 1993 Process Type: Local Authority Air Pollution Control Description: PG6/29 Di-isocyanate processes **Status: Authorised** Positional Accuracy: Manually positioned to the road within the address or location	A5NE (W)	712	4	489216 290596

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
39	**Local Authority Pollution Prevention and Controls** Name: Dulmison Location: Macadam Road, Earlstrees Industrial Estate, CORBY, Northamptonshire, NN17 4JN Authority: Corby Borough Council, Environmental Health Department Permit Reference: ES/EPA/DJ/019 Dated: 19th January 1995 Process Type: Local Authority Air Pollution Control Description: PG6/32 Adhesive coating **Status: Authorisation revokedRevoked** Positional Accuracy: Manually positioned to the address or location	A5SE (SW)	728	4	489259 290412
40	**Local Authority Pollution Prevention and Controls** Name: Premier Galvanising (Corby) Location: Davey Road, Willowbrook East Industrial Estate, CORBY, Northamptonshire, NN17 5XZ Authority: Corby Borough Council, Environmental Health Department Permit Reference: PA2-3 Dated: 8th June 2002 Process Type: Local Authority Air Pollution Control Description: PG2/2 Hot dip galvanising processes **Status: Transferred to LAIPPC** Positional Accuracy: Manually positioned to the road within the address or location	A3SW (S)	777	4	490312 289831
41	**Local Authority Pollution Prevention and Controls** Name: Clarkes Accident Repair Centres Ltd Location: 97 Macadam Road, Earlstree Industrial Estate, Corby, Nn17 4jn Authority: Corby Borough Council, Environmental Health Department Permit Reference: P43 Dated: 8th April 2008 Process Type: Local Authority Pollution Prevention and Control Description: PG6/34 Respraying of road vehicles **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A5SE (SW)	785	4	489192 290422
42	**Local Authority Pollution Prevention and Controls** Name: The Concrete Company Location: Davey Road, CORBY, Northamptonshire, NN18 5XX Authority: Corby Borough Council, Environmental Health Department Permit Reference: P4/2 Dated: 3rd September 1998 Process Type: Local Authority Air Pollution Control Description: PG3/1Blending, packing, loading and use of bulk cement **Status: Authorised** Positional Accuracy: Manually positioned to the address or location	A3NW (S)	791	4	490396 289846
43	**Local Authority Pollution Prevention and Controls** Name: Corby Polymex Ltd Location: Sondes Road, Willowbrook Industrial Estate, Corby, Nn17 5xl Authority: Corby Borough Council, Environmental Health Department Permit Reference: P33 Dated: 17th April 2008 Process Type: Local Authority Pollution Prevention and Control Description: PG6/17 Printing of flexible packaging **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A8NE (E)	829	4	491279 290612
44	**Local Authority Pollution Prevention and Controls** Name: Aquagraphics Location: 20 Brunel Road, CORBY, Northamptonshire, NN17 5JX Authority: Corby Borough Council, Environmental Health Department Permit Reference: Es/Epa/Wmw/035 Dated: 11th June 1998 Process Type: Local Authority Air Pollution Control Description: Part B - General Coating Process (No Specific Reference) **Status: Authorisation revokedRevoked** Positional Accuracy: Manually positioned to the road within the address or location	A9SW (W)	833	4	489062 290937
45	**Local Authority Pollution Prevention and Controls** Name: Powdertech Ltd Location: Unit 5 Cockerell Road, Phoenix Parkway, CORBY, Northamptonshire, NN17 1QT Authority: Corby Borough Council, Environmental Health Department Permit Reference: P16 Dated: 22nd October 1993 Process Type: Local Authority Air Pollution Control Description: PG6/31 Powder coating processes (including sheradizing) **Status: Authorised** Positional Accuracy: Automatically positioned to the address	A2SW (S)	858	4	489837 289758

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
45	**Local Authority Pollution Prevention and Controls** Name: Powdertech Ltd Location: Unit 5 Cockerell Road, Phoenix Parkway, Corby, Northamptonshire, Nn17 1qt Authority: Corby Borough Council, Environmental Health Department Permit Reference: P16 Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG6/31 Powder coating processes (including sheradizing) **Status:** **Authorised** Positional Accuracy: Located by supplier to within 10m	A2SW (S)	858	4	489837 289758
46	**Local Authority Pollution Prevention and Controls** Name: Echo Packaging Location: Sondes Road, Willowbrook East Industrial Estate, Corby, NN17 5XL Authority: Corby Borough Council, Environmental Health Department Permit Reference: Not Supplied Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG6/16 Printworks **Status:** **Permitted** Positional Accuracy: Manually positioned to the road within the address or location	A8NE (E)	870	4	491333 290680
47	**Local Authority Pollution Prevention and Controls** Name: Alumax Location: Brunel Road, Earlstrees Industrial Estate, CORBY, Northamptonshire, NN17 4SL Authority: Corby Borough Council, Environmental Health Department Permit Reference: Not Given Dated: 11th October 1993 Process Type: Local Authority Air Pollution Control Description: PG6/13 Coil coating processes **Status:** **Authorisation revokedRevoked** Positional Accuracy: Manually positioned to the road within the address or location	A9SW (W)	899	4	488996 290944
48	**Local Authority Pollution Prevention and Controls** Name: Forest Gate (Corby) Ltd Location: Whittle Road, Phoenix Parkway, CORBY, Northamptonshire, NN17 5DX Authority: Corby Borough Council, Environmental Health Department Permit Reference: P14.3 Dated: 14th March 2008 Process Type: Local Authority Air Pollution Control Description: PG6/34 Respraying of road vehicles **Status:** **Authorised** Positional Accuracy: Manually positioned to the address or location	A2SE (S)	912	4	489917 289682
49	**Local Authority Pollution Prevention and Controls** Name: Tarmac Ltd Location: Gretton Brook Road, Earlstrees Industrial Estate, CORBY, Northamptonshire, NN17 4BA Authority: Corby Borough Council, Environmental Health Department Permit Reference: P2/2 Dated: 22nd April 1993 Process Type: Local Authority Air Pollution Control Description: PG3/1Blending, packing, loading and use of bulk cement **Status:** **Authorised** Positional Accuracy: Manually positioned to the address or location	A9NW (W)	944	4	489058 291339
50	**Local Authority Pollution Prevention and Controls** Name: Corus Location: Corby Works, PO Box 101, Weldon Road, CORBY, Northamptonshire, NN17 5UA Authority: Corby Borough Council, Environmental Health Department Permit Reference: Es/Epa/Dj/021 Dated: 12th December 1995 Process Type: Local Authority Air Pollution Control Description: PG6/42 Bitumen and tar processes **Status:** **Authorised** Positional Accuracy: Manually positioned to the address or location	A4NW (SE)	964	4	490997 289969
50	**Local Authority Pollution Prevention and Controls** Name: Corus Location: Corby Works, PO Box 101, Weldon Road, CORBY, Northamptonshire, NN17 5UA Authority: Corby Borough Council, Environmental Health Department Permit Reference: Es/Epa/Dj/017 Dated: 24th April 1994 Process Type: Local Authority Air Pollution Control Description: PG6/23 Coating of metal and plastic **Status:** **Authorised** Positional Accuracy: Manually positioned to the address or location	A4NW (SE)	964	4	490997 289969

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
50	**Local Authority Pollution Prevention and Controls** Name: Corus Location: Corby Works, PO Box 101, Weldon Road, CORBY, Northamptonshire, NN17 5UA Authority: Corby Borough Council, Environmental Health Department Permit Reference: Es/Epa/Dj/014 Dated: 8th October 1993 Process Type: Local Authority Air Pollution Control Description: PG2/2 Hot dip galvanising processes **Status:** **Authorised** Positional Accuracy: Manually positioned to the address or location	A4NW (SE)	964	4	490997 289969
51	**Local Authority Pollution Prevention and Controls** Name: Corby Car Care Location: Unit 3, Curie Courtyard, Cockerell Road, CORBY, Northamptonshire, NN17 5DU Authority: Corby Borough Council, Environmental Health Department Permit Reference: P11/3 Dated: 9th July 1999 Process Type: Local Authority Air Pollution Control Description: PG6/34 Respraying of road vehicles **Status:** **Authorised** Positional Accuracy: Manually positioned to the address or location	A2SW (S)	993	4	489804 289627
	Nearest Surface Water Feature	A6NE (S)	0	-	490130 290628
52	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Unknown Note: Ground Incident Date: 19th June 1992 Incident Reference: 1374 Catchment Area: Not Given Receiving Water: Groundwater Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A10SE (NW)	0	3	490001 291001
53	**Pollution Incidents to Controlled Waters** Property Type: Food industry Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Organic Wastes: Milk Note: Willow Bk; Northern Stream Incident Date: 24th July 1995 Incident Reference: 2420 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Leaking Tank Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A6SE (S)	199	3	490001 290401
54	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Unknown Note: Gretton Brook Incident Date: 3rd February 1992 Incident Reference: 1252 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A10NW (NW)	273	3	489800 291300
55	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Unknown Note: Willow Bk Central Stream Incident Date: 10th December 1992 Incident Reference: 1505 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A6NW (W)	317	3	489600 290700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
56	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Unknown Note: Gretton Brook Incident Date: 27th March 1993 Incident Reference: 1602 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A10NW (NW)	345	3	489700 291300
57	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Oils - Diesel (Including Agricultural) Note: Gretton Brook Incident Date: 23rd February 1994 Incident Reference: 1917 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A10NW (NW)	356	3	489800 291400
58	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Foul Sewer Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Crude Sewage Note: Bugbrooke Brook Incident Date: 22nd March 1998 Incident Reference: 3303 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Blocked Sewer Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A7SW (S)	392	3	490200 290200
59	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Oils - Other Oil Note: Gretton Brook Incident Date: 9th September 1997 Incident Reference: 3143 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A10NW (NW)	414	3	489700 291400
60	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Unknown Note: Gretton Brook Incident Date: 7th July 1993 Incident Reference: 1715 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A11NW (N)	416	3	490300 291500
61	**Pollution Incidents to Controlled Waters** Property Type: Other General Premises Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Oils - Waste Oil Note: Gretton Brook Incident Date: 27th June 1997 Incident Reference: 3058 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Poor/Inadequate Maintenance Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A10NW (NW)	426	3	489600 291295

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
61	**Pollution Incidents to Controlled Waters** Property Type: Other General Premises Location: CORBY Authority: Environment Agency, Anglian Region Pollutant: Oils - Waste Oil Note: Gretton Brook Incident Date: 27th June 1997 Incident Reference: 3058 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Poor/Inadequate Maintenance Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A10NW (NW)	429	3	489600 291300
62	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Oils - Other Oil Note: Gretton Brook Incident Date: 20th August 1997 Incident Reference: 3133 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NE (NW)	518	3	489500 291300
63	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Surface Water Outfall Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Oils - Other Oil Note: Gretton Brook Incident Date: 22nd July 1995 Incident Reference: 2417 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NE (W)	574	3	489400 291200
64	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Surface Water Outfall Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Oils - Other Oil Note: Willow Bk; Northern Stream Incident Date: 21st May 1994 Incident Reference: 2015 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A5SE (SW)	593	3	489500 290300
65	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Unknown Note: Northern Stream; Willow Brook Incident Date: 1st July 1992 Incident Reference: 1396 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A6SW (SW)	605	3	489600 290200
65	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Oils - Gas Oil Note: Northern Stream Incident Date: 16th July 1997 Incident Reference: 3079 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A6SW (SW)	606	3	489605 290195

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
65	**Pollution Incidents to Controlled Waters** Property Type: Industrial: Other Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Miscellaneous - Urban Runoff Note: Northern Stream Incident Date: 20th June 1994 Incident Reference: 2056 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Accidental Spillage/Leakage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A6SW (SW)	609	3	489600 290195
66	**Pollution Incidents to Controlled Waters** Property Type: Industrial: Other Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Oils - Waste Oil Note: Gretton Brook Incident Date: 9th December 1998 Incident Reference: 3609 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Fire Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A14SW (NW)	633	3	489600 291600
67	**Pollution Incidents to Controlled Waters** Property Type: Not Applicable Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Miscellaneous - Natural Note: Willow Brook North Incident Date: 1st July 1997 Incident Reference: 3062 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Low Flow Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A5SE (SW)	665	3	489505 290200
67	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Unknown Note: Willow Bk North Incident Date: 16th March 1993 Incident Reference: 1581 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A5SE (SW)	668	3	489500 290200
67	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Surface Water Outfall Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Miscellaneous - Urban Runoff Note: Northern Stream Incident Date: 18th August 1997 Incident Reference: 3127 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Accidental Spillage/Leakage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A5SE (SW)	669	3	489505 290195
67	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Oils - Other Oil Note: Willow Brook North Incident Date: 2nd July 1997 Incident Reference: 3063 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A5SE (SW)	672	3	489500 290195

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
68	**Pollution Incidents to Controlled Waters** Property Type: Food industry Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Oils - Vegetable Oil Note: Gretton Brook Incident Date: 25th June 1996 Incident Reference: 2748 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NE (W)	668	3	489300 291200
69	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Surface Water Outfall Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Miscellaneous - Unknown Note: Northern Stream Incident Date: 15th May 1995 Incident Reference: 2362 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A5SE (SW)	735	3	489400 290200
70	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Surface Water Outfall Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Crude Sewage Note: Willow Brook Incident Date: 19th August 1997 Incident Reference: 3124 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Other Cause Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A1NE (SW)	746	3	489500 290100
71	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Unknown Note: Willow Bk Northern Stream Incident Date: 4th November 1992 Incident Reference: 1495 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A1NE (SW)	809	3	489400 290100
72	**Pollution Incidents to Controlled Waters** Property Type: Landfill/Waste Disposal Site Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Miscellaneous - Tip Leachate Note: Gretton Brook Incident Date: 6th March 1994 Incident Reference: 1938 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Other Cause Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A15NW (N)	852	3	490500 291900
73	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Unknown Note: Gretton Brook Incident Date: 9th February 1993 Incident Reference: 1559 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A15NE (N)	853	3	490600 291895

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
73	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Unknown Note: Gretton Brook Incident Date: 4th November 1992 Incident Reference: 1494 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A15NE (N)	858	3	490600 291900
74	**Pollution Incidents to Controlled Waters** Property Type: Food industry Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Organic Wastes: Other Suspended Solids Note: Tributary Willow Brk Incident Date: 12th July 1996 Incident Reference: 2771 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Leaking Underground Pipe Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A5SE (SW)	887	3	489200 290200
75	**Pollution Incidents to Controlled Waters** Property Type: Road Location: Kettering District, CORBY Authority: Environment Agency, Anglian Region Pollutant: Oils - Petrol Note: Gretton Brook Incident Date: 30th May 1999 Incident Reference: 3733 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Accidental Spillage/Leakage Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NW (W)	946	3	489000 291195
75	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Kettering District Authority: Environment Agency, Anglian Region Pollutant: Unknown Note: Gretton Brook Incident Date: 2nd July 1992 Incident Reference: 1397 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A9NW (W)	948	3	489000 291200
	River Quality Name: Northern Strm GQA Grade: River Quality C Reach: Headwaters...Deene Lake (2) Estimated Distance (km): 1.5 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A7NW (SE)	0	3	490292 290691
	River Quality Name: Northern Strm GQA Grade: River Quality F Reach: Headwaters...Deene Lake (3) Estimated Distance (km): 2 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A7NW (SE)	0	3	490369 290732

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
76	**Substantiated Pollution Incident Register** Authority: Environment Agency - Anglian Region, Northern Area Incident Date: 21st August 2003 Incident Reference: 184025 Water Impact: Category 2 - Significant Incident Air Impact: Category 4 - No Impact Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 10m Pollutant: General Biodegradable Materials And Wastes: Food And Drink	A6SE (S)	115	3	490027 290484
77	**Substantiated Pollution Incident Register** Authority: Environment Agency - Anglian Region, Northern Area Incident Date: 20th March 2012 Incident Reference: 972082 Water Impact: Category 2 - Significant Incident Air Impact: Category 3 - Minor Incident Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 10m Pollutant: Organic Chemicals : Adhesives / Sealants	A8NW (E)	621	3	491092 290775
78	**Substantiated Pollution Incident Register** Authority: Environment Agency - Anglian Region, Northern Area Incident Date: 15th July 2003 Incident Reference: 173909 Water Impact: Category 2 - Significant Incident Air Impact: Category 3 - Minor Incident Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 10m Pollutant: Sewage Materials: Grey Water	A9SW (W)	825	3	489119 291167
79	**Substantiated Pollution Incident Register** Authority: Environment Agency - Anglian Region, Northern Area Incident Date: 24th October 2012 Incident Reference: 1050414 Water Impact: Category 2 - Significant Incident Air Impact: Category 4 - No Impact Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 10m Pollutant: Sewage Materials: Process Effluent	A9NW (NW)	917	3	489141 291474
80	**Substantiated Pollution Incident Register** Authority: Environment Agency - Anglian Region, Northern Area Incident Date: 18th July 2015 Incident Reference: 1356228 Water Impact: Category 4 - No Impact Air Impact: Category 2 - Significant Incident Land Impact: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 10m Pollutant: Atmospheric Pollutants And Effects: Smoke	A9SW (W)	919	3	489015 291155
81	**Substantiated Pollution Incident Register** Authority: Environment Agency - Anglian Region, Northern Area Incident Date: 9th December 2002 Incident Reference: 125367 Water Impact: Category 4 - No Impact Air Impact: Category 2 - Significant Incident Land Impact: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m Pollutant: Atmospheric Pollutants And Effects: Dust	A3SW (S)	998	3	490300 289600
	Water Abstractions Operator: British Steel Corporation Licence Number: 5/32/08/*s/033 Permit Version: Not Supplied Location: Willow Brook, Weldon Grange, WELDON Authority: Environment Agency, Anglian Region Abstraction: Cooling Abstraction Type: Not Supplied Source: Stream Daily Rate (m3): 70 Yearly Rate (m3): 345000 Details: Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Manually corrected supplier location	(SE)	1948	3	491100 288900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
82	**Water Industry Act Referrals** Name: Vayland Ltd Location: HERITAGE WAY, PHOENIX PARKWAY, CORBY, NORTHAMPTONSHIRE, NN17 1QU Authority: Environment Agency, Anglian Region Permit Reference: BH9108 Dated: 16th February 2000 Process Type: Permissions or amendments to discharge under the Water Industry Act 1991 Description: Processes which result in the discharge of Special Category effluents under The Trade Effluents (Prescribed Processes and Substances) Regulations **Status: Application cancelled** Positional Accuracy: Manually positioned to the road within the address or location	A6NW (W)	289	3	489631 290680
	Groundwater Vulnerability Soil Classification: Soils of High Leaching Potential (U) - Soil information for restored mineral workings and urban areas is based on fewer observations than elsewhere. A worst case vulnerability classification (H) assumed, until proved otherwise Map Sheet: Sheet 24 North Northamptonshire Scale: 1:100,000	A10SE (E)	0	3	490190 290879
	Drift Deposits None				
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A10SE (W)	0	2	490000 290879
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A10SE (E)	0	2	490190 290879
	Superficial Aquifer Designations No Data Available				
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A6NE (S)	0	3	490092 290599
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A7NW (SE)	0	3	490308 290726
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A7NW (E)	4	3	490476 290812
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A11SW (E)	5	3	490465 290922
	Extreme Flooding from Rivers or Sea without Defences Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A11SE (E)	137	3	490613 290918
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A6NE (S)	0	3	490092 290599
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A7NW (SE)	0	3	490308 290726
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A7NW (E)	4	3	490476 290812
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A11SW (E)	5	3	490465 290922
	Flooding from Rivers or Sea without Defences Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Fluvial Models Boundary Accuracy: As Supplied	A11SE (E)	137	3	490613 290918

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
83	**Detailed River Network Lines** River Type: Primary River River Name: Not Supplied Hydrographic Area: B05 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk Management Status: Flood Risk Management Indicative/Statutory Main River Water Course Name: Willow Brook North Water Course Reference: 5501	A7NW (SE)	0	3	490304 290721
84	**Detailed River Network Lines** River Type: Tertiary River River Name: Drain Hydrographic Area: B05 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Currently Undefined Flood Risk Management Status: Flood Risk Management Indicative/Statutory Main River Water Course Name: Willow Brook North Water Course Reference: 5501	A7NW (E)	49	3	490520 290822
85	**Detailed River Network Lines** River Type: Tertiary River River Name: Not Supplied Hydrographic Area: B05 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk Management Status: Other Rivers Water Course Name: Not Supplied Water Course Reference: Not Supplied	A6SE (S)	97	3	490038 290498
86	**Detailed River Network Lines** River Type: Primary River River Name: Not Supplied Hydrographic Area: B05 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk Management Status: Flood Risk Management Indicative/Statutory Main River Water Course Name: Willow Brook North Water Course Reference: 5501	A6SE (S)	97	3	490038 290498
87	**Detailed River Network Lines** River Type: Secondary River River Name: Not Supplied Hydrographic Area: B05 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk Management Status: Other Rivers Water Course Name: Not Supplied Water Course Reference: Not Supplied	A6SE (S)	121	3	490051 290464

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
88	**Detailed River Network Lines** River Type: Secondary River River Name: Not Supplied Hydrographic Area: B05 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk Management Status: Other Rivers Water Course Name: Not Supplied Water Course Reference:	A6SE (SW)	129	3	490014 290476
89	**Detailed River Network Lines** River Type: Primary River River Name: Drain Hydrographic Area: B05 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Currently Undefined Flood Risk Management Status: Flood Risk Management Indicative/Statutory Main River Water Course Name: Willow Brook North Water Course Reference: 5501	A6SE (SW)	137	3	490013 290467
90	**Detailed River Network Lines** River Type: Primary River River Name: Gretton Brook Hydrographic Area: B05 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk Management Status: Flood Risk Management Indicative/Statutory Main River Water Course Name: GRETTON BROOK Water Course Reference: 5315	A10NE (N)	286	3	490028 291414
91	**Detailed River Network Lines** River Type: Tertiary River River Name: Drain Hydrographic Area: B05 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Drain (ditch, Reen, Rhyne, Drain) Flood Risk Management Status: Other Rivers Water Course Name: Not Supplied Water Course Reference: Not Supplied	A11SE (E)	320	3	490799 290938
92	**Detailed River Network Lines** River Type: Extended Culvert (greater than 50m) River Name: Not Supplied Hydrographic Area: B05 River Flow Type: Primary Flow Path River Surface Level: Below Surface Drain Feature: Not a Drain Flood Risk Management Status: Flood Risk Management Indicative/Statutory Main River Water Course Name: Willow Brook North Water Course Reference: 5501	A6SW (SW)	327	3	489835 290368
93	**Detailed River Network Lines** River Type: Tertiary River River Name: Drain Hydrographic Area: B05 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Currently Undefined Flood Risk Management Status: Flood Risk Management Indicative/Statutory Main River Water Course Name: Willow Brook North Water Course Reference: 5501	A11SE (E)	342	3	490816 290916

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
94	**Detailed River Network Offline Drainage** River Type: Tertiary River Hydrographic Area: D005	A7NW (SE)	0	3	490229 290830
95	**Detailed River Network Offline Drainage** River Type: Tertiary River Hydrographic Area: D005	A11SW (E)	0	3	490278 290865
96	**Detailed River Network Offline Drainage** River Type: Tertiary River Hydrographic Area: D005	A10NE (N)	228	3	490029 291355
97	**Detailed River Network Offline Drainage** River Type: Secondary River Hydrographic Area: D005	A10NW (NW)	240	3	489857 291303
98	**Detailed River Network Offline Drainage** River Type: Tertiary River Hydrographic Area: D005	A11SE (E)	353	3	490849 291088

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
99	**BGS Recorded Landfill Sites** Site Name: British Steel Corp Location: Gretton Brook Road, Deene, CORBY, Northamptonshire Authority: British Geological Survey, National Geoscience Information Service Ground Water: No threat to ground water Surface Water: No threat to surface water Geology: N/A Positional Accuracy: Positioned by the supplier Boundary Accuracy: Moderate	A10SE (E)	0	-	490190 290879
100	**Historical Landfill Sites** Licence Holder: British Steel Corporation Location: North Bank Of North Brook, Lagoon Site, Corby Name: BSC North Brook Lagoons Operator Location: Tubes Division, Po Box 101, Weldon Road, Corby Boundary Accuracy: As Supplied Provider Reference: EAHLD02020 First Input Date: 31st December 1984 Last Input Date: Not Supplied Specified Waste Type: Deposited Waste included Industrial and Special Waste, and Liquid Sludge EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 2800/0061 BGS Ref: Not Supplied Other Ref: C/018	A10SE (NW)	0	3	490082 290943
101	**Historical Landfill Sites** Licence Holder: BSC Corby Location: Corby, Northamptonshire Name: Candy Filter Sludge Ponds Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD02017 First Input Date: 1st March 1984 Last Input Date: Not Supplied Specified Waste Type: Deposited Waste included Special Waste and Liquid Sludge EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 2800/0081 BGS Ref: Not Supplied Other Ref: C/77/003	A7NW (SE)	0	3	490224 290821
102	**Historical Landfill Sites** Licence Holder: BSC Corby Location: Corby, Northamptonshire Name: Candy Filter Sludge Ponds Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD02021 First Input Date: 1st March 1984 Last Input Date: Not Supplied Specified Waste Type: Deposited Waste included Special Waste and Liquid Sludge EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 2800/0081 BGS Ref: Not Supplied Other Ref: C/77/003	A7NW (SE)	0	3	490293 290681
103	**Historical Landfill Sites** Licence Holder: BSC Corby Location: Corby, Northamptonshire Name: Candy Filter Sludge Ponds Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD02016 First Input Date: 1st March 1984 Last Input Date: Not Supplied Specified Waste Type: Deposited Waste included Inert and Special Waste, and Liquid Sludge EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 2800/0081 BGS Ref: Not Supplied Other Ref: C/77/003	A6NE (S)	0	3	490160 290803

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
104	**Historical Landfill Sites** Licence Holder: British Steel Corporation Location: Gretton Brook Road, Deene, Corby, Northamptonshire Name: British Steel Corporation Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD31130 First Input Date: 31st December 1950 Last Input Date: 28th February 1986 Specified Waste Type: Deposited Waste included Inert and Industrial Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 2800/0080 BGS Ref: 469 Other Ref: C/004	A10SE (E)	0	3	490190 290879
105	**Historical Landfill Sites** Licence Holder: BSC Corby Location: Corby, Northamptonshire Name: Candy Filter Sludge Ponds Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD02018 First Input Date: 1st March 1984 Last Input Date: Not Supplied Specified Waste Type: Deposited Waste included Special Waste and Liquid Sludge EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 2800/0081 BGS Ref: Not Supplied Other Ref: C/77/003	A11SW (E)	2	3	490462 290908
106	**Historical Landfill Sites** Licence Holder: BSC Corby Location: Corby, Northamptonshire Name: Candy Filter Sludge Ponds Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD02019 First Input Date: 1st March 1984 Last Input Date: Not Supplied Specified Waste Type: Deposited Waste included Special Waste and Liquid Sludge EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 2800/0081 BGS Ref: Not Supplied Other Ref: C/77/003	A11SE (E)	132	3	490607 290928
107	**Historical Landfill Sites** Licence Holder: BSC Corby Location: Off Gretton Brook Road, Corby, Northamptonshire Name: Candy Filter Sludge Ponds Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD02030 First Input Date: 1st March 1984 Last Input Date: Not Supplied Specified Waste Type: Deposited Waste included Special Waste and Liquid Sludge EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 2800/0081 BGS Ref: Not Supplied Other Ref: C3E, C20, C3C, C3d, C/77/003	A10NW (NW)	203	3	489856 291256
108	**Historical Landfill Sites** Licence Holder: British Steel Corporation Location: Gretton Road Name: Refractory Tip Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD02031 First Input Date: 31st December 1980 Last Input Date: 28th February 1986 Specified Waste Type: Deposited Waste included Inert and Industrial Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 2800/0080 BGS Ref: Not Supplied Other Ref: C/004	A11NE (NE)	353	3	490615 291381

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
109	**Historical Landfill Sites** Licence Holder: British Steel Corporation Location: Gretton Road West Name: Refractory tip Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD02004 First Input Date: 31st December 1980 Last Input Date: 28th February 1986 Specified Waste Type: Deposited Waste included Inert and Industrial Waste, and Liquid Sludge EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 2800/0080 BGS Ref: Not Supplied Other Ref: C/B, C/004	A9SE (W)	734	3	489187 291086
110	**Licensed Waste Management Facilities (Landfill Boundaries)** Name: C D C Deene Quarry Licence Number: 70561 Location: Corby Borough Council, Deene Quarry, Corby, Northants, NN17 3AS Licence Holder: Corby Borough Council Authority: Environment Agency - Anglian Region, Northern Area Site Category: Household, Commercial And Industrial Waste Landfills Max Input Rate: Not Supplied **Licence Status: Closure** Issued: 9th April 1987 Positional Accuracy: Positioned by the supplier Boundary Accuracy: As Supplied	A10SE (N)	0	3	490115 291129
111	**Licensed Waste Management Facilities (Landfill Boundaries)** Name: North Brook Landfill Site Licence Number: 70559 Location: British Steel Corporation, North Bank Of North Brook, Corby, Northants, NN17 4AP Licence Holder: Tata Steel Uk Ltd Authority: Environment Agency - Anglian Region, Northern Area Site Category: Industrial Waste Landfills Max Input Rate: Not Supplied **Licence Status: Closure** Issued: 30th November 1984 Positional Accuracy: Positioned by the supplier Boundary Accuracy: As Supplied	A10SE (E)	0	3	490190 290879
112	**Licensed Waste Management Facilities (Locations)** Licence Number: 70560 Location: North Bank Of North Brook (lagoons), Steel Road, Corby, Northamptonshire, NN17 5ZN Operator Name: Corus U K Ltd Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Northern Area Site Category: Lagoons **Licence Status: Surrendered** Issued: 12th December 1984 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: 9th November 2010 IPPC Reference: Not Supplied Positional Accuracy: Approximate location provided by supplier	A10SE (NW)	0	3	490000 291000
113	**Licensed Waste Management Facilities (Locations)** Licence Number: 70559 Location: North Bank Of North Brook, Corby, Northamptonshire, NN17 4AP Operator Name: Tata Steel Uk Ltd Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Northern Area Site Category: Industrial Waste Landfills **Licence Status: Closed** Issued: 30th November 1984 Last Modified: 13th March 2009 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 100m	A6NE (SW)	0	3	490100 290700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
114	**Licensed Waste Management Facilities (Locations)** Licence Number: 73044 Location: Princewood Road, Corby, Northamptonshire, NN17 4AP Operator Name: Northampton County Council Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Northern Area Site Category: Landfills Taking Non-biodegradeable Wastes (Not Construction) **Licence Status: Closed** Issued: 4th December 1992 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 100m	A10SW (W)	95	3	489800 290900
115	**Licensed Waste Management Facilities (Locations)** Licence Number: 73016 Location: Mitchell Road, Corby, Northamptonshire, NN17 5AF Operator Name: Universal Salvage Plc Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Northern Area Site Category: Metal Recycling Sites (Vehicle Dismantlers) **Licence Status: Surrendered** Issued: 29th December 1999 Last Modified: 3rd December 2003 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: 6th February 2006 IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 100m	A10NW (NW)	206	3	489800 291200
116	**Licensed Waste Management Facilities (Locations)** Licence Number: 103555 Location: Corby Metal Recycling, Arkwright Road, Corby, Northamptonshire, NN17 5AE Operator Name: Peterborough Metal Recycling Ltd Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Northern Area Site Category: Metal Recycling Sites (Mixed) **Licence Status: Issued** Issued: 28th March 2012 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A7SW (S)	277	3	490379 290409
117	**Licensed Waste Management Facilities (Locations)** Licence Number: 73199 Location: Land/premises At, Gretton Brook Road, Corby, Northamptonshire, NN17 4BA Operator Name: Storefield Plant Ltd Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Northern Area Site Category: Physical Treatment Facilities **Licence Status: Modified** Issued: 20th August 2004 Last Modified: 18th May 2006 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A10NW (NW)	354	3	489816 291406
118	**Licensed Waste Management Facilities (Locations)** Licence Number: 400745 Location: Heritage Way, Corby, Northamptonshire, NN17 5XW Operator Name: Baileys Skip Hire And Recycling Ltd Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Northern Area Site Category: HCI Waste TS + treatment **Licence Status: Modified** Issued: 4th February 2014 Last Modified: 30th January 2015 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A6SW (SW)	413	3	489709 290360

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
119	**Licensed Waste Management Facilities (Locations)** Licence Number: 102024 Location: Westminster House, Gretton Brook Road, Corby, NN17 4BA Operator Name: Storefield Plant Rushton Limited Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Northern Area Site Category: HCI Waste TS + treatment **Licence Status: Transferred** Issued: 18th October 2010 Last Modified: 22nd February 2011 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A10NW (NW)	429	3	489756 291459
120	**Licensed Waste Management Facilities (Locations)** Licence Number: 70561 Location: Deene Quarry, Corby, Northamptonshire, NN17 3AS Operator Name: Corby Borough Council Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Northern Area Site Category: Household, Commercial And Industrial Waste Landfills **Licence Status: Closed** Issued: 9th April 1987 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 100m	A12NW (NE)	675	3	491000 291500
121	**Licensed Waste Management Facilities (Locations)** Licence Number: 73057 Location: Darwin Road, Corby, Northamptonshire, NN17 5XZ Operator Name: Envirotank (Corby) Ltd Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Northern Area Site Category: Physico-chemical Treatment Facilities **Licence Status: Expired** Issued: 4th February 1993 Last Modified: Not Supplied Expires: 1st April 1993 Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 100m	A3NW (S)	695	3	490500 290000
122	**Licensed Waste Management Facilities (Locations)** Licence Number: 73043 Location: Pilot Road, Corby, Northamptonshire, NN18 8HA Operator Name: Oakley Skip Hire Ltd Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Northern Area Site Category: Household, Commercial And Industrial Transfer Stations **Licence Status: Surrendered** Issued: 2nd December 1999 Last Modified: 20th July 2001 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: 22nd July 2003 IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 100m	A3SW (S)	784	3	490200 289800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
123	**Licensed Waste Management Facilities (Locations)** Licence Number: 402981 Location: 97 Macadam Road, Earlstrees Industrial Est, Corby, Northamptonshire, NN17 4JN Operator Name: Platinum Batteries (Europe) Limited Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Northern Area Site Category: Metal recycling site **Licence Status: Issued** Issued: 14th March 2016 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A5SW (SW)	802	3	489181 290404
124	**Licensed Waste Management Facilities (Locations)** Licence Number: 100405 Location: 1 Brunel Road, Earlstrees Ind Est, Corby, Northamptonshire, NN17 4JW Operator Name: Viridor Waste (Corby) Ltd Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Northern Area Site Category: Material Recycling Treatment Facilities **Licence Status: Surrendered** Issued: 2nd December 2008 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: 11th November 2010 IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A9SW (W)	843	3	489060 291010
125	**Licensed Waste Management Facilities (Locations)** Licence Number: 73127 Location: Viridor Waste Management, Pilot Road, Pheonix Parkway, Corby, Northamptonshire, NN17 5YH Operator Name: Viridor Waste (Corby) Limited Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Northern Area Site Category: Household, Commercial And Industrial Transfer Stations **Licence Status: Modified** Issued: 22nd July 2003 Last Modified: 13th September 2016 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Manually positioned to the address or location	A3SW (S)	859	3	490228 289728
126	**Licensed Waste Management Facilities (Locations)** Licence Number: 101437 Location: Crown House, Gretton Brook Road, Corby, Northamptonshire, NN17 4BA Operator Name: Recycle Force Limited Operator Location: Not Supplied Authority: Environment Agency - Anglian Region, Northern Area Site Category: Material Recycling Treatment Facilities **Licence Status: Modified** Issued: 17th September 2010 Last Modified: 21st May 2014 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A9SW (W)	899	3	489028 291127
	Local Authority Landfill Coverage Name: Northamptonshire County Council - Has supplied landfill data		0	7	490190 290879
	Local Authority Landfill Coverage Name: Corby Borough Council - Has no landfill data to supply		0	5	490158 290860
	Local Authority Landfill Coverage Name: East Northamptonshire District Council - Landfill data has been supplied by another authority		0	6	490190 290879

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
127	**Potentially Infilled Land (Non-Water)** Bearing Ref: NW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1987	A10SE (NW)	0	10	490171 290919
128	**Potentially Infilled Land (Non-Water)** Bearing Ref: E Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1987	A10SE (E)	0	10	490190 290879
129	**Potentially Infilled Land (Non-Water)** Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A11SW (NE)	2	10	490367 291015
130	**Potentially Infilled Land (Non-Water)** Bearing Ref: E Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1992	A7NE (E)	343	10	490796 290689
131	**Potentially Infilled Land (Non-Water)** Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1987	A6NW (W)	369	10	489544 290712
132	**Potentially Infilled Land (Non-Water)** Bearing Ref: NW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1987	A10NW (NW)	376	10	489706 291354
133	**Potentially Infilled Land (Non-Water)** Bearing Ref: N Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1987	A15SW (N)	700	10	490494 291748
134	**Potentially Infilled Land (Non-Water)** Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1987	A9NE (W)	795	10	489190 291270
135	**Potentially Infilled Land (Non-Water)** Bearing Ref: S Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1988	A3SW (S)	930	10	490298 289668
136	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1958	A2NE (S)	477	10	490105 290100
137	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1958	A9SW (W)	853	10	489085 291155
138	**Registered Landfill Sites** Licence Holder: Corus U K Ltd T/A Corus Tubes Licence Reference: C/017 Site Location: Bsc Landfill Site, North Bank Of Northbrook, Corby, Northamptonshire Licence Easting: Not Supplied Licence Northing: Not Supplied Operator Location: Po Box 10, Weldon Road, Corby, Northamptonshire, Nn17 1gd Authority: Environment Agency - Anglian Region, Northern Area Site Category: Landfill Max Input Rate: Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Status: Operational as far as is knownOperational Dated: 30th November 1984 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Positioned by the supplier Boundary Accuracy: Good Authorised Waste: Max.Waste Permitted By Licence Northamptonshire Category C * Northamptonshire Category D Northants/Lincs Category A * Northants/Lincs Category B * Prohibited Waste: Asbestos Carcasses And Flesh Household Waste Special Wastes	A7NW (SE)	0	3	490218 290818

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
139	**Registered Landfill Sites** Licence Holder: British Steel Licence Reference: C/004 Site Location: Dry Tip (Rail Haulage) & Refractory Tip, Corby Works, Corby, Northamptonshire Licence Easting: Not Supplied Licence Northing: Not Supplied Operator Location: Corby Works, Weldon Road, CORBY, Northamptonshire, NN17 1NA Authority: Environment Agency - Anglian Region, Northern Area Site Category: Landfill Max Input Rate: Undefined Waste Source Restrictions: No known restriction on source of waste Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 4th June 1980 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Positioned by the supplier Boundary Accuracy: Moderate Authorised Waste: Construction And Demolition Wastes Excavated Natural Materials $ Hardcore And Rubble Refractory Waste At Refractory Tip	A11NW (NE)	353	3	490449 291424
140	**Registered Landfill Sites** Licence Holder: Corby D.C. Licence Reference: C/020 Site Location: Deene Quarry, Gretton Brook Road, Corby, Northamptonshire Licence Easting: 490800 Licence Northing: 291400 Operator Location: Civic Centre, George Street, Corby, Northamptonshire Authority: Environment Agency - Anglian Region, Northern Area Site Category: Landfill Max Input Rate: Large (Equal to or greater than 75,000 and less than 250,000 tonnes per year) Waste Source Restrictions: Waste produced/controlled by licence holder Status: Site Closed Dated: 1st May 1996 Preceded By Licence: C/020 Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Contaminated Material Max.Waste Permitted By Licence Northants Cat. A1 -Solid Inert (Soils) Prohibited Waste: Waste N.O.S.	A11NE (NE)	463	3	490800 291400
140	**Registered Landfill Sites** Licence Holder: Corby D.C. Licence Reference: C/020 Site Location: Deene Quarry, Gretton Brook Road, Corby, Northamptonshire Licence Easting: 490800 Licence Northing: 291400 Operator Location: Civic Centre, George Street, Corby, Northamptonshire Authority: Environment Agency - Anglian Region, Northern Area Site Category: Landfill Max Input Rate: Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per year) Waste Source Restrictions: Waste produced/controlled by licence holder Status: Record supersededSuperseded Dated: 1st October 1992 Preceded By Licence: C/020 Superseded By Licence: C/020 Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Max.Waste Permitted By Licence Northants Cat. A1 -Solid Inert (Soils) Prohibited Waste: Waste N.O.S.	A11NE (NE)	463	3	490800 291400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
140	**Registered Landfill Sites** Licence Holder: Corby D.C. Licence Reference: C/020 Site Location: Deene Quarry, Gretton Brook Road, Corby, Northamptonshire Licence Easting: 490800 Licence Northing: 291400 Operator Location: Civic Centre, George Street, Corby, Northamptonshire Authority: Environment Agency - Anglian Region, Northern Area Site Category: Landfill Max Input Rate: Undefined Waste Source Restrictions: Waste produced/controlled by licence holder Status: Record supersededSuperseded Dated: 9th April 1987 Preceded By Licence: Not Given Superseded By Licence: C/020 Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Contam'D Mat'L Ex Deene By-Prod. Plant Contaminated Mat'L Ex Toxic Ponds Area Northants Cat. A - Ex Steel-Works Only Prohibited Waste: Aqueous Waste Oil Waste	A11NE (NE)	463	3	490800 291400
141	**Registered Landfill Sites** Licence Holder: British Steel Licence Reference: C/004 Site Location: Sludge Tips (East Of Tarmac Plant And, Earltrees Quarry), Corby, Northamptonshire Licence Easting: Not Supplied Licence Northing: Not Supplied Operator Location: Corby Works, Weldon Road, CORBY, Northamptonshire, NN17 1NA Authority: Environment Agency - Anglian Region, Northern Area Site Category: Landfill Max Input Rate: Undefined Waste Source Restrictions: No known restriction on source of waste Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 4th June 1980 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Positioned by the supplier Boundary Accuracy: Moderate Authorised Waste: Refractory Waste Rubble, Spoil, Etc Sludges From Settling Ponds Prohibited Waste: Asbestos Other Waste / Waste Not Otherwise Specified	A9SW (W)	759	3	489161 291085
142	**Registered Landfill Sites** Licence Holder: British Steel Licence Reference: C/002 Site Location: Gretton Road Gulley, East Of Corby Works, Corby, Northamptonshire Licence Easting: Not Supplied Licence Northing: Not Supplied Operator Location: Corby Works, Weldon Road, CORBY, Northamptonshire, NN17 1NA Authority: Environment Agency - Anglian Region, Northern Area Site Category: Landfill Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source Restrictions: Only waste produced on site Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 4th June 1980 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Positioned by the supplier Boundary Accuracy: Moderate Authorised Waste: Household + Commercial Waste Incinerator Residues Sludge Wastes Waste Ex Ferro-Manganese Process	A16NW (NE)	989	3	491002 291899

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
143	**Registered Waste Transfer Sites** Licence Holder: S J Mc Eachran - Scrap Care Licence Reference: C/033 Site Location: Scrap Care Heritage Way, Phoenix Parkway, Corby, Northamptonshire Operator Location: 4 Tavistock Square, CORBY, Northamptonshire, NN17 1PD Authority: Environment Agency - Anglian Region, Northern Area Site Category: Transfer Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Licence Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st September 1993 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the road within the address or location Boundary Quality: Not Supplied Authorised Waste: Max.Waste Permitted By Licence Northants Cat. B - Slowly Decompose Northants Cat. C - Putresc./Domestic Prohibited Waste: Waste N.O.S.	A6NW (SW)	318	3	489650 290550
144	**Registered Waste Transfer Sites** Licence Holder: Oakley Skip Hire Ltd Licence Reference: C/039 Site Location: Pilot Road, Corby, Northamptonshire Operator Location: Mayfield, Little Oakley, CORBY, Northamptonshire, NN18 8HA Authority: Environment Agency - Anglian Region, Northern Area Site Category: Transfer Max Input Rate: Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Licence Status: Operational as far as is knownOperational Dated: 2nd December 1999 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Positioned by the supplier Boundary Quality: Good Authorised Waste: Northants Cat. A - Solid Inert Waste (Including Demolition Waste) Northants Cat. B - Solid Degradable Waste Northants Cat. C - Putrescible/Domestic Waste Prohibited Waste: Maximum Storage Of Cat A Outside Building Maximum Storage Of Cats A, B, C Within Building Other Waste/Waste Not Otherwise Specified	A3SW (S)	823	3	490229 289765
145	**Registered Waste Treatment or Disposal Sites** Licence Holder: Corus U K Ltd T/A Corus Tubes Licence Reference: C/018 Site Location: Bsc Lagoons Site, North Bank Of Northbrook, Corby, Northamptonshire Operator Location: Po Box 10, Weldon Road, Corby, Northamptonshire, Nn17 1gd Authority: Environment Agency - Anglian Region, Northern Area Site Category: Storage - Lagoon Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Licence Status: Operational as far as is knownOperational Dated: 12th December 1984 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Positioned by the supplier Boundary Quality: Good Authorised Waste: Liquid Wastes Prohibited Waste: Asbestos Special Wastes	A10SE (NW)	0	3	490142 290899

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
146	**Registered Waste Treatment or Disposal Sites** Licence Holder: British Steel Licence Reference: C/003 Site Location: Oil Separation Tanks & Pond, Corby Works, Corby, Northamptonshire Operator Location: Corby Works, Weldon Road, CORBY, Northamptonshire, NN17 1NA Authority: Environment Agency - Anglian Region, Northern Area Site Category: Storage - Lagoon Max Input Rate: Undefined Waste Source Restrictions: Only waste produced on site Licence Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 4th June 1980 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Iron/Steel Manufacturing Wastes	A10SE (NW)	0	3	490050 291000
147	**Registered Waste Treatment or Disposal Sites** Licence Holder: British Steel Licence Reference: C/003 Site Location: Western Ponds, Corby Works, Corby, Northamptonshire Operator Location: Corby Works, Weldon Road, CORBY, Northamptonshire, NN17 1NA Authority: Environment Agency - Anglian Region, Northern Area Site Category: Storage - Lagoon Max Input Rate: Undefined Waste Source Restrictions: Only waste produced on site Licence Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 4th June 1980 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Positioned by the supplier Boundary Quality: Good Authorised Waste: Aliphatic Acids $ Aliphatic Hydrocarbons Alkali Metal Oxides/Hydroxides $ Aromatic Hydrocarbons Chromic Acid Fats, Waxes And Greases Ferrous Sulphate Fuel Oil Kerosene And Derv. Mineral Oils Oil/Water Mixtures Paint Waste $ Phenols, Analogues/Derivatives Proprietary Alkaline Cleaners Silt And Dredgings Sodium/Potassium Cyanides Sulphuric Acid Tank Cleaning Sludge $ Vegetable And Other Oils Water (Contaminated)	A6NE (S)	0	3	490159 290802
148	**Registered Waste Treatment or Disposal Sites** Licence Holder: Universal Salvage Plc Licence Reference: EAWML73016 Site Location: Mitchell Road, Phoenix Parkway, CORBY, Northamptonshire, NN17 5AF Operator Location: Acrey Fields, Woburn Road, WOOTTON, Bedfordshire, MK43 9EJ Authority: Environment Agency - Anglian Region, Northern Area Site Category: Scrapyard Max Input Rate: Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Licence Status: Operational as far as is knownOperational Dated: 29th December 1999 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Positioned by the supplier Boundary Quality: Good Authorised Waste: Batteries Maximum Waste Permitted By Licence Metal Waste/Scrap Metal (As In Post'98 E.A.Lics And Equivalent To 23.00.00) Special Fluids Waste (As In Epa 1990:S62 Of 1996 Regs) Tyres Prohibited Waste: Other Waste/Waste Not Otherwise Specified	A10NE (NW)	258	3	489901 291355

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Registered Waste Treatment or Disposal Sites				
149	Licence Holder: Envirotank (Corby) Ltd Licence Reference: C/031 Site Location: Darwin Road, Corby, Northamptonshire Operator Location: 40 Boroughgate, OTLEY, West Yorkshire, LS21 1AF Authority: Environment Agency - Anglian Region, Northern Area Site Category: Transfer - with treatment Max Input Rate: Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Licence Status: Site not yet started Dated: 4th February 1993 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned within the geographical locality Boundary Quality: Not Supplied Authorised Waste: Max.Storage In Licence Max.Waste Permitted By Licence Environment Agency must give specific authorisation for this waste to be acceptedWaste requires prior approval: Difficult Wastes (As In Wmp.26) Northants Cat. D Difficult Waste Northants Cat. F - Prohibited At L/F	A3NW (S)	695	3	490500 290000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
150	**Control of Major Accident Hazards Sites (COMAH)** Name: Cpl Operations Ltd Location: Corby, Corby Power Station, Mitchell Road, Pheonix Parkway, Corby, Northamptonshire, Nn17 5qt Reference: Not Supplied Type: Lower Tier **Status: Active** Positional Accuracy: Manually positioned to the address or location	A10SW (NW)	375	8	489591 291141
151	**Control of Major Accident Hazards Sites (COMAH)** Name: Euramax Coated Products Limited Location: Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JW Reference: Not Supplied Type: Lower Tier **Status: Active** Positional Accuracy: Automatically positioned to the address	A5NE (W)	440	8	489495 290597
152	**Notification of Installations Handling Hazardous Substances (NIHHS)** Name: Starion International Location: Unit 8 Baird Road, Willowsbrook Ind Est, Corby, Nn17 5Je **Status: Not Active** Positional Accuracy: Manually positioned to the road within the address or location	A7SE (SE)	388	8	490653 290432

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Inferior Oolite Group	A10SE (E)	0	2	490190 290879
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A10SE (E)	0	2	490190 290879
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A10SE (N)	0	2	490190 291000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A10NE (NW)	252	2	489982 291363
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 35 - 45 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 90 - 120 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A6NW (W)	284	2	489632 290701
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A7SW (S)	285	2	490311 290335
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A6NW (W)	376	2	489532 290707

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 35 - 45 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 90 - 120 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A10NW (NW)	391	2	489660 291324
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A9NE (NW)	564	2	489438 291268
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 35 - 45 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 90 - 120 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A3NW (S)	582	2	490471 290105
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A9NE (NW)	620	2	489412 291352
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 90 - 120 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A3NW (S)	715	2	490221 289871
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A15SE (N)	719	2	490542 291766

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A13SE (NW)	778	2	489348 291552
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A3NE (SE)	853	2	490831 290000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 35 - 45 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 90 - 120 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A15NE (N)	858	2	490598 291901
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A14NE (N)	868	2	490000 292000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A4NW (SE)	935	2	491000 290007
153	**BGS Recorded Mineral Sites** Site Name: Great Excellent Quarries Location: , Rockingham, Corby, Northamptonshire Source: British Geological Survey, National Geoscience Information Service Reference: 139291 Type: Opencast **Status: Ceased** Operator: Not Supplied Operator Location: Not Supplied Periodic Type: Jurassic Geology: Northampton Sand Formation Commodity: Iron Ore - Ironstone Positional Accuracy: Located by supplier to within 10m	A6NE (S)	0	2	490186 290754

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
154	**BGS Recorded Mineral Sites** Site Name: Great Excellent Quarries Location: , Rockingham, Corby, Northamptonshire Source: British Geological Survey, National Geoscience Information Service Reference: 139292 Type: Opencast **Status: Ceased** Operator: Not Supplied Operator Location: Not Supplied Periodic Type: Jurassic Geology: Northampton Sand Formation Commodity: Iron Ore - Ironstone Positional Accuracy: Located by supplier to within 10m	A6NE (SW)	0	2	490060 290688
155	**BGS Recorded Mineral Sites** Site Name: Great Excellent Quarries Location: , Rockingham, Corby, Northamptonshire Source: British Geological Survey, National Geoscience Information Service Reference: 139289 Type: Opencast **Status: Ceased** Operator: Not Supplied Operator Location: Not Supplied Periodic Type: Jurassic Geology: Northampton Sand Formation Commodity: Iron Ore - Ironstone Positional Accuracy: Located by supplier to within 10m	A6NE (S)	0	2	490103 290656
156	**BGS Recorded Mineral Sites** Site Name: Great Excellent Quarries Location: , Rockingham, Corby, Northamptonshire Source: British Geological Survey, National Geoscience Information Service Reference: 139288 Type: Opencast **Status: Ceased** Operator: Not Supplied Operator Location: Not Supplied Periodic Type: Jurassic Geology: Northampton Sand Formation Commodity: Iron Ore - Ironstone Positional Accuracy: Located by supplier to within 10m	A6NE (SW)	150	2	489910 290535
157	**BGS Recorded Mineral Sites** Site Name: Great Excellent Quarries Location: , Rockingham, Corby, Northamptonshire Source: British Geological Survey, National Geoscience Information Service Reference: 139287 Type: Opencast **Status: Ceased** Operator: Not Supplied Operator Location: Not Supplied Periodic Type: Jurassic Geology: Northampton Sand Formation Commodity: Iron Ore - Ironstone Positional Accuracy: Located by supplier to within 10m	A6SW (SW)	255	2	489813 290478
158	**BGS Recorded Mineral Sites** Site Name: Great Excellent Quarries Location: , Rockingham, Corby, Northamptonshire Source: British Geological Survey, National Geoscience Information Service Reference: 139290 Type: Opencast **Status: Ceased** Operator: Not Supplied Operator Location: Not Supplied Periodic Type: Jurassic Geology: Northampton Sand Formation Commodity: Iron Ore - Ironstone Positional Accuracy: Located by supplier to within 10m	A6SW (SW)	444	2	489766 290272
159	**BGS Recorded Mineral Sites** Site Name: Deene Location: , Corby, Corby, Northamptonshire Source: British Geological Survey, National Geoscience Information Service Reference: 20650 Type: Opencast **Status: Ceased** Operator: Not Supplied Operator Location: Not Supplied Periodic Type: Jurassic Geology: Northampton Sand Formation (Northampton Sand Ironstone) Commodity: Iron Ore - Ironstone Positional Accuracy: Located by supplier to within 100m	A12NW (NE)	675	2	491000 291500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
160	**BGS Recorded Mineral Sites** Site Name: Brookfield Pit Location: , Gretton, Corby, Northamptonshire Source: British Geological Survey, National Geoscience Information Service Reference: 20647 Type: Opencast **Status: Dormant** Operator: Not Supplied Operator Location: Not Supplied Periodic Type: Jurassic Geology: Northampton Sand Formation (Northampton Sand Ironstone) Commodity: Iron Ore - Ironstone Positional Accuracy: Located by supplier to within 10m	A14NE (N)	813	2	489860 291915
161	**BGS Recorded Mineral Sites** Site Name: Earlstrees Location: , Corby, Corby, Northamptonshire Source: British Geological Survey, National Geoscience Information Service Reference: 20653 Type: Opencast **Status: Ceased** Operator: Not Supplied Operator Location: Not Supplied Periodic Type: Jurassic Geology: Northampton Sand Formation (Northampton Sand Ironstone) Commodity: Iron Ore - Ironstone Positional Accuracy: Located by supplier to within 100m	A5SW (W)	944	2	489000 290500
162	**BGS Recorded Mineral Sites** Site Name: Old Glebe Location: , Corby, Corby, Northamptonshire Source: British Geological Survey, National Geoscience Information Service Reference: 20645 Type: Opencast **Status: Ceased** Operator: Not Supplied Operator Location: Not Supplied Periodic Type: Jurassic Geology: Northampton Sand Formation (Northampton Sand Ironstone) Commodity: Iron Ore - Ironstone Positional Accuracy: Located by supplier to within 10m	A3SW (S)	946	2	490450 289700
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 489680, 290740 Soil Sample Type: Topsoil Sample Area: Corby Arsenic Measured Concentration: 54.80 mg/kg Cadmium Measured Concentration: 0.60 mg/kg Chromium Measured Concentration: 169.70 mg/kg Lead Measured Concentration: 438.00 mg/kg Nickel Measured Concentration: 45.40 mg/kg	A6NW (W)	232	2	489680 290740
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 490180, 290220 Soil Sample Type: Topsoil Sample Area: Corby Arsenic Measured Concentration: 20.30 mg/kg Cadmium Measured Concentration: 0.30 mg/kg Chromium Measured Concentration: 136.80 mg/kg Lead Measured Concentration: 42.80 mg/kg Nickel Measured Concentration: 38.00 mg/kg	A6SE (S)	367	2	490180 290220

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 490820, 290660 Soil Sample Type: Topsoil Sample Area: Corby Arsenic Measured Concentration: 20.80 mg/kg Cadmium Measured Concentration: 0.30 mg/kg Chromium Measured Concentration: 66.50 mg/kg Lead Measured Concentration: 158.80 mg/kg Nickel Measured Concentration: 24.90 mg/kg	A7NE (E)	376	2	490820 290660
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 489670, 291370 Soil Sample Type: Topsoil Sample Area: Corby Arsenic Measured Concentration: 46.50 mg/kg Cadmium Measured Concentration: 0.30 mg/kg Chromium Measured Concentration: 106.50 mg/kg Lead Measured Concentration: 27.00 mg/kg Nickel Measured Concentration: 31.40 mg/kg	A10NW (NW)	413	2	489670 291370
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 489770, 290290 Soil Sample Type: Topsoil Sample Area: Corby Arsenic Measured Concentration: 17.90 mg/kg Cadmium Measured Concentration: 0.30 mg/kg Chromium Measured Concentration: 100.30 mg/kg Lead Measured Concentration: 126.90 mg/kg Nickel Measured Concentration: 23.60 mg/kg	A6SW (SW)	428	2	489770 290290
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 490830, 290320 Soil Sample Type: Topsoil Sample Area: Corby Arsenic Measured Concentration: 13.70 mg/kg Cadmium Measured Concentration: 0.30 mg/kg Chromium Measured Concentration: 87.90 mg/kg Lead Measured Concentration: 36.70 mg/kg Nickel Measured Concentration: 27.80 mg/kg	A7SE (SE)	584	2	490830 290320
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 489300, 291160 Soil Sample Type: Topsoil Sample Area: Corby Arsenic Measured Concentration: 23.90 mg/kg Cadmium Measured Concentration: 0.30 mg/kg Chromium Measured Concentration: 95.00 mg/kg Lead Measured Concentration: 67.00 mg/kg Nickel Measured Concentration: 29.90 mg/kg	A9SE (W)	653	2	489300 291160

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 490260, 289900 Soil Sample Type: Topsoil Sample Area: Corby Arsenic Measured Concentration: 17.80 mg/kg Cadmium Measured Concentration: 0.80 mg/kg Chromium Measured Concentration: 103.00 mg/kg Lead Measured Concentration: 36.80 mg/kg Nickel Measured Concentration: 30.50 mg/kg	A3NW (S)	697	2	490260 289900
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 489750, 291760 Soil Sample Type: Topsoil Sample Area: Corby Arsenic Measured Concentration: 18.70 mg/kg Cadmium Measured Concentration: 0.30 mg/kg Chromium Measured Concentration: 92.30 mg/kg Lead Measured Concentration: 23.80 mg/kg Nickel Measured Concentration: 26.60 mg/kg	A14SW (NW)	706	2	489750 291760
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 489190, 290790 Soil Sample Type: Topsoil Sample Area: Corby Arsenic Measured Concentration: 21.80 mg/kg Cadmium Measured Concentration: 0.30 mg/kg Chromium Measured Concentration: 100.30 mg/kg Lead Measured Concentration: 45.20 mg/kg Nickel Measured Concentration: 36.30 mg/kg	A5NE (W)	710	2	489190 290790
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 489270, 290260 Soil Sample Type: Topsoil Sample Area: Corby Arsenic Measured Concentration: 25.80 mg/kg Cadmium Measured Concentration: 0.30 mg/kg Chromium Measured Concentration: 110.10 mg/kg Lead Measured Concentration: 36.70 mg/kg Nickel Measured Concentration: 32.20 mg/kg	A5SE (SW)	795	2	489270 290260
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 491270, 290680 Soil Sample Type: Topsoil Sample Area: Corby Arsenic Measured Concentration: 64.40 mg/kg Cadmium Measured Concentration: 0.30 mg/kg Chromium Measured Concentration: 232.80 mg/kg Lead Measured Concentration: 180.00 mg/kg Nickel Measured Concentration: 63.50 mg/kg	A8NE (E)	807	2	491270 290680

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 490700, 289900 Soil Sample Type: Topsoil Sample Area: Corby Arsenic Measured Concentration: 21.80 mg/kg Cadmium Measured Concentration: 0.30 mg/kg Chromium Measured Concentration: 95.00 mg/kg Lead Measured Concentration: 41.00 mg/kg Nickel Measured Concentration: 32.90 mg/kg	A3NE (SE)	877	2	490700 289900
	BGS Measured Urban Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Grid: 489760, 289730 Soil Sample Type: Topsoil Sample Area: Corby Arsenic Measured Concentration: 15.80 mg/kg Cadmium Measured Concentration: 0.30 mg/kg Chromium Measured Concentration: 68.30 mg/kg Lead Measured Concentration: 21.10 mg/kg Nickel Measured Concentration: 40.70 mg/kg	A2SW (S)	911	2	489760 289730
	BGS Urban Soil Chemistry Averages Source: British Geological Survey, National Geoscience Information Service Sample Area: Corby Count Id: 133 Arsenic Minimum Concentration: 11.00 mg/kg Arsenic Average Concentration: 23.00 mg/kg Arsenic Maximum Concentration: 90.00 mg/kg Cadmium Minimum Concentration: 0.30 mg/kg Cadmium Average Concentration: 0.30 mg/kg Cadmium Maximum Concentration: 4.00 mg/kg Chromium Minimum Concentration: 56.00 mg/kg Chromium Average Concentration: 94.00 mg/kg Chromium Maximum Concentration: 233.00 mg/kg Lead Minimum Concentration: 18.00 mg/kg Lead Average Concentration: 49.00 mg/kg Lead Maximum Concentration: 438.00 mg/kg Nickel Minimum Concentration: 16.00 mg/kg Nickel Average Concentration: 31.00 mg/kg Nickel Maximum Concentration: 64.00 mg/kg	A10SE (E)	0	2	490190 290879
	Coal Mining Affected Areas In an area that might not be affected by coal mining				
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10SE (E)	0	2	490190 290879
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10SE (W)	0	2	490000 290879

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A10SE (W)	0	2	490000 290879
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A10SE (E)	0	2	490190 290879
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A10SE (W)	0	2	490000 290879
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A10SE (E)	0	2	490190 290879
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10SE (W)	0	2	490000 290879
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10SE (E)	0	2	490190 290879
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10SE (W)	0	2	490000 290879
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10SE (E)	0	2	490190 290879
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A10SE (E)	0	2	490190 290879
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A10SE (W)	0	2	490000 290879
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A10SE (E)	0	2	490190 290879
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A10SE (W)	0	2	490000 290879
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A10SE (E)	0	2	490190 290879
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A10SE (W)	0	2	490000 290879

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
163	**Contemporary Trade Directory Entries** Name: Brammer Location: 3, Alpha Court, Corby, Northamptonshire, NN17 5DP Classification: Engineering Materials **Status: Active** Positional Accuracy: Automatically positioned to the address	A6NW (SW)	163	-	489775 290644
163	**Contemporary Trade Directory Entries** Name: Pumpkin Print Ltd Location: 4, Alpha Court, Corby, NN17 5DP Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6NW (SW)	176	-	489765 290634
163	**Contemporary Trade Directory Entries** Name: Crown Location: 6, Alpha Court, Corby, Northamptonshire, NN17 5DP Classification: Wallpapers & Wall Coverings **Status: Active** Positional Accuracy: Automatically positioned to the address	A6NW (SW)	203	-	489735 290634
164	**Contemporary Trade Directory Entries** Name: Travis Perkins Plc Location: Unit 3, Heritage Way, Corby, NN17 5XW Classification: Builders' Merchants **Status: Active** Positional Accuracy: Automatically positioned to the address	A6NW (W)	271	-	489652 290664
164	**Contemporary Trade Directory Entries** Name: Northamptonshire Pallets Ltd Location: Heritage Way, Corby, Northamptonshire, NN17 5XW Classification: Pallets, Crates & Packing Cases **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A6NW (W)	292	-	489628 290684
164	**Contemporary Trade Directory Entries** Name: Tony Weston Location: Heritage Way, Corby, Northants, NN17 5XW Classification: Garage Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A6NW (W)	292	-	489628 290684
164	**Contemporary Trade Directory Entries** Name: Metal Morphosis Location: The Old Boiler Shed,Herritage Way, Northampton, Northamptonshire, NN1 5XW Classification: Metal Products - Fabricated **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A6NW (W)	292	-	489629 290678
165	**Contemporary Trade Directory Entries** Name: J B Rubber Ltd Location: 2, Heritage Way, Corby, NN17 5XW Classification: Tyre Dealers **Status: Active** Positional Accuracy: Automatically positioned to the address	A6NW (W)	276	-	489634 290751
165	**Contemporary Trade Directory Entries** Name: A C K (Haulage) Ltd Location: Heritage Way, Corby, Northants, NN17 5XW Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A6NW (W)	294	-	489622 290710
165	**Contemporary Trade Directory Entries** Name: Xj Services Location: Heritage Way, Corby, Northamptonshire, NN17 5XW Classification: Garage Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A6NW (W)	296	-	489616 290737
166	**Contemporary Trade Directory Entries** Name: Corby Pallets Location: Mitchell Road, Corby, Northamptonshire, NN17 5AF Classification: Pallets, Crates & Packing Cases **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A10NW (NW)	301	-	489735 291273

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
166	**Contemporary Trade Directory Entries** Name: Wenshield Engineering Location: Mitchell Road, Corby, Northamptonshire, NN17 5AF Classification: Aluminium Fabricators **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A10NW (NW)	301	-	489735 291273
167	**Contemporary Trade Directory Entries** Name: National Plastics Location: Unit 1 Baird rd, Willowbrook North Industrial Estate, Corby, Northamptonshire, NN17 5ZA Classification: Cladding Suppliers & Installers **Status: Active** Positional Accuracy: Manually positioned to the road within the address or location	A7SE (SE)	303	-	490580 290489
168	**Contemporary Trade Directory Entries** Name: Corby M O T Testing Centre Location: 1, Heritage Way, Corby, Northamptonshire, NN17 5XW Classification: Mot Testing Centres **Status: Active** Positional Accuracy: Automatically positioned to the address	A10SW (W)	306	-	489588 290859
169	**Contemporary Trade Directory Entries** Name: Eurofleet Ltd Location: 3, Arkwright Road, Willowbrook North Industrial Estate, Corby, Northamptonshire, NN17 5AE Classification: Distribution Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6SE (S)	319	-	490174 290268
169	**Contemporary Trade Directory Entries** Name: Camden Fleet Solutions Location: 3, Arkwright Road, Willowbrook North Industrial Estate, Corby, Northamptonshire, NN17 5AE Classification: Distribution Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6SE (S)	319	-	490174 290268
170	**Contemporary Trade Directory Entries** Name: Corby Metal Recycling Location: Corby Metal Recycling, Arkwright Road, Corby, NN17 5AE Classification: Recycling Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SW (SE)	320	-	490408 290375
171	**Contemporary Trade Directory Entries** Name: Ford & Slater Location: Ford and Slater, Gretton Brook Road, Corby, NN17 4BA Classification: Commercial Vehicle Dealers **Status: Active** Positional Accuracy: Automatically positioned to the address	A10NE (NW)	347	-	489875 291423
172	**Contemporary Trade Directory Entries** Name: Universal Salvage Ltd Location: Gretton Brook Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4BA Classification: Salvage Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A10NW (NW)	354	-	489816 291406
173	**Contemporary Trade Directory Entries** Name: Dubois Ltd Location: Amaray House, Arkwright Road, Willowbrook North Industrial Estate, Corby, Northamptonshire, NN17 5AE Classification: Plastics - Injection Moulding **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SW (S)	360	-	490309 290278
174	**Contemporary Trade Directory Entries** Name: Keencut Location: Baird Road, Willowbrook North Industrial Estate, Corby, Northamptonshire, NN17 5ZA Classification: Machine Tools - Manufacturers & Distributors **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	369	-	490684 290477
174	**Contemporary Trade Directory Entries** Name: Keencut Ltd Location: Baird Road, Willowbrook North Industrial Estate, Corby, Northamptonshire, NN17 5ZA Classification: Cutting Tools & Machinery **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	369	-	490684 290477

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
174	**Contemporary Trade Directory Entries** Name: House Of Vantage Location: Baird rd, Willowbrook North Industrial Estate, Corby, Northamptonshire, NN17 5ZA Classification: Manufacturers **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A7SE (SE)	370	-	490684 290477
174	**Contemporary Trade Directory Entries** Name: Corby Mechanical Services Ltd Location: Unit 2 Trafalgar Business Park,Baird Road, Willowbrook North Industrial Estate, Corby, Northamptonshire, NN17 5ZA Classification: Mechanical Engineers **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A7SE (SE)	370	-	490684 290477
175	**Contemporary Trade Directory Entries** Name: Corby Power Ltd Location: Mitchell Road, Corby, Northamptonshire, NN17 5QT Classification: Power Transmission Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A10SW (NW)	375	-	489591 291141
175	**Contemporary Trade Directory Entries** Name: Universal Salvage Ltd Location: Mitchell Road, Corby, Northamptonshire, NN17 5QT Classification: Salvage Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A10SW (NW)	375	-	489591 291141
176	**Contemporary Trade Directory Entries** Name: Starion International (Distribution) Ltd Location: Willowbrook Indust Est,Baird Rd, Corby, Northants, NN17 5ZA Classification: Distribution Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A7SE (SE)	399	-	490654 290420
176	**Contemporary Trade Directory Entries** Name: Utilx Ltd Location: Unit 3, Baird Road, Willowbrook North Industrial Estate, Corby, Northamptonshire, NN17 5ZA Classification: Drilling & Boring Equipment & Supplies **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	428	-	490692 290410
176	**Contemporary Trade Directory Entries** Name: Charles Walker Midlands Ltd Location: Unit 2, Baird Road, Willowbrook North Industrial Estate, Corby, Northamptonshire, NN17 5ZA Classification: Conveyors & Conveyor Belts **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	432	-	490704 290414
177	**Contemporary Trade Directory Entries** Name: Robs Transport & Haulage Services Ltd Location: Mitchell Road, Corby, Northamptonshire, NN17 5AF Classification: Road Haulage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A11NE (NE)	406	-	490707 291397
178	**Contemporary Trade Directory Entries** Name: Corby Windows Ltd Location: Pywell Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XJ Classification: Window Frame Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NE (E)	413	-	490843 290618
179	**Contemporary Trade Directory Entries** Name: Parker Fine Foods Location: Baird Road, Willowbrook North Industrial Estate, Corby, Northamptonshire, NN17 5ZA Classification: Frozen Food Processors & Distributors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	426	-	490618 290371
180	**Contemporary Trade Directory Entries** Name: Phase 2 Packaging Ltd Location: Unit H & I,Marconi Courtyard,Brunel Rd, Earlstrees Ind Est, Corby, Northamptonshir, NN17 4LT Classification: Packaging Materials Manufacturers & Suppliers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A6SW (SW)	431	-	489568 290470

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
180	**Contemporary Trade Directory Entries** Name: Apex Print Finishers Ltd Location: Unit I, Marconi Courtyard, Brunel Road, Corby, NN17 4LT Classification: Print Finishers **Status: Active** Positional Accuracy: Automatically positioned to the address	A6SW (SW)	452	-	489551 290457
181	**Contemporary Trade Directory Entries** Name: Benteler Automotive Uk Ltd Location: Baird Road, Willowbrook North Industrial Estate, Corby, Northamptonshire, NN17 5BB Classification: Car Component Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A7SE (SE)	438	-	490769 290463
182	**Contemporary Trade Directory Entries** Name: Golden West Foods Ltd Location: Genner Road, Willowbrook North Industrial Estate, Corby, Northamptonshire, NN17 5FD Classification: Food Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2NE (S)	442	-	489984 290149
183	**Contemporary Trade Directory Entries** Name: Euramax Coated Products Ltd Location: Brunel Road, Earlstrees Industrial Estate, Corby, NN17 4JW Classification: Aluminium Fabricators **Status: Active** Positional Accuracy: Automatically positioned to the address	A5NE (SW)	447	-	489502 290557
184	**Contemporary Trade Directory Entries** Name: Turco Products Ltd Location: 14, Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JW Classification: Chemicals - Distributors & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NE (W)	456	-	489458 290711
184	**Contemporary Trade Directory Entries** Name: Indarge (Uk) Ltd Location: Birbeck House, 15, Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JW Classification: Bottle Manufacturers & Suppliers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NE (W)	458	-	489452 290735
184	**Contemporary Trade Directory Entries** Name: Multy Uk Ltd Location: Birbeck House, 11-13, Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JW Classification: Cleaning Materials & Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NE (W)	458	-	489452 290735
185	**Contemporary Trade Directory Entries** Name: Taxi Pit Stop Location: Heritage Way, Corby, Northamptonshire, NN17 5XW Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6SW (SW)	464	-	489677 290320
186	**Contemporary Trade Directory Entries** Name: Electric Motors Corby Location: 15, Rutherford Court, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SJ Classification: Electric Motor Sales & Service **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6SW (SW)	467	-	489607 290372
186	**Contemporary Trade Directory Entries** Name: Oakham Engineering Ltd Location: 15, Rutherford Court, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SJ Classification: Engineering Machine Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A6SW (SW)	467	-	489607 290372

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
186	**Contemporary Trade Directory Entries** Name: A White Location: 13, Rutherford Court, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SJ Classification: Engineering Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6SW (SW)	489	-	489571 290377
186	**Contemporary Trade Directory Entries** Name: Carbodywork Location: 11-12, Rutherford Court, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SJ Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6SW (SW)	497	-	489561 290375
187	**Contemporary Trade Directory Entries** Name: Oak International Ltd Location: Basildon House, Pywell Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XJ Classification: Engineering Materials **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (E)	473	-	490922 290658
188	**Contemporary Trade Directory Entries** Name: Euro Tanks Location: 4, Heritage Way, Corby, Northamptonshire, NN17 5XW Classification: Blast Cleaning **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6SW (SW)	488	-	489709 290262
188	**Contemporary Trade Directory Entries** Name: Turnwell Engineering Location: 4, Heritage Way, Corby, Northamptonshire, NN17 5XW Classification: Precision Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6SW (SW)	488	-	489709 290262
189	**Contemporary Trade Directory Entries** Name: Courtyard Coatings Ltd Location: E-F, Unit, Marconi Courtyard, Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4LT Classification: Coating Specialists **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6SW (SW)	489	-	489552 290398
189	**Contemporary Trade Directory Entries** Name: General Automotive Solutions Location: UnitE,Marconi Courtyard,Brunel Rd, Earlstrees Ind Est, Corby, Northamptonshire, NN17 4LT Classification: Garage Services **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A6SW (SW)	489	-	489551 290398
189	**Contemporary Trade Directory Entries** Name: A J Phillips Location: Unit D,Marconi Courtyard,Brunel Rd, Earlstrees Ind Est, Corby, Northamptonshire, NN17 4LT Classification: Commercial Vehicle Servicing, Repairs, Parts & Accessories **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A6SW (SW)	497	-	489536 290403
189	**Contemporary Trade Directory Entries** Name: Sjs Car Repairs Ltd Location: 11, Rutherford Court, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SJ Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6SW (SW)	503	-	489553 290374
189	**Contemporary Trade Directory Entries** Name: S J S Car Repairs Location: 11, Rutherford Court, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SJ Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6SW (SW)	503	-	489553 290374

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
189	**Contemporary Trade Directory Entries** Name: The Finishing Shop Location: 9, Rutherford Court, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SJ Classification: Spraying - Paint & Coatings **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A6SW (SW)	513	-	489541 290373
189	**Contemporary Trade Directory Entries** Name: General Automotive Solutions Location: 5, Rutherford Court, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SJ Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5SE (SW)	534	-	489515 290370
190	**Contemporary Trade Directory Entries** Name: Universal Training Services Midlands Ltd Location: Unit 3, Gretton Brook Road, Corby, NN17 4BA Classification: Metal Products - Fabricated **Status: Active** Positional Accuracy: Automatically positioned to the address	A10NW (NW)	491	-	489760 291532
190	**Contemporary Trade Directory Entries** Name: Universal Engineering Location: Unit 3, Gretton Brook Road, Corby, NN17 4BA Classification: Engineers - General **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A10NW (NW)	491	-	489760 291532
191	**Contemporary Trade Directory Entries** Name: Inspired Surfaces Ltd Location: 26, Brunel Road, Earlstrees Industrial Estate, Corby, NN17 4JW Classification: Floorcoverings - Manufacturers & Wholesalers **Status: Active** Positional Accuracy: Automatically positioned to the address	A5NE (W)	498	-	489406 290771
192	**Contemporary Trade Directory Entries** Name: Maxim Logistics Location: Darwin Road, Willowbrook East Industrial Estate, Corby, NN17 5XZ Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2NE (S)	500	-	490107 290077
192	**Contemporary Trade Directory Entries** Name: Key Packaging Location: Trevithick Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XY Classification: Machinery - Industrial & Commercial **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2NE (S)	510	-	490066 290068
192	**Contemporary Trade Directory Entries** Name: Key Packaging Machinery Ltd Location: Unit F, Trevithick Road, Willowbrook East Industrial Estate, Corby, NN17 5XY Classification: Packaging & Wrapping Equipment & Supplies **Status: Active** Positional Accuracy: Automatically positioned to the address	A2NE (S)	510	-	490066 290068
192	**Contemporary Trade Directory Entries** Name: Fastrax Conveyor Rollers Ltd Location: Unit F, Trevithick Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XY Classification: Conveyors & Conveyor Belts **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2NE (S)	510	-	490066 290068
192	**Contemporary Trade Directory Entries** Name: Action Screen Process Location: Unit F, Trevithick Road, Willowbrook East Industrial Estate, Corby, NN17 5XY Classification: Screen Process Printers **Status: Active** Positional Accuracy: Automatically positioned to the address	A2NE (S)	510	-	490066 290068
192	**Contemporary Trade Directory Entries** Name: Brudenell Builders Location: Unit D,Gaydon House,Trevithick Rd, Willowbrook East Ind Est, Corby, Northamptonshire, NN17 5XY Classification: Builders' Merchants **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A2NE (S)	521	-	490045 290058

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192	**Contemporary Trade Directory Entries** Name: Strathcarrons Location: Unit B-C, Gaydon House, Trevithick Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XY Classification: Leisure & Sportswear Manufacturers & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2NE (S)	531	-	490028 290050
192	**Contemporary Trade Directory Entries** Name: Wydels Location: Unit B-c, Gaydon House, Trevithick Road, Willowbrook East Industrial Estate, Corby, NN17 5XY Classification: Electrical Goods Sales, Manufacturers & Wholesalers **Status: Active** Positional Accuracy: Automatically positioned to the address	A2NE (S)	531	-	490028 290050
192	**Contemporary Trade Directory Entries** Name: A S F Upvc Joinery Location: Unit B-C, Gaydon House, Trevithick Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XY Classification: Window Frames - Sales & Service **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A2NE (S)	531	-	490028 290050
193	**Contemporary Trade Directory Entries** Name: Great British T-Shirt Co The Location: Pywell Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XJ Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (SE)	514	-	490888 290494
194	**Contemporary Trade Directory Entries** Name: Containexx Location: 103 Brunel Rd, Earlstrees Ind Est, Corby, Northamptonshire, NN17 4JW Classification: Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A5NE (W)	516	-	489390 290758
194	**Contemporary Trade Directory Entries** Name: Treasure Chocolates Ltd Location: 1, Brunel Court, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4UB Classification: Confectionery Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A5NE (W)	526	-	489387 290708
194	**Contemporary Trade Directory Entries** Name: Pretech Tools Location: 3, Brunel Court, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4UB Classification: Builders' Tools & Equipment Manufacturers **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A5NE (W)	537	-	489376 290709
194	**Contemporary Trade Directory Entries** Name: Euroteam International Frieght Location: 2, Brunel Court, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4UB Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NE (W)	538	-	489376 290709
194	**Contemporary Trade Directory Entries** Name: Car Scraping Scrap Yards In Corby Location: Brunel Road, Corby, Northamptonshire, NN17 4JW Classification: Car Breakers & Dismantlers **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A5NE (W)	546	-	489362 290743
194	**Contemporary Trade Directory Entries** Name: Seaway Freight Services Ltd Location: 16, Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JW Classification: Distribution Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NE (W)	546	-	489362 290743

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194	**Contemporary Trade Directory Entries** Name: Recycle Force Location: 103 Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JW Classification: Chemical Recycling & Disposal Services **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A5NE (W)	546	-	489362 290743
194	**Contemporary Trade Directory Entries** Name: Traiload Vehicle Equipment Location: 3-5, Brunel Court, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4UB Classification: Trailers & Towing Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NE (W)	567	-	489346 290710
194	**Contemporary Trade Directory Entries** Name: Inter Fit (Uk) Ltd Location: 3-5, Brunel Court, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4UB Classification: Tyre Manufacturers & Distributors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NE (W)	567	-	489346 290710
195	**Contemporary Trade Directory Entries** Name: Chilled Packaging Location: Corby, NN17 5XJ Classification: Packaging Materials Manufacturers & Suppliers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (E)	520	-	490977 290678
195	**Contemporary Trade Directory Entries** Name: Masteretch Services Location: 10, Pywell Court, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5WA Classification: Machinery - Industrial & Commercial **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (E)	548	-	491010 290698
195	**Contemporary Trade Directory Entries** Name: Jaybee Location: 10, Pywell Court, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5WA Classification: Plastic Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (E)	548	-	491010 290698
196	**Contemporary Trade Directory Entries** Name: Dedicatred Distribution Services Ltd Location: Darwin Rd, Willowbrook East Ind Es, Corby, Northamptonshir, NN17 5XZ Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2NE (S)	525	-	490183 290060
196	**Contemporary Trade Directory Entries** Name: Kev'S Transport (Uk) Services Ltd Location: Unit 7 Darwin Rd, Willowbrook East Ind Est, Corby, Northants, NN17 5XZ Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A2NE (S)	557	-	490189 290028
196	**Contemporary Trade Directory Entries** Name: Maxim Logistics Location: Unit 3-4, Darwin Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XZ Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2NE (S)	560	-	490156 290020
196	**Contemporary Trade Directory Entries** Name: M & J International Freight Ltd Location: Darwin Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XZ Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2NE (S)	560	-	490156 290020

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
196	**Contemporary Trade Directory Entries** Name: Amc Uk Fasteners Location: Unit 3-4, Darwin Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XZ Classification: Nuts, Bolts & Fixings **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2NE (S)	560	-	490156 290020
196	**Contemporary Trade Directory Entries** Name: I B Accident Repairs Location: Unit 1, Darwin Road, Corby, NN17 5XY Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2NE (S)	571	-	490134 290008
197	**Contemporary Trade Directory Entries** Name: Qual Plumb (Uk) Ltd Location: Unit A, Marconi Courtyard, Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4LT Classification: Plastics - Extrusion **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5SE (SW)	536	-	489490 290398
197	**Contemporary Trade Directory Entries** Name: Mint Publishing Ltd Location: Unit A, Marconi Courtyard, Brunel Road, Earlstrees Industrial Estate, Corby, NN17 4LT Classification: Greeting Card Publishers & Wholesalers **Status: Active** Positional Accuracy: Automatically positioned to the address	A5SE (SW)	538	-	489489 290396
197	**Contemporary Trade Directory Entries** Name: A S Garage Services Location: 4 Rutherford Ct, Earlstrees Ind Est, Corby, Northamptonshire, NN17 4SJ Classification: Classic Car Specialists **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A5SE (SW)	541	-	489508 290368
197	**Contemporary Trade Directory Entries** Name: Lyne Components Hilux Location: 1-3, Rutherford Court, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SJ Classification: Lighting Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5SE (SW)	560	-	489486 290364
198	**Contemporary Trade Directory Entries** Name: Aquagraphics (Europe) Ltd Location: Manton Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JL Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NE (W)	546	-	489377 290641
198	**Contemporary Trade Directory Entries** Name: 3fff Location: Unit B, 18, Brunel Road, Earlstrees Industrial Estate, Corby, NN17 4JW Classification: Firefighting Equipment **Status: Active** Positional Accuracy: Automatically positioned to the address	A5NE (W)	547	-	489377 290641
198	**Contemporary Trade Directory Entries** Name: Glendon Products Ltd Location: Unit B, 18, Brunel Road, Earlstrees Industrial Estate, Corby, NN17 4JW Classification: Refrigeration Equipment Manufacturers & Distributors **Status: Active** Positional Accuracy: Automatically positioned to the address	A5NE (W)	547	-	489377 290641
198	**Contemporary Trade Directory Entries** Name: A B C Macintosh Location: Unit B, 18, Brunel Road, Earlstrees Industrial Estate, Corby, NN17 4JW Classification: Firefighting Equipment **Status: Active** Positional Accuracy: Automatically positioned to the address	A5NE (W)	547	-	489376 290641
198	**Contemporary Trade Directory Entries** Name: Metalico Location: 85a, Manton Road, Corby, NN17 4JL Classification: Engineers - General **Status: Active** Positional Accuracy: Automatically positioned to the address	A5NE (W)	577	-	489348 290630

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
199	**Contemporary Trade Directory Entries** Name: Synergy Packaging Location: Unit B, Bracknell House, Pywell Road, Willowbrook East Industrial Estate, Corby, NN17 5XJ Classification: Packaging Materials Manufacturers & Suppliers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (E)	549	-	490993 290630
199	**Contemporary Trade Directory Entries** Name: Oakley Location: Unit 6,Pywell Court, Willowbrook East Ind Est, Corby, Northamptonshire, NN17 5WA Classification: Industrial Services **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A8NW (E)	567	-	491023 290668
199	**Contemporary Trade Directory Entries** Name: Smartsign Location: 4-7, Pywell Court, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5WA Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (E)	576	-	491029 290653
199	**Contemporary Trade Directory Entries** Name: Jaycee Engineering Location: 1, Pywell Court, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5WA Classification: Tool Design, Manufacturers & Makers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (E)	591	-	491038 290631
199	**Contemporary Trade Directory Entries** Name: Adira Uk Location: Pywell Rd, Willowbrook East Ind Est, Corby, Northamptonshire, NN17 5XJ Classification: Sheet Metal Working Equipment & Supplies **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A8NW (E)	608	-	491052 290620
200	**Contemporary Trade Directory Entries** Name: Morgan Advanced Materials Technical Ceramics Certech Location: Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JW Classification: Ceramic Manufacturers, Supplies & Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A5NE (SW)	554	-	489397 290534
200	**Contemporary Trade Directory Entries** Name: Mace Industries Ltd Location: Corby, NN17 4JN Classification: Mechanical Handling Engineers **Status: Active** Positional Accuracy: Automatically positioned to the address	A5SE (SW)	567	-	489396 290498
201	**Contemporary Trade Directory Entries** Name: Be Ashbury Chocolates Location: Darwin Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XZ Classification: Confectionery Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3NW (S)	556	-	490327 290072
201	**Contemporary Trade Directory Entries** Name: Baronie Uk Location: Darwin Road, Willowbrook East Industrial Estate, Corby, NN17 5XZ Classification: Confectionery Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A3NW (S)	557	-	490334 290074
202	**Contemporary Trade Directory Entries** Name: Breedon Aggregates Location: Corby Asphalt & Readymix Plants,Grettonbrook Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4BA Classification: Sand, Gravel & Other Aggregates **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A9NE (W)	569	-	489405 291198

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
202	**Contemporary Trade Directory Entries** Name: Hope Construction Materials Location: Gretton Brook Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4BA Classification: Sand, Gravel & Other Aggregates **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A9SE (W)	587	-	489380 291182
203	**Contemporary Trade Directory Entries** Name: Country Charm Ltd Location: Unit E,Harlow House,Shelton Rd, Willowbrook East Ind Est, Corby, Northamptonshire, NN17 5XH Classification: Ornamental Metalwork **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (E)	573	-	491043 290754
203	**Contemporary Trade Directory Entries** Name: Midland Hose Services Ltd Location: Unit N, Harlow House, Shelton Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XH Classification: Hydraulic Equipment & Accessories - Sales & Service **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (E)	586	-	491057 290769
203	**Contemporary Trade Directory Entries** Name: Cartell Location: Unit F, Harlow House, Shelton Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XH Classification: Adhesives, Glues & Sealants **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (E)	593	-	491063 290752
203	**Contemporary Trade Directory Entries** Name: Cartell Uk Ltd Location: Unit F, Harlow House, Shelton Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XH Classification: Distribution Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (E)	593	-	491063 290752
204	**Contemporary Trade Directory Entries** Name: Briggs Irrigation Location: Boyle Road, Willowbrook East Industrial Estate, CORBY, Northamptonshire, NN17 5XU Classification: Agricultural Machinery - Sales & Service **Status: Active** Positional Accuracy: Automatically positioned to the address	A3NW (S)	575	-	490495 290133
205	**Contemporary Trade Directory Entries** Name: Cereform Ltd Location: 9, Brunel Road, Earlstrees Industrial Estate, Corby, NN17 4SL Classification: Food Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SE (W)	576	-	489332 291014
205	**Contemporary Trade Directory Entries** Name: A D M Milling Ltd Location: 9, Brunel Road, Earlstrees Industrial Estate, CORBY, Northamptonshire, NN17 4SL Classification: Mills & Millers **Status: Active** Positional Accuracy: Automatically positioned to the address	A9SE (W)	578	-	489326 290992
206	**Contemporary Trade Directory Entries** Name: Pluswipes Ltd Location: Pluswipes Ltd, Pywell Road, Corby, NN17 5XJ Classification: Cleaning Materials & Equipment **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SW (SE)	578	-	490974 290515
207	**Contemporary Trade Directory Entries** Name: Carter Building Services Ltd Location: Welding Services Ltd, Trevithick Road, Corby, NN17 5XY Classification: Electrical Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2NE (S)	587	-	490110 289990

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
207	**Contemporary Trade Directory Entries** Name: Welding Services (Weldon) Ltd Location: Trevithick Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XY Classification: Metal Products - Fabricated **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2NE (S)	588	-	490110 289990
208	**Contemporary Trade Directory Entries** Name: Nickerson Ltd Location: 24, Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JW Classification: Mould Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A5SE (SW)	591	-	489428 290391
208	**Contemporary Trade Directory Entries** Name: Plastic Moulding Supplies Ltd Location: 24, Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JW Classification: Rubber & Plastic Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5SE (SW)	591	-	489428 290391
208	**Contemporary Trade Directory Entries** Name: Panelock Location: 26, Brunel Road, Earlstrees Industrial Estate, Corby, NN17 4JW Classification: Wood Products, Except Furniture - Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A5SE (SW)	620	-	489394 290389
209	**Contemporary Trade Directory Entries** Name: Feige Location: Curver Way, Willowbrook East Ind Est, Corby, Northants, NN17 5XN Classification: Distribution Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A7SE (SE)	596	-	490851 290322
209	**Contemporary Trade Directory Entries** Name: Newell Location: Curver Way,Willowbrook East Indust Est, Corby, Northants, NN17 5XN Classification: Rubber & Plastic Products - Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A7SE (SE)	624	-	490862 290294
210	**Contemporary Trade Directory Entries** Name: Marlec Engineering Co Ltd Location: Rutland House, Trevithick Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XY Classification: Generators - Sales & Service **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2NE (S)	611	-	490045 289968
211	**Contemporary Trade Directory Entries** Name: Rockingham Manufacturing Ltd Location: Unit M, Harlow House, Shelton Road, Willowbrook East Industrial Estate, Corby, NN17 5XH Classification: Precision Engineers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (E)	612	-	491083 290779
211	**Contemporary Trade Directory Entries** Name: Jigsaw Location: Unit G, Harlow House, Shelton Road, Willowbrook East Industrial Estate, Corby, NN17 5XH Classification: Classic Car Specialists **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (E)	617	-	491087 290763
211	**Contemporary Trade Directory Entries** Name: Csm Light Haulage Location: Unit g,Harlow House,Shelton Rd, Willowbrook East Ind Est, Corby, Northamptonshir, NN17 5XH Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A8NW (E)	617	-	491087 290762

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
211	**Contemporary Trade Directory Entries** Name: Chrysalis Clothes Ltd Location: Unit L, Harlow House, Shelton Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XH Classification: Clothing & Fabrics - Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (E)	632	-	491104 290788
211	**Contemporary Trade Directory Entries** Name: Prospect Location: Unit H, Harlow House, Shelton Road, Willowbrook East Industrial Estate, Corby, NN17 5XH Classification: Car Body Repairs **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (E)	637	-	491108 290768
211	**Contemporary Trade Directory Entries** Name: Remchem Ltd Location: Unit K, Harlow House, Shelton Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XH Classification: Commercial Cleaning Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (E)	647	-	491119 290793
211	**Contemporary Trade Directory Entries** Name: Remchem Location: Unit K, Harlow House, Shelton Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XH Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (E)	647	-	491119 290793
211	**Contemporary Trade Directory Entries** Name: Autogas Solutions Location: Unit J, Harlow House, Shelton Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XH Classification: Autogas Suppliers & Installers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A8NW (E)	653	-	491124 290775
212	**Contemporary Trade Directory Entries** Name: C J Packaging Supplies Ltd Location: 92f, Macadam Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JN Classification: Boxes & Cartons **Status: Active** Positional Accuracy: Automatically positioned to the address	A5SE (SW)	621	-	489338 290496
213	**Contemporary Trade Directory Entries** Name: Egg Box Graphics Location: Unit E,Crawley House,Shelton Rd, Willowbrook East Ind Est, Corby, Northamptonshire, NN17 5XH Classification: Digital Printing **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A8NW (E)	630	-	491089 290674
213	**Contemporary Trade Directory Entries** Name: Oakley Products Ltd Location: Unit E, Crawley House, Shelton Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XH Classification: Ornamental Metalwork **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (E)	631	-	491089 290674
214	**Contemporary Trade Directory Entries** Name: Recticel Foams Location: Manton Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JL Classification: Foam Products - Rubber & Plastics **Status: Active** Positional Accuracy: Automatically positioned to the address	A5NE (W)	647	-	489271 290671
215	**Contemporary Trade Directory Entries** Name: Maylan Ltd Location: Unit 7 Darwin Court,Trevithick Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XY Classification: Precision Engineers **Status: Active** Positional Accuracy: Manually positioned to the address or location	A2NE (S)	656	-	490192 289928

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
215	**Contemporary Trade Directory Entries** Name: Eurolink Location: Unit 7, Darwin Court, Trevithick Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XY Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2NE (S)	661	-	490193 289924
215	**Contemporary Trade Directory Entries** Name: M H Connectors Ltd Location: MH Connectors Ltd, Darwin Road, Corby, NN17 5XZ Classification: Electronic Component Manufacturers & Distributors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3NW (S)	686	-	490204 289900
216	**Contemporary Trade Directory Entries** Name: Rulmeca Uk Ltd Location: Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JW Classification: Materials Handling Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SE (W)	665	-	489229 290867
216	**Contemporary Trade Directory Entries** Name: Interroll Ltd Location: Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4UX Classification: Materials Handling Equipment **Status: Active** Positional Accuracy: Automatically positioned to the address	A9SE (W)	665	-	489229 290867
216	**Contemporary Trade Directory Entries** Name: F M H Conveyors International Ltd Location: Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JW Classification: Conveyors & Conveyor Belts **Status: Active** Positional Accuracy: Automatically positioned to the address	A9SE (W)	665	-	489229 290867
217	**Contemporary Trade Directory Entries** Name: Rockingham Cars Ltd Location: Cockerell Road, Corby, Northamptonshire, NN17 5DU Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2NE (S)	667	-	489903 289938
217	**Contemporary Trade Directory Entries** Name: Rockingham Cars Ltd Location: Cockerell Road, Corby, Northamptonshire, NN17 5DU Classification: Car Customisation & Conversion Specialists **Status: Active** Positional Accuracy: Automatically positioned to the address	A2NE (S)	667	-	489903 289938
217	**Contemporary Trade Directory Entries** Name: Verdant Location: Whittle Road, Corby, NN17 5DX Classification: Laboratories **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2NE (S)	688	-	489897 289918
217	**Contemporary Trade Directory Entries** Name: M & A Cars Location: Unit 11, Whittle Road, Corby, NN17 5DX Classification: Tyre Dealers **Status: Active** Positional Accuracy: Automatically positioned to the address	A2NE (S)	688	-	489897 289918
217	**Contemporary Trade Directory Entries** Name: C M S Ltd Location: Unit 11, Whittle Road, Corby, NN17 5DX Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2NE (S)	688	-	489897 289918
218	**Contemporary Trade Directory Entries** Name: 7 Formation Location: Darwin Road,Willowbrook Industrial Estate, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XZ Classification: Shop Fittings Manufacturers **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A3NW (S)	672	-	490376 289967

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
218	**Contemporary Trade Directory Entries** Name: The Garage Of Corby Location: Unit 1b Darwin Rd, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XZ Classification: Mot Testing Centres **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A3NW (S)	672	-	490376 289967
218	**Contemporary Trade Directory Entries** Name: Maxim Logistics Location: Unit 3 Darwin Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XZ Classification: Road Haulage Services **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A3NW (S)	672	-	490376 289967
219	**Contemporary Trade Directory Entries** Name: Watermark Packaging Location: Manton Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JL Classification: Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NE (W)	693	-	489250 290534
220	**Contemporary Trade Directory Entries** Name: Macemain Amstad Location: Boyle Road, Willowbrook East Industrial Estate, CORBY, Northamptonshire, NN17 5XU Classification: Engineers - General **Status: Active** Positional Accuracy: Automatically positioned to the address	A3NE (SE)	706	-	490551 290014
221	**Contemporary Trade Directory Entries** Name: Sovereign Location: Unit 1,Brunel Rd, Earlstrees Ind Est, Corby, Northamptonshire, NN17 4JW Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A9SE (W)	711	-	489184 290929
222	**Contemporary Trade Directory Entries** Name: Orchard House Foods Ltd Location: Bell House, 3, Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Food Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NE (W)	713	-	489191 290757
223	**Contemporary Trade Directory Entries** Name: Perfect Panels Corby Location: 1, Shelton Court, Corby, Northamptonshire, NN17 5YU Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (E)	725	-	491193 290729
223	**Contemporary Trade Directory Entries** Name: Corby Auto Repairs Location: 1, Shelton Court, Corby, NN17 5YU Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (E)	725	-	491193 290728
223	**Contemporary Trade Directory Entries** Name: Traffco Ltd Location: Traffco Ltd, Shelton Court, Corby, NN17 5YU Classification: Trailers & Towing Equipment **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NE (E)	748	-	491217 290739
223	**Contemporary Trade Directory Entries** Name: C K P Acrylics Location: 3-4, Shelton Court, Corby, Northamptonshire, NN17 5YU Classification: Plastic Products - Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NE (E)	749	-	491219 290739
223	**Contemporary Trade Directory Entries** Name: Acrylic Fabrications Location: 3-4, Shelton Court, Corby, Northamptonshire, NN17 5YU Classification: Plastic Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (E)	749	-	491219 290739

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
223	**Contemporary Trade Directory Entries** Name: Tyrep Ltd Location: Unit 7, Shelton Court, Corby, Northamptonshire, NN17 5YU Classification: Tyre Repairs & Retreading **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NE (E)	771	-	491241 290749
224	**Contemporary Trade Directory Entries** Name: N S (Uk) Ltd Location: Shelton Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XH Classification: Car Accessories Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (E)	725	-	491196 290835
225	**Contemporary Trade Directory Entries** Name: Euroteam Location: 92 Manton Road, Earlstrees Ind Est, Corby, Northamptonshir, NN17 4LT Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A5NE (W)	738	-	489190 290598
226	**Contemporary Trade Directory Entries** Name: Premier Galvanizing Location: Premier Galvanising Ltd, Davey Road, Corby, NN17 5XZ Classification: Metal Finishing Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3NW (S)	738	-	490242 289854
226	**Contemporary Trade Directory Entries** Name: Premier Galvanizing Location: Premier Galvanising Ltd, Davey Road, Corby, NN17 5XZ Classification: Metal Finishing Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A3NW (S)	738	-	490242 289854
227	**Contemporary Trade Directory Entries** Name: Smartscan Location: Pywell Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XJ Classification: Electronic Component Manufacturers & Distributors **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NW (E)	746	-	491181 290568
228	**Contemporary Trade Directory Entries** Name: Truck East Ltd Location: Darwin Rd, Willowbrook East Ind Est, Corby, Northamptonshir, NN17 5XZ Classification: Commercial Vehicle Dealers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A3NW (S)	753	-	490463 289916
229	**Contemporary Trade Directory Entries** Name: Rapid Production Solutions Location: 18 Fleming Rd, Earlstrees Ind Est, Corby, Northamptonshire, NN17 4SW Classification: Precision Engineers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A5NW (W)	762	-	489136 290803
229	**Contemporary Trade Directory Entries** Name: Recticel Automotive (Uk) Location: Fleming Rd, Earlstrees Ind Est, Corby, Northamptonshire, NN17 4SW Classification: Lamination & Encapsulation Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A5NW (W)	774	-	489124 290802
229	**Contemporary Trade Directory Entries** Name: G J P Engineering Location: 8, Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Precision Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	784	-	489116 290779
229	**Contemporary Trade Directory Entries** Name: G J P Ltd Location: 8, Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Precision Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	784	-	489116 290779

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
230	**Contemporary Trade Directory Entries** Name: Newly Weds Foods Ltd Location: Manton Road, Earlstrees Industrial Estate, Corby, NN17 4JL Classification: Food Products - Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A5NW (W)	763	-	489178 290534
230	**Contemporary Trade Directory Entries** Name: Newly Weds Foods Ltd Location: Manton Road, Earlstrees Industrial Estate, Corby, NN17 4JL Classification: Food Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	763	-	489178 290534
231	**Contemporary Trade Directory Entries** Name: Paul Birney Location: Darwin Rd, Willowbrook East Ind Est, Corby, Northants, NN17 5XZ Classification: Spraying - Paint & Coatings **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A3NE (SE)	769	-	490627 289983
232	**Contemporary Trade Directory Entries** Name: Symrise Location: 12, Cockerell Road, Corby, Northamptonshire, NN17 5DU Classification: Food Colouring, Flavouring & Additive Manufacturers & Distributors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2SW (S)	784	-	489855 289831
233	**Contemporary Trade Directory Entries** Name: Elite Cars Location: 10 Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, NN17 4SW Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	790	-	489117 290731
233	**Contemporary Trade Directory Entries** Name: Dubbers Kiln Location: 10 Alexander Court,Fleming Rd, Earlstrees Ind Est, Corby, Northamptonshire, NN17 4SW Classification: Ceramic Manufacturers, Supplies & Services **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A5NW (W)	790	-	489117 290736
233	**Contemporary Trade Directory Entries** Name: Meccanica Ltd Location: 11, Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Precision Engineers **Status: Active** Positional Accuracy: Automatically positioned to the address	A5NW (W)	798	-	489109 290733
233	**Contemporary Trade Directory Entries** Name: The Zing Co Location: 12, Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Joinery Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	804	-	489103 290732
233	**Contemporary Trade Directory Entries** Name: Big Impressions Ltd Location: 13, Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	809	-	489098 290733
233	**Contemporary Trade Directory Entries** Name: T G Mechanical & Body Repairs Location: Alexander Court,Fleming Rd, Earlstrees Ind Est, Corby, Northamptonshire, NN17 4SW Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	813	-	489090 290759
233	**Contemporary Trade Directory Entries** Name: Sterling Heating Parts & Control Location: Unit 3 Alexander Court,Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Central Heating Supplies & Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	813	-	489090 290759

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
233	**Contemporary Trade Directory Entries** Name: Shire Lodge Autos Location: Unit 13 Alexander Court,Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Garage Services **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A5NW (W)	816	-	489084 290782
233	**Contemporary Trade Directory Entries** Name: A G M Fabrications Location: 14, Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Sheet Metal Work **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	816	-	489091 290733
233	**Contemporary Trade Directory Entries** Name: Vibra Technics Location: 14, Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Car Accessories Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A5NW (W)	816	-	489091 290733
233	**Contemporary Trade Directory Entries** Name: Eastern Power & Motion Ltd Location: 16, Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Engineering Materials **Status: Active** Positional Accuracy: Automatically positioned to the address	A5NW (W)	831	-	489075 290734
233	**Contemporary Trade Directory Entries** Name: M & A M O T & Service Centre Location: 18, Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Mot Testing Centres **Status: Active** Positional Accuracy: Automatically positioned to the address	A5NW (W)	853	-	489052 290736
233	**Contemporary Trade Directory Entries** Name: M & A Cars Location: 18 Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, NN17 4SW Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	854	-	489052 290736
233	**Contemporary Trade Directory Entries** Name: Lolane Motors Ltd Location: 19, Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	864	-	489042 290737
234	**Contemporary Trade Directory Entries** Name: Echo Packaging Ltd Location: Sondes Road, Willowbrook East Industrial Estate, Corby, NN17 5XL Classification: Paper & Cardboard Products & Packaging - Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NE (E)	796	-	491262 290703
235	**Contemporary Trade Directory Entries** Name: Habasit (Uk) Ltd Location: Cockerell Rd, Corby, Northants, NN17 5DU Classification: Conveyors & Conveyor Belts **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A2SW (S)	797	-	489795 289838
236	**Contemporary Trade Directory Entries** Name: The Concrete Co Location: Davey Road, Corby, Northamptonshire, NN17 5XX Classification: Concrete Manufacturers & Distributors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3SW (S)	809	-	490280 289790

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
237	**Contemporary Trade Directory Entries** Name: 4sure Trailers Location: 6, Fleming Road, Earlstrees Industrial Estate, CORBY, Northamptonshire, NN17 4SW Classification: Trailers & Towing Equipment **Status: Active** Positional Accuracy: Automatically positioned to the address	A5NW (W)	822	-	489072 290840
237	**Contemporary Trade Directory Entries** Name: General Bridge & Engineering Ltd Location: Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Plant & Machinery Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	822	-	489072 290840
237	**Contemporary Trade Directory Entries** Name: Seg Location: Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4TY Classification: Rubber & Plastic Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	852	-	489042 290846
238	**Contemporary Trade Directory Entries** Name: A V K Location: Sondes Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XL Classification: Valve Manufacturers & Suppliers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8NE (E)	828	-	491278 290612
239	**Contemporary Trade Directory Entries** Name: Uk Fire International Ltd Location: 2, Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Firefighting Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	844	-	489056 290784
239	**Contemporary Trade Directory Entries** Name: Pn Refinishing Location: The Safety Centre, 2, Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	844	-	489056 290784
239	**Contemporary Trade Directory Entries** Name: Universal Vacuum Location: 1, Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Coating Specialists **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	853	-	489046 290785
239	**Contemporary Trade Directory Entries** Name: Byles Fires & Fireplaces Ltd Location: 22 Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, NN17 4SW Classification: Fireplaces & Mantelpieces **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	879	-	489020 290781
239	**Contemporary Trade Directory Entries** Name: Eurotex (Gb) Ltd Location: 21, Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Cleaning Materials & Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	888	-	489012 290778
239	**Contemporary Trade Directory Entries** Name: Inovex Systems Ltd Location: 21, Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4SW Classification: Printing Equipment Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	888	-	489012 290778

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
240	**Contemporary Trade Directory Entries** Name: Sovereign Cleaning Location: 1, Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4UD Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (W)	844	-	489056 290987
240	**Contemporary Trade Directory Entries** Name: Courts Carpet Processing Unit Location: 1, Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4UD Classification: Distribution Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (W)	844	-	489056 290987
241	**Contemporary Trade Directory Entries** Name: M & J International Location: Unit 1, Davey Road, Corby, Northamptonshire, NN17 5XX Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3SW (S)	850	-	490453 289806
241	**Contemporary Trade Directory Entries** Name: Major Packaging Systems Ltd Location: Unit 1, Davey Road, Corby, Northamptonshire, NN17 5XX Classification: Packaging & Wrapping Equipment & Supplies **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3SW (S)	850	-	490453 289806
242	**Contemporary Trade Directory Entries** Name: Recycle Force Location: Crown House, Gretton Brook Road, Corby, NN17 4LS Classification: Waste Disposal Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9SW (W)	850	-	489069 291091
243	**Contemporary Trade Directory Entries** Name: Powdertech Location: 6, Cockerell Road, Corby, Northamptonshire, NN17 5DU Classification: Powder Coatings **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2SW (S)	858	-	489837 289758
243	**Contemporary Trade Directory Entries** Name: Powdertech Corby Location: 5, Cockerell Road, Corby, Northamptonshire, NN17 5DU Classification: Powder Coatings **Status: Active** Positional Accuracy: Automatically positioned to the address	A2SW (S)	893	-	489817 289729
243	**Contemporary Trade Directory Entries** Name: Prestigious Cars Location: 5, Cockerell Road, Corby, Northamptonshire, NN17 5DU Classification: Car Dealers - Used **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2SW (S)	895	-	489820 289725
243	**Contemporary Trade Directory Entries** Name: Kennelgate Pet Food Superstore Location: 5, Cockerell Road, Corby, Northamptonshire, NN17 5DU Classification: Pet Foods & Animal Feeds **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A2SW (S)	895	-	489820 289725
244	**Contemporary Trade Directory Entries** Name: Newly Weds Location: Manton Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JL Classification: Food Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	866	-	489068 290555
245	**Contemporary Trade Directory Entries** Name: Dulmison (Uk) Ltd Location: Macadam Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JN Classification: Power Transmission Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5SW (SW)	867	-	489111 290401

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
246	**Contemporary Trade Directory Entries** Name: Elm Uk Ltd Location: 6, Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JW Classification: Printers **Status: Active** Positional Accuracy: Automatically positioned to the address	A9SW (W)	868	-	489026 290897
247	**Contemporary Trade Directory Entries** Name: R C S Logistics Location: Darwin Road, Willowbrook East Industrial Estate, Corby, NN17 5XZ Classification: Road Haulage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A3NE (SE)	871	-	490662 289886
247	**Contemporary Trade Directory Entries** Name: R C S Logistics Location: Darwin Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XZ Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A3NE (SE)	879	-	490675 289884
248	**Contemporary Trade Directory Entries** Name: Truckeast Location: Darwin Road, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5XZ Classification: Commercial Vehicle Servicing, Repairs, Parts & Accessories **Status: Active** Positional Accuracy: Automatically positioned to the address	A3SE (S)	890	-	490568 289815
249	**Contemporary Trade Directory Entries** Name: Cove Producers Ltd Location: Whittle Road, Corby, Northamptonshire, NN17 5DX Classification: Builders' Tools & Equipment Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A2SE (S)	895	-	489921 289699
249	**Contemporary Trade Directory Entries** Name: Hamlet Circuits Ltd Location: 1, Pasteur Courtyard, Whittle Road, Corby, Northamptonshire, NN17 5DX Classification: Printed Circuit Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2SE (S)	913	-	489896 289686
249	**Contemporary Trade Directory Entries** Name: Oakley Refrigeration & Air Conditioning Ltd Location: 2, Pasteur Courtyard, Whittle Road, Corby, Northamptonshire, NN17 5DX Classification: Air Conditioning & Refrigeration Contractors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2SE (S)	914	-	489912 289682
249	**Contemporary Trade Directory Entries** Name: Oakley Refrigeration & Air Conditioning Location: 2, Pasteur Courtyard, Whittle Road, Corby, Northamptonshire, NN17 5DX Classification: Air Conditioning & Refrigeration Contractors **Status: Active** Positional Accuracy: Automatically positioned to the address	A2SE (S)	914	-	489912 289682
249	**Contemporary Trade Directory Entries** Name: Forest Gate (Corby) Ltd Location: Whittle Road, Corby, Northamptonshire, NN17 5DX Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2SE (S)	915	-	489938 289676
249	**Contemporary Trade Directory Entries** Name: Forest Gate Corby Ltd Location: Whittle Road, Corby, Northamptonshire, NN17 5DX Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2SE (S)	915	-	489938 289676
249	**Contemporary Trade Directory Entries** Name: B3 Print Ltd Location: 4, Pasteur Courtyard, Whittle Road, Corby, Northamptonshire, NN17 5DX Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2SE (S)	915	-	489938 289676

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
249	**Contemporary Trade Directory Entries** Name: Forest Gate Location: Whittle Road, Corby, Northamptonshire, NN17 5DX Classification: Car Customisation & Conversion Specialists **Status: Active** Positional Accuracy: Automatically positioned to the address	A2SE (S)	915	-	489938 289676
249	**Contemporary Trade Directory Entries** Name: Forest Gate Location: Whittle Road, Corby, Northamptonshire, NN17 5DX Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2SE (S)	915	-	489938 289676
249	**Contemporary Trade Directory Entries** Name: Forest Gate (Corby) Ltd Location: Whittle Road, Corby, Northamptonshire, NN17 5DX Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2SE (S)	915	-	489938 289676
249	**Contemporary Trade Directory Entries** Name: Premier Laser Cutting Location: Pasteur Courtyard,1 Whittle Rd, Corby, Northamptonshire, NN17 5DX Classification: Engineering Machine Services **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A2SE (S)	935	-	489909 289660
250	**Contemporary Trade Directory Entries** Name: Impact Handling Location: 4, Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JW Classification: Fork Lift Trucks **Status: Active** Positional Accuracy: Automatically positioned to the address	A9SW (W)	918	-	488976 290892
251	**Contemporary Trade Directory Entries** Name: Westlands Hydraulics Systems & Repairs Ltd Location: Unit O, Edison Courtyard, Brunel Road, Earlstrees Industrial Estate, CORBY, Northamptonshire, NN17 4LS Classification: Engineers - General **Status: Active** Positional Accuracy: Automatically positioned to the address	A9SW (W)	919	-	488991 291059
251	**Contemporary Trade Directory Entries** Name: Zeus Packaging Uk Ltd Location: Gretton Brook Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4BA Classification: Packaging Materials Manufacturers & Suppliers **Status: Active** Positional Accuracy: Automatically positioned to the address	A9SW (W)	955	-	488961 291094
251	**Contemporary Trade Directory Entries** Name: S R M O T & Service Centre Ltd Location: Unit K, Edison Courtyard, Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4LS Classification: Mot Testing Centres **Status: Active** Positional Accuracy: Automatically positioned to the address	A9SW (W)	961	-	488949 291062
252	**Contemporary Trade Directory Entries** Name: Freerider (Uk) Ltd Location: Earlstrees Court, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4AX Classification: Disability Equipment - Manufacturers & Suppliers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	939	-	488959 290793
252	**Contemporary Trade Directory Entries** Name: Interroll Ltd Location: 21, Causeway Road, Earlstrees Industrial Estate, CORBY, Northamptonshire, NN17 4DU Classification: Materials Handling Equipment **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A5NW (W)	940	-	488958 290793
253	**Contemporary Trade Directory Entries** Name: 1st Mix Location: Gretton Brook Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4BA Classification: Concrete & Mortar Ready Mixed **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A9NW (W)	946	-	489055 291338

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
253	**Contemporary Trade Directory Entries** Name: Transport Solutions Location: Gretton Brook Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4BA Classification: Garage Services **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A9NW (W)	946	-	489055 291338
253	**Contemporary Trade Directory Entries** Name: Universal Auto Repairs Location: Gretton Brook Rd, Earlstrees Ind Est, Corby, Northamptonshire, NN17 4BA Classification: Garage Services **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A9NW (W)	946	-	489055 291338
254	**Contemporary Trade Directory Entries** Name: Cumulus Resources Ltd Location: 13, The Octagon, Corby, Northamptonshire, NN17 1DW Classification: Cleaning Services - Commercial **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A1NE (SW)	949	-	489430 289895
255	**Contemporary Trade Directory Entries** Name: Intersnack Ltd Location: 5/6, Pasteur Courtyard, Whittle Road, Corby, Northamptonshire, NN17 5DX Classification: Food Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2SE (S)	964	-	489895 289633
256	**Contemporary Trade Directory Entries** Name: Apollo Print Management Ltd Location: 14a, Curie Courtyard, Cockerell Road, Corby, Northamptonshire, NN17 5DU Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A2SW (S)	966	-	489822 289650
257	**Contemporary Trade Directory Entries** Name: Insignia Manufacturing Ltd Location: 77, Earlstrees Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4AW Classification: Kitchen Furniture Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A5NW (W)	968	-	488943 290695
257	**Contemporary Trade Directory Entries** Name: Homestyle Location: 77, Earlstrees Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4AW Classification: Blinds, Awnings & Canopies **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A5NW (W)	968	-	488943 290695
258	**Contemporary Trade Directory Entries** Name: Chemi Supply Ltd Location: Ewell House, Brunel Road, Earlstrees Industrial Estate, CORBY, Northamptonshire, NN17 4JW Classification: Cleaning Materials & Equipment **Status: Active** Positional Accuracy: Automatically positioned to the address	A9SW (W)	968	-	488926 290925
259	**Contemporary Trade Directory Entries** Name: Advantage Cover Fabrications Ltd Location: Unit 5 Earlstrees Court, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4AX Classification: Marquee Manufacturers **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A5NW (W)	992	-	488904 290815
260	**Contemporary Trade Directory Entries** Name: R P C Containers Ltd Location: 4, Sallow Road, Weldon North Industrial Estate, Corby, NN17 5JX Classification: Plastic Products - Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SE (E)	997	-	491383 290396
261	**Points of Interest - Commercial Services** Name: Paragon Automotive Location: Baird Road, Willowbrook North Industrial Estate, Corby, NN17 5ZA Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7NW (SE)	217	9	490499 290545

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
262	**Points of Interest - Commercial Services** Name: Corby MOT Testing Centre Ltd Location: 1 Heritage Way, Corby, NN17 5XW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A10SW (W)	306	9	489588 290859
262	**Points of Interest - Commercial Services** Name: Corby M O T Testing Centre Location: 1 Heritage Way, Corby, NN17 5XW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A10SW (W)	306	9	489588 290858
263	**Points of Interest - Commercial Services** Name: Eurofleet Ltd Location: 3 Arkwright Road, Willowbrook North Industrial Estate, Corby, NN17 5AE Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A6SE (S)	319	9	490174 290268
263	**Points of Interest - Commercial Services** Name: Eurofleet Ltd Location: 3 Arkwright Road, Willowbrook North Industrial Estate, Corby, NN17 5AE Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A6SE (S)	319	9	490174 290268
264	**Points of Interest - Commercial Services** Name: Corby Metal Recycling Location: Corby Metal Recycling, Arkwright Road, Corby, NN17 5AE Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A7SW (SE)	320	9	490408 290375
265	**Points of Interest - Commercial Services** Name: Corby Power Ltd Location: Mitchell Road, Corby, NN17 5QT Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A10SW (NW)	375	9	489591 291141
266	**Points of Interest - Commercial Services** Name: Robs Transport & Haulage Services Ltd Location: Mitchell Road, Corby, NN17 5AF Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A11NE (NE)	406	9	490706 291397
267	**Points of Interest - Commercial Services** Name: Taxi Pit Stop Location: Heritage Way, Corby, NN17 5XW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A6SW (SW)	464	9	489677 290320
267	**Points of Interest - Commercial Services** Name: Xj Services Location: Heritage Way, Corby, NN17 5XW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A6SW (SW)	488	9	489709 290262
268	**Points of Interest - Commercial Services** Name: West House Transport S & G Ltd Location: Unit J Marconi Courtyard, Brunel Road, Earlstrees Industrial Estate, Corby, NN17 4LT Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A6SW (SW)	471	9	489531 290453
268	**Points of Interest - Commercial Services** Name: General Automotive Solutions Location: Unite, Marconi Courtyard, Brunel Rd, Earlstrees Ind Est, Corby, Northamptonshire, NN17 4LT Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A6SW (SW)	489	9	489551 290398

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
268	**Points of Interest - Commercial Services** Name: General Automotive Solutions Location: 5 Rutherford Court, Earlstrees Industrial Estate, Corby, NN17 4SJ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A5SE (SW)	534	9	489515 290370
268	**Points of Interest - Commercial Services** Name: General Automotive Solutions Ltd Location: 5 Rutherford Court, Earlstrees Industrial Estate, Corby, NN17 4SJ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A5SE (SW)	534	9	489515 290370
268	**Points of Interest - Commercial Services** Name: A J Phillips Commercial Ltd Location: Unit A Marconi Courtyard, Brunel Road, Earlstrees Industrial Estate, Corby, NN17 4LT Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A5SE (SW)	536	9	489490 290398
268	**Points of Interest - Commercial Services** Name: Foamclean Ltd Location: Unit A Marconi Courtyard, Brunel Road, Earlstrees Industrial Estate, Corby, NN17 4LT Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A5SE (SW)	536	9	489490 290398
269	**Points of Interest - Commercial Services** Name: Corfast Location: J B S Court, Earlstrees Industrial Estate, Corby, NN17 4BA Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A10NW (NW)	480	9	489764 291521
270	**Points of Interest - Commercial Services** Name: The Garage Location: Unit 1, Darwin Road, Willowbrook East Industrial Estate, Corby, NN17 5XZ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A2NE (S)	492	9	490126 290086
270	**Points of Interest - Commercial Services** Name: Maxim Logistics Location: Darwin Road, Willowbrook East Industrial Estate, Corby, NN17 5XZ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A2NE (S)	500	9	490107 290077
270	**Points of Interest - Commercial Services** Name: M & J International Freight Ltd Location: Darwin Road, Willowbrook East Industrial Estate, Corby, NN17 5XZ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A2NE (S)	560	9	490156 290020
271	**Points of Interest - Commercial Services** Name: Diamond Windscreens Location: Unit E Gaydon House, Trevithick Road, Willowbrook East Industrial Estate, Corby, NN17 5XY Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A2NE (S)	518	9	490055 290060
272	**Points of Interest - Commercial Services** Name: Euroteam International Frieght Location: 2 Brunel Court, Earlstrees Industrial Estate, Corby, NN17 4UB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A5NE (W)	538	9	489376 290709
272	**Points of Interest - Commercial Services** Name: Euroteam International Frieght Location: 2 Brunel Court, Earlstrees Industrial Estate, Corby, NN17 4UB Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A5NE (W)	538	9	489376 290709

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
272	**Points of Interest - Commercial Services** Name: Brunel Motors Location: 3-5 Brunel Court, Earlstrees Industrial Estate, Corby, NN17 4UB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A5NE (W)	567	9	489346 290710
272	**Points of Interest - Commercial Services** Name: Brunel Motors Location: 3-5 Brunel Court, Earlstrees Industrial Estate, Corby, NN17 4UB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A5NE (W)	567	9	489346 290710
273	**Points of Interest - Commercial Services** Name: Simply Weather Vanes Location: Unit 5 Pywell Court, Willowbrook East Industrial Estate, Corby, NN17 5WA Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A8NW (E)	570	9	491024 290660
273	**Points of Interest - Commercial Services** Name: G-Sport Location: Unit 3 Pywell Court, Willowbrook East Industrial Estate, Corby, Northamptonshire, NN17 5WA Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NW (E)	581	9	491032 290646
273	**Points of Interest - Commercial Services** Name: Oakley Products Ltd Location: Unit E Crawley House, Shelton Road, Willowbrook East Industrial Estate, Corby, NN17 5XH Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A8NW (E)	631	9	491089 290674
273	**Points of Interest - Commercial Services** Name: Oakley Products Ltd Location: Unit E Crawley House, Shelton Road, Willowbrook East Industrial Estate, Corby, NN17 5XH Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A8NW (E)	631	9	491089 290674
274	**Points of Interest - Commercial Services** Name: Csm Light Haulage Location: Unit N Harlow House, Shelton Road, Willowbrook East Industrial Estate, Corby, NN17 5XH Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A8NW (E)	586	9	491057 290769
274	**Points of Interest - Commercial Services** Name: Jigsaw Location: Unit G Harlow House, Shelton Road, Willowbrook East Industrial Estate, Corby, NN17 5XH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NW (E)	617	9	491087 290763
274	**Points of Interest - Commercial Services** Name: Prospect Location: Unit H Harlow House, Shelton Road, Willowbrook East Industrial Estate, Corby, NN17 5XH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NW (E)	636	9	491107 290768
274	**Points of Interest - Commercial Services** Name: Autogas Experts Location: Unit J Harlow House, Shelton Road, Willowbrook East Industrial Estate, Corby, NN17 5XH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NW (E)	653	9	491124 290775

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
274	**Points of Interest - Commercial Services** Name: L P G Power Ltd Location: Unit J Harlow House, Shelton Road, Willowbrook East Industrial Estate, Corby, NN17 5XH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NW (E)	653	9	491124 290775
275	**Points of Interest - Commercial Services** Name: Eurolink Location: Unit 7 Darwin Court, Trevithick Road, Willowbrook East Industrial Estate, Corby, NN17 5XY Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A2NE (S)	661	9	490193 289924
276	**Points of Interest - Commercial Services** Name: Multy UK Location: 1a Fleming Road, Earlstrees Industrial Estate, Corby, NN17 4SW Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A9SE (W)	665	9	489229 290867
277	**Points of Interest - Commercial Services** Name: Maxim Logistics Location: Unit 3 Darwin Road, Willowbrook East Industrial Estate, Corby, NN17 5XZ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NW (S)	672	9	490376 289967
278	**Points of Interest - Commercial Services** Name: West Recycling Ltd Location: Unit 5 Brunel Road, Earlstrees Industrial Estate, Corby, NN17 4JW Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A9SW (W)	718	9	489181 290974
279	**Points of Interest - Commercial Services** Name: Corby Auto Repairs Location: 1 Shelton Court, Corby, NN17 5YU Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NW (E)	725	9	491193 290728
279	**Points of Interest - Commercial Services** Name: Brammer UK Ltd Location: 1 Shelton Court, Corby, NN17 5YU Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NW (E)	725	9	491193 290729
279	**Points of Interest - Commercial Services** Name: Tyrep Ltd Location: Unit 7, Shelton Court, Corby, NN17 5YU Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NE (E)	771	9	491241 290748
279	**Points of Interest - Commercial Services** Name: Tyrep Ltd Location: Unit 7, Shelton Court, Corby, NN17 5YU Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NE (E)	771	9	491241 290749
280	**Points of Interest - Commercial Services** Name: Clarkes Accident Repair Location: 97 Macadam Road, Earlstrees Industrial Estate, Corby, NN17 4JN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A5SE (SW)	785	9	489192 290422
281	**Points of Interest - Commercial Services** Name: T G Mechanical Location: 7 Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, NN17 4SW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A5NW (W)	793	9	489107 290780

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
281	**Points of Interest - Commercial Services** Name: Shire Lodge Autos Location: 13 Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, NN17 4SW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A5NW (W)	810	9	489097 290733
281	**Points of Interest - Commercial Services** Name: Pn Refinishing Location: The Safety Centre, 2 Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, NN17 4SW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A5NW (W)	844	9	489056 290784
281	**Points of Interest - Commercial Services** Name: In-line Containers Ltd Location: 1 Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, NN17 4SW Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A5NW (W)	853	9	489046 290785
281	**Points of Interest - Commercial Services** Name: M & A Cars Location: 18 Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, NN17 4SW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A5NW (W)	854	9	489052 290736
281	**Points of Interest - Commercial Services** Name: M & A M O T & Service Centre Location: 20 Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, NN17 4SW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A5NW (W)	872	9	489034 290735
281	**Points of Interest - Commercial Services** Name: Pn Refinishing Location: 22 Alexander Court, Fleming Road, Earlstrees Industrial Estate, Corby, NN17 4SW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A5NW (W)	880	9	489019 290781
282	**Points of Interest - Commercial Services** Name: R C S Logistics Ltd Location: Darwin Rd, Willowbrook East Ind Est, Corby, Northamptonshire, NN17 5XZ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (S)	825	9	490542 289875
283	**Points of Interest - Commercial Services** Name: M & J International Freight Ltd Location: Unit 1, Davey Road, Corby, NN17 5XX Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3SW (S)	850	9	490453 289806
284	**Points of Interest - Commercial Services** Name: R C S Logistics Location: Darwin Road, Willowbrook East Industrial Estate, Corby, NN17 5XZ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A3NE (SE)	879	9	490675 289884
285	**Points of Interest - Commercial Services** Name: Forest Gate Corby Ltd Location: Whittle Road, Corby, NN17 5DX Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A2SE (S)	915	9	489938 289676
286	**Points of Interest - Commercial Services** Name: S R M O T & Service Centre Ltd Location: Unit K Edison Courtyard, Brunel Road, Earlstrees Industrial Estate, Corby, NN17 4LS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9SW (W)	962	9	488948 291061

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
287	**Points of Interest - Manufacturing and Production** Name: Tank Location: NN17 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A10NW (NW)	299	9	489715 291241
287	**Points of Interest - Manufacturing and Production** Name: Tank Location: NN17 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A10NW (NW)	371	9	489656 291281
288	**Points of Interest - Manufacturing and Production** Name: Tank Location: NN17 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A10SW (W)	335	9	489583 291010
288	**Points of Interest - Manufacturing and Production** Name: Tank Location: NN17 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A10SW (W)	353	9	489585 291064
288	**Points of Interest - Manufacturing and Production** Name: Tank Location: NN17 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A10SW (W)	358	9	489561 291016
289	**Points of Interest - Manufacturing and Production** Name: Power Station Location: NN17 Category: Industrial Features Class Code: Energy Production Positional Accuracy: Positioned to address or location	A10SW (NW)	374	9	489592 291142
289	**Points of Interest - Manufacturing and Production** Name: Tank Location: NN17 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A10SW (W)	426	9	489523 291108
289	**Points of Interest - Manufacturing and Production** Name: Tank Location: NN17 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A9SE (W)	442	9	489517 291136
289	**Points of Interest - Manufacturing and Production** Name: Tank Location: NN17 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A9SE (W)	457	9	489510 291160
290	**Points of Interest - Manufacturing and Production** Name: Works Location: NN17 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A10NW (NW)	430	9	489655 291378
291	**Points of Interest - Manufacturing and Production** Name: Factory Location: NN17 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A10NW (NW)	450	9	489762 291487
292	**Points of Interest - Manufacturing and Production** Name: Industrial Estate Location: NN17 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A8NW (E)	461	9	490927 290730

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
293	**Points of Interest - Manufacturing and Production** Name: Tank Location: NN17 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A9NE (NW)	493	9	489489 291204
294	**Points of Interest - Manufacturing and Production** Name: Tank Location: NN17 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A7SE (SE)	551	9	490790 290330
295	**Points of Interest - Manufacturing and Production** Name: Tank Location: NN17 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A3NW (S)	725	9	490474 289952
296	**Points of Interest - Manufacturing and Production** Name: Works Location: NN17 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A3NE (SE)	794	9	490864 290086
296	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A3NE (SE)	795	9	490869 290087
297	**Points of Interest - Manufacturing and Production** Name: Tank Location: NN17 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A3NE (S)	815	9	490577 289905
298	**Points of Interest - Manufacturing and Production** Name: Industrial Estate Location: NN17 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A2SE (S)	821	9	489926 289773
299	**Points of Interest - Manufacturing and Production** Name: Industrial Estate Location: NN17 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A8NE (E)	856	9	491326 290747
300	**Points of Interest - Manufacturing and Production** Name: Quarry (Disused) Location: NN17 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A12SE (E)	873	9	491367 291138
301	**Points of Interest - Manufacturing and Production** Name: Tank Location: NN17 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A8SW (SE)	903	9	491196 290255
301	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A8SE (SE)	931	9	491235 290262
301	**Points of Interest - Manufacturing and Production** Name: Works Location: NN17 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A8SE (SE)	931	9	491235 290263

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
302	**Points of Interest - Manufacturing and Production** Name: Tanks Location: NN17 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A5SW (SW)	955	9	489048 290327
302	**Points of Interest - Manufacturing and Production** Name: Tank Location: NN17 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A5SW (SW)	963	9	489039 290328
302	**Points of Interest - Manufacturing and Production** Name: Tank Location: NN17 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A5SW (SW)	967	9	489035 290326
303	**Points of Interest - Manufacturing and Production** Name: Tank Location: NN17 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A2SE (S)	958	9	490143 289620
304	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9NW (W)	963	9	489036 291336
304	**Points of Interest - Manufacturing and Production** Name: Works Location: NN17 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9NW (W)	964	9	489035 291335
305	**Points of Interest - Manufacturing and Production** Name: Tank Location: NN17 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A3SW (S)	985	9	490253 289605
306	**Points of Interest - Public Infrastructure** Name: Sludge Beds Location: NN17 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A10SE (NW)	0	9	489966 291017
306	**Points of Interest - Public Infrastructure** Name: Sludge Beds Location: NN17 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A10SE (NW)	0	9	490051 291052
307	**Points of Interest - Public Infrastructure** Name: Sludge Beds Location: NN17 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A10SE (W)	0	9	490032 290920
308	**Points of Interest - Public Infrastructure** Name: Outfall Location: NN17 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A11SW (E)	11	9	490472 290915
308	**Points of Interest - Public Infrastructure** Name: Outfall Location: NN17 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A7NW (E)	21	9	490487 290845

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
309	**Points of Interest - Public Infrastructure** Name: Recycling Centre Location: Pilot Road, NN17 Category: Infrastructure and Facilities Class Code: Recycling Centres Positional Accuracy: Positioned to address or location	A3SW (S)	860	9	490229 289728
310	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A2NW (SW)	728	9	489534 290095
310	**Points of Interest - Recreational and Environmental** Name: Playground Location: Pen Green Lane, NN17 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A2NW (SW)	728	9	489534 290095
311	**Gas Pipelines** Name: FM02 - Caldecott to Corby PS Nat Grid: Owned By National Grid Diameter (mm): 300 Building Proximity Distance (m): 33 Status: Active Pipe Length (m): 5046.3 Pipe Number: Feeder 2	A10NW (NW)	451	10	489540 291220

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
312	**Nitrate Vulnerable Zones** Name: Not Supplied Description: Surface Water Source: Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	A10SE (E)	0	12	490190 290879

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
East Northamptonshire District Council - Environmental Health Department	April 2014	Annual Rolling Update
Harborough District Council - Environmental Health Department	April 2014	Annual Rolling Update
Corby Borough Council - Environmental Health Department	December 2013	Annual Rolling Update
Rutland Unitary Council - Environmental Health Department	January 2015	Annual Rolling Update
Kettering Borough Council - Environmental Health Department	October 2013	Annual Rolling Update
Discharge Consents		
Environment Agency - Anglian Region	January 2017	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - Anglian Region	March 2013	As notified
Environment Agency - Midlands Region	March 2013	As notified
Integrated Pollution Controls		
Environment Agency - Anglian Region	October 2008	Not Applicable
Environment Agency - Midlands Region	October 2008	Not Applicable
Integrated Pollution Prevention And Control		
Environment Agency - Anglian Region	January 2017	Quarterly
Environment Agency - Midlands Region	January 2017	Quarterly
Local Authority Integrated Pollution Prevention And Control		
Corby Borough Council - Environmental Health Department	January 2015	Annual Rolling Update
East Northamptonshire District Council - Environmental Health Department	June 2014	Annual Rolling Update
Harborough District Council - Environmental Health Department	March 2015	Annual Rolling Update
Rutland Unitary Council - Environmental Health Department	May 2014	Annual Rolling Update
Kettering Borough Council - Environmental Health Department	November 2014	Annual Rolling Update
Local Authority Pollution Prevention and Controls		
Corby Borough Council - Environmental Health Department	January 2015	Annually
East Northamptonshire District Council - Environmental Health Department	June 2014	Annual Rolling Update
Harborough District Council - Environmental Health Department	March 2015	Annual Rolling Update
Rutland Unitary Council - Environmental Health Department	May 2014	Annual Rolling Update
Kettering Borough Council - Environmental Health Department	November 2014	Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements		
Corby Borough Council - Environmental Health Department	January 2015	Annual Rolling Update
East Northamptonshire District Council - Environmental Health Department	June 2014	Annual Rolling Update
Harborough District Council - Environmental Health Department	March 2015	Annual Rolling Update
Rutland Unitary Council - Environmental Health Department	May 2014	Annual Rolling Update
Kettering Borough Council - Environmental Health Department	November 2014	Annual Rolling Update
Nearest Surface Water Feature		
Ordnance Survey	July 2012	Quarterly
Pollution Incidents to Controlled Waters		
Environment Agency - Anglian Region	September 1999	Not Applicable
Prosecutions Relating to Authorised Processes		
Environment Agency - Midlands Region	July 2015	As notified
Environment Agency - Anglian Region	March 2013	As notified
Prosecutions Relating to Controlled Waters		
Environment Agency - Anglian Region	March 2013	As notified
Environment Agency - Midlands Region	March 2013	As notified
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

Data Currency

Agency & Hydrological	Version	Update Cycle
Substantiated Pollution Incident Register		
Environment Agency - Anglian Region - Northern Area	January 2017	Quarterly
Environment Agency - Midlands Region - East Area	January 2017	Quarterly
Environment Agency - Midlands Region - Lower Trent Area	January 2017	Quarterly
Water Abstractions		
Environment Agency - Anglian Region	October 2016	Quarterly
Water Industry Act Referrals		
Environment Agency - Anglian Region	January 2017	Quarterly
Environment Agency - Midlands Region	January 2017	Quarterly
Groundwater Vulnerability		
Environment Agency - Head Office	April 2015	Not Applicable
Drift Deposits		
Environment Agency - Head Office	January 1999	Not Applicable
Bedrock Aquifer Designations		
British Geological Survey - National Geoscience Information Service	August 2015	As notified
Superficial Aquifer Designations		
British Geological Survey - National Geoscience Information Service	August 2015	As notified
Source Protection Zones		
Environment Agency - Head Office	February 2017	Quarterly
Extreme Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	February 2017	Quarterly
Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	February 2017	Quarterly
Areas Benefiting from Flood Defences		
Environment Agency - Head Office	February 2017	Quarterly
Flood Water Storage Areas		
Environment Agency - Head Office	February 2017	Quarterly
Flood Defences		
Environment Agency - Head Office	February 2017	Quarterly
Detailed River Network Lines		
Environment Agency - Head Office	September 2014	Annually
Detailed River Network Offline Drainage		
Environment Agency - Head Office	March 2012	Annually
Surface Water 1 in 30 year Flood Extent		
Environment Agency - Head Office	October 2013	As notified
Surface Water 1 in 100 year Flood Extent		
Environment Agency - Head Office	October 2013	As notified
Surface Water 1 in 1000 year Flood Extent		
Environment Agency - Head Office	October 2013	As notified
Surface Water Suitability		
Environment Agency - Head Office	October 2013	As notified
BGS Groundwater Flooding Susceptibility		
British Geological Survey - National Geoscience Information Service	May 2013	Annually

Data Currency

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	January 2017	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - Anglian Region	October 2008	Not Applicable
Environment Agency - Midlands Region	October 2008	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - Anglian Region - Northern Area	August 2016	Quarterly
Environment Agency - Midlands Region - East Area	August 2016	Quarterly
Environment Agency - Midlands Region - Lower Trent Area	August 2016	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - Anglian Region - Northern Area	October 2016	Quarterly
Environment Agency - Midlands Region - East Area	October 2016	Quarterly
Environment Agency - Midlands Region - Lower Trent Area	October 2016	Quarterly
Local Authority Landfill Coverage		
Corby Borough Council - Plannning Department	May 2000	Not Applicable
East Northamptonshire District Council - Community Services - Planning Department	May 2000	Not Applicable
Harborough District Council - Environmental Health Department	May 2000	Not Applicable
Kettering Borough Council - Environmental Health Department	May 2000	Not Applicable
Leicestershire County Council	May 2000	Not Applicable
Northamptonshire County Council	May 2000	Not Applicable
Rutland Unitary Council - Environmental Health Department	May 2000	Not Applicable
Local Authority Recorded Landfill Sites		
Corby Borough Council - Plannning Department	May 2000	Not Applicable
East Northamptonshire District Council - Community Services - Planning Department	May 2000	Not Applicable
Harborough District Council - Environmental Health Department	May 2000	Not Applicable
Kettering Borough Council - Environmental Health Department	May 2000	Not Applicable
Leicestershire County Council	May 2000	Not Applicable
Northamptonshire County Council	May 2000	Not Applicable
Rutland Unitary Council - Environmental Health Department	May 2000	Not Applicable
Potentially Infilled Land (Non-Water)		
Landmark Information Group Limited	December 1999	Not Applicable
Potentially Infilled Land (Water)		
Landmark Information Group Limited	December 1999	Not Applicable
Registered Landfill Sites		
Environment Agency - Anglian Region - Northern Area	March 2003	Not Applicable
Environment Agency - Midlands Region - Lower Trent Area	March 2003	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - Anglian Region - Northern Area	March 2003	Not Applicable
Environment Agency - Midlands Region - Lower Trent Area	March 2003	Not Applicable
Registered Waste Treatment or Disposal Sites		
Environment Agency - Anglian Region - Northern Area	March 2003	Not Applicable
Environment Agency - Midlands Region - Lower Trent Area	March 2003	Not Applicable

Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	July 2016	Bi-Annually
Explosive Sites		
Health and Safety Executive	September 2016	Bi-Annually
Notification of Installations Handling Hazardous Substances (NIHHS)		
Health and Safety Executive	November 2000	Not Applicable
Planning Hazardous Substance Enforcements		
Corby Borough Council - Plannning Department	February 2016	Annual Rolling Update
Harborough District Council	February 2016	Annual Rolling Update
Kettering Borough Council	February 2016	Annual Rolling Update
Leicestershire County Council	February 2016	Annual Rolling Update
Rutland Unitary Council - Planning Support	February 2016	Annual Rolling Update
Northamptonshire County Council	November 2011	Annual Rolling Update
East Northamptonshire District Council - Community Services - Planning Department	October 2015	Annual Rolling Update
Planning Hazardous Substance Consents		
Corby Borough Council - Plannning Department	February 2016	Annual Rolling Update
Harborough District Council	February 2016	Annual Rolling Update
Kettering Borough Council	February 2016	Annual Rolling Update
Leicestershire County Council	February 2016	Annual Rolling Update
Rutland Unitary Council - Planning Support	February 2016	Annual Rolling Update
Northamptonshire County Council	May 2013	Annual Rolling Update
East Northamptonshire District Council - Community Services - Planning Department	October 2015	Annual Rolling Update

Data Currency

Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	Not Applicable
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	October 2015	As notified
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	October 2016	Bi-Annually
BGS Urban Soil Chemistry British Geological Survey - National Geoscience Information Service	October 2015	As notified
BGS Urban Soil Chemistry Averages British Geological Survey - National Geoscience Information Service	October 2015	As notified
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011	Not Applicable
Coal Mining Affected Areas The Coal Authority - Property Searches	March 2014	As notified
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	June 2015	Annually
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2015	Annually
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	June 2015	Annually
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	As notified
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	As notified

Data Currency

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	January 2017	Quarterly
Fuel Station Entries Catalist Ltd - Experian	February 2017	Quarterly
Gas Pipelines National Grid	July 2014	Quarterly
Points of Interest - Commercial Services PointX	December 2016	Quarterly
Points of Interest - Education and Health PointX	December 2016	Quarterly
Points of Interest - Manufacturing and Production PointX	December 2016	Quarterly
Points of Interest - Public Infrastructure PointX	December 2016	Quarterly
Points of Interest - Recreational and Environmental PointX	December 2016	Quarterly
Underground Electrical Cables National Grid	December 2015	Bi-Annually
Sensitive Land Use	**Version**	**Update Cycle**
Ancient Woodland Natural England	August 2016	Bi-Annually
Areas of Outstanding Natural Beauty Natural England	January 2017	Bi-Annually
Environmentally Sensitive Areas Natural England	January 2017	Annually
Forest Parks Forestry Commission	April 1997	Not Applicable
Local Nature Reserves Natural England	January 2017	Bi-Annually
Marine Nature Reserves Natural England	January 2017	Bi-Annually
National Nature Reserves Natural England	January 2017	Bi-Annually
National Parks Natural England	February 2017	Bi-Annually
Nitrate Sensitive Areas Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	April 2016	Not Applicable
Nitrate Vulnerable Zones Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	October 2015	Annually
Ramsar Sites Natural England	January 2017	Bi-Annually
Sites of Special Scientific Interest Natural England	January 2017	Bi-Annually
Special Areas of Conservation Natural England	January 2017	Bi-Annually
Special Protection Areas Natural England	January 2017	Bi-Annually
World Heritage Sites English Heritage - National Monument Record Centre	September 2015	Bi-Annually

Data Suppliers

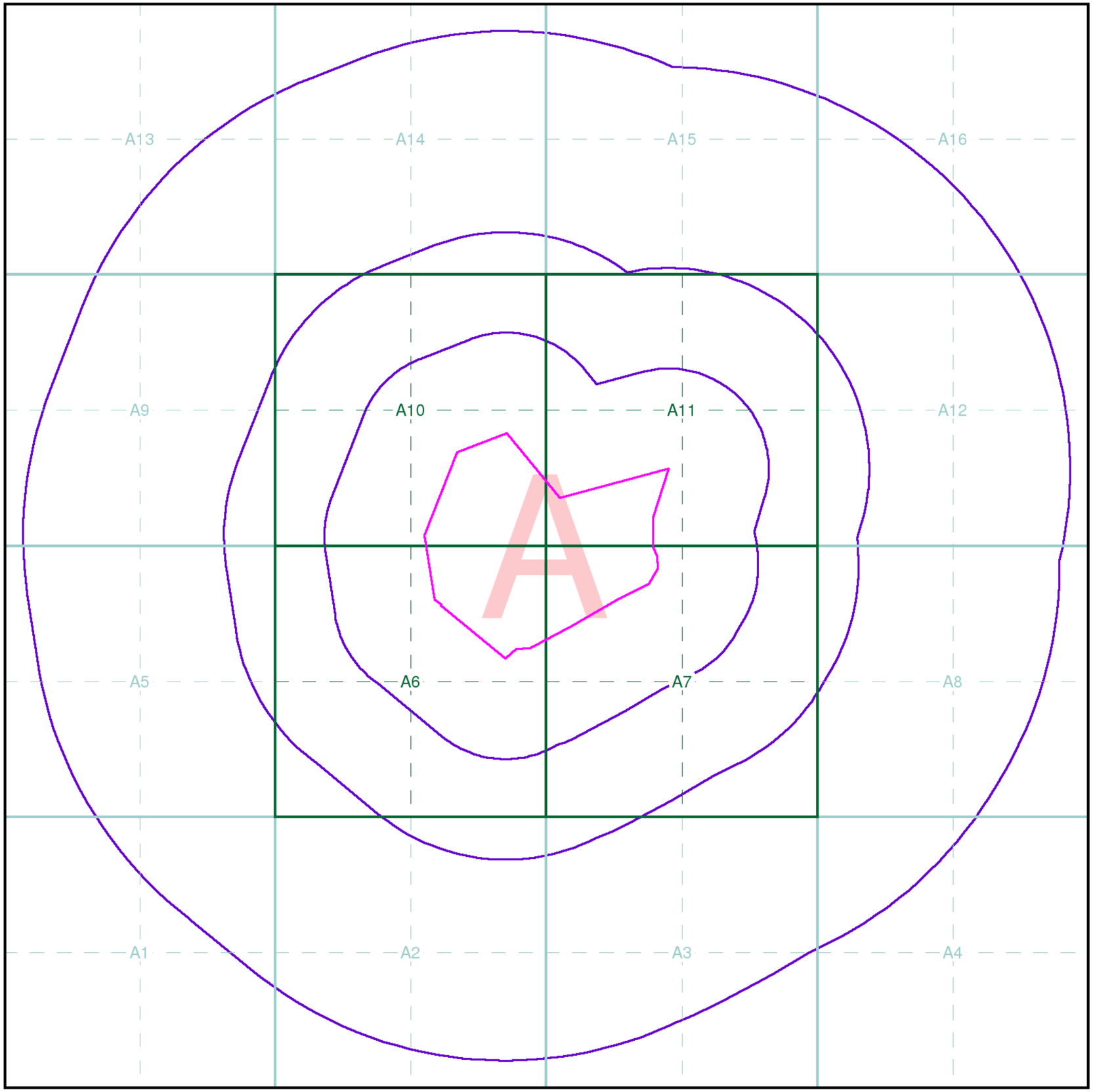
A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	
Centre for Ecology and Hydrology	
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Peter Brett Associates	

Useful Contacts

Contact	Name and Address	Contact Details
2	**British Geological Survey - Enquiry Service** British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
3	**Environment Agency - National Customer Contact Centre (NCCC)** PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
4	**Corby Borough Council - Environmental Health Department** Dean House, New Post Office Square, Corby, Northamptonshire, NN17 1GD	Telephone: 01536 464051 Fax: 01536 464644 Website: www.corby.gov.uk
5	**Corby Borough Council - Plannning Department** Civic Centre, George Street, Corby, Northamptonshire, NN17 1QB	Telephone: 01536 402551 Fax: 01536 400200 Website: www.corby.gov.uk
6	**East Northamptonshire District Council - Community Services - Planning Department** East Northampton House, Cedar Drive, Thrapston, Kettering, Northamptonshire, NN14 4LZ	Telephone: 01832 742000 Fax: 01832 000000 Website: www.east-northamptonshire.gov.uk
7	**Northamptonshire County Council** County Hall, Northampton, Northamptonshire, NN1 1DN	Telephone: 0300 126 1000 Website: www.northamptonshire.gov.uk
8	**Health and Safety Executive** 5S.2 Redgrave Court, Merton Road, Bootle, L20 7HS	Website: www.hse.gov.uk
9	**PointX** 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
10	**Landmark Information Group Limited** Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9966 Fax: 0844 844 9951 Email: helpdesk@landmark.co.uk Website: www.landmark.co.uk
11	**Natural England** County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
12	**Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)** Government Buildings, Otley Road, Lawnswood, Leeds, West Yorkshire, LS16 5QT	Telephone: 0113 2613333 Fax: 0113 230 0879
13	**Environment Agency - Head Office** Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
-	**Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards** Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	**Landmark Information Group Limited** Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 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.



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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:

Map data
British Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL
Environment Agency
NATURAL ENGLAND

Envirocheck reports are compiled from 136 different sources of data.

Client Details

Ms R Brown, Soiltechnics, Cedar Barn, White Lodge, Walgrave, Northampton, NN6 9PY

Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490170, 290860
Site Area (Ha):	21.24
Search Buffer (m):	1000

Site Details

Rockingham Enterprise Area

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

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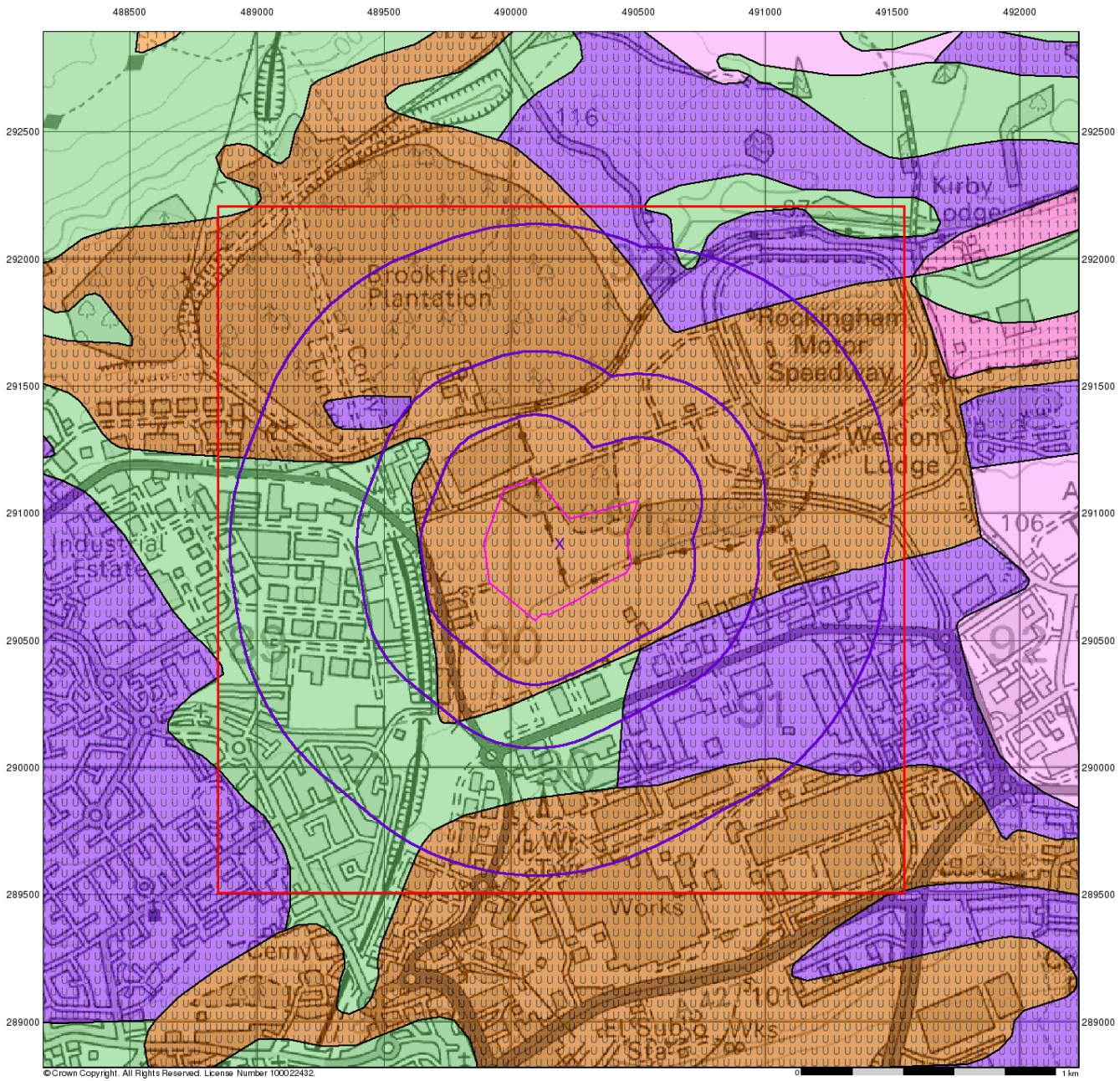

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Groundwater Vulnerability

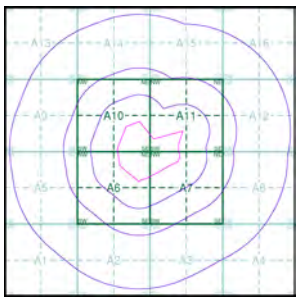
General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes	Soil Classes
Major Aquifer (Highly Permeable)	High (H) 1, 2, 3, U
	Intermediate (I) 1, 2
	Low
Minor Aquifer (Variably Permeable)	High (H) 1, 2, 3, U
	Intermediate (I) 1, 2
	Low
Non Aquifer (Negligibly Permeable)	
Water or Sea	
Drift Deposit	

Site Sensitivity Context Map - Slice A



Order Details

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Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	1000

Site Details

Rockingham Enterprise Area

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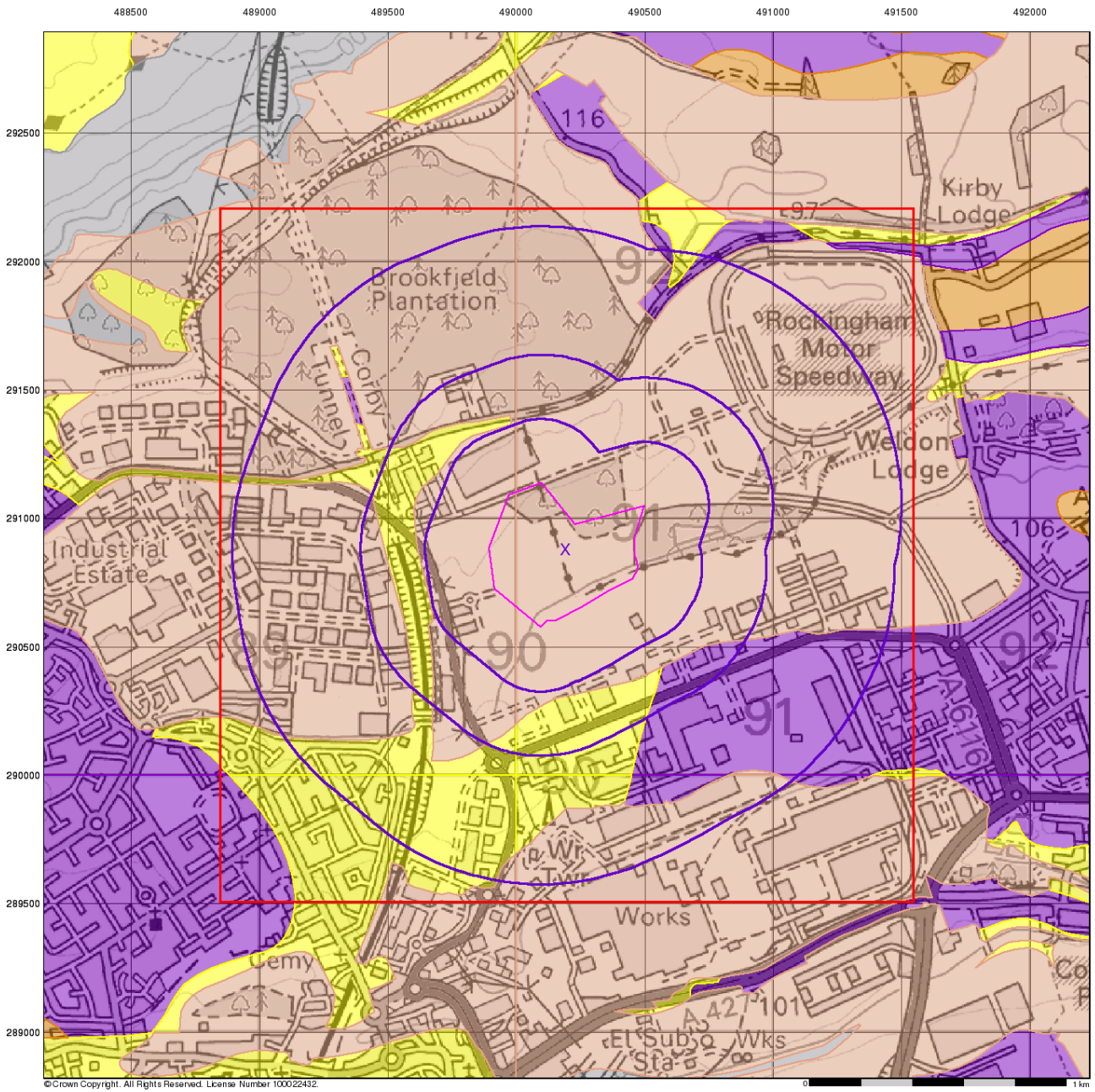

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Bedrock Aquifer Designation

General

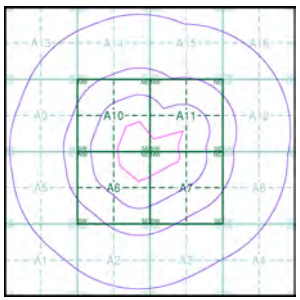
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



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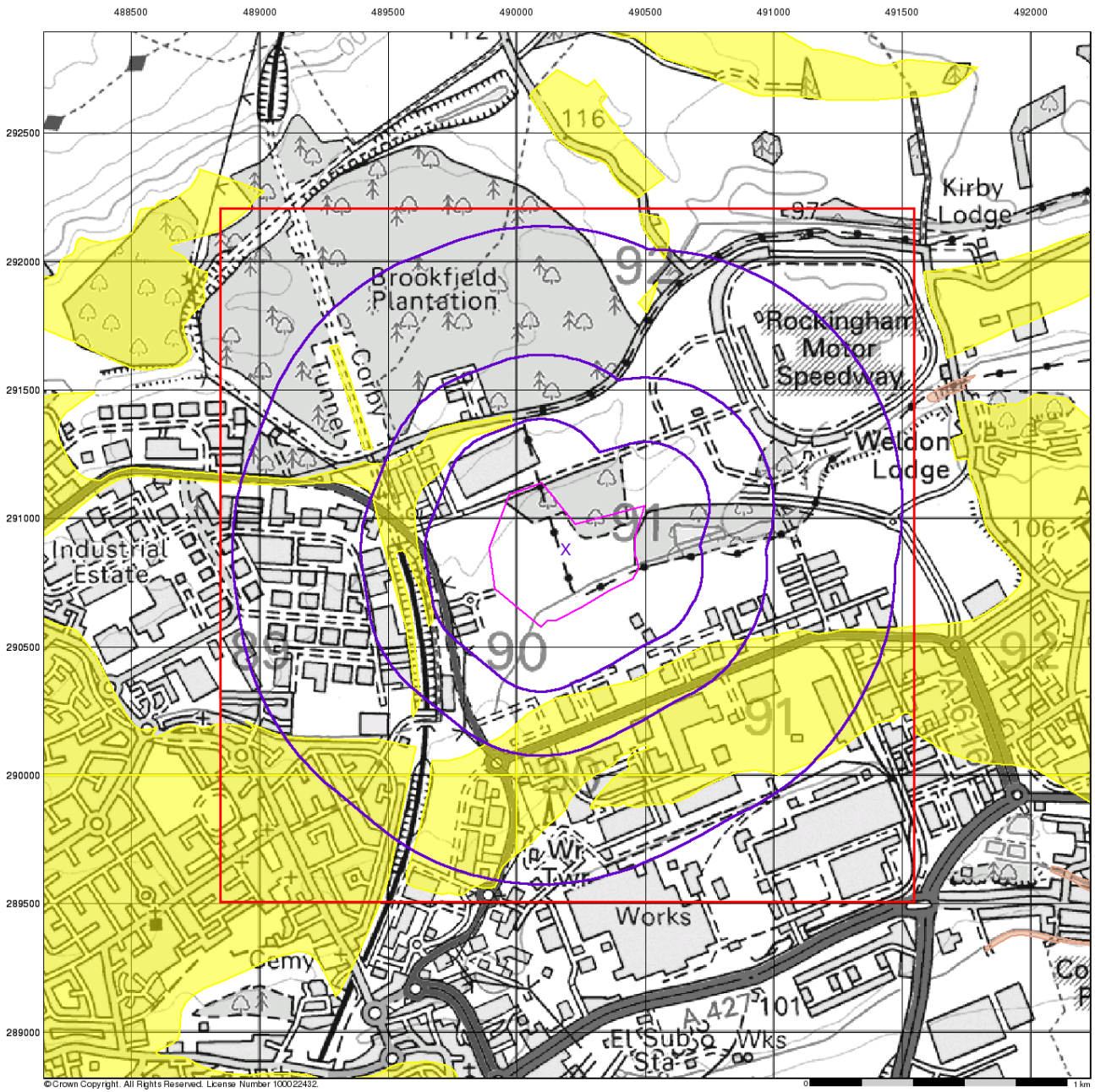

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Superficial Aquifer Designation

General

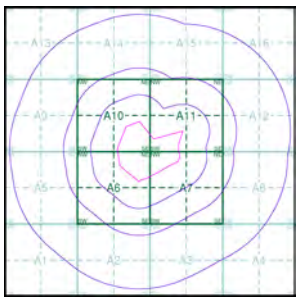
Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



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Site Details

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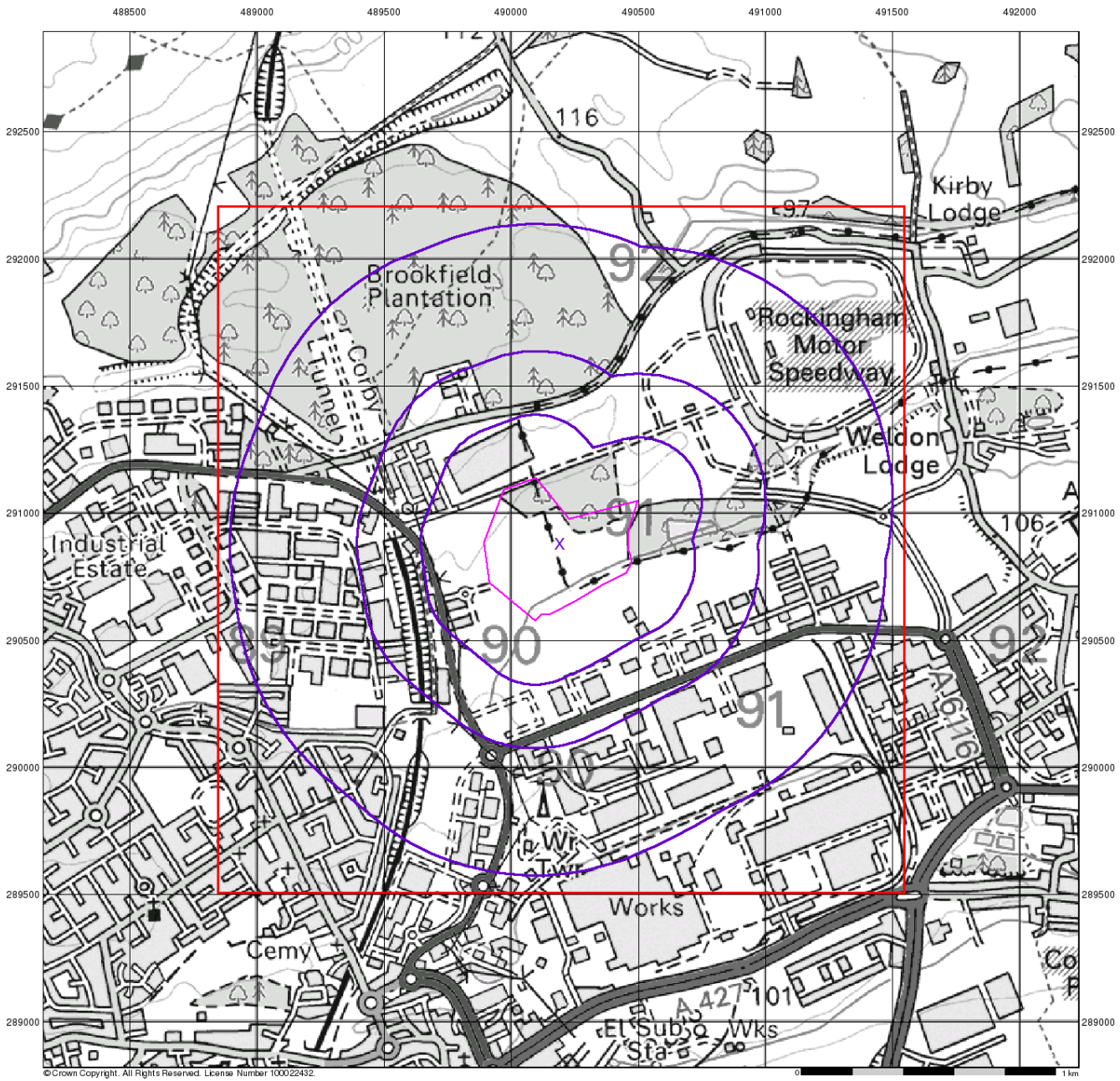

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Source Protection Zones

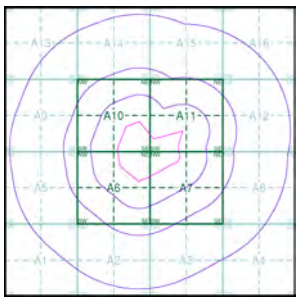
General

Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)
- Source Protection Zone Borehole

Site Sensitivity Context Map - Slice A



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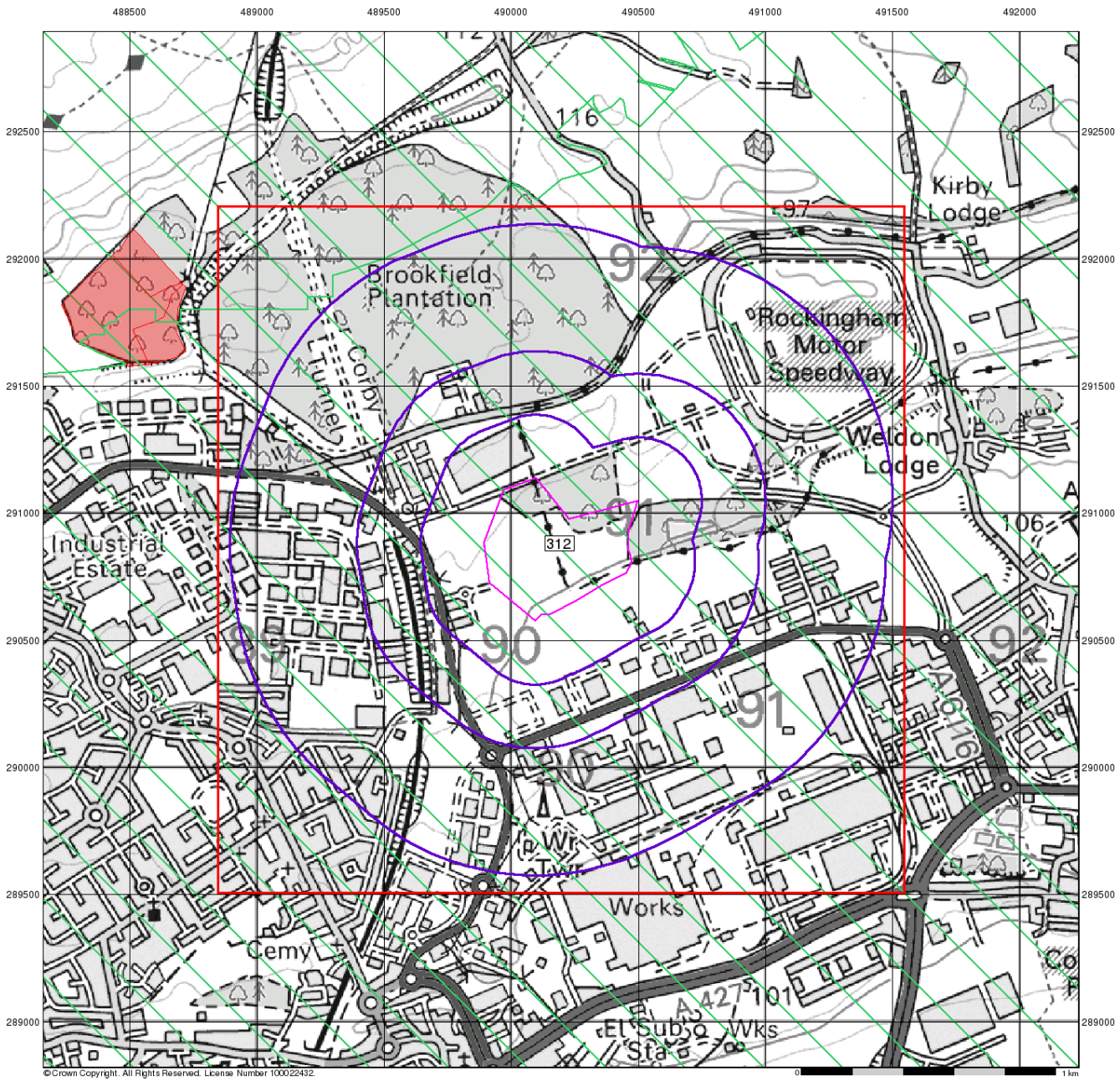

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Sensitive Land Uses

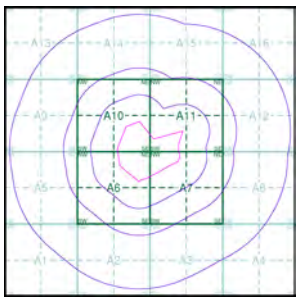
General

Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Sensitive Land Uses

- Ancient Woodland
- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Sites

Site Sensitivity Context Map - Slice A



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Site Details

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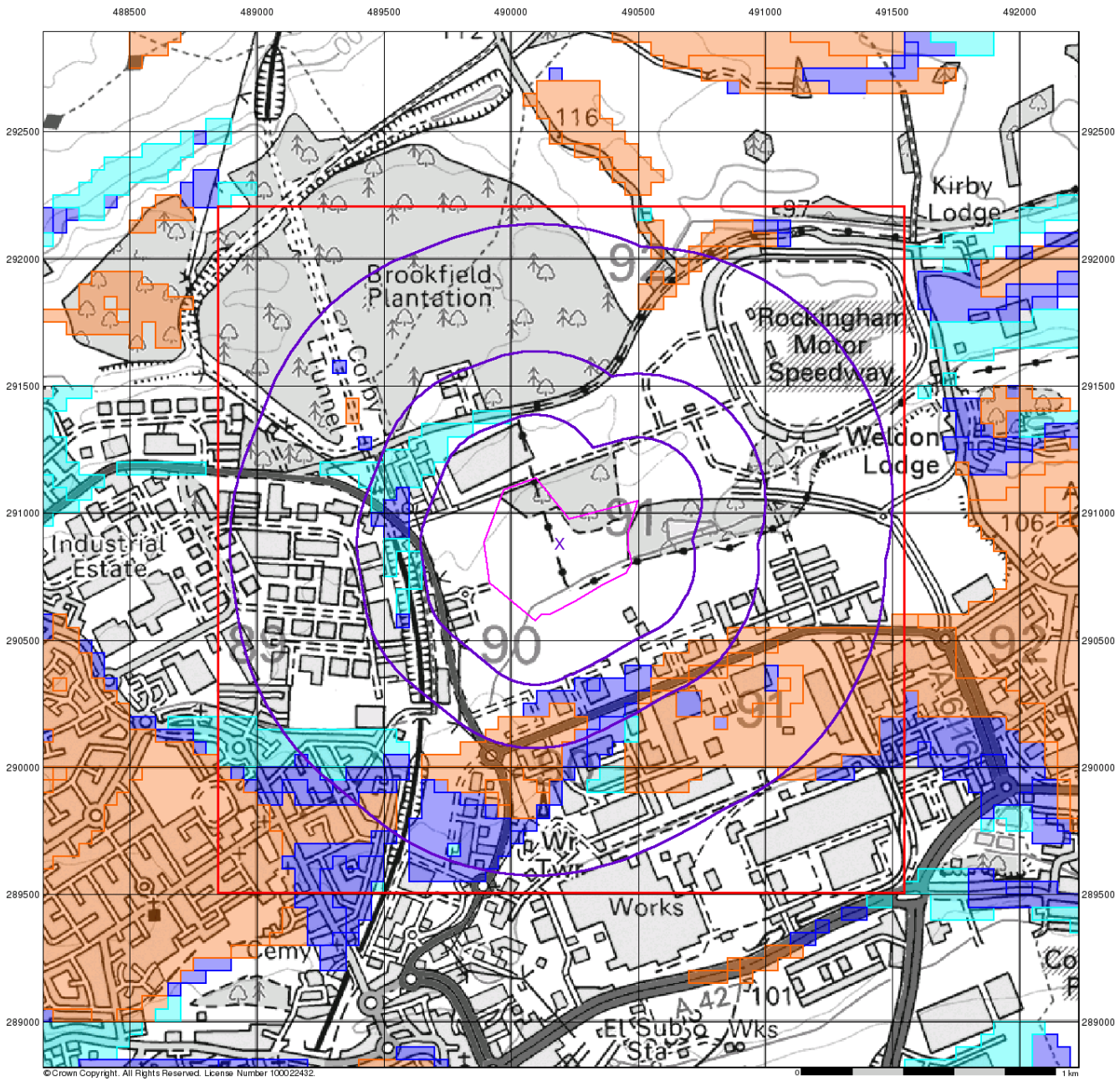

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BGS Flood GFS Data

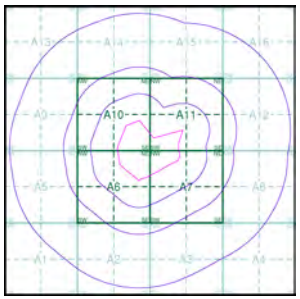
General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice A



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Site Details

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Geology 1:50,000 Maps Legends

Artificial Ground and Landslip

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	WMGR	Infilled Ground	Artificial Deposit	Cenozoic - Cenozoic
	MGR	Made Ground (Undivided)	Artificial Deposit	Holocene - Holocene
	SLIP	Landslide Deposit	Unknown/Unclassified Entry	Quaternary - Quaternary

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Flandrian - Flandrian
	ODT	Oadby Member	Diamicton	Anglian - Anglian

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	LLL	Lower Lincolnshire Limestone Member	Limestone	Bajocian - Bajocian
	RLD	Rutland Formation	Argillaceous Rocks with Subordinate Sandstone and Limestone	Bathonian - Bajocian
	ULL	Upper Lincolnshire Limestone Member	Limestone	Bajocian - Bajocian
	RLD	Rutland Formation	Mudstone	Bathonian - Bajocian
	NS	Northampton Sand Formation	Ironstone, Ooidal	Aalenian - Aalenian
	GRF	Grantham Formation	Sandstone, Siltstone and Mudstone	Aalenian - Aalenian
	WHM	Whitby Mudstone Formation	Mudstone	Toarcian - Toarcian
	WHM	Whitby Mudstone Formation	Limestone	Toarcian - Toarcian
	DYS	Dyrham Formation	Siltstone and Mudstone, Interbedded	Pliensbachian - Pliensbachian
	CHAM	Charmouth Mudstone Formation	Mudstone	Pliensbachian - Sinemurian
		Faults		

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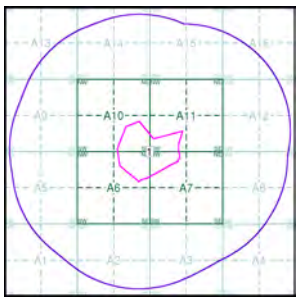
Geology 1:50,000 Maps

This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.
The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

Geology 1:50,000 Maps Coverage

Map ID:	**1**
Map Sheet No:	**171**
Map Name:	**Kettering**
Map Date:	**2002**
Bedrock Geology:	**Available**
Superficial Geology:	**Available**
Artificial Geology:	**Available**
Faults:	**Not Supplied**
Landslip:	**Available**
Rock Segments:	**Not Supplied**

Geology 1:50,000 Maps - Slice A

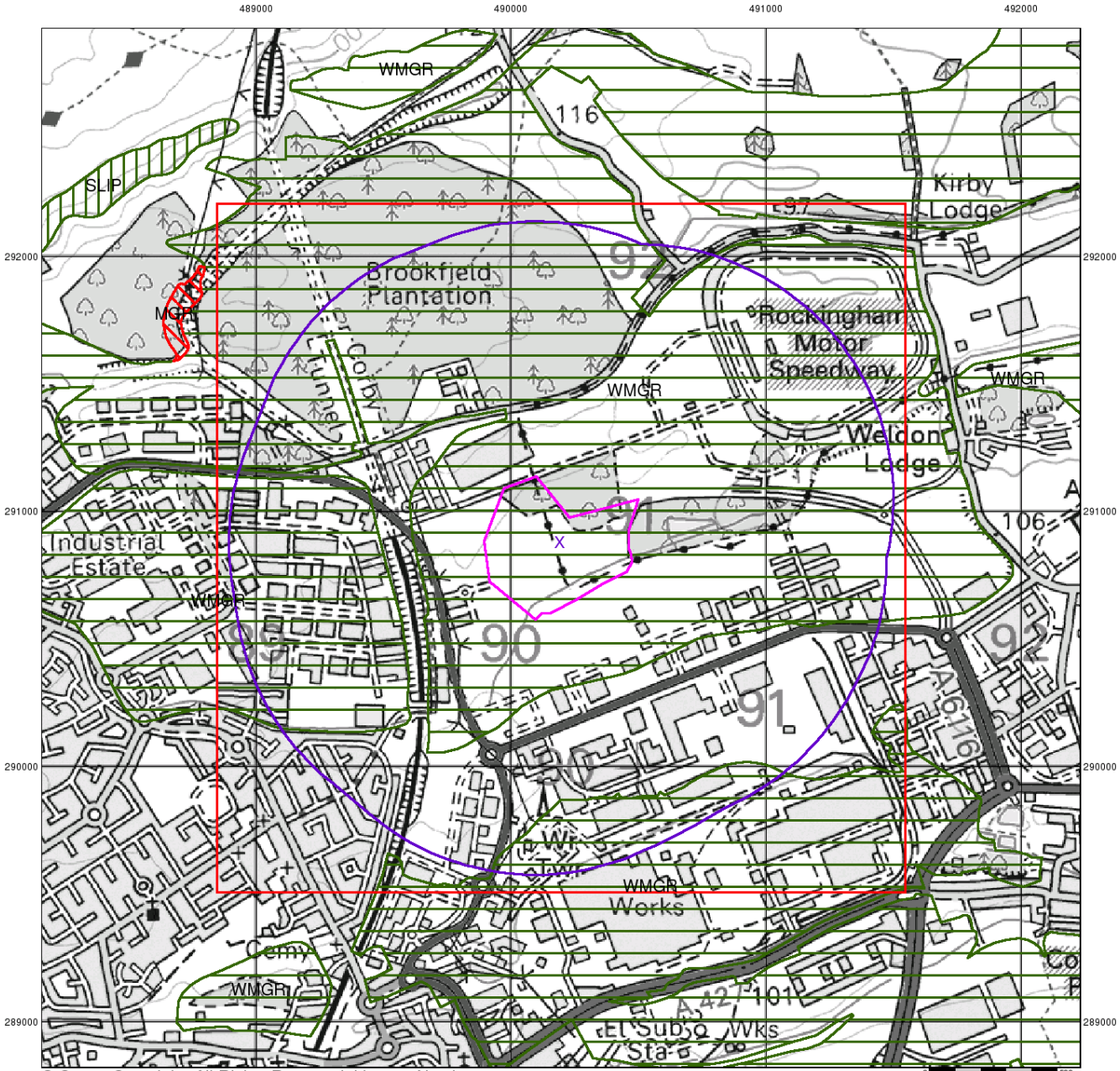


Order Details:

Order Number:	118207619_1_1
Customer Reference:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	1000

Site Details:

Rockingham Enterprise Area



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Artificial Ground and Landslip

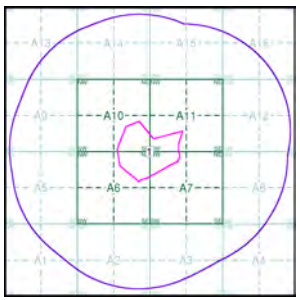
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

Artificial ground includes:

- Made ground - man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground - areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground - areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground - areas where the surface has been reshaped.
- Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

Artificial Ground and Landslip Map - Slice A



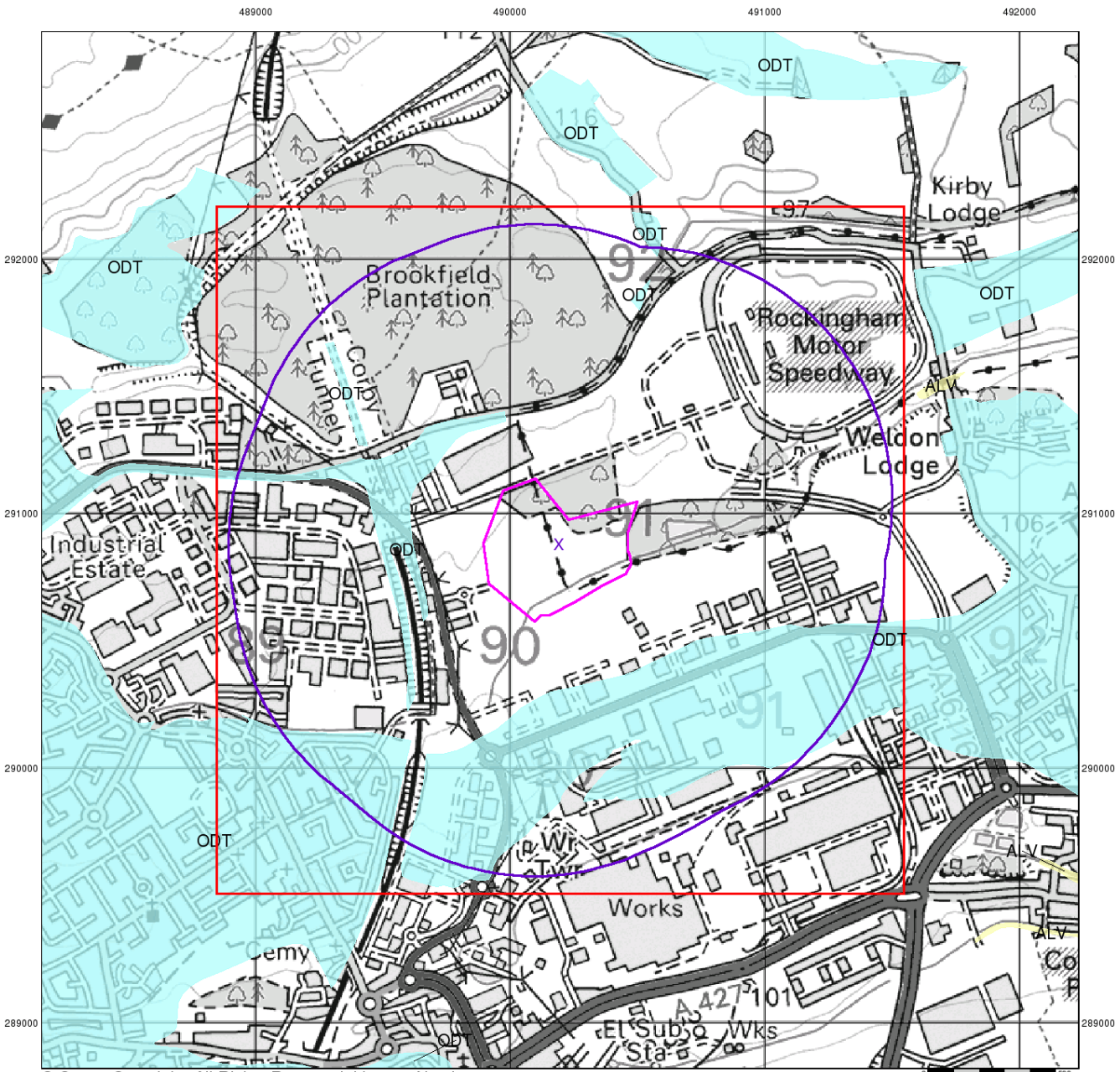
Order Details:

Order Number:	118207619_1_1
Customer Reference:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	1000

Site Details:

Rockingham Enterprise Area

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



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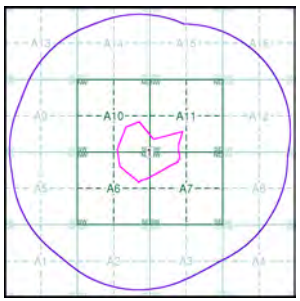
Superficial Geology

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

Superficial Geology Map - Slice A



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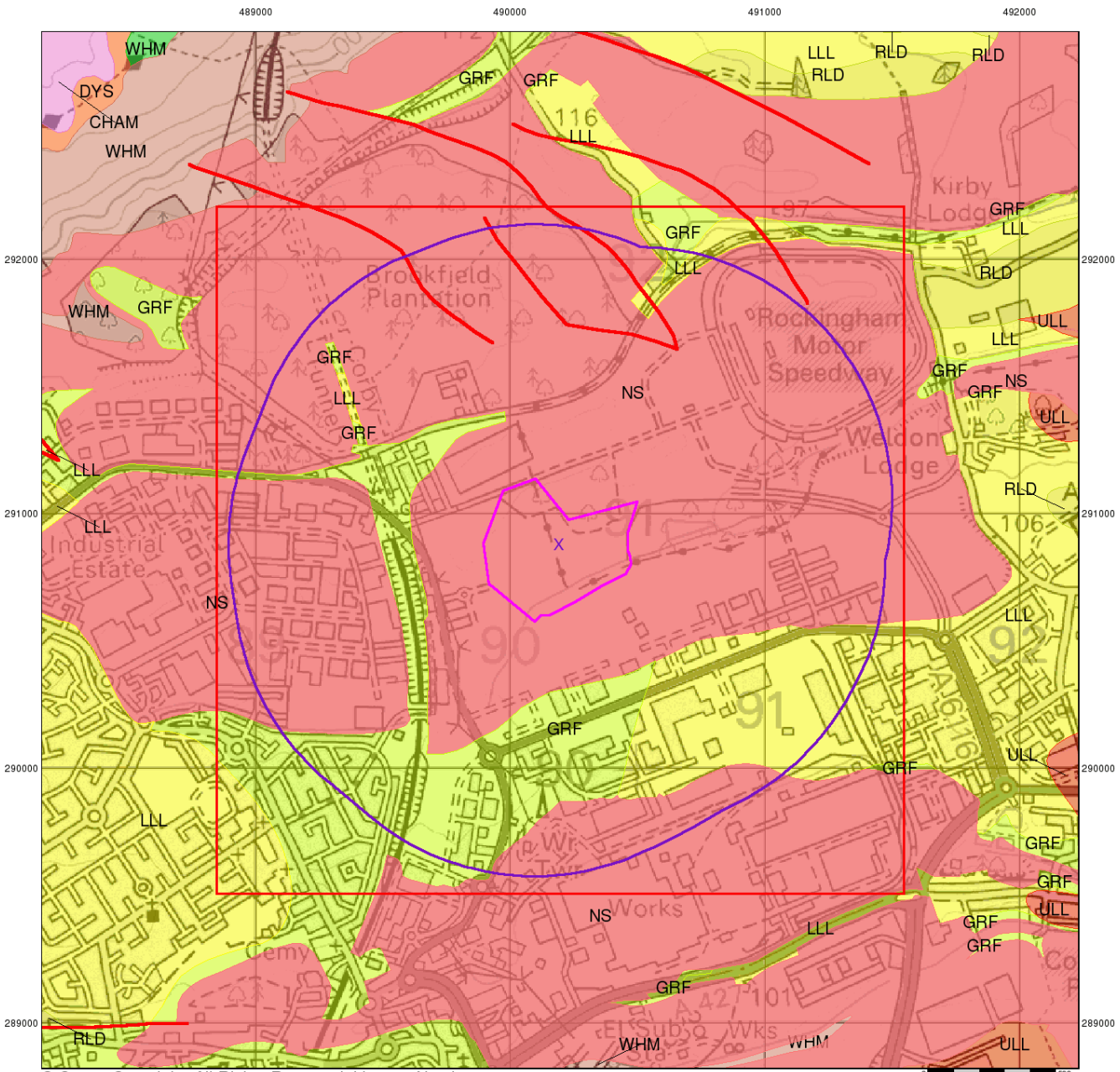

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Bedrock and Faults

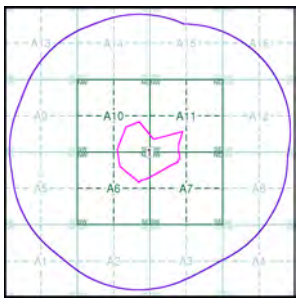
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

Bedrock and Faults Map - Slice A



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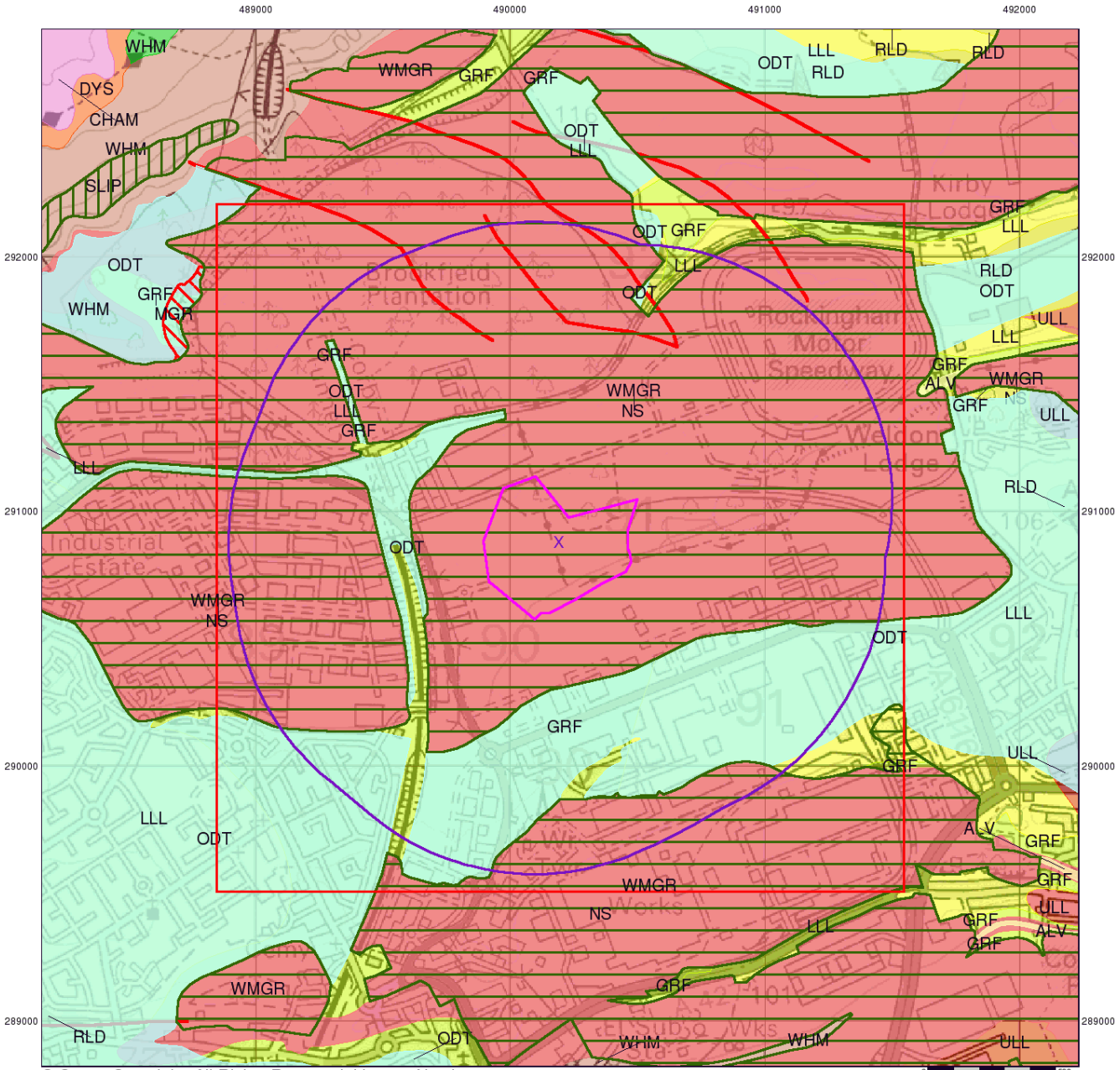

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Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

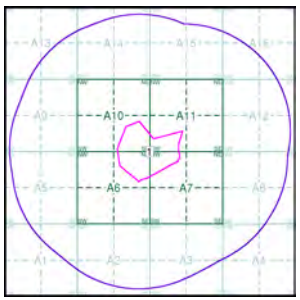
Additional Information

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

Contact

British Geological Survey
Kingsley Dunham Centre
Keyworth
Nottingham
NG12 5GG
Telephone: 0115 936 3143
Fax: 0115 936 3276
email: enquiries@bgs.ac.uk
website: www.bgs.ac.uk

Combined Geology Map - Slice A



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Site Area (Ha):	21.24
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Site Details:

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Historical Mapping Legends

Ordnance Survey County Series 1:10,560

Gravel Pit
Sand Pit
Other Pits
Quarry
Shingle
Orchard
Osiers
Reeds
Marsh
Mixed Wood
Deciduous
Brushwood
Fir
Furze
Rough Pasture
Arrow denotes flow of water
Trigonometrical Station
Site of Antiquities
Bench Mark
Pump, Guide Post, Signal Post
Well, Spring, Boundary Post
·285 Surface Level
Sketched Contour
Instrumental Contour
Main Roads
Fenced
Un-Fenced
Minor Roads
Fenced
Un-Fenced
Sunken Road
Raised Road
Road over Railway
Railway over River
Railway over Road
Level Crossing
Road over River or Canal
Road over Stream
Road over Stream
County Boundary (Geographical)
County & Civil Parish Boundary
Administrative County & Civil Parish Boundary
Co. Boro. Bdy. County Borough Boundary (England)
Co. Burgh Bdy. County Burgh Boundary (Scotland)
R.D. Bdy. Rural District Boundary
Civil Parish Boundary

Ordnance Survey Plan 1:10,000

Chalk Pit, Clay Pit or Quarry
Gravel Pit
Sand Pit
Disused Pit or Quarry
Refuse or Slag Heap
Lake, Loch or Pond
Dunes
Boulders
Coniferous Trees
Non-Coniferous Trees
Orchard
Scrub
Coppice
Bracken
Heath
Rough Grassland
Marsh
Reeds
Saltings
Building
Direction of Flow of Water
Shingle
Sand
Glasshouse
Pylon
Electricity Transmission Line
Pole
Sloping Masonry
Cutting
Embankment
Standard Gauge Multiple Track
Standard Gauge Single Track
Road Under
Road Over
Level Crossing
Foot Bridge
Siding, Tramway or Mineral Line
Narrow Gauge
Geographical County
Administrative County, County Borough or County of City
Municipal Borough, Urban or Rural District, Burgh or District Council
Borough, Burgh or County Constituency
Shown only when not coincident with other boundaries
Civil Parish
Shown alternately when coincidence of boundaries occurs

BP, BS	Boundary Post or Stone	Pol Sta	Police Station
Ch	Church	PO	Post Office
CH	Club House	PC	Public Convenience
F E Sta	Fire Engine Station	PH	Public House
FB	Foot Bridge	SB	Signal Box
Fn	Fountain	Spr	Spring
GP	Guide Post	TCB	Telephone Call Box
MP	Mile Post	TCP	Telephone Call Post
MS	Mile Stone	W	Well

1:10,000 Raster Mapping

Gravel Pit
Refuse tip or slag heap
Rock
Rock (scattered)
Boulders
Boulders (scattered)
Shingle
Mud
Sand
Sand Pit
Slopes
Top of cliff
General detail
Underground detail
Overhead detail
Narrow gauge railway
Multi-track railway
Single track railway
County boundary (England only)
Civil, parish or community boundary
District, Unitary, Metropolitan, London Borough boundary
Constituency boundary
Area of wooded vegetation
Non-coniferous trees
Non-coniferous trees (scattered)
Coniferous trees
Coniferous trees (scattered)
Positioned tree
Orchard
Coppice or Osiers
Rough Grassland
Heath
Scrub
Marsh, Salt Marsh or Reeds
Water feature
Flow arrows
MHW(S) Mean high water (springs)
MLW(S) Mean low water (springs)
Telephone line (where shown)
Electricity transmission line (with poles)
BM 123.45 m Bench mark (where shown)
Triangulation station
Point feature (e.g. Guide Post or Mile Stone)
Pylon, flare stack or lighting tower
Site of (antiquity)
Glasshouse
General Building
Important Building

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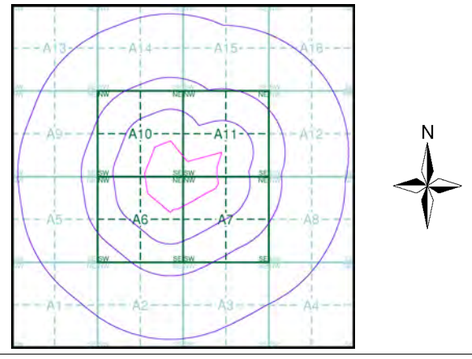
Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Northamptonshire	1:10,560	1885	2
Northamptonshire	1:10,560	1901	3
Northamptonshire	1:10,560	1901	4
Northamptonshire	1:10,560	1938 - 1950	5
Northamptonshire	1:10,560	1952	6
Ordnance Survey Plan	1:10,000	1958	7
Ordnance Survey Plan	1:10,000	1967 - 1968	8
Ordnance Survey Plan	1:10,000	1974 - 1975	9
Ordnance Survey Plan	1:10,000	1982 - 1987	10
Ordnance Survey Plan	1:10,000	1988	11
Ordnance Survey Plan	1:10,000	1992	12
10K Raster Mapping	1:10,000	1999	13
10K Raster Mapping	1:10,000	2006	14
VectorMap Local	1:10,000	2017	15

Historical Map - Slice A



Order Details

Order Number: 118207619_1_1
Customer Ref: STP3966D
National Grid Reference: 490190, 290880
Slice: A
Site Area (Ha): 21.24
Search Buffer (m): 1000

Site Details

Rockingham Enterprise Area

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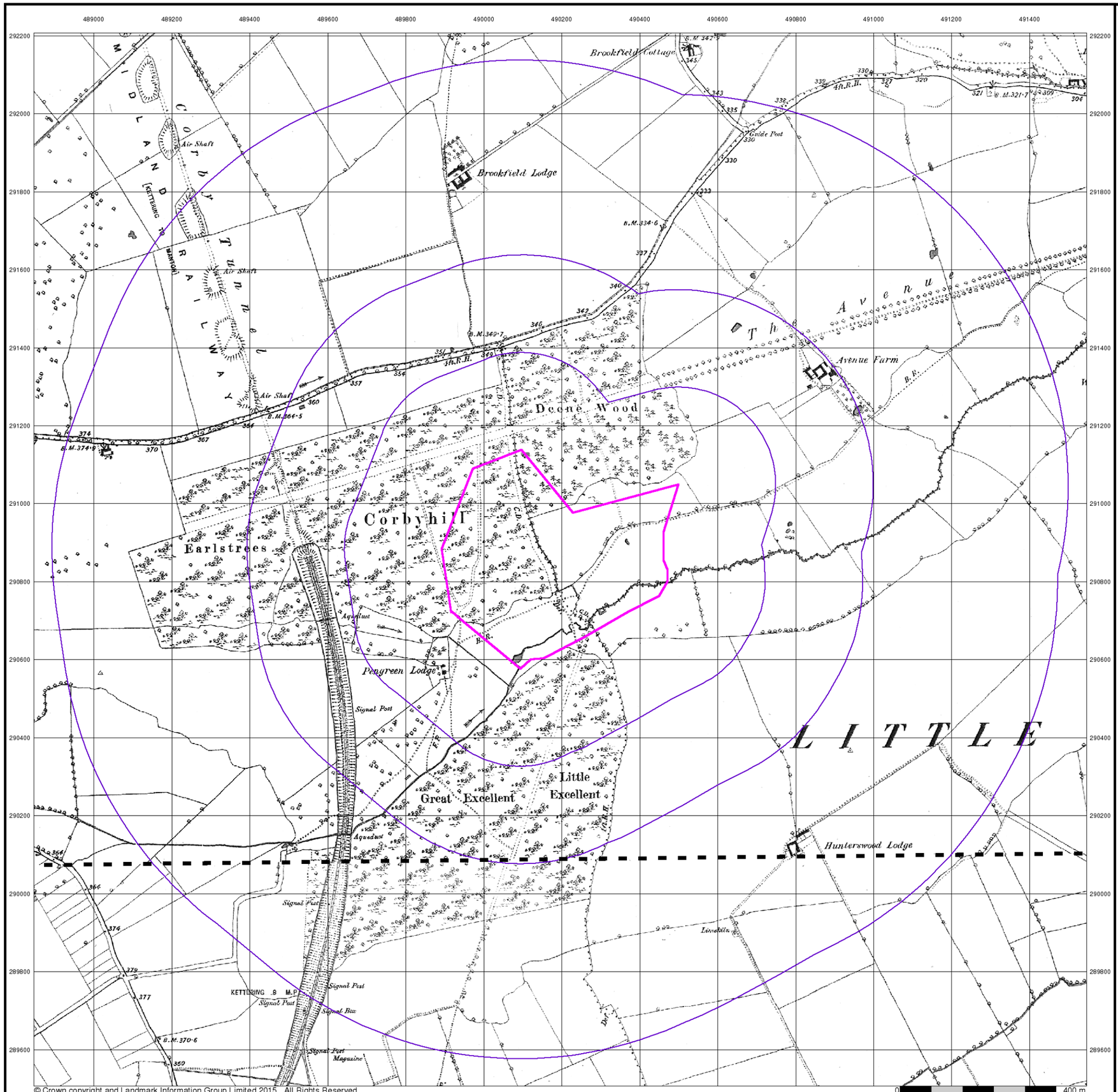

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Northamptonshire

Published 1885

Source map scale - 1:10,560

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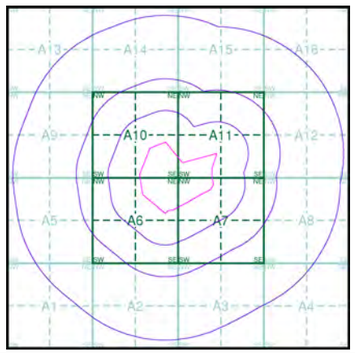
Map Name(s) and Date(s)

011SE
1885
1:10,560

017NE
1885
1:10,560

Historical Map - Slice A



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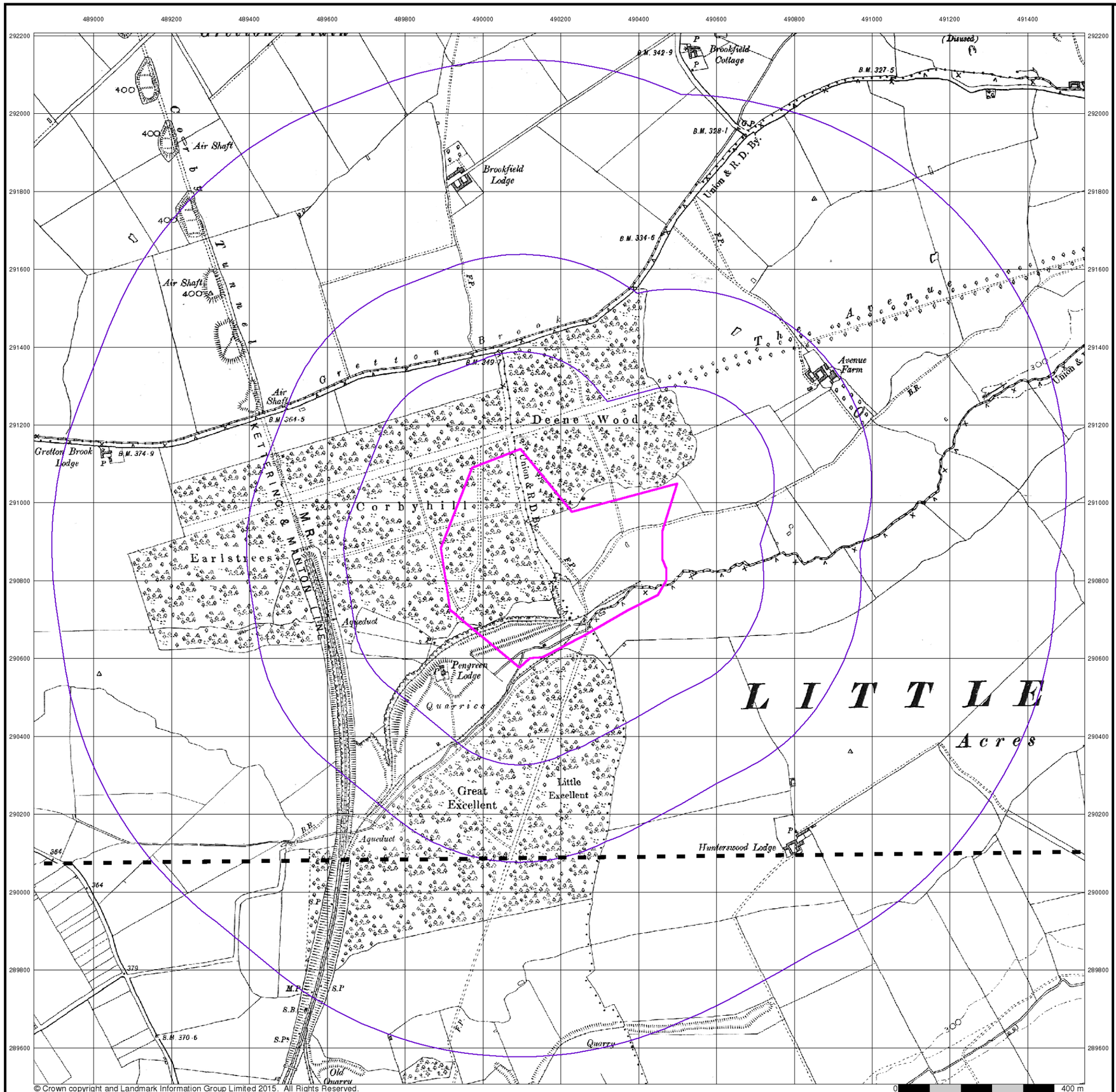

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Northamptonshire

Published 1901

Source map scale - 1:10,560

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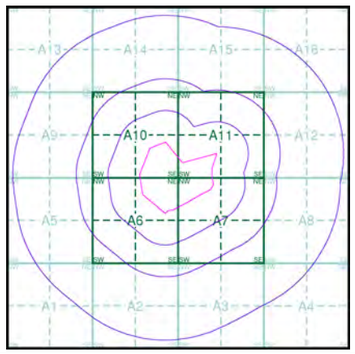
Map Name(s) and Date(s)

011SE
1901
1:10,560

017NE
1901
1:10,560

Historical Map - Slice A



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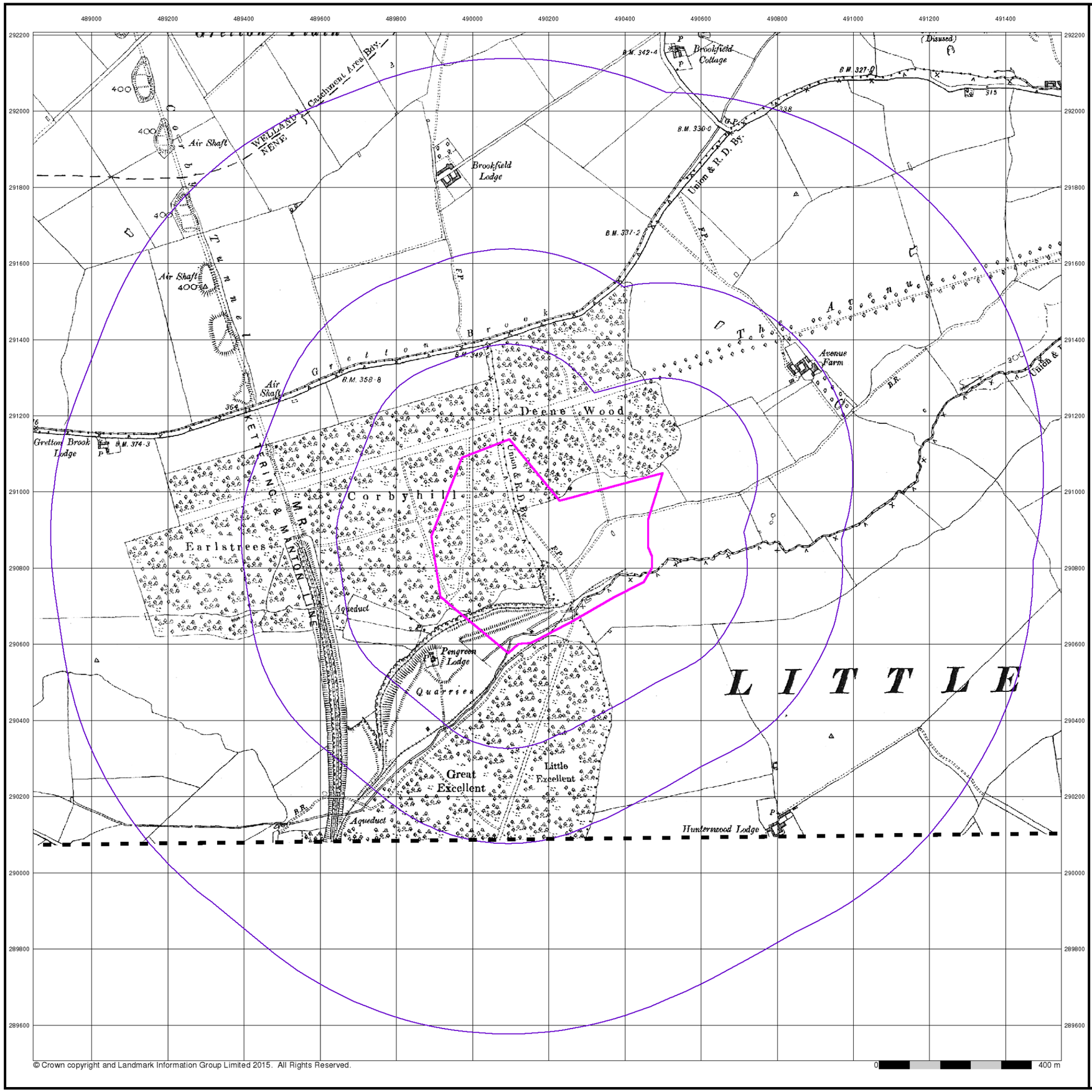

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Northamptonshire

Published 1901

Source map scale - 1:10,560

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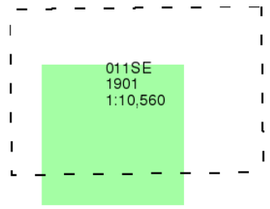
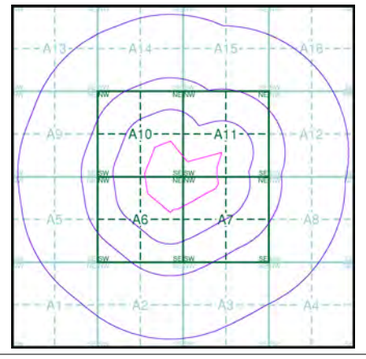


Historical Map - Slice A



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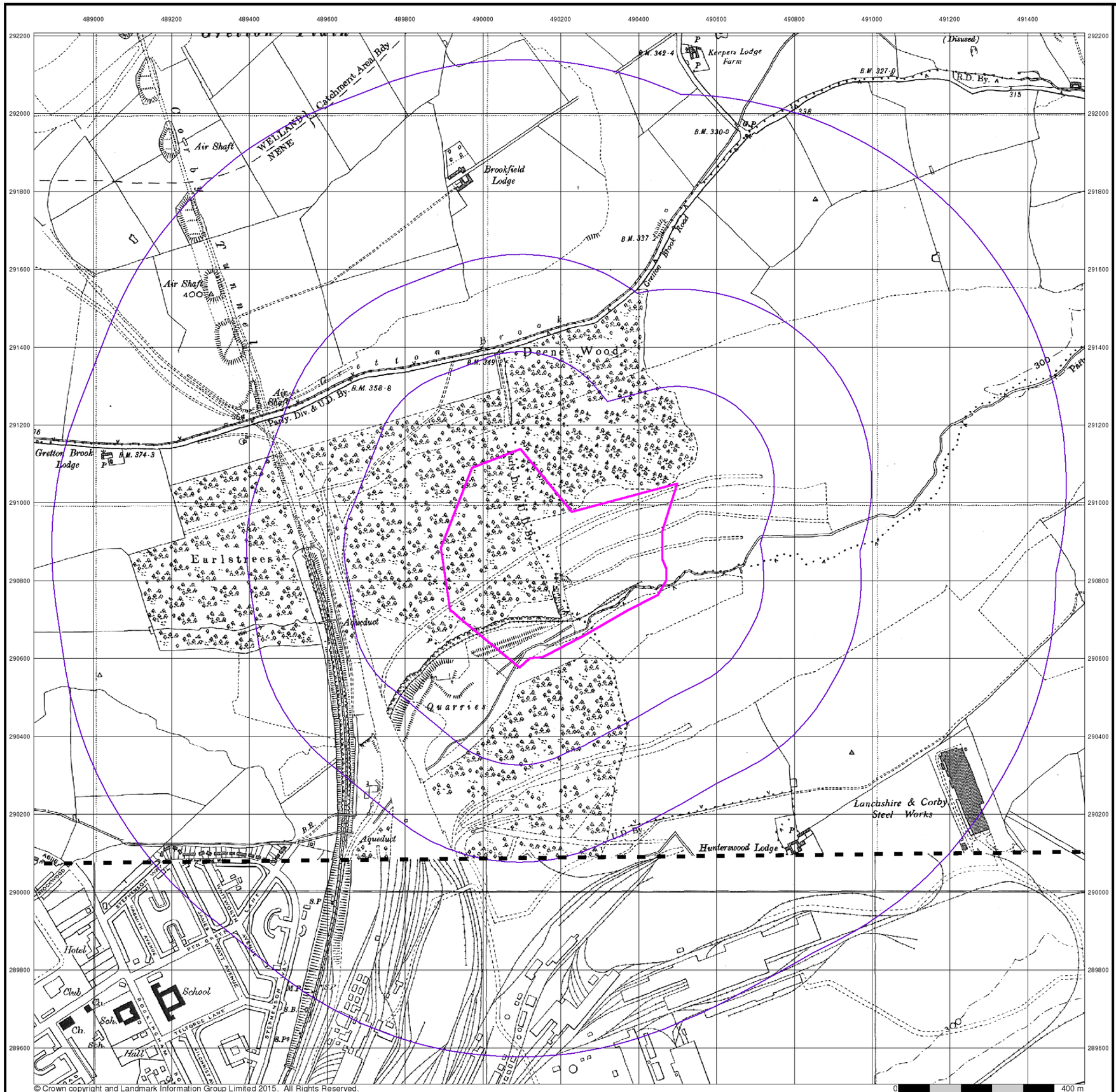

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Published 1938 - 1950

Source map scale - 1:10,560

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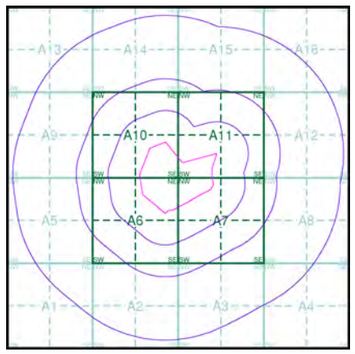
Map Name(s) and Date(s)

011SE
1950
1:10,560

017NE
1938
1:10,560

Historical Map - Slice A



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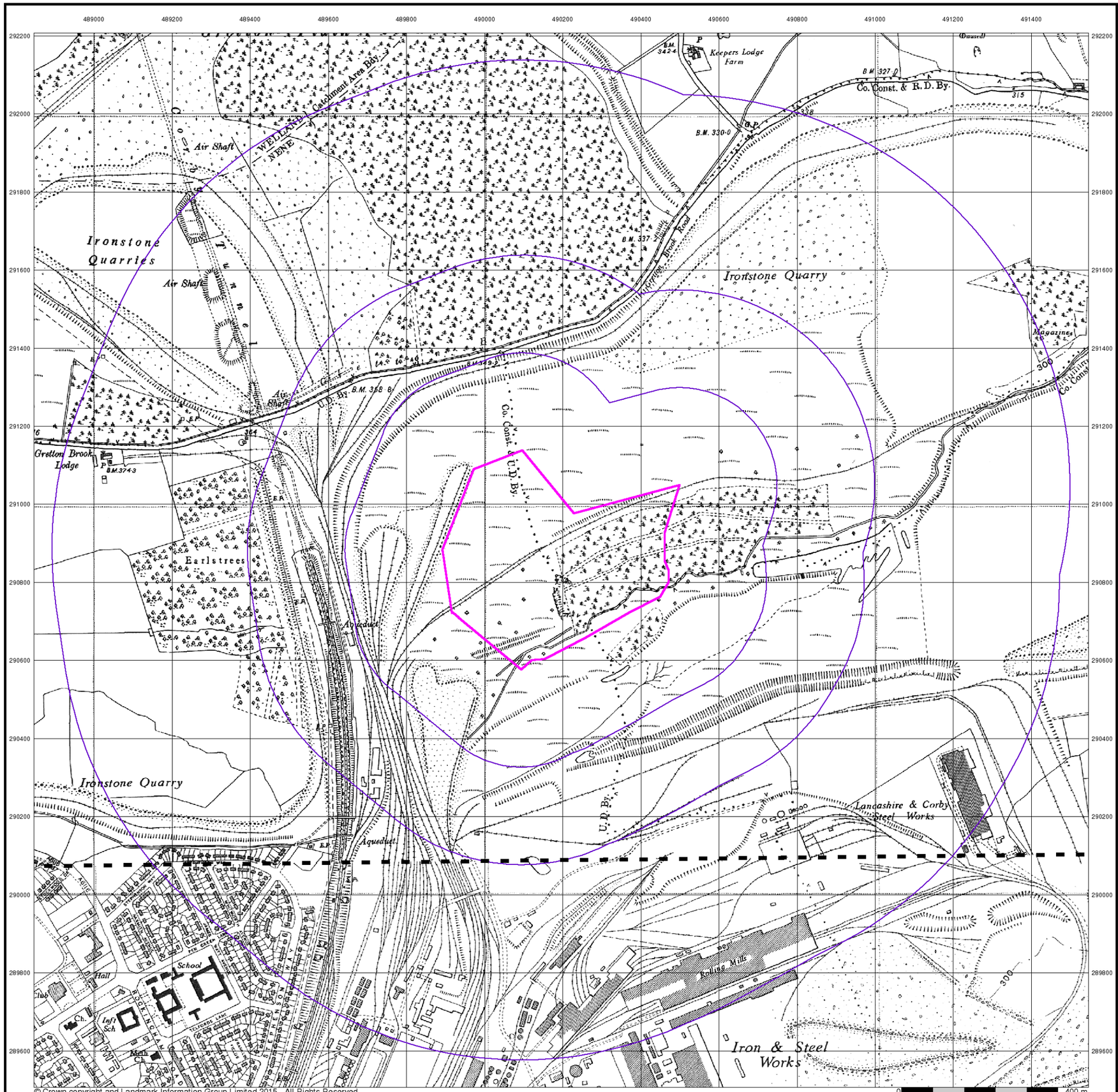

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Northamptonshire

Published 1952

Source map scale - 1:10,560

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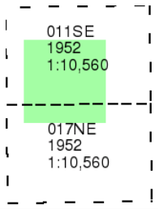
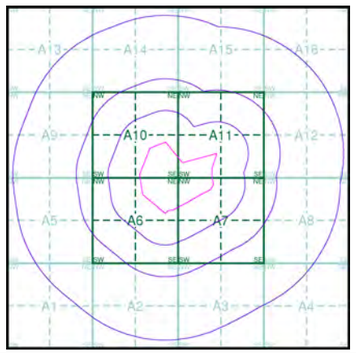
Map Name(s) and Date(s)



Historical Map - Slice A



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Ordnance Survey Plan

Published 1958

Source map scale - 1:10,000

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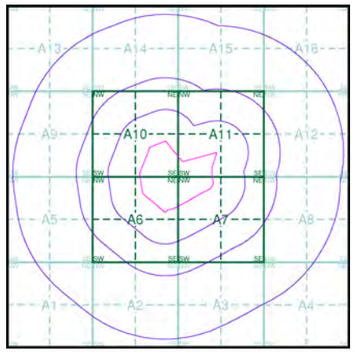
Map Name(s) and Date(s)

SP89SE 1958 1:10,560	SP99SW 1958 1:10,560
SP88NE 1958 1:10,560	SP98NW 1958 1:10,560

Historical Map - Slice A



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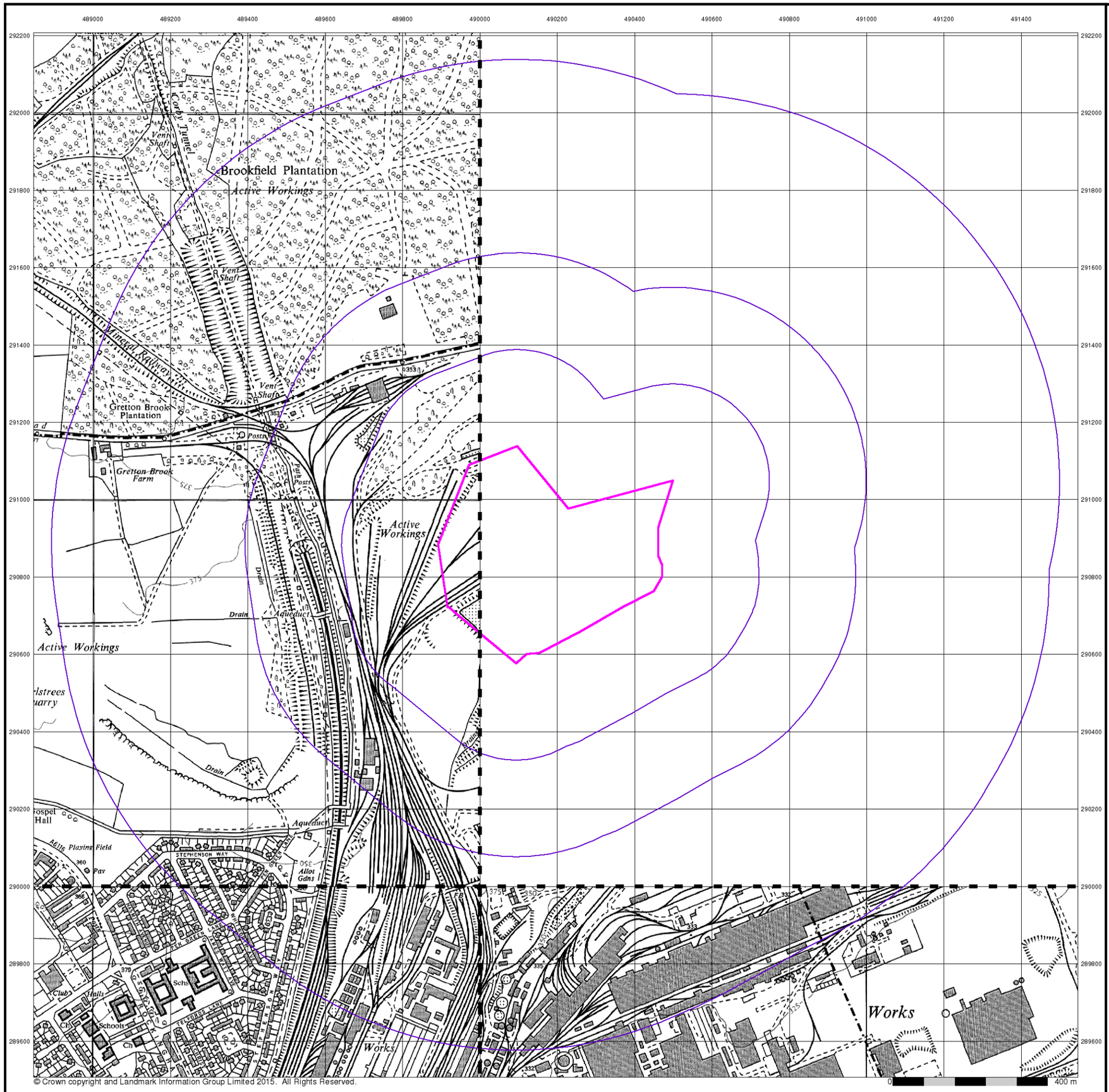

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Ordnance Survey Plan

Published 1967 - 1968

Source map scale - 1:10,000

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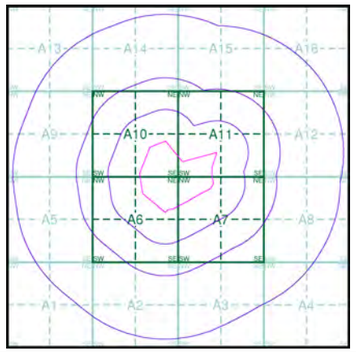
Map Name(s) and Date(s)

SP89SE
1968
1:10,560

SP88NE
1968
1:10,560

SP98NW
1967
1:10,560

Historical Map - Slice A



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	1000

Site Details

Rockingham Enterprise Area

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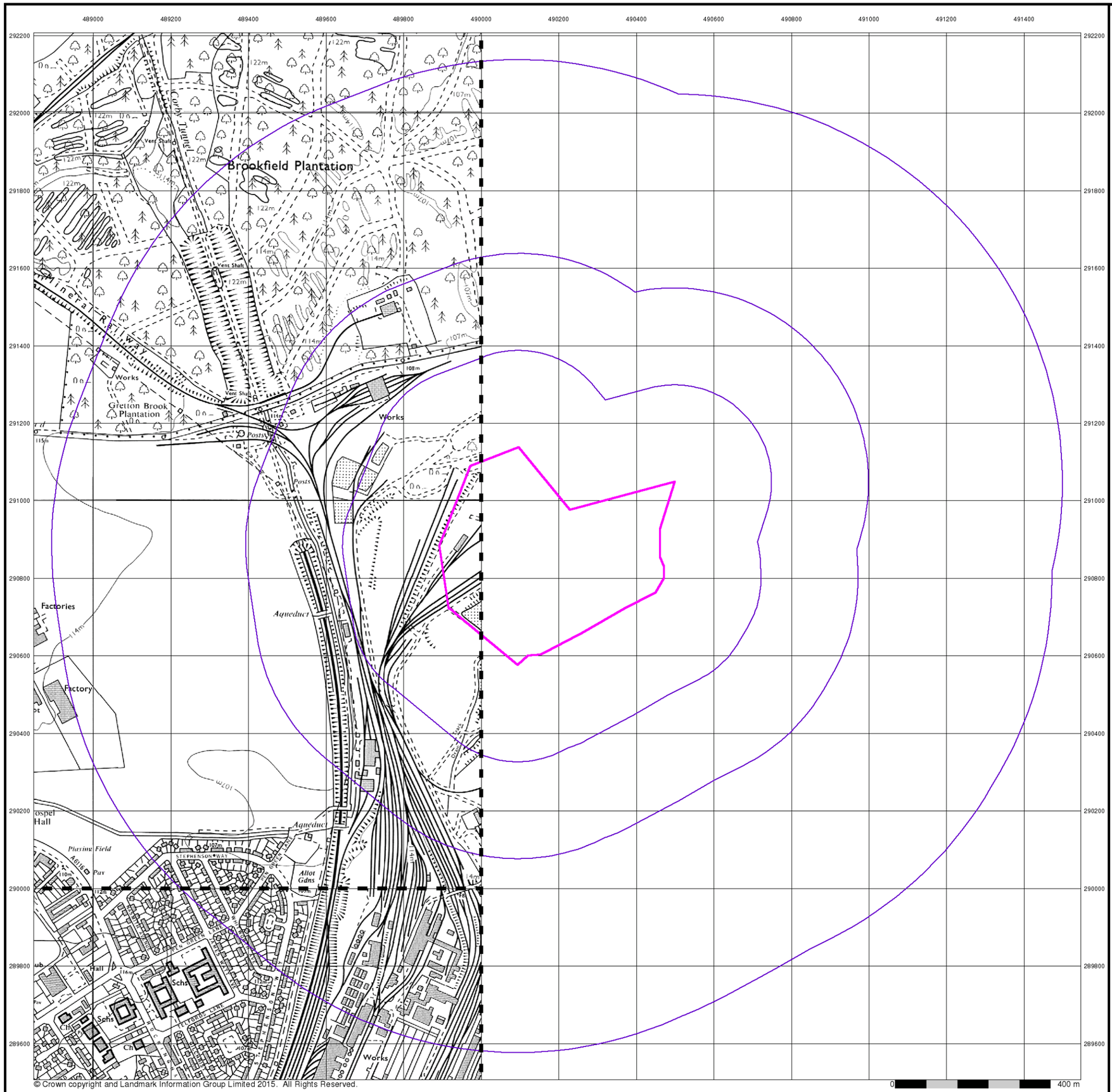

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Ordnance Survey Plan

Published 1974 - 1975

Source map scale - 1:10,000

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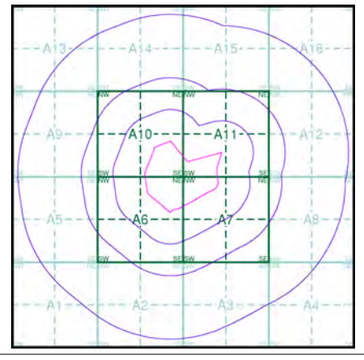
Map Name(s) and Date(s)

SP89SE
1975
1:10,000

SP88NE
1974
1:10,000

Historical Map - Slice A



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	1000

Site Details

Rockingham Enterprise Area

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0 400 m

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Ordnance Survey Plan

Published 1982 - 1987

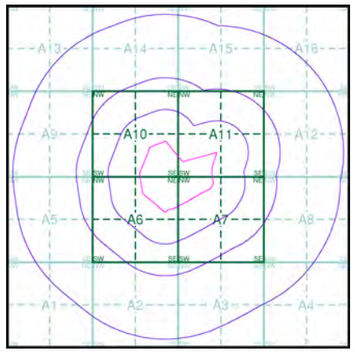
Source map scale - 1:10,000

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.

Map Name(s) and Date(s)

SP89SE 1987 1:10,000	SP99SW 1985 1:10,000
SP88NE 1982 1:10,000	SP98NW 1982 1:10,000

Historical Map - Slice A



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	1000

Site Details

Rockingham Enterprise Area

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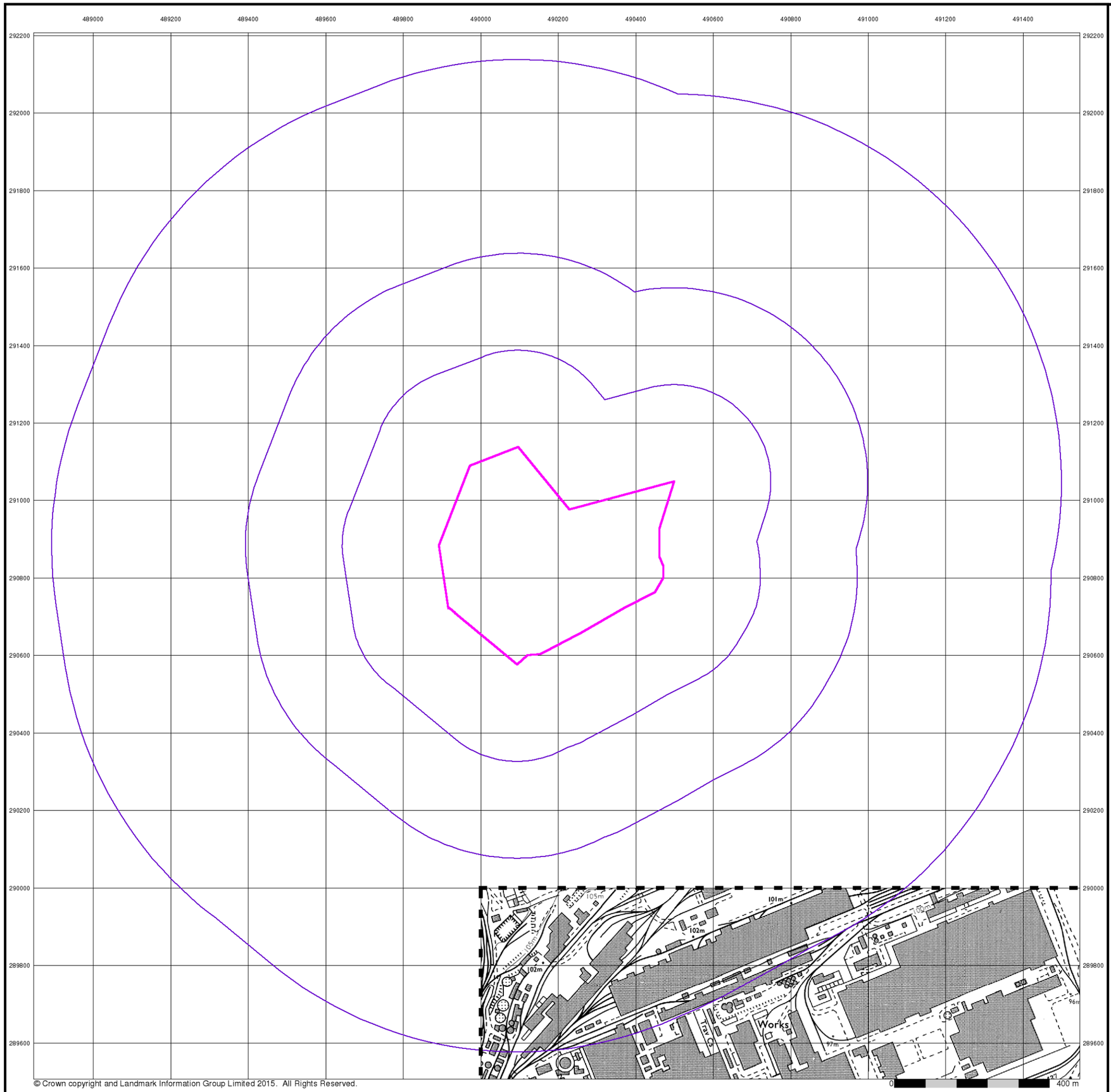

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Ordnance Survey Plan

Published 1988

Source map scale - 1:10,000

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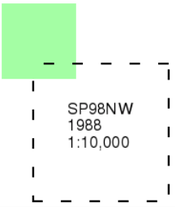
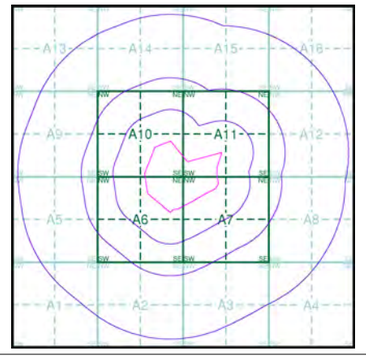
Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	1000

Site Details

Rockingham Enterprise Area

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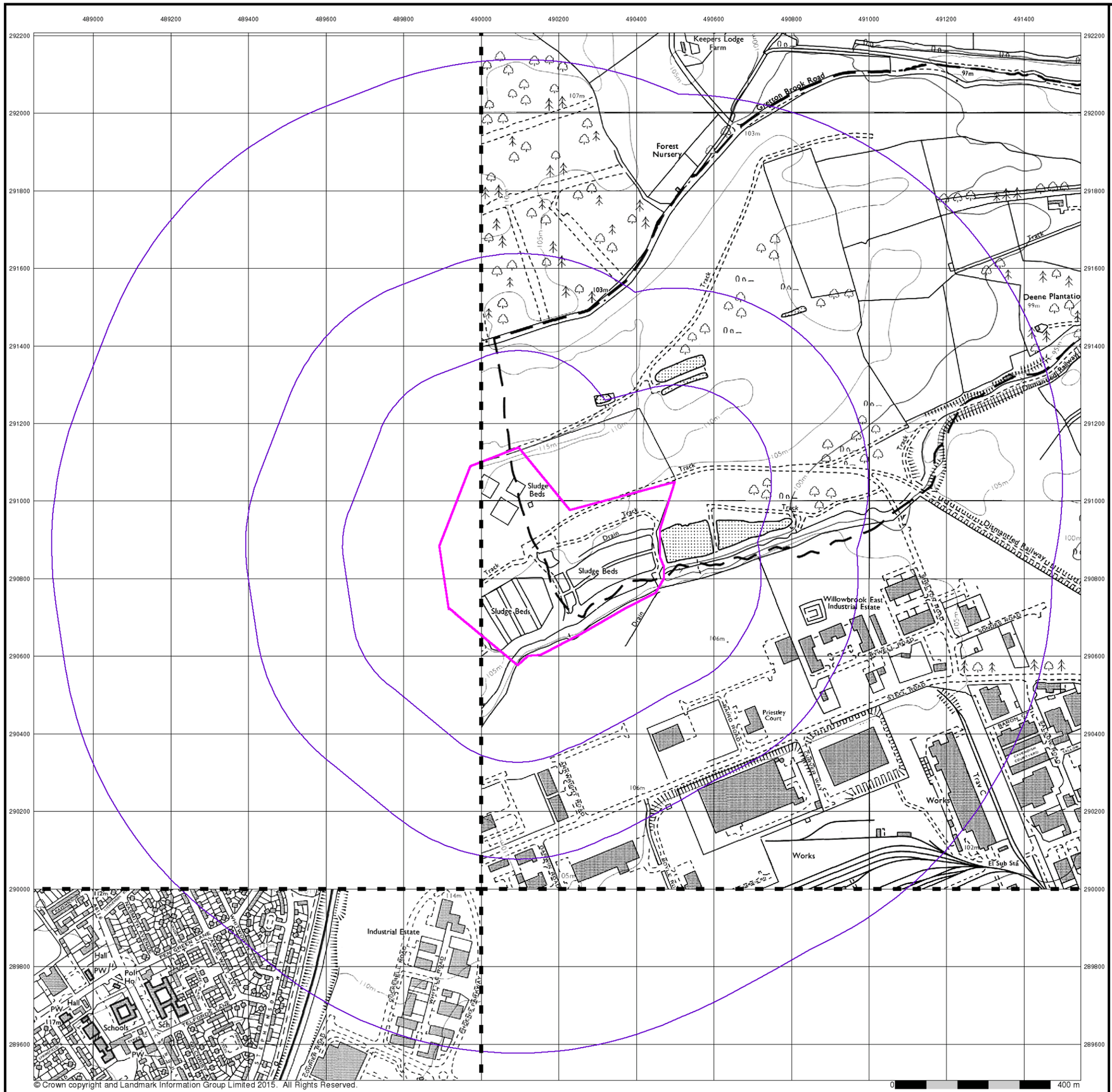

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Ordnance Survey Plan

Published 1992

Source map scale - 1:10,000

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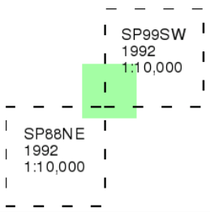
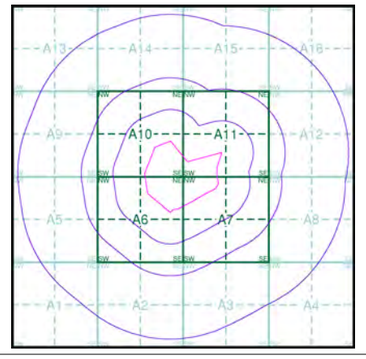
Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	1000

Site Details

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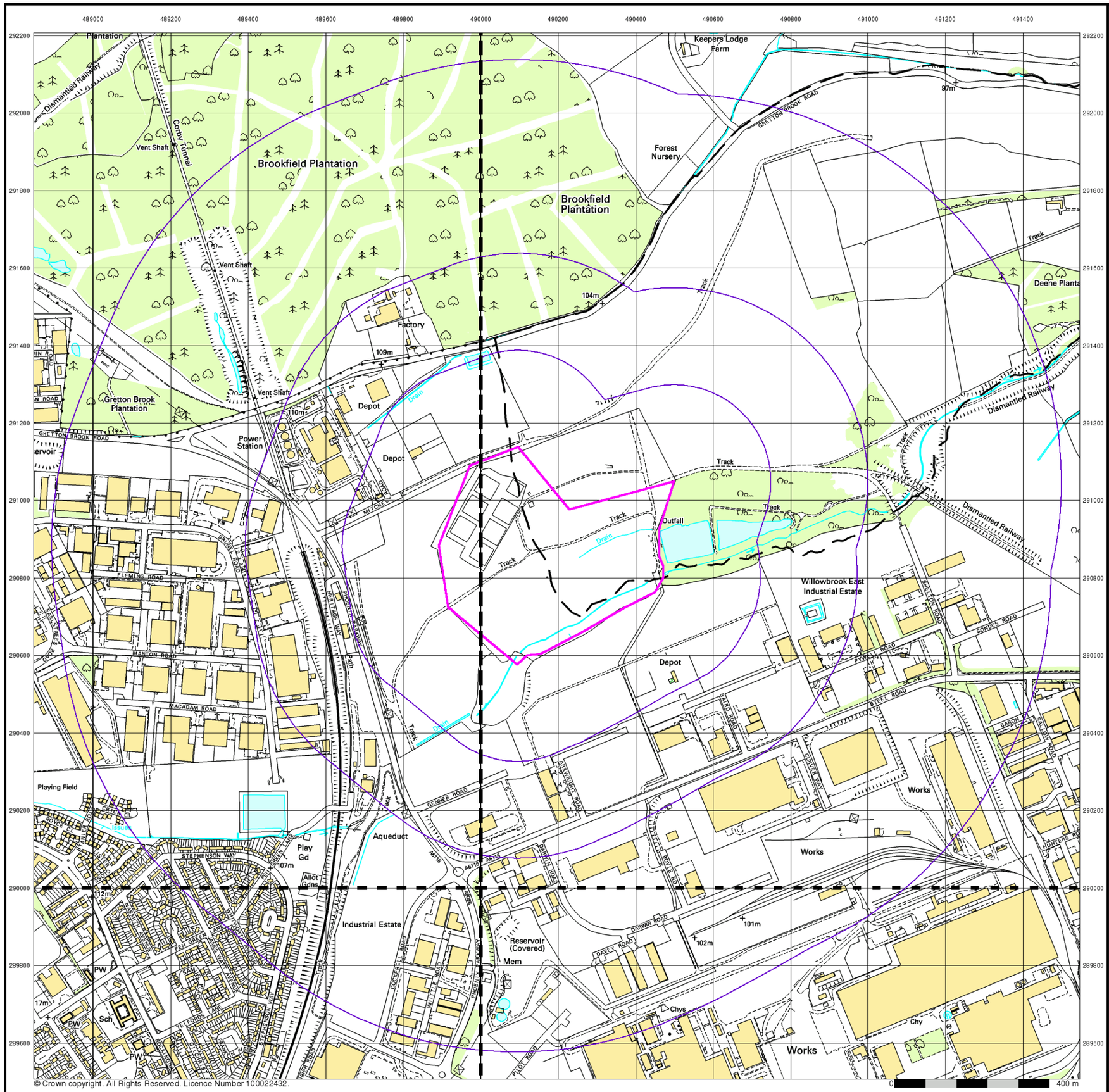

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0 400 m

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10k Raster Mapping

Published 1999

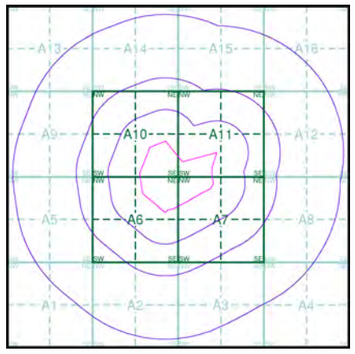
Source map scale - 1:10,000

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)

SP89SE 1999 1:10,000	SP99SW 1999 1:10,000
SP88NE 1999 1:10,000	SP98NW 1999 1:10,000

Historical Map - Slice A



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	1000

Site Details

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10k Raster Mapping

Published 2006

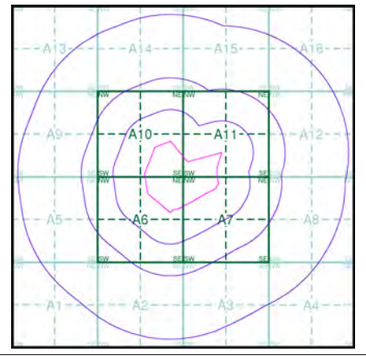
Source map scale - 1:10,000

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)

SP89SE 2006 1:10,000	SP99SW 2006 1:10,000
SP88NE 2006 1:10,000	SP98NW 2006 1:10,000

Historical Map - Slice A



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	1000

Site Details

Rockingham Enterprise Area

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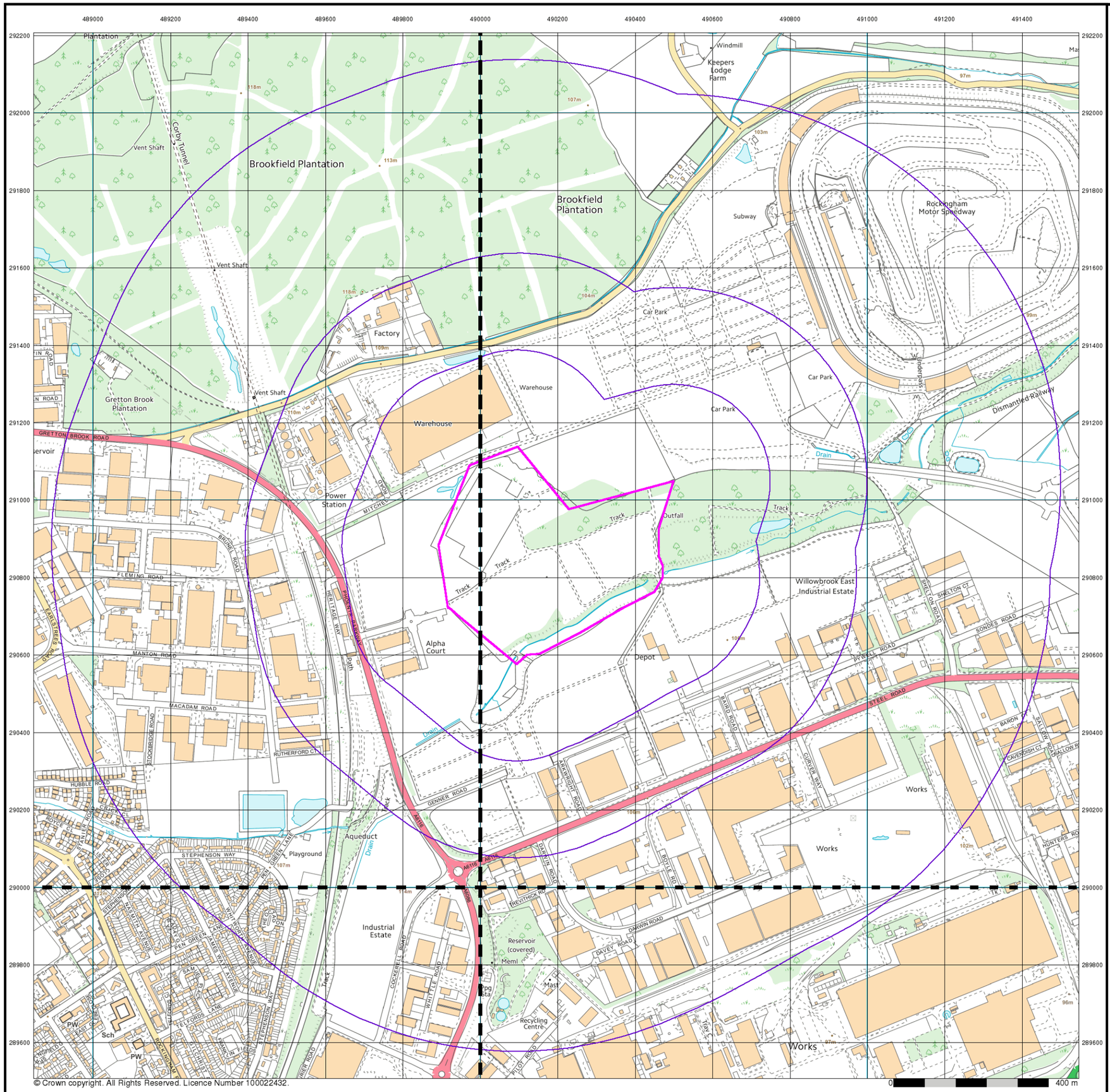

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VectorMap Local

Published 2017

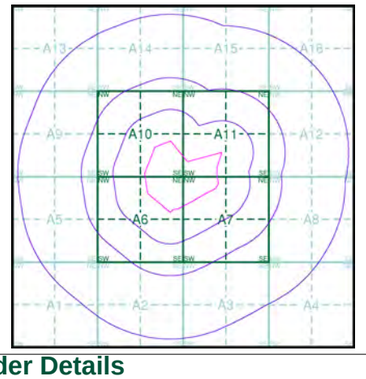
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities),1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)

SP89SE 2017 Variable	SP99SW 2017 Variable
SP88NE 2017 Variable	SP98NW 2017 Variable

Historical Map - Slice A



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	1000

Site Details

Rockingham Enterprise Area

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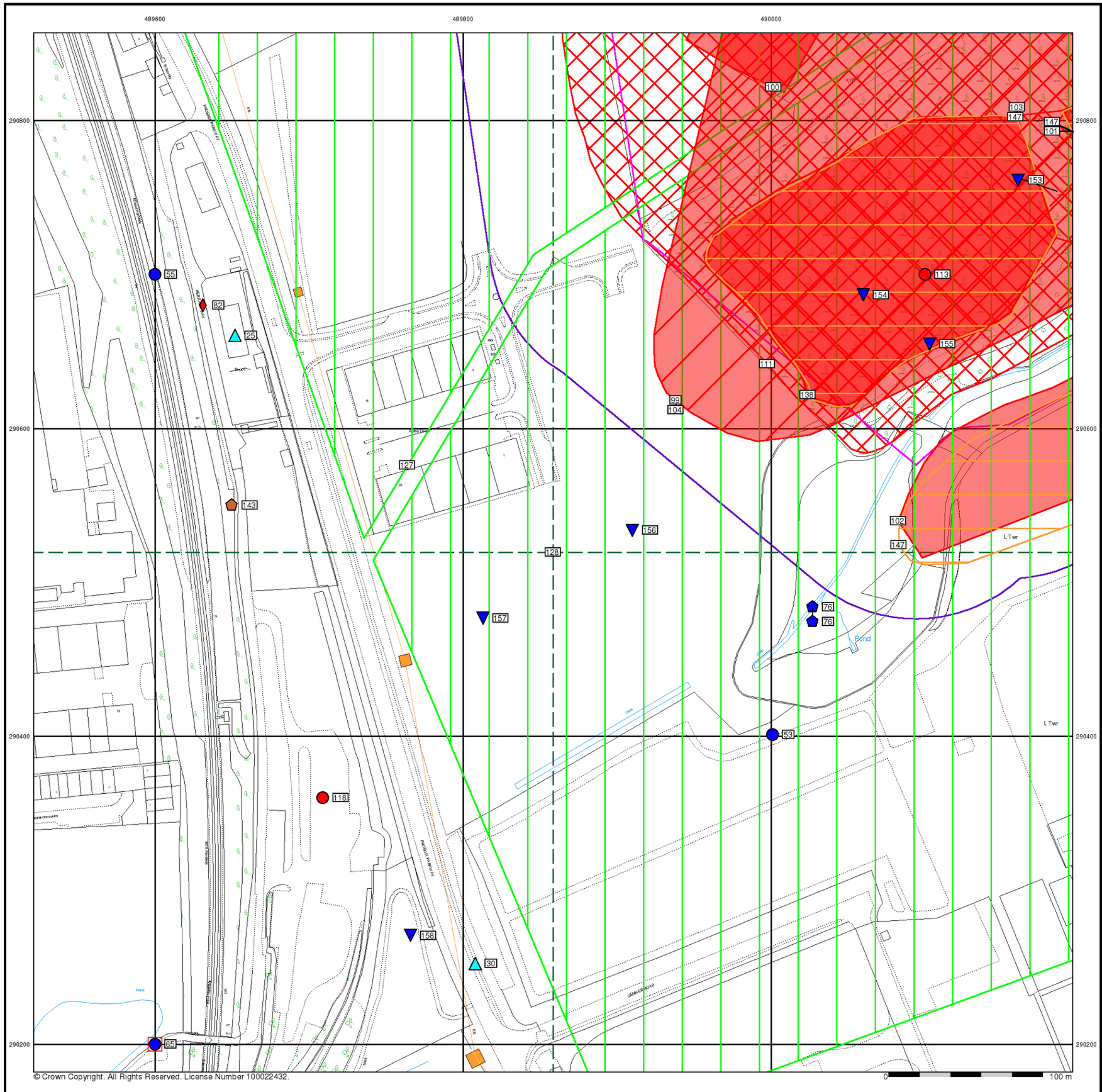

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General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location
- Pylon
- Overhead Transmission Line

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

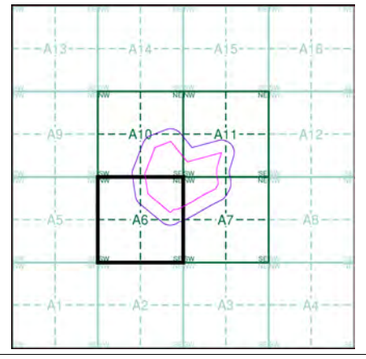
Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Segment A6



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Plot Buffer (m):	100

Site Details

Rockingham Enterprise Area

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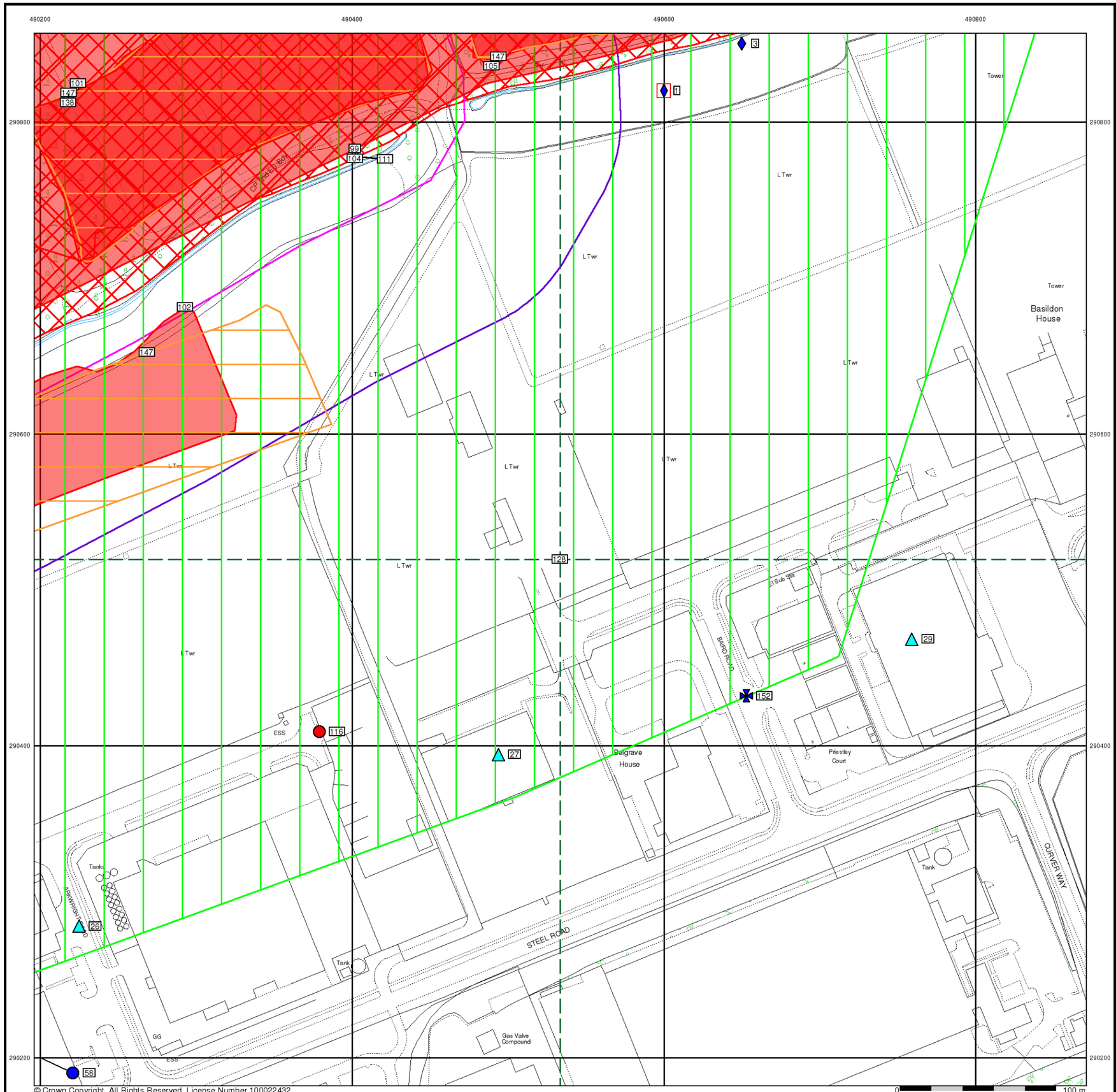
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location
- Pylon
- Overhead Transmission Line

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

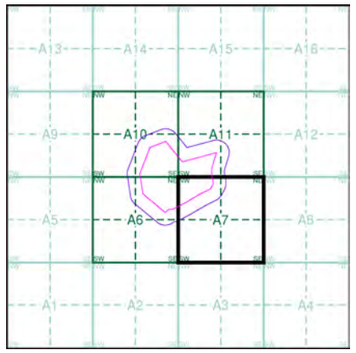
Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Segment A7



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Plot Buffer (m):	100

Site Details

Rockingham Enterprise Area

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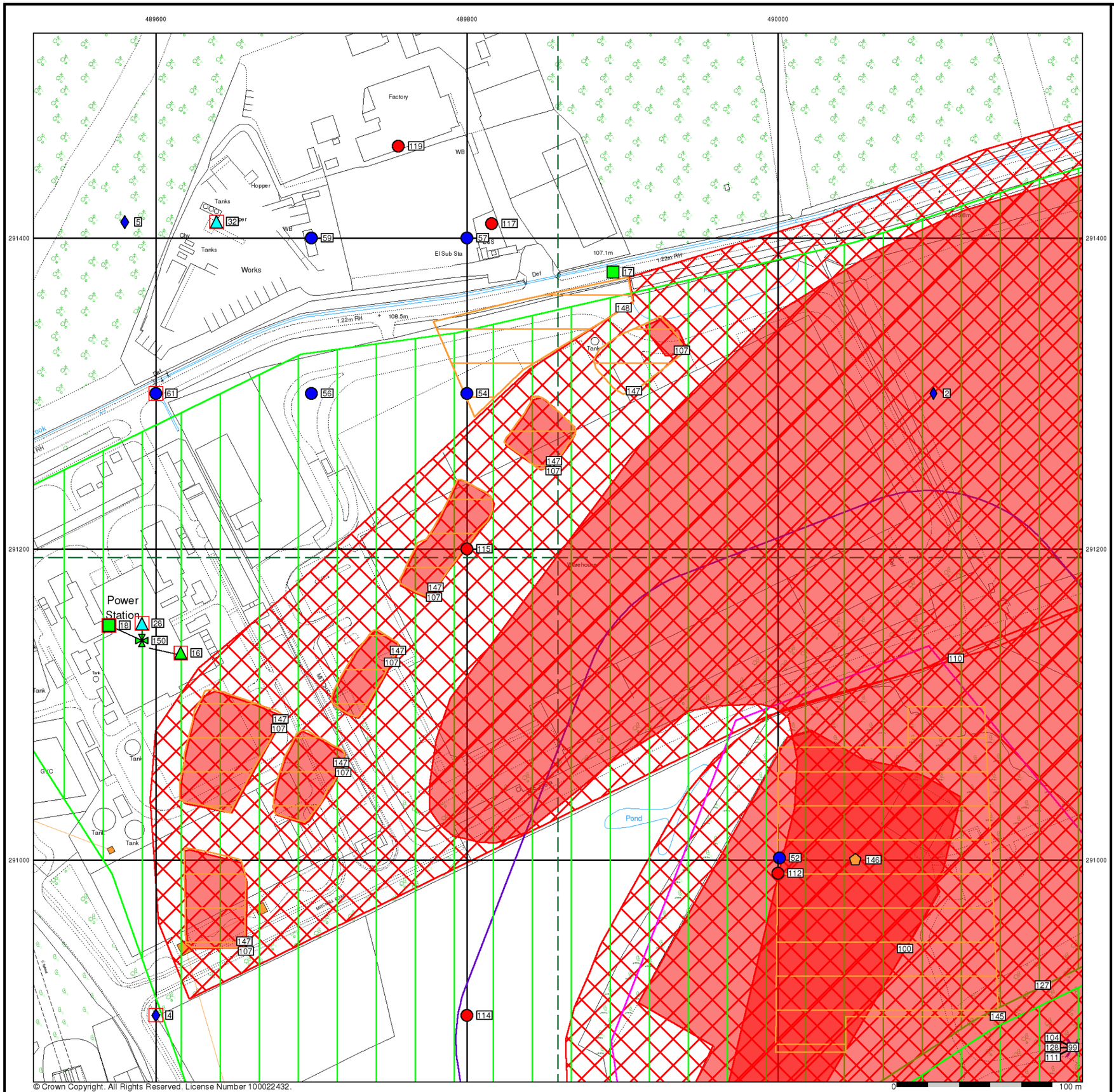
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location
- Pylon
- Overhead Transmission Line

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
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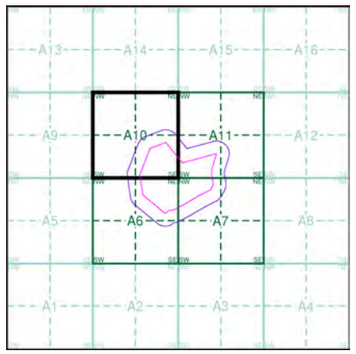
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Segment A10



Order Details

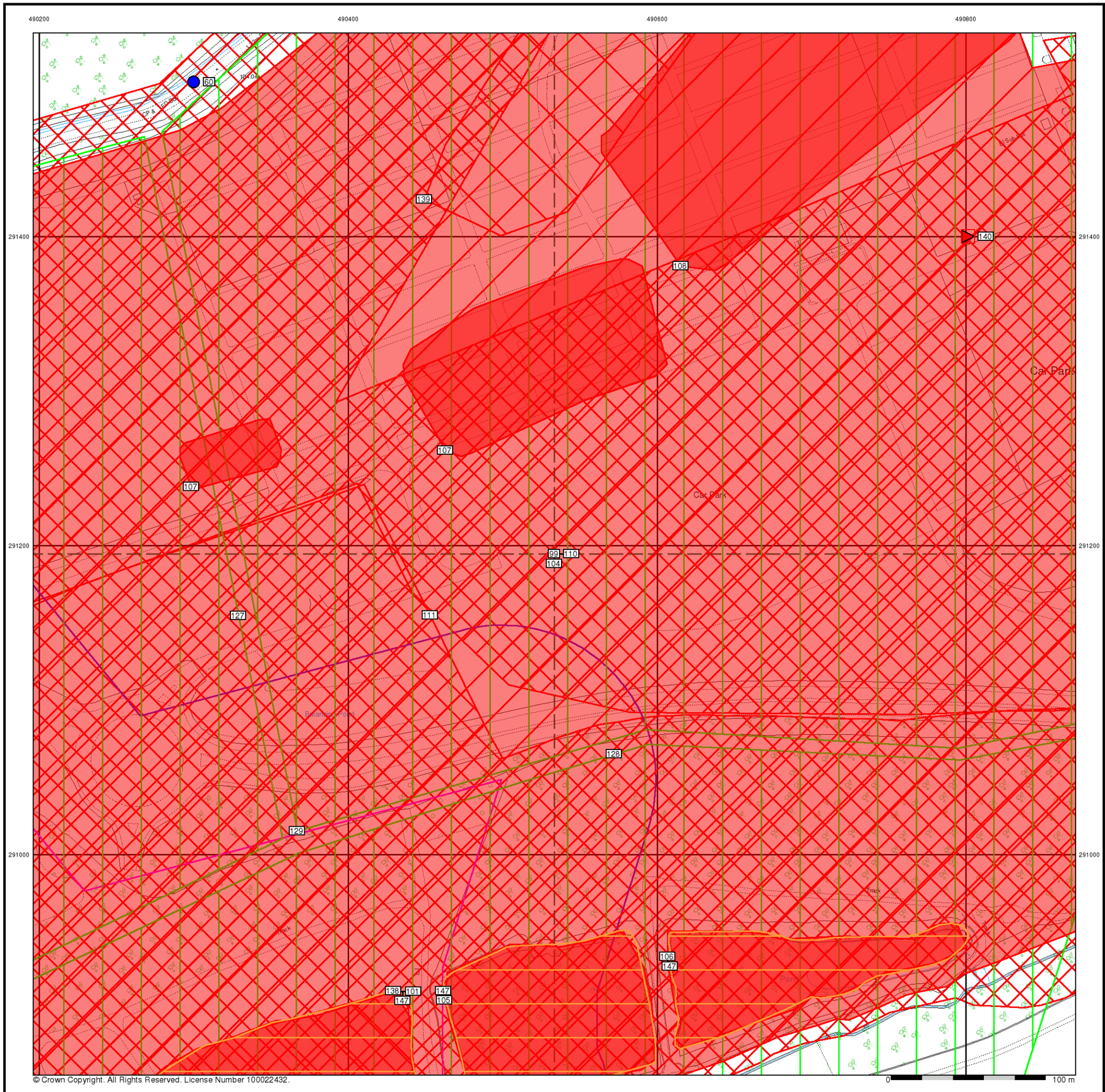
Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Plot Buffer (m):	100

Site Details

Rockingham Enterprise Area

Landmark INFORMATION GROUP

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



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General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location
- Pylon
- Overhead Transmission Line

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

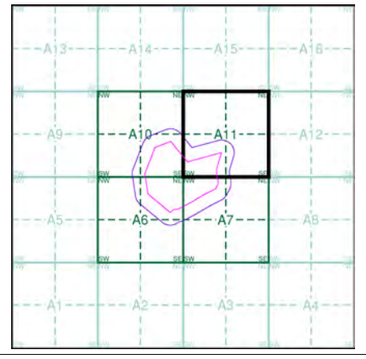
Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Segment A11



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Plot Buffer (m):	100

Site Details

Rockingham Enterprise Area

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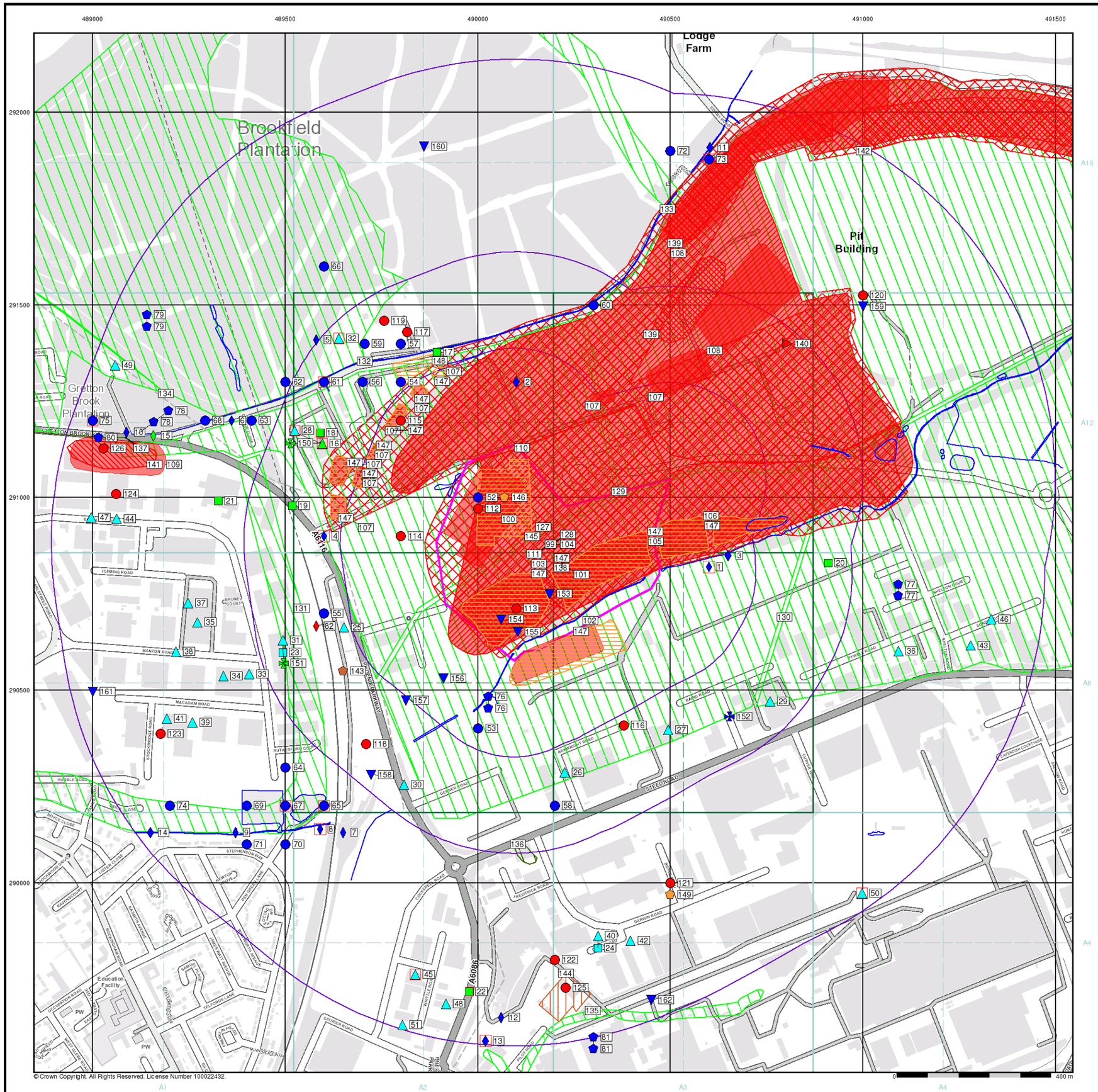

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General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Map ID

Several of Type at Location

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
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- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Hazardous Substances

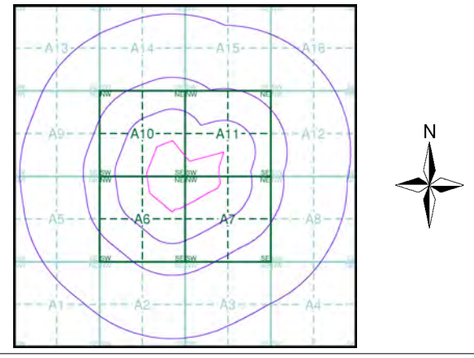
COMAH Site | Explosive Site | NIHHS Site

- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

Geological

- BGS Recorded Mineral Site

Site Sensitivity Map - Slice A



Order Details

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National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	1000

Site Details

Rockingham Enterprise Area

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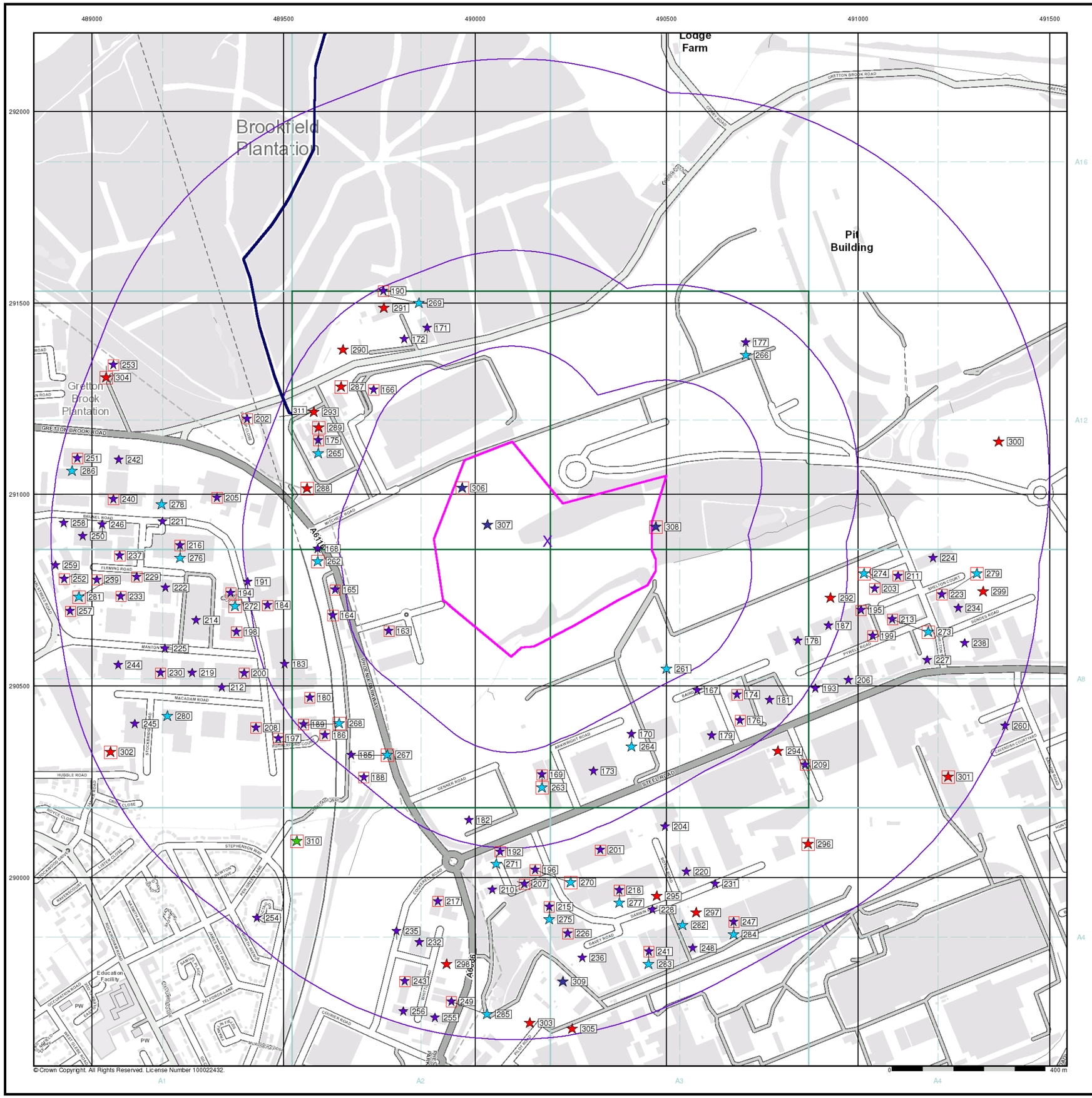

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Industrial Land Use Map

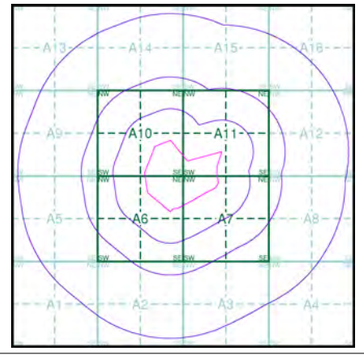
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Gas Pipeline
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Environmental
- Underground Electrical Cables

Industrial Land Use Map - Slice A



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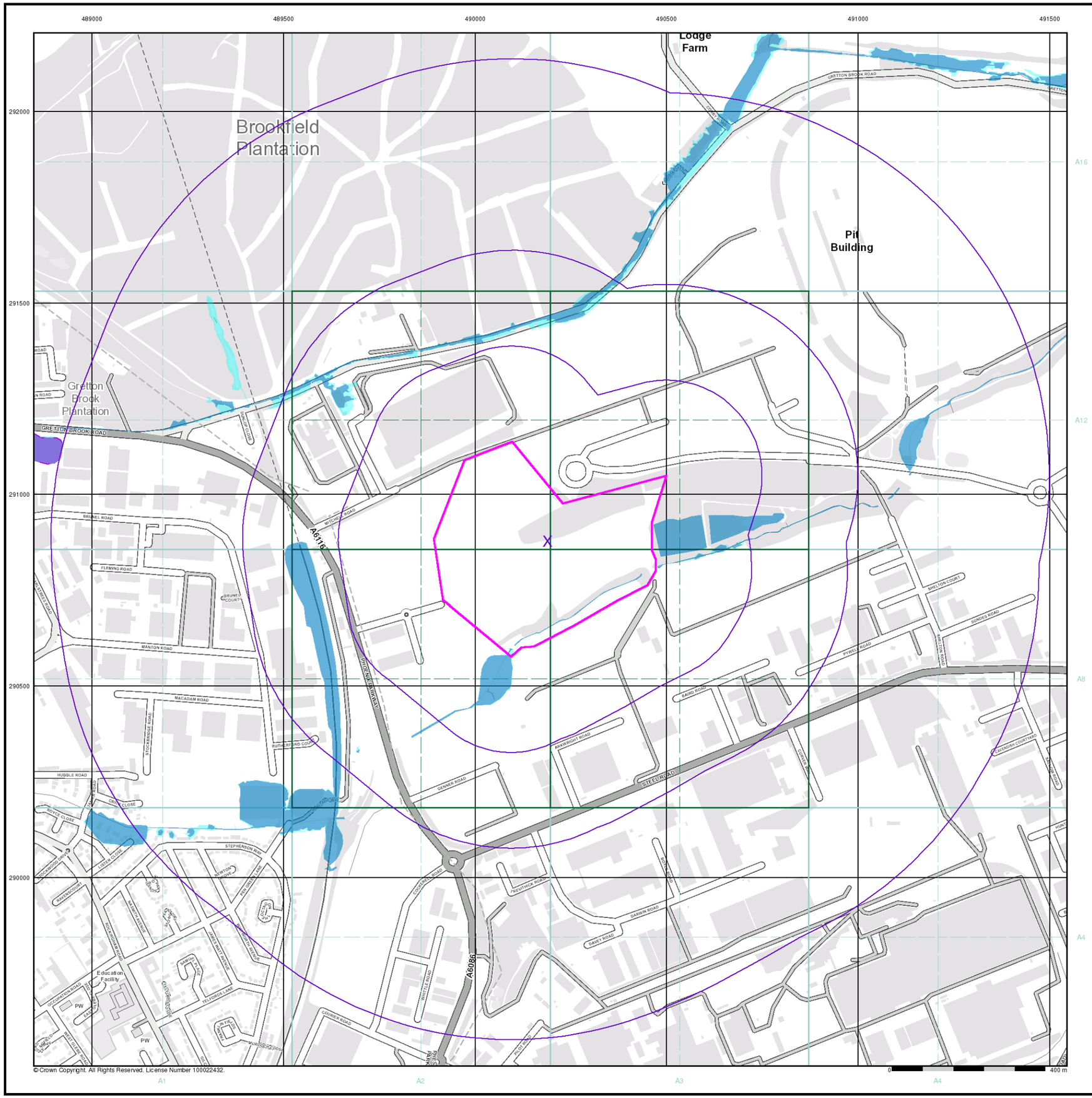

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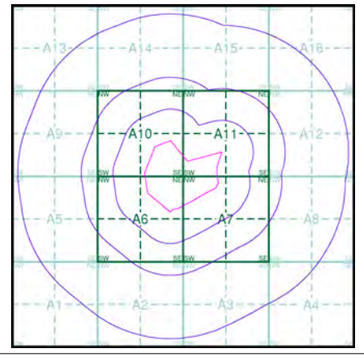
General

- Specified Site
- Specified Buffer(s)
- 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

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	1000

Site Details

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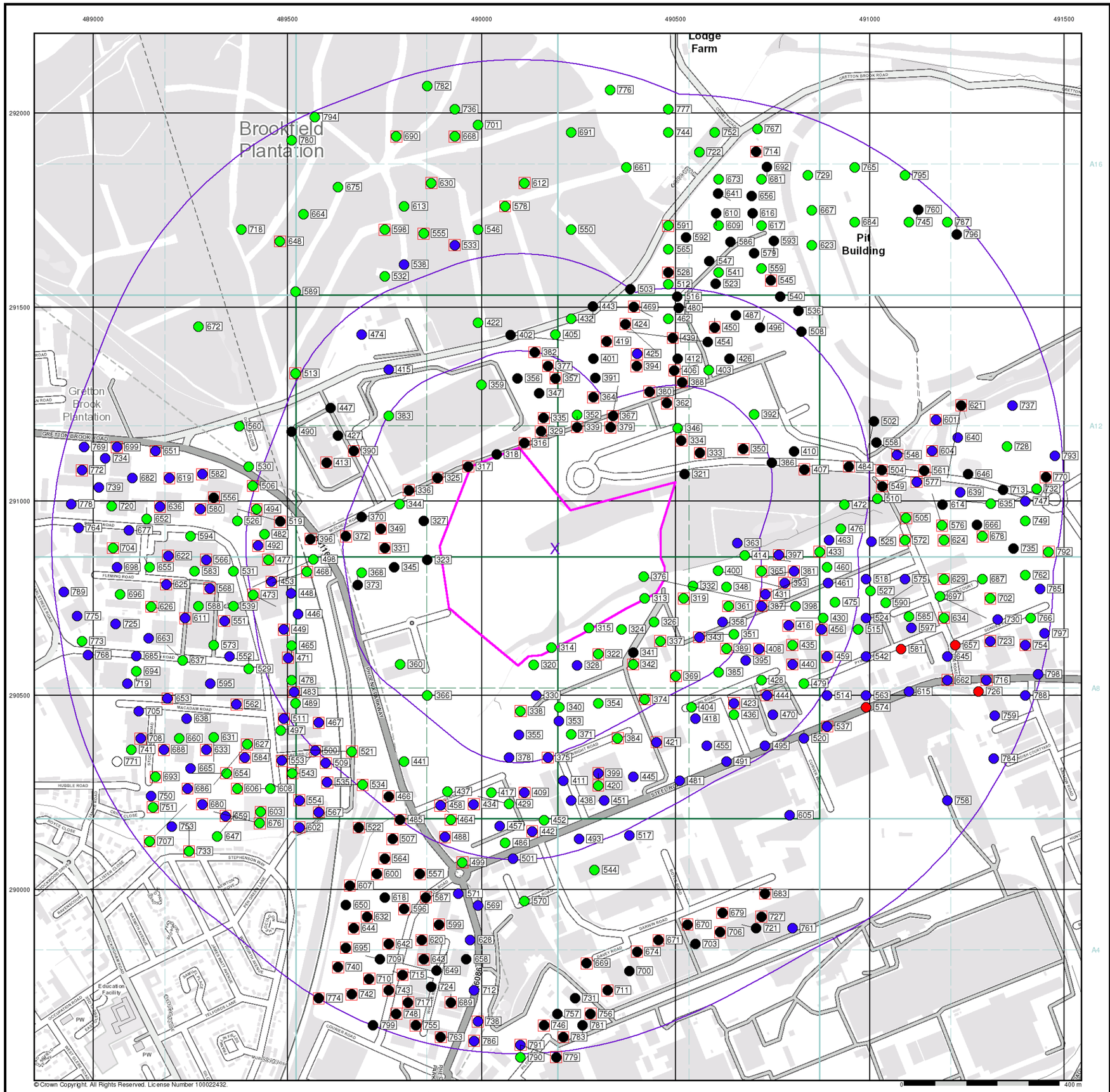

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General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location

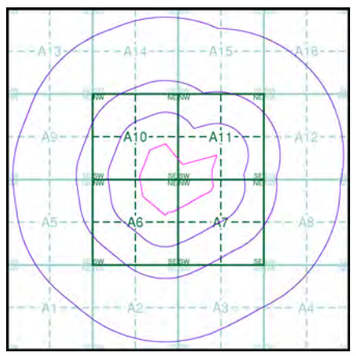
Agency and Hydrological (Boreholes)

- 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:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
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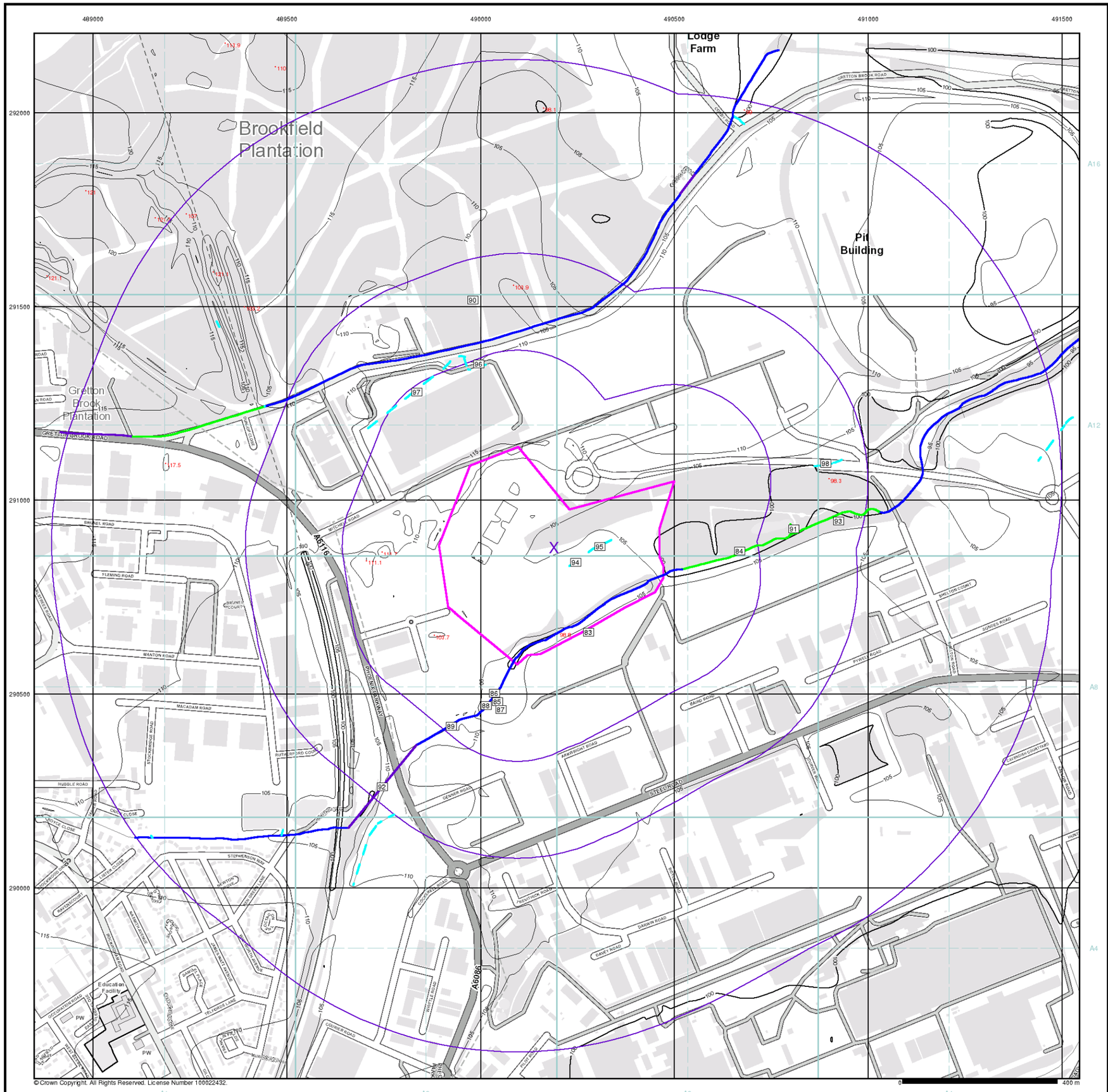

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General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID

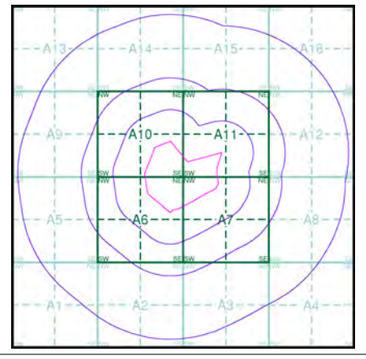
Detailed River Network Data

- Primary River
- Secondary River
- Tertiary River
- Canal
- Canal Tunnel
- Undefined River
- Lake/Reservoir
- Offline Drainage Feature
- Extended Culvert (greater than 50m)
- Underground River (inferred)
- Underground River (local knowledge)
- Downstream of High Water Mark
- Downstream of Seaward Extension
- Not assigned River feature

Contours (height in metres)

Standard Contour 105 100 95 — MLW Mean Low Water
Master Contour — MHW Mean High Water
Spot Height 167.3

EA/NRW Detailed River Network Map - Slice A



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	1000

Site Details

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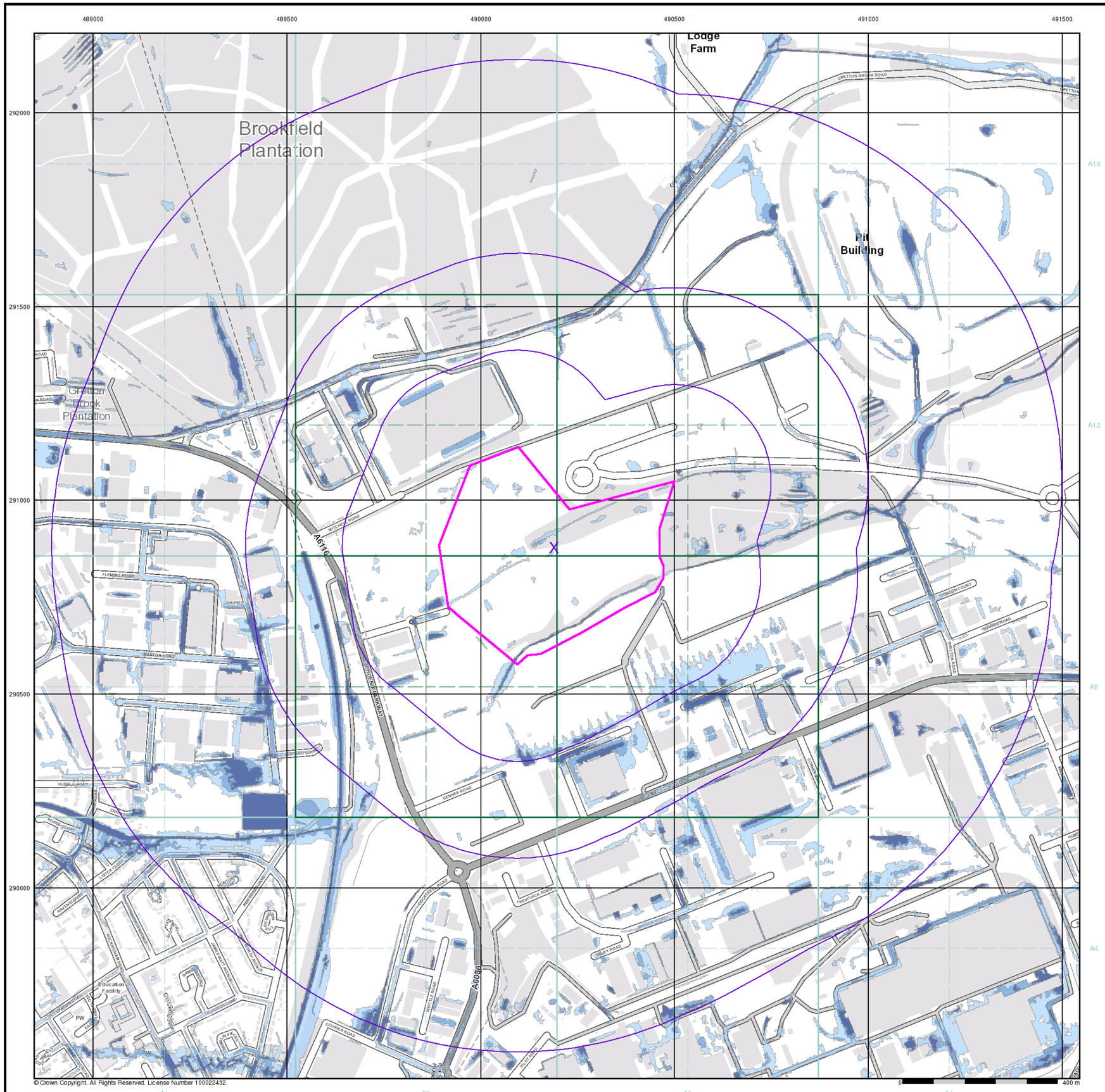

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General

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

Risk of Flooding from Surface Water

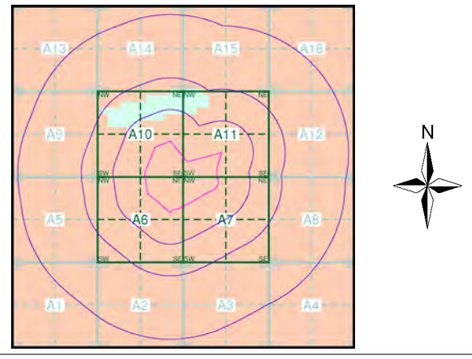
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

EA/NRW Suitability Map - Slice A



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Order Number:	118207619_1_1
Customer Ref:	STP3966D
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Site Details

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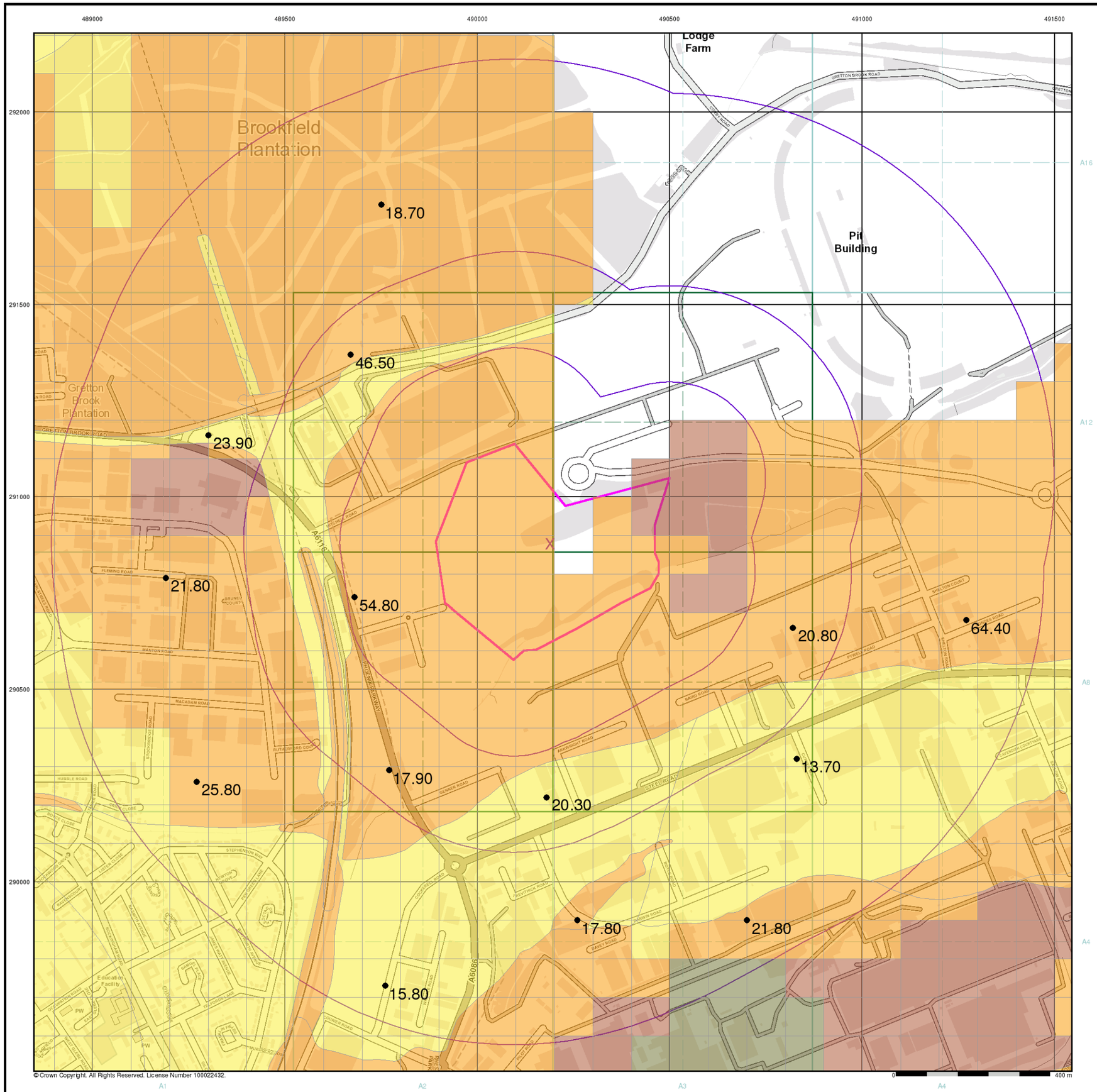

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General

Specified Site | Specified Buffer(s) | X Bearing Reference Point

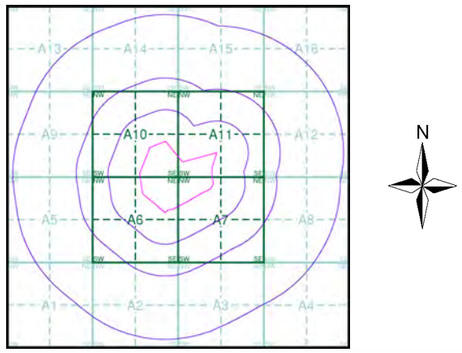
Urban Soil Chemistry Arsenic

● BGS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Arsenic Concentrations mg/kg

- < 15
- 15 - 25
- 25 - 35
- 35 - 45
- 45 - 60
- 60 - 120
- > 120

Urban Soil Chemistry Arsenic - Slice A



Order Details

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Customer Ref:	STP3966D
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Slice:	A
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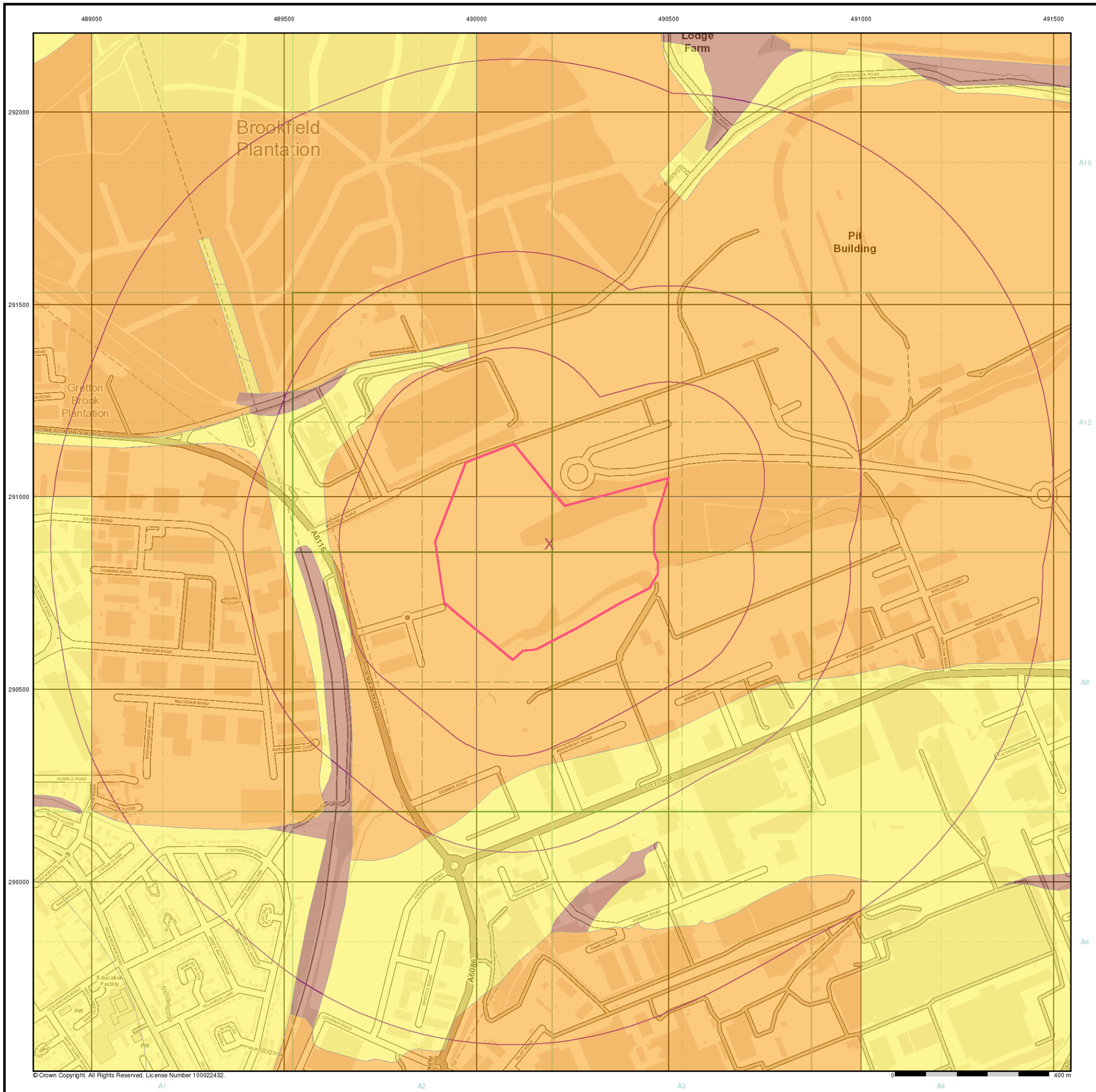

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General

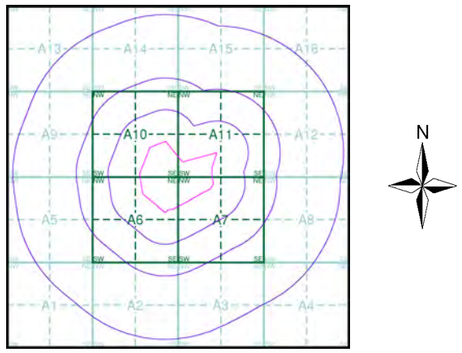
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg

- < 15
- 15 - 25
- 25 - 35
- 35 - 45
- 45 - 60
- 60 - 120
- > 120

Estimated Soil Chemistry Arsenic - Slice A



Order Details

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General

Specified Site | Specified Buffer(s) | Bearing Reference Point

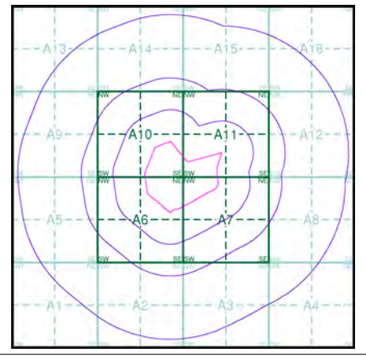
Urban Soil Chemistry Cadmium

BGS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Cadmium Concentrations mg/kg

< 1.8
1.8 - 2.2
2.2 - 3.0
> 3.0

Urban Soil Chemistry Cadmium - Slice A



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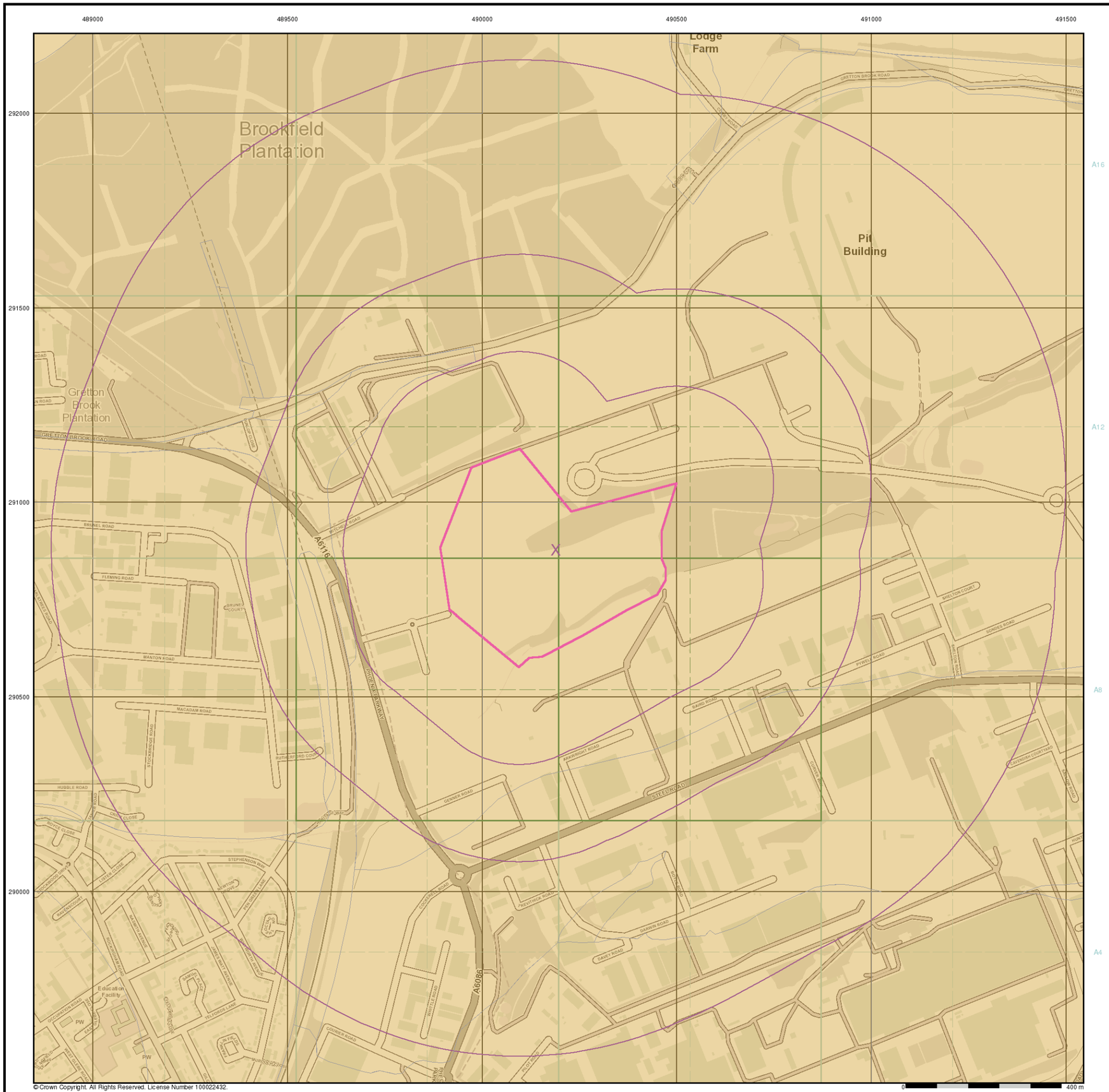

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General

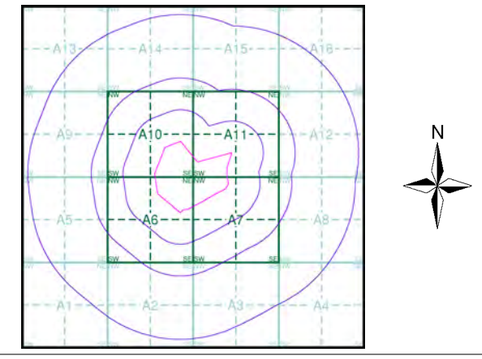
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Cadmium

Cadmium Concentrations mg/kg

- < 1.8
- 1.8 - 2.2
- 2.2 - 3.0
- > 3.0

Estimated Soil Chemistry Cadmium - Slice A



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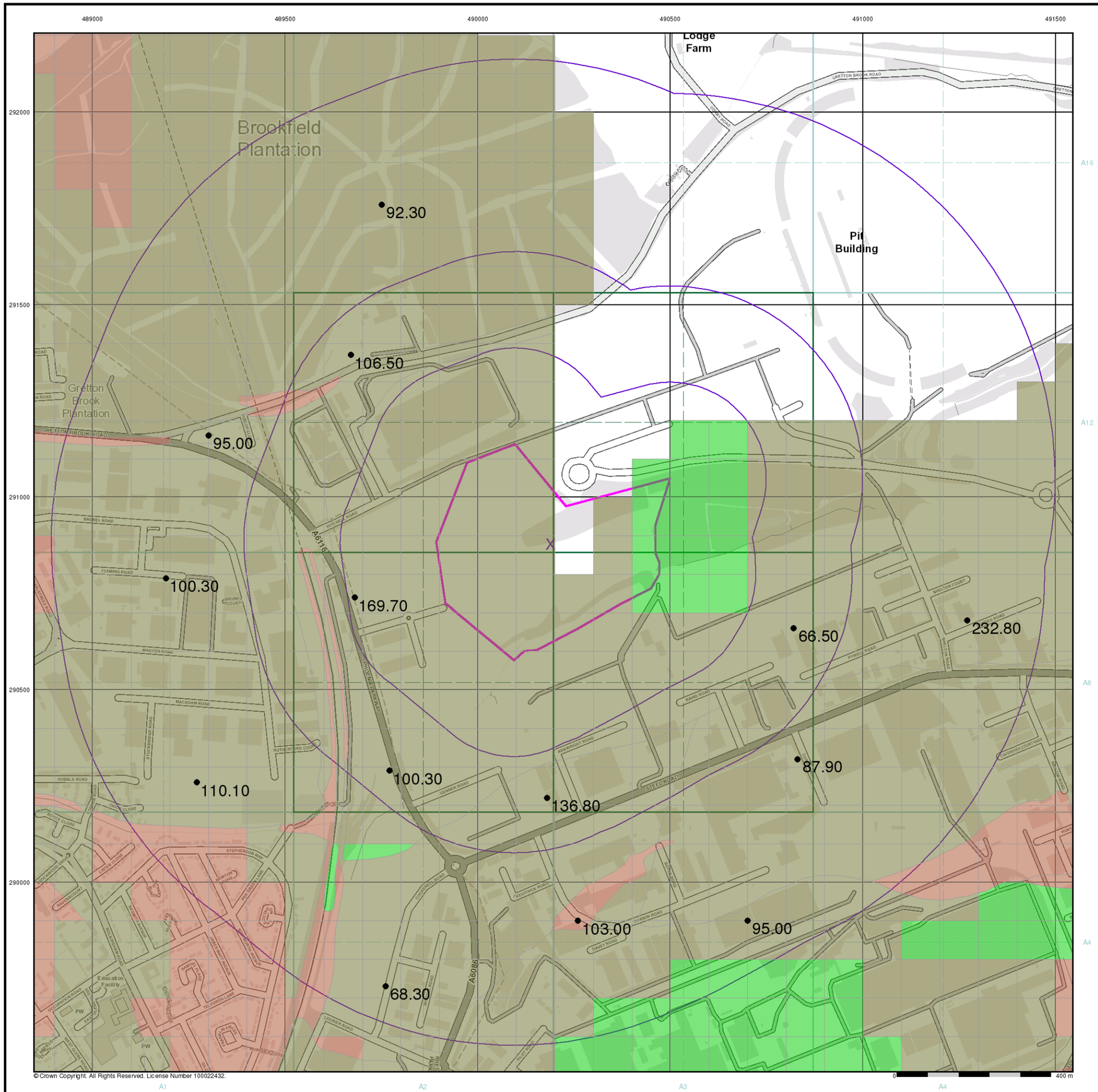

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General

Specified Site | Specified Buffer(s) | X Bearing Reference Point

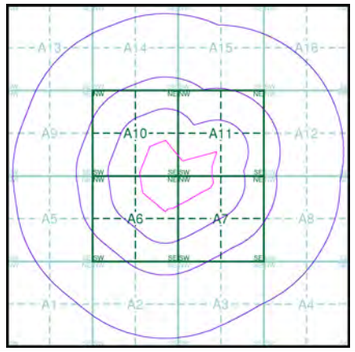
Urban Soil Chemistry Chromium

● BGS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Chromium Concentrations mg/kg

- < 20
- 20 - 40
- 40 - 60
- 60 - 90
- 90 - 120
- 120 - 180
- > 180

Urban Soil Chemistry Chromium - Slice A



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General

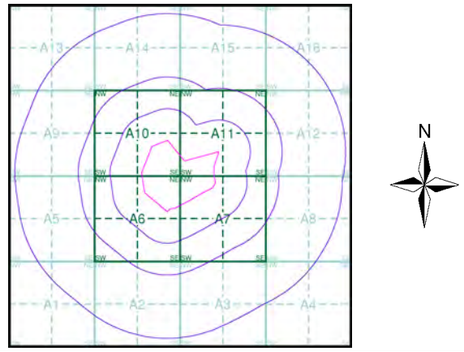
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg

- < 20
- 20 - 40
- 40 - 60
- 60 - 90
- 90 - 120
- 120 - 180
- > 180

Estimated Soil Chemistry Chromium - Slice A



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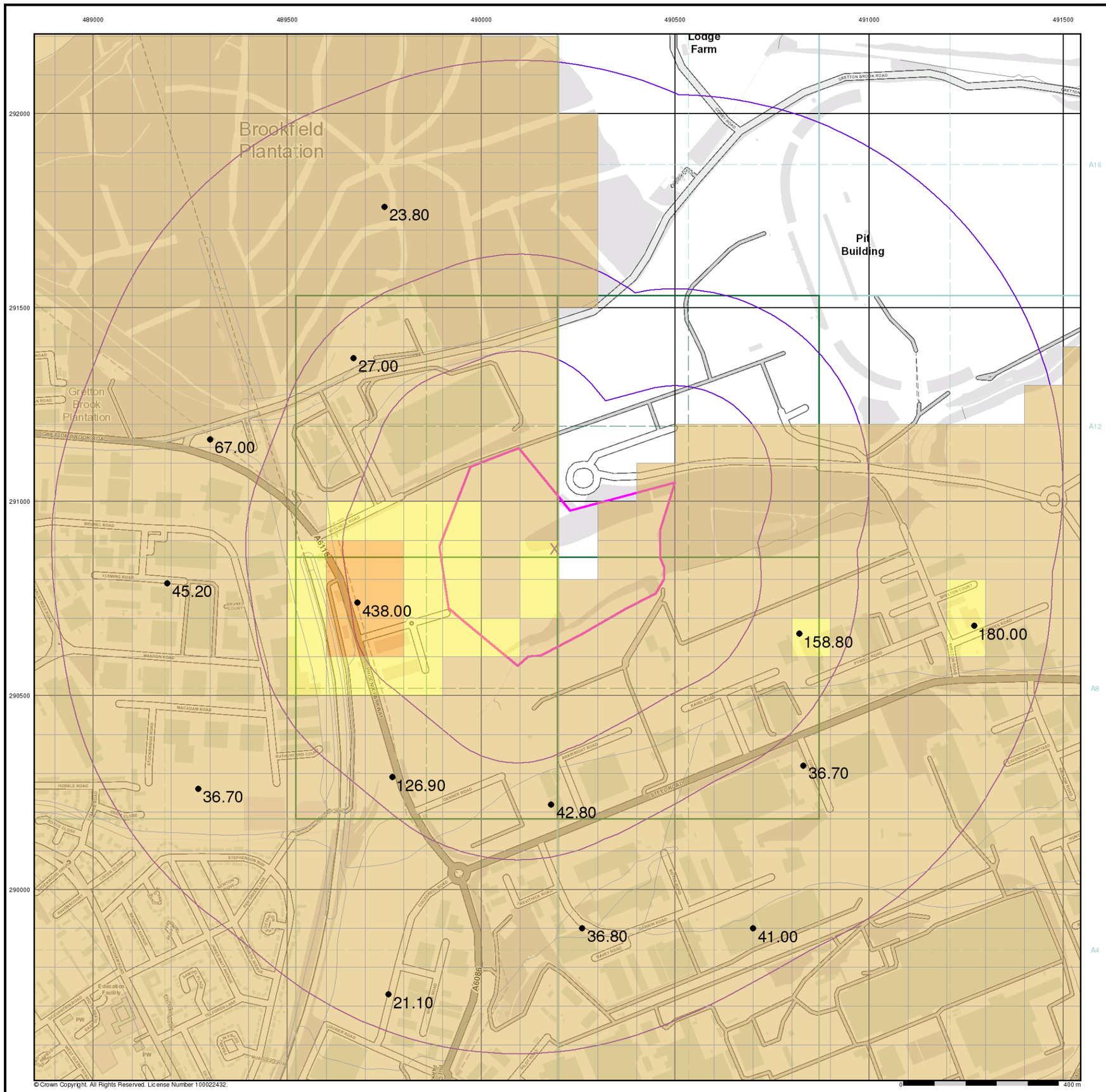

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General

Specified Site | Specified Buffer(s) | X Bearing Reference Point

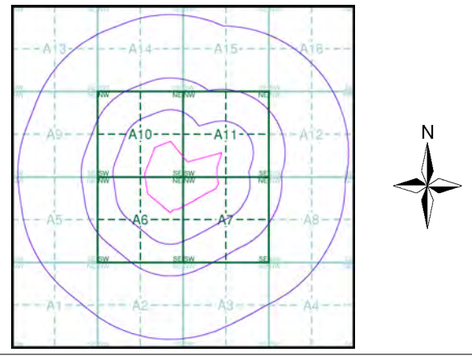
Urban Soil Chemistry Lead

● BGS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Lead Concentrations mg/kg

- < 150
- 150 - 300
- 300 - 600
- 600 - 900
- > 900

Urban Soil Chemistry Lead - Slice A



Order Details

Order Details:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search buffer (m):	1000

Site Details

Rockingham Enterprise Area

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

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A1 A2 A3 A4

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General

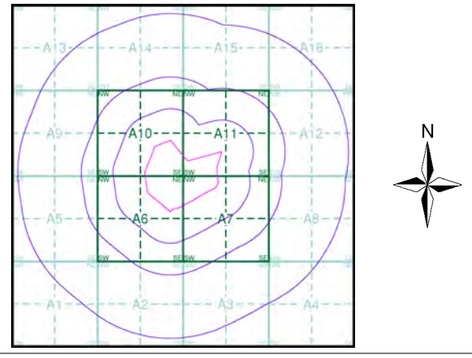
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Lead

Lead Concentrations mg/kg

- <100 mg/kg
- 100 - 200
- 200 - 300
- 300 - 600
- 600 - 1200
- >1200

Estimated Soil Chemistry Lead - Slice A



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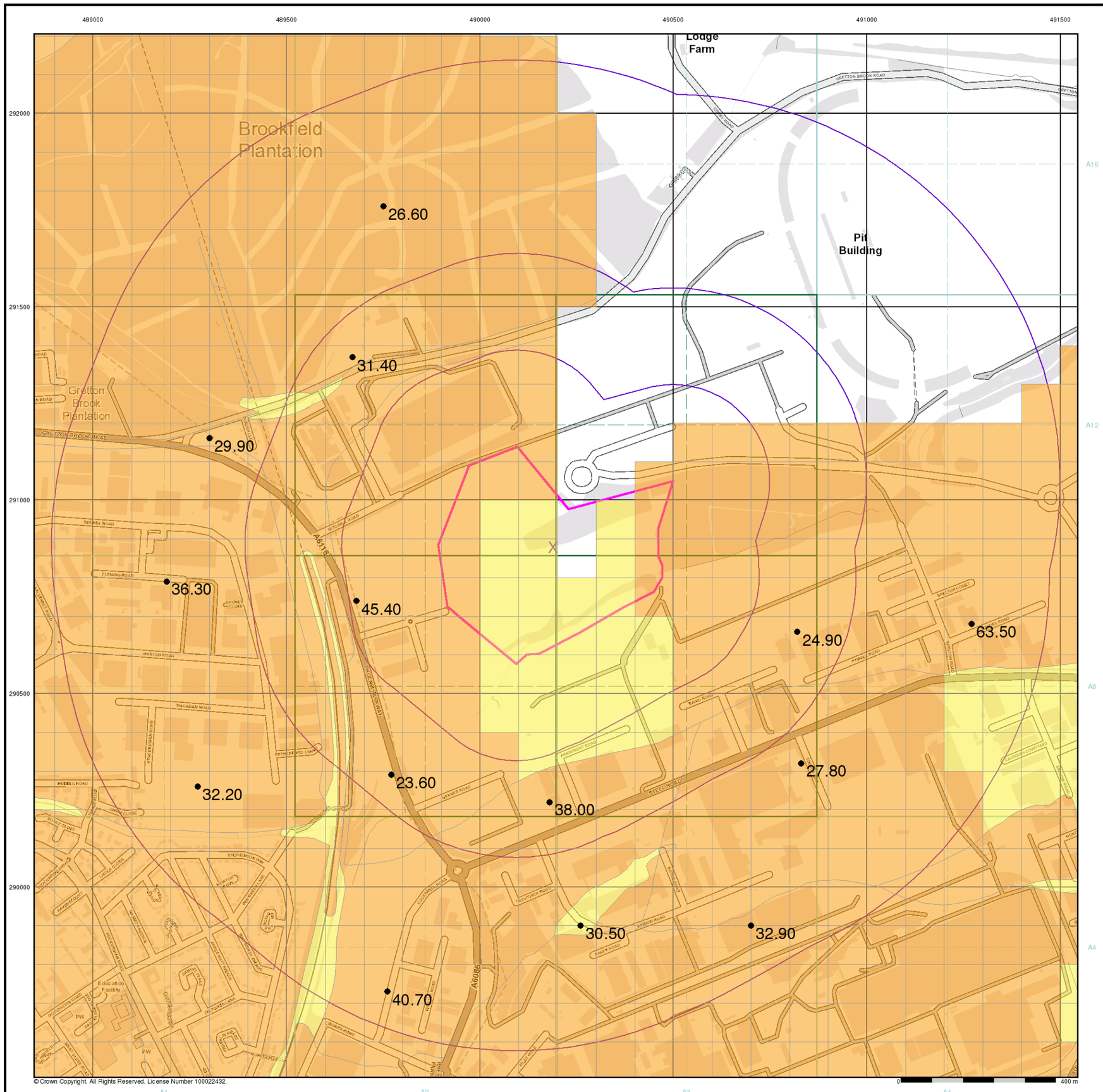

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General

Specified Site | Specified Buffer(s) | X Bearing Reference Point

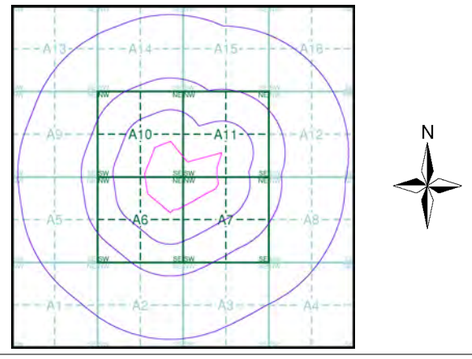
Urban Soil Chemistry Nickel

● BGS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Nickel Concentrations mg/kg

- < 15
- 15 - 30
- 30 - 45
- 45 - 60
- 60 - 80
- 80 - 100
- > 100

Urban Soil Chemistry Nickel - Slice A



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General

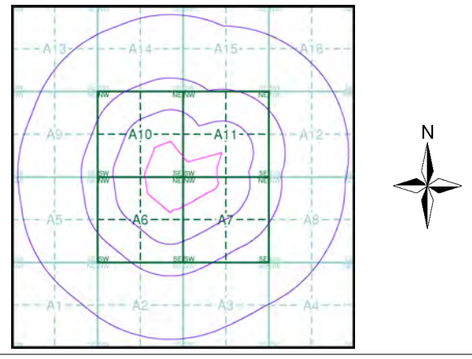
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg

- < 15
- 15 - 30
- 30 - 45
- 45 - 60
- 60 - 80
- 80 - 100
- > 100

Estimated Soil Chemistry Nickel - Slice A



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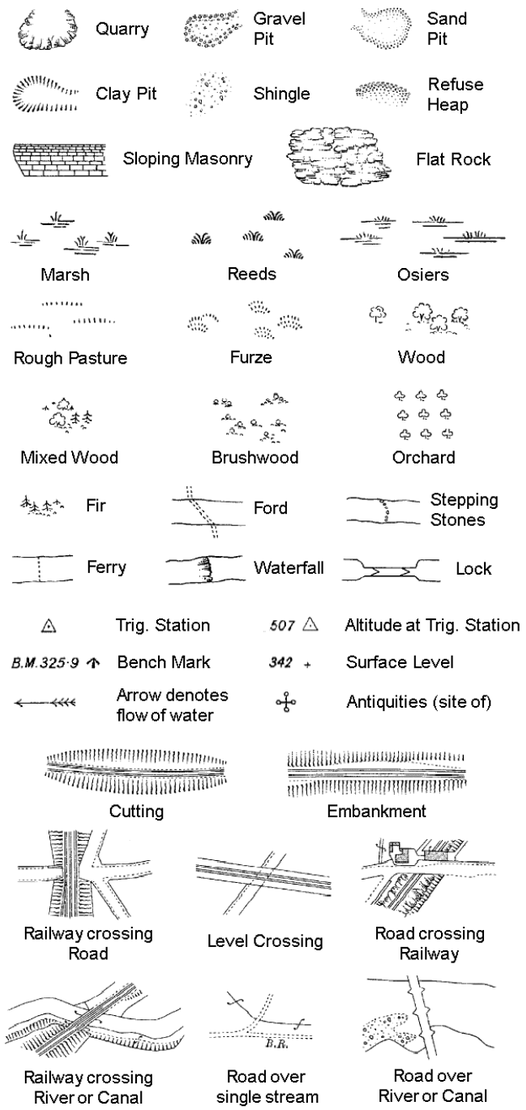
Historical Mapping Legends

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



County Boundary (Geographical)

County & Civil Parish Boundary

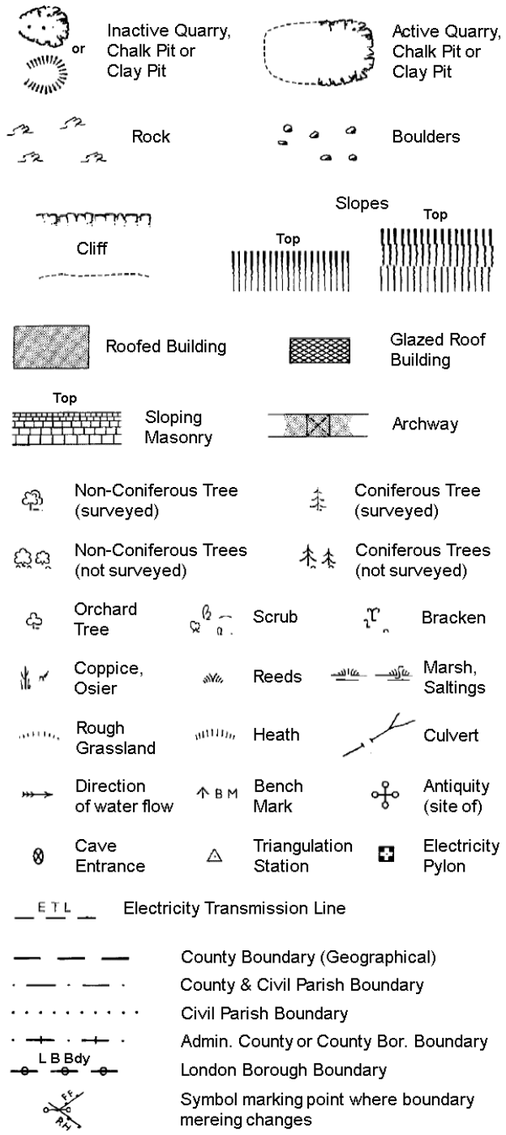
Administrative County & Civil Parish Boundary

Co. Boro. Bdy. County Borough Boundary (England)

Co. Burgh Bdy. County Burgh Boundary (Scotland)

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

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



County Boundary (Geographical)

County & Civil Parish Boundary

Civil Parish Boundary

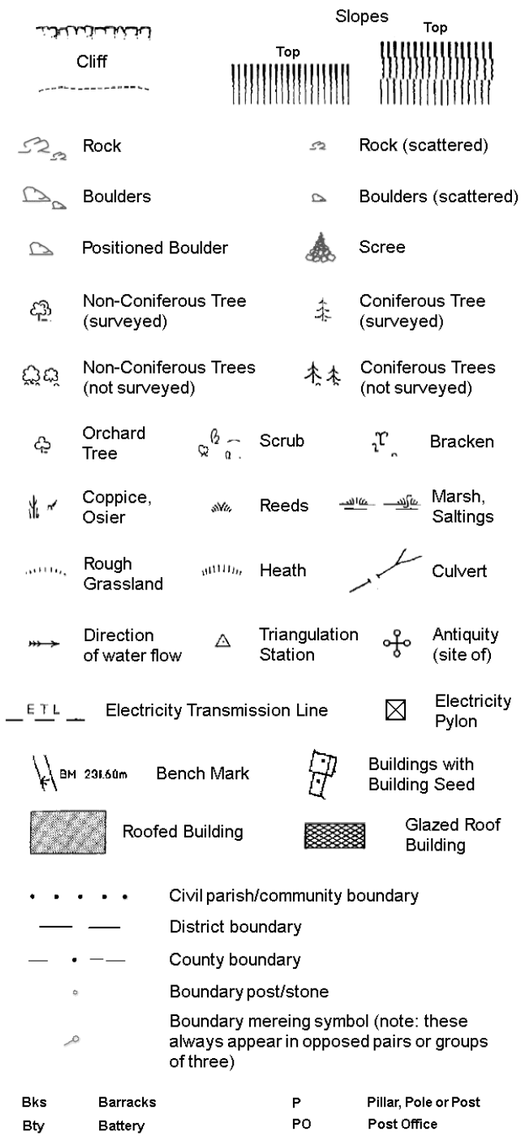
Admin. County or County Bor. Boundary

L B Bdy London Borough Boundary

Symbol marking point where boundary mereing changes

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

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



Civil parish/community boundary

District boundary

County boundary

Boundary post/stone

Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

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

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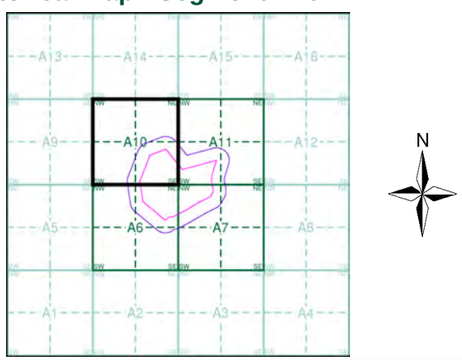
Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Northamptonshire	1:2,500	1886	2
Northamptonshire	1:2,500	1900	3
Northamptonshire	1:2,500	1938	4
Ordnance Survey Plan	1:2,500	1964 - 1965	5
Ordnance Survey Plan	1:2,500	1973 - 1987	6
Additional SIMs	1:2,500	1978 - 1988	7
Additional SIMs	1:2,500	1983 - 1988	8
Ordnance Survey Plan	1:2,500	1987	9
Additional SIMs	1:2,500	1987 - 1991	10
Large-Scale National Grid Data	1:2,500	1992 - 1993	11
Large-Scale National Grid Data	1:1,250	1992	12
Large-Scale National Grid Data	1:1,250	1994	13
Large-Scale National Grid Data	1:2,500	1994	14
Large-Scale National Grid Data	1:2,500	1996	15
Historical Aerial Photography	1:2,500	1999	16

Historical Map - Segment A10



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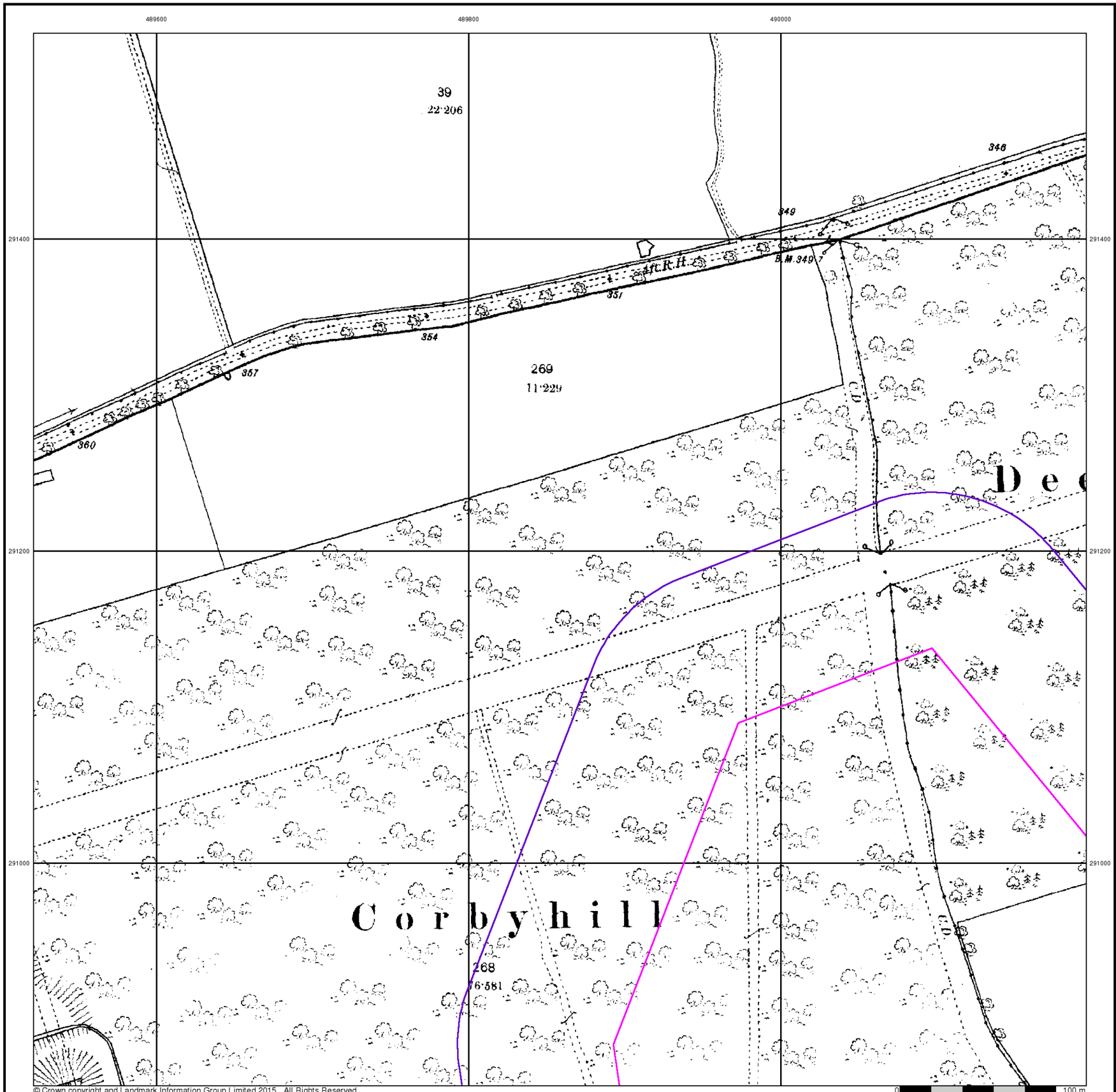

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Northamptonshire

Published 1886

Source map scale - 1:2,500

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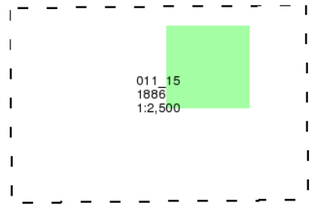
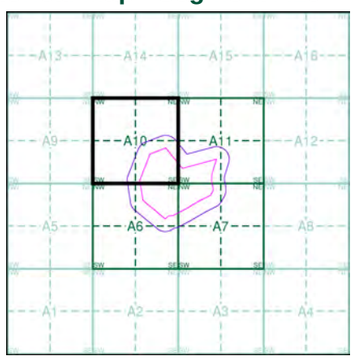
Map Name(s) and Date(s)



Historical Map - Segment A10



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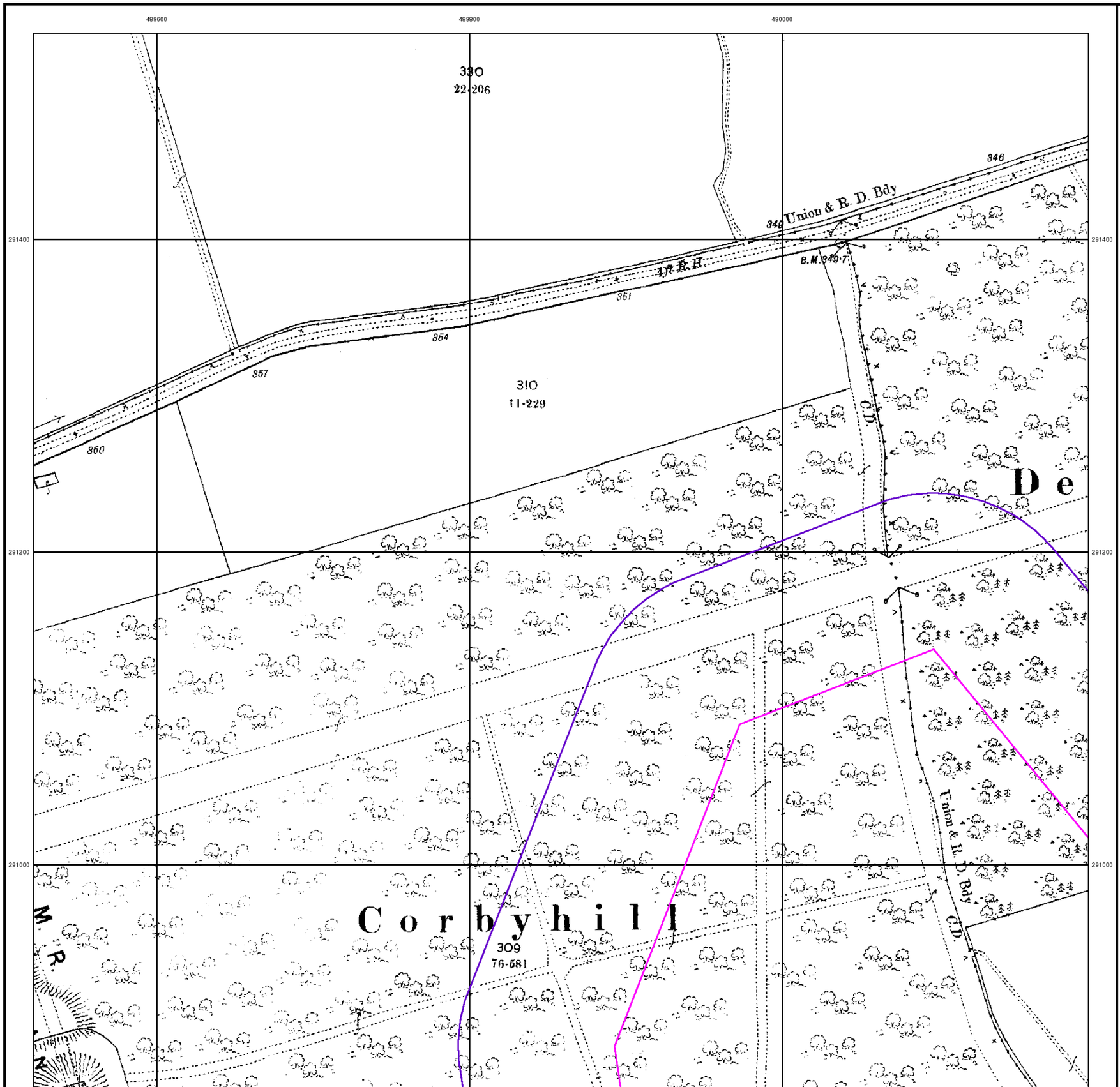

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Northamptonshire

Published 1900

Source map scale - 1:2,500

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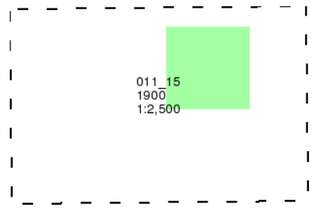
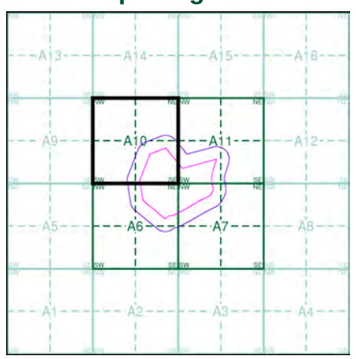


Historical Map - Segment A10



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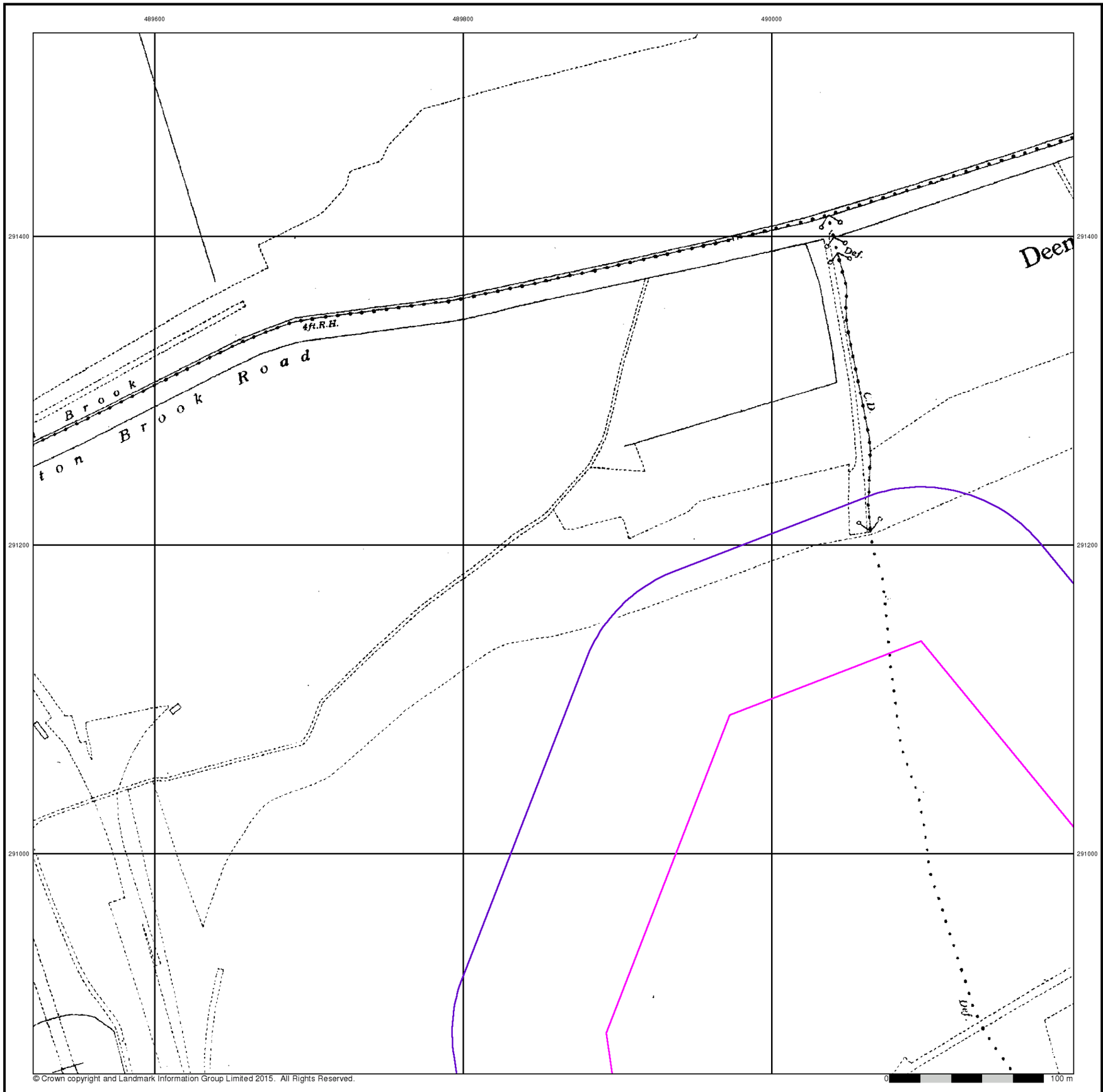

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Northamptonshire

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.

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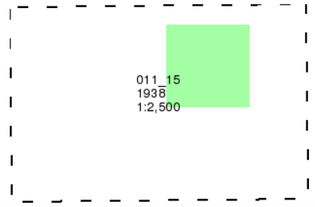
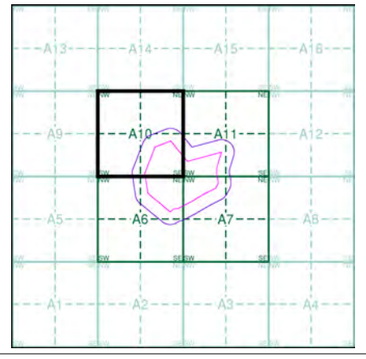


Historical Map - Segment A10



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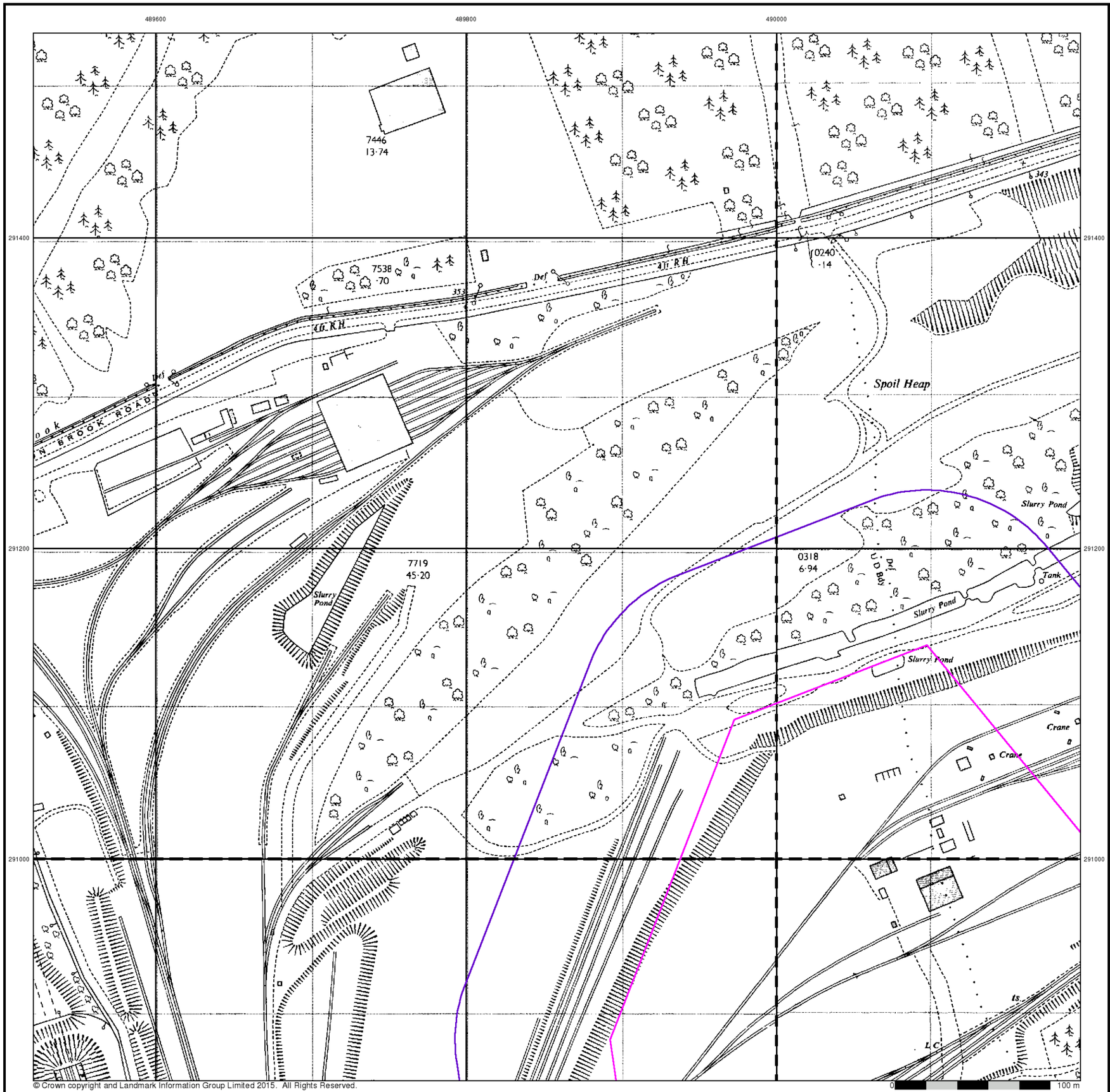

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Ordnance Survey Plan

Published 1964 - 1965

Source map scale - 1:2,500

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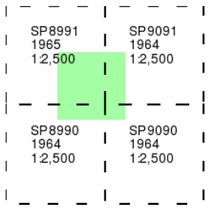
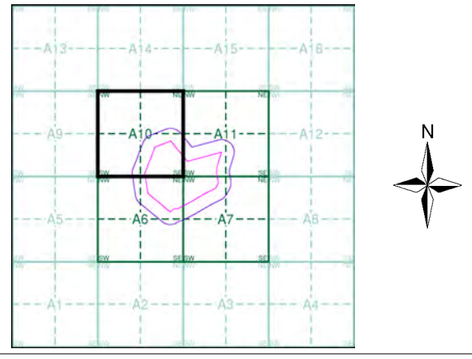


Historical Map - Segment A10



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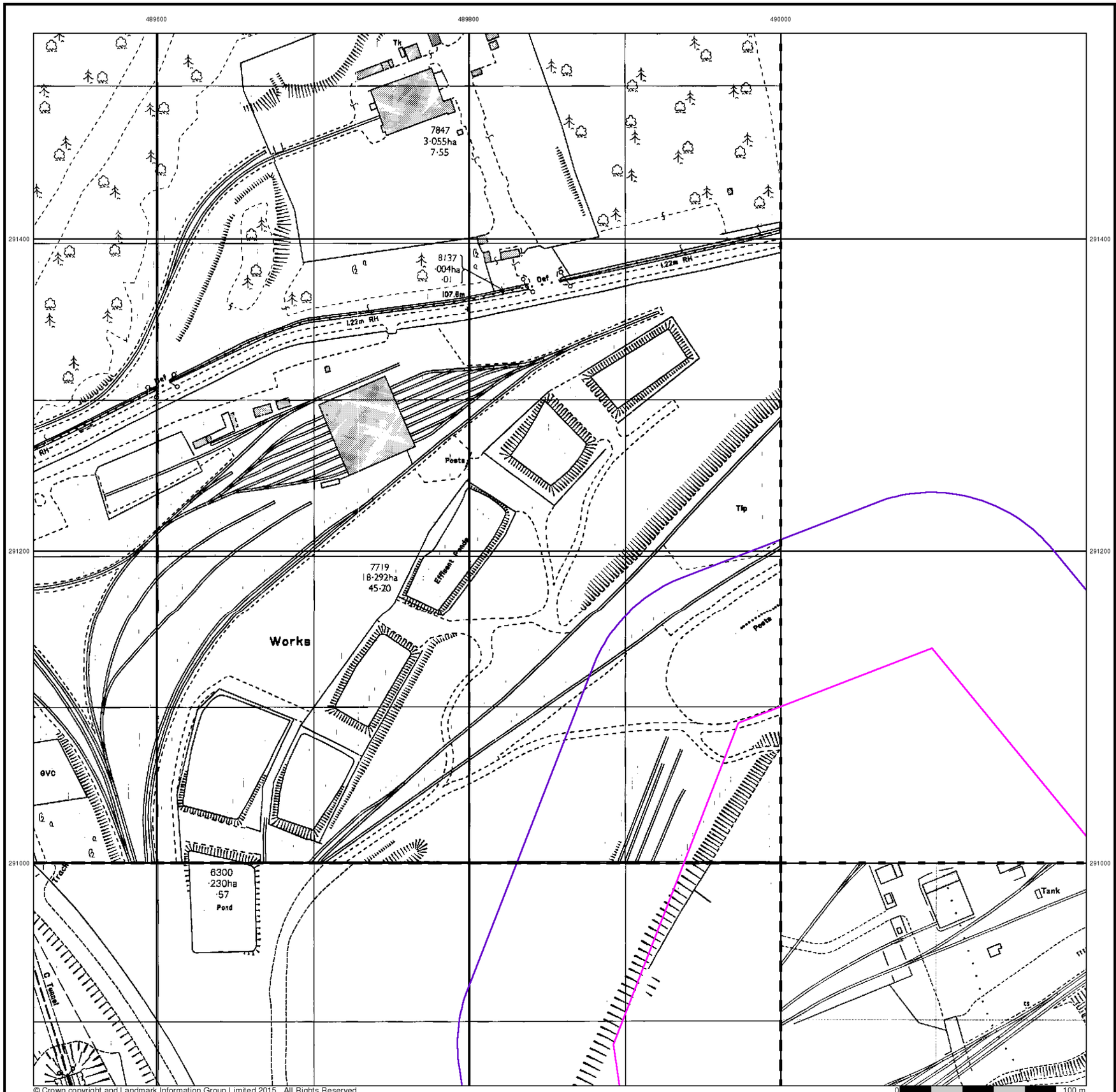

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Ordnance Survey Plan

Published 1973 - 1987

Source map scale - 1:2,500

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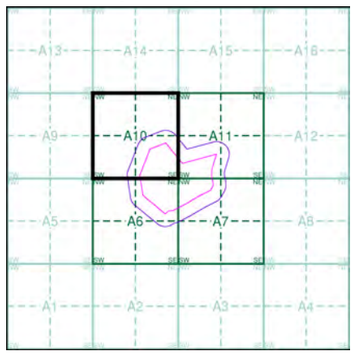
Map Name(s) and Date(s)

SP8991
1977
1:2,500

SP8990
1987
1:2,500

SP9090
1973
1:2,500

Historical Map - Segment A10



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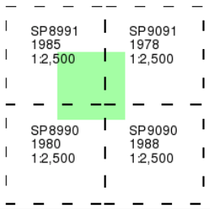
Additional SIMs

Published 1978 - 1988

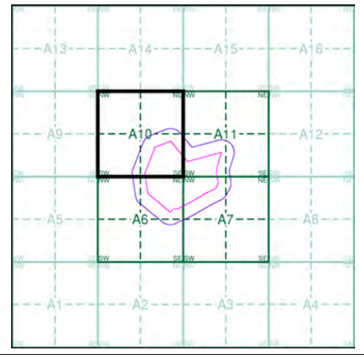
Source map scale - 1:2,500

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 A10



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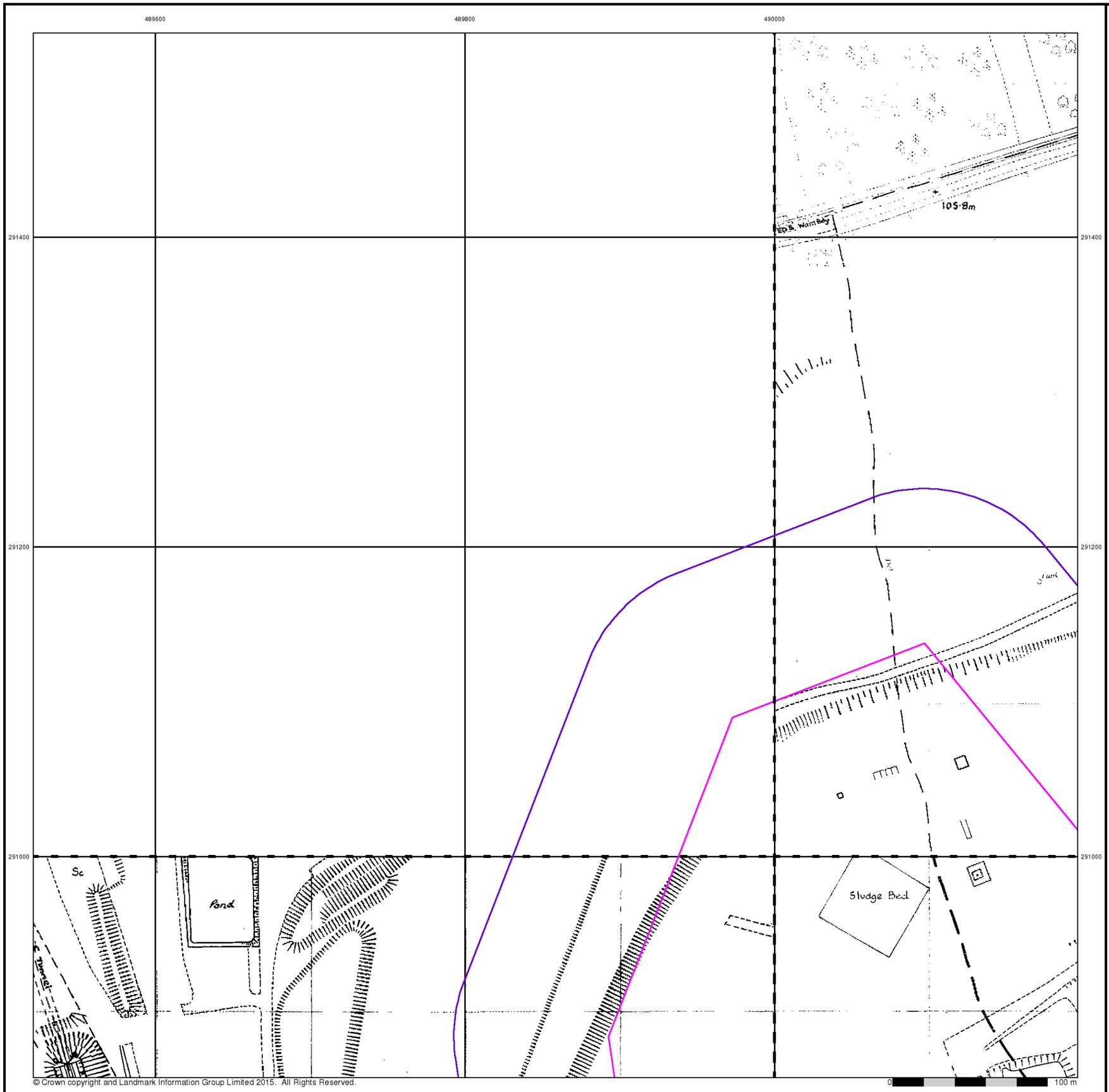

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Additional SIMs

Published 1983 - 1988

Source map scale - 1:2,500

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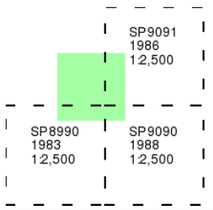
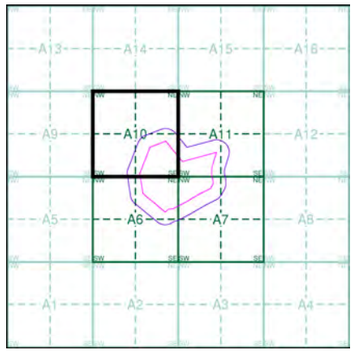


Historical Map - Segment A10



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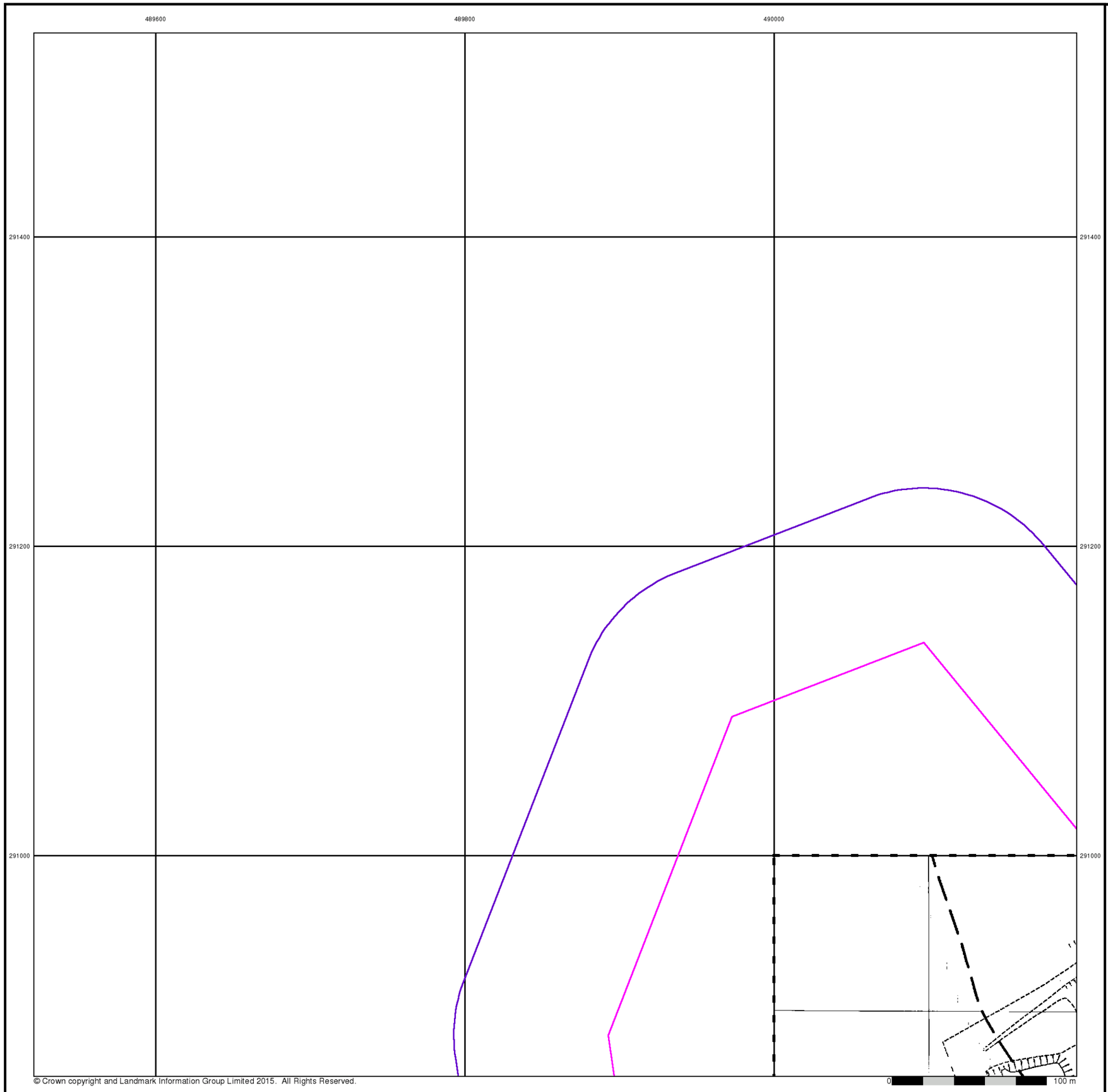

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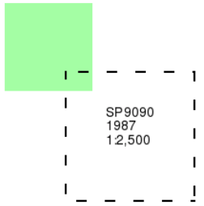
Ordnance Survey Plan

Published 1987

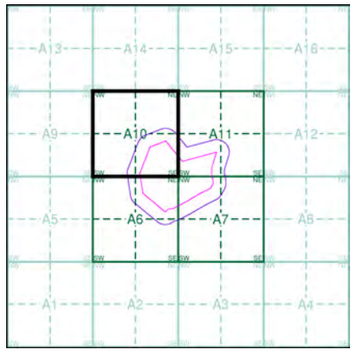
Source map scale - 1:2,500

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 A10



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	100

Site Details

Rockingham Enterprise Area

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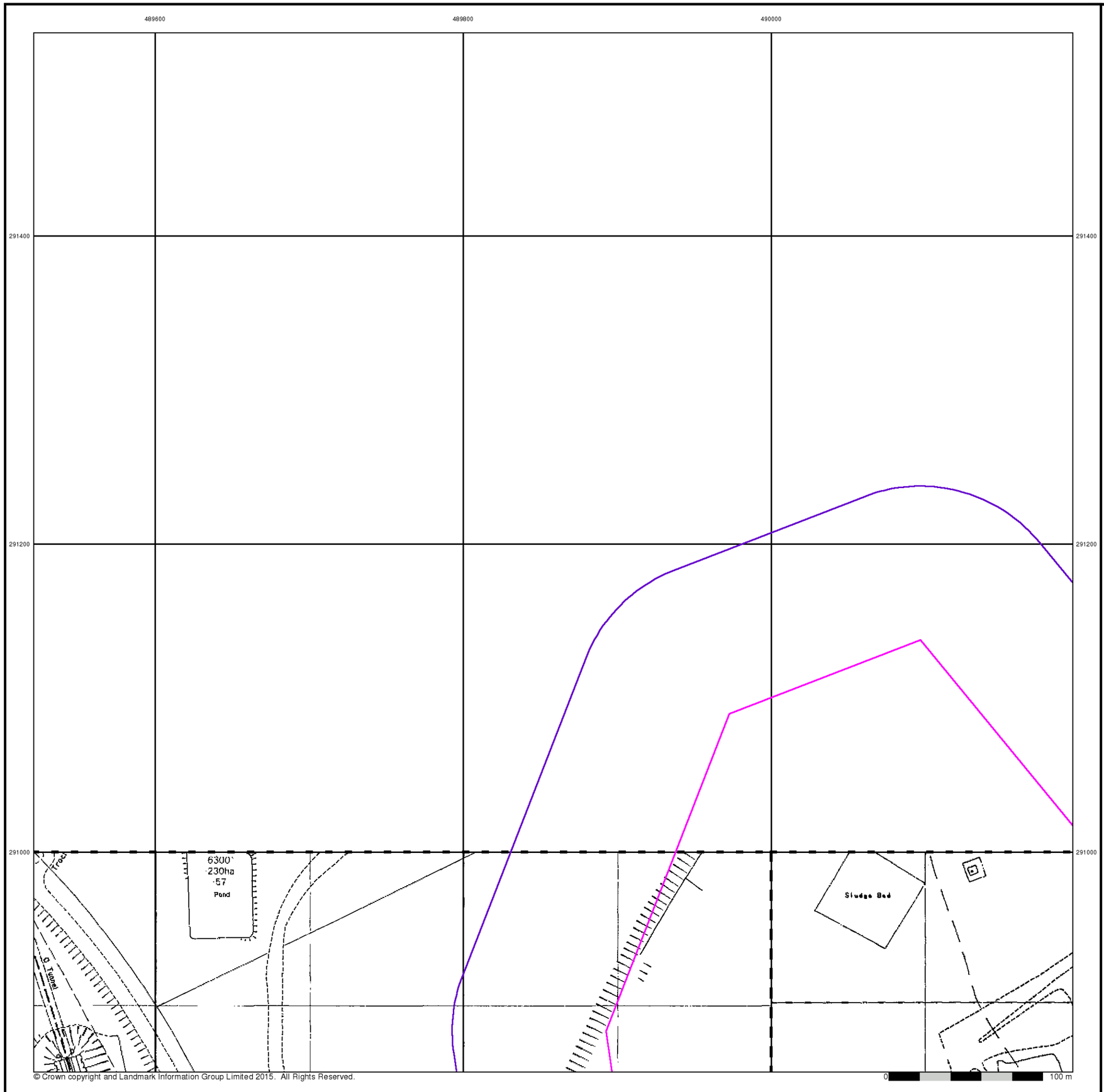

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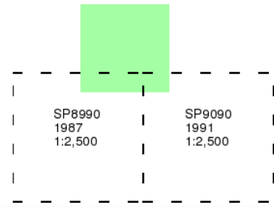
Additional SIMs

Published 1987 - 1991

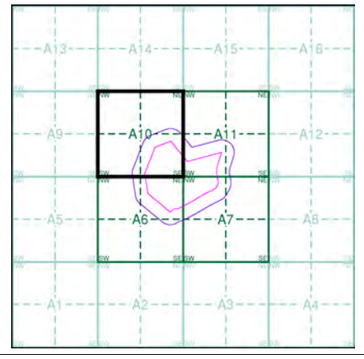
Source map scale - 1:2,500

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 A10



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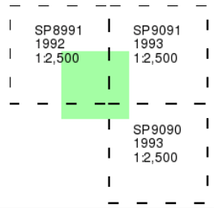
Large-Scale National Grid Data

Published 1992 - 1993

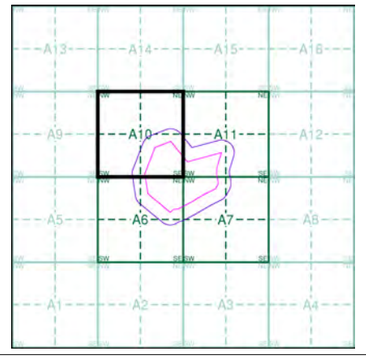
Source map scale - 1:2,500

'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 A10



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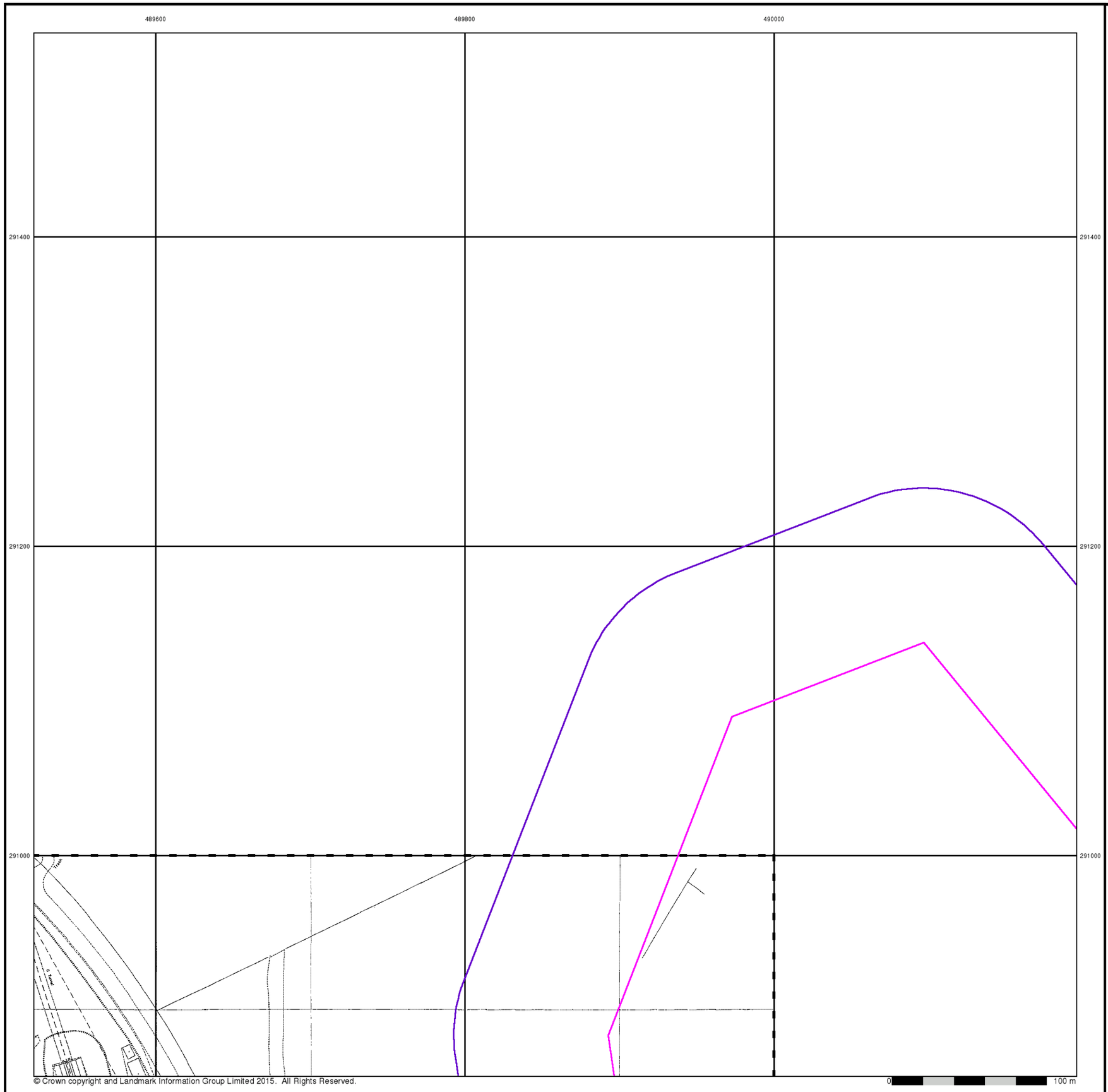

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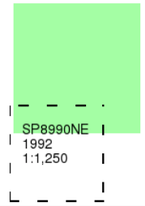
Large-Scale National Grid Data

Published 1992

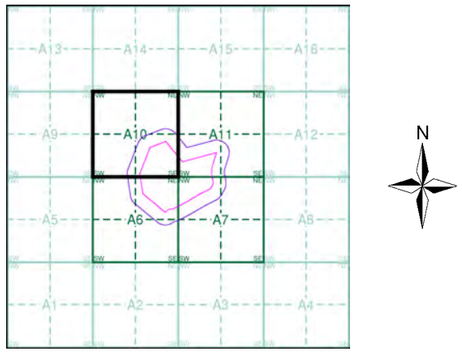
Source map scale - 1:1,250

'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 A10



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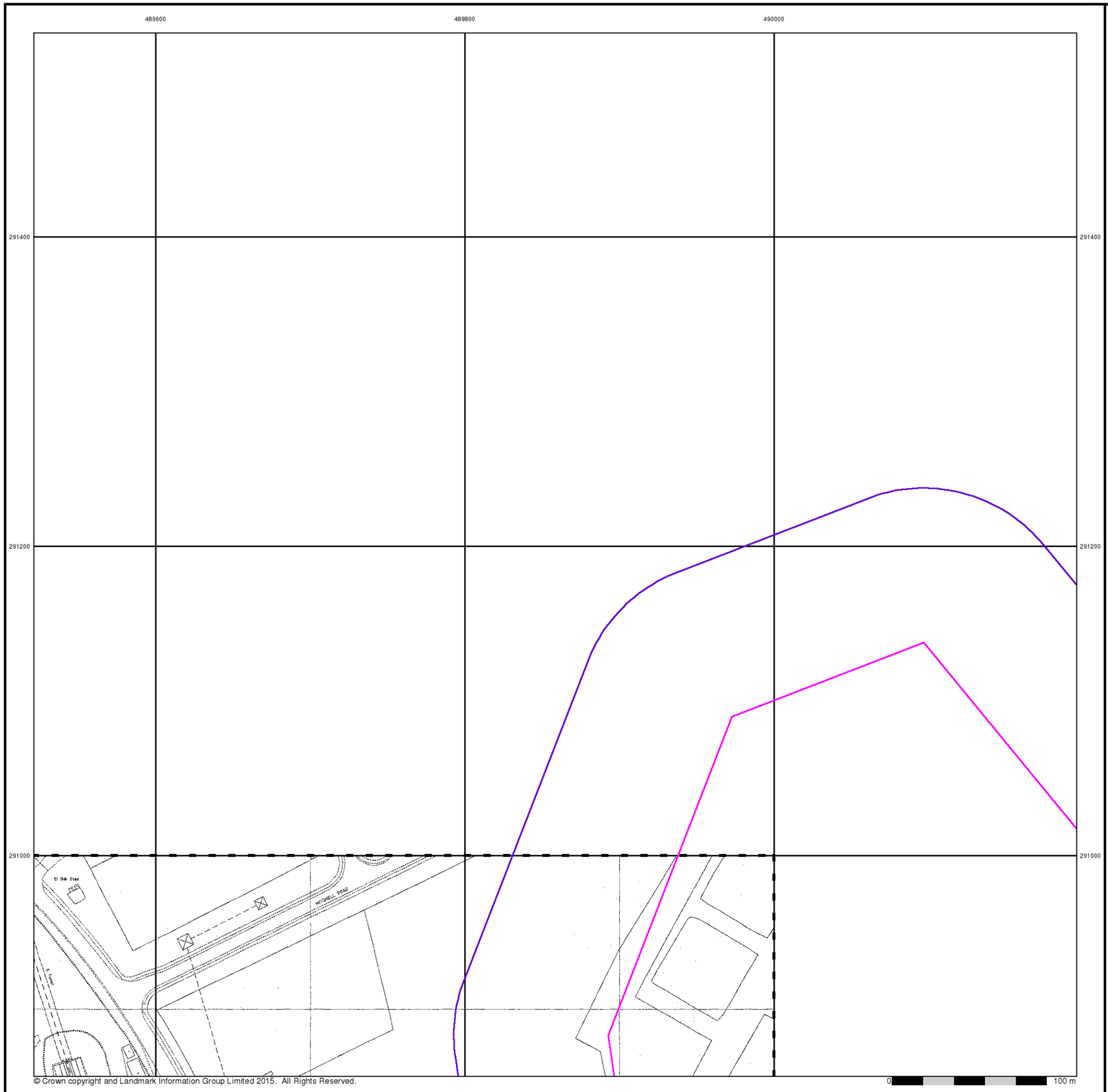

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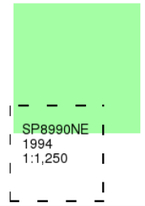
Large-Scale National Grid Data

Published 1994

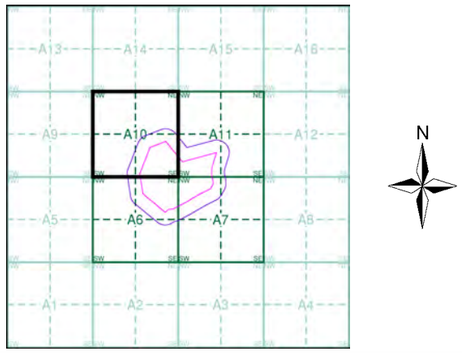
Source map scale - 1:1,250

'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 A10



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Large-Scale National Grid Data

Published 1994

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'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.

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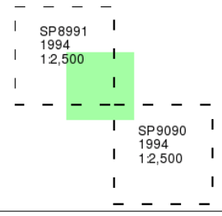
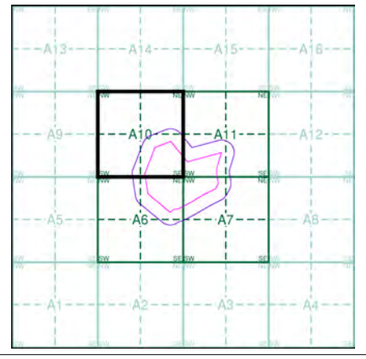


Historical Map - Segment A10



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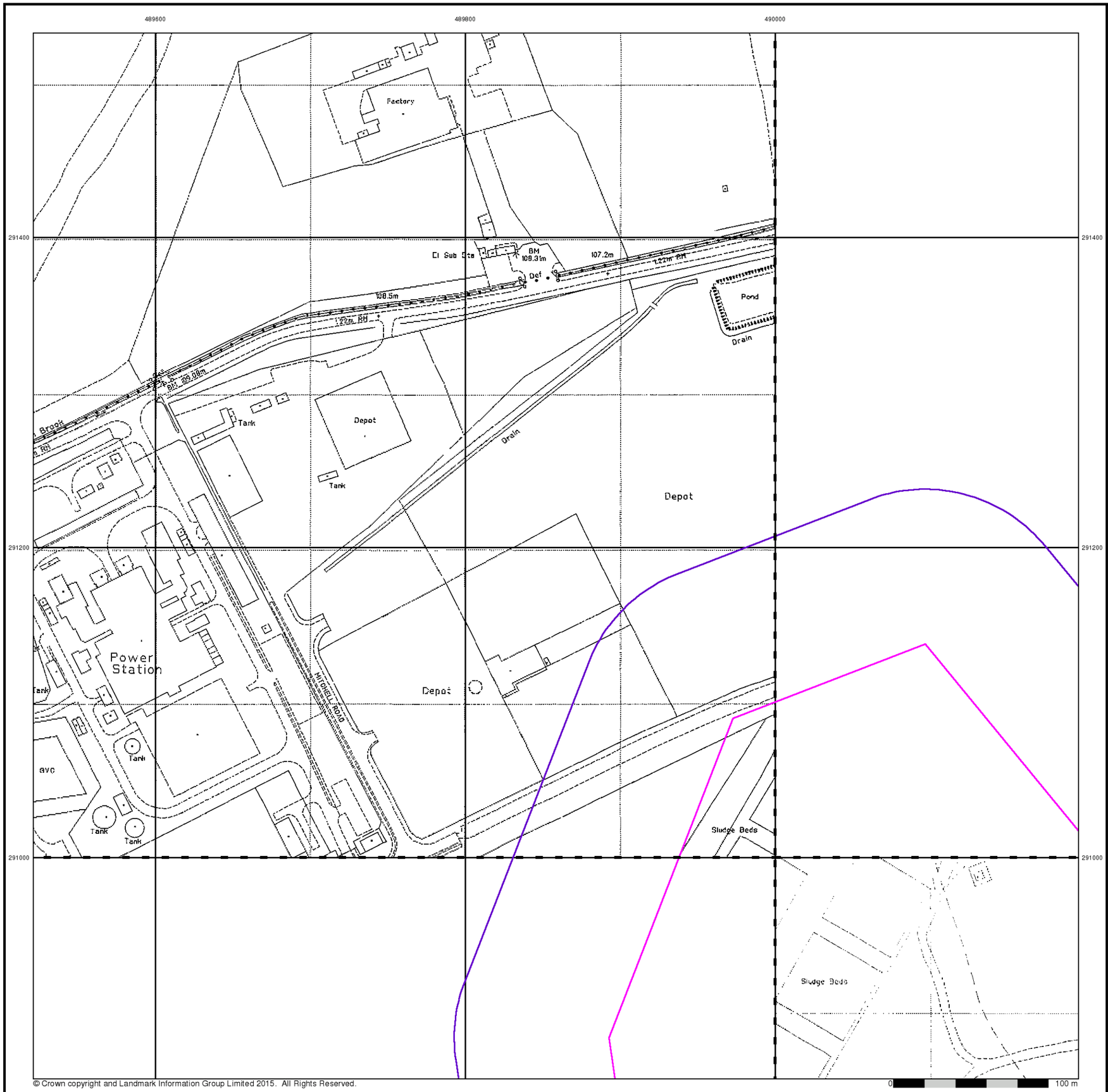

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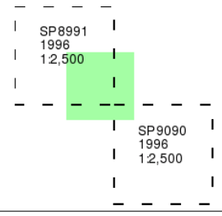
Large-Scale National Grid Data

Published 1996

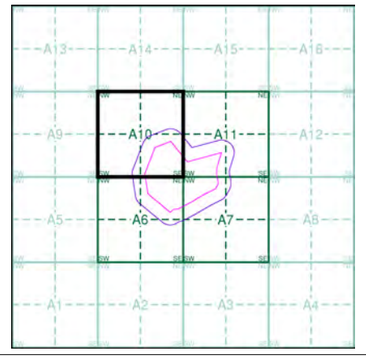
Source map scale - 1:2,500

'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 A10



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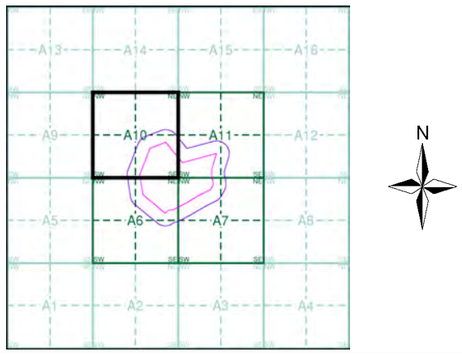
Historical Aerial Photography

Published 1999

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

Historical Aerial Photography - Segment A10



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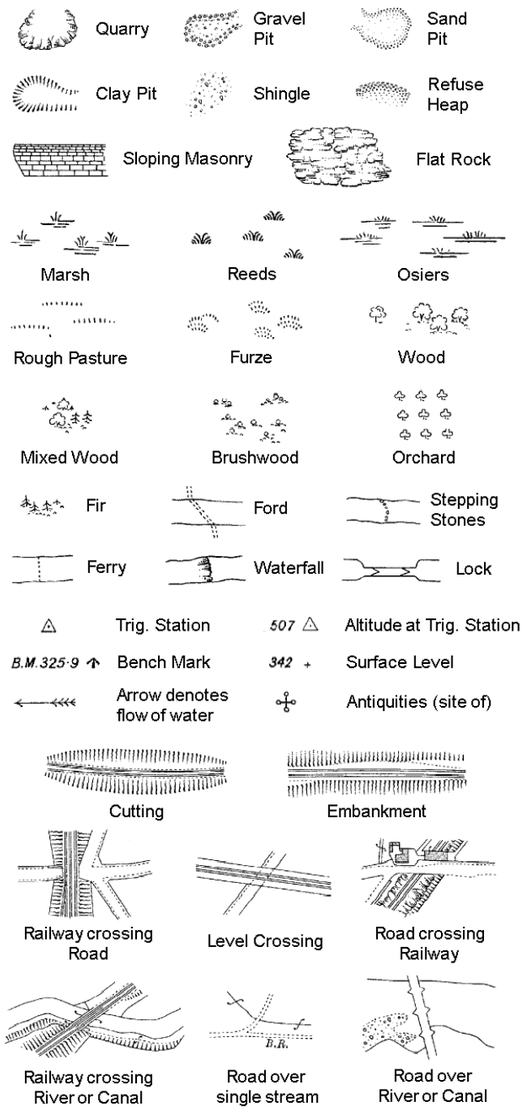
Historical Mapping Legends

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



County Boundary (Geographical)

County & Civil Parish Boundary

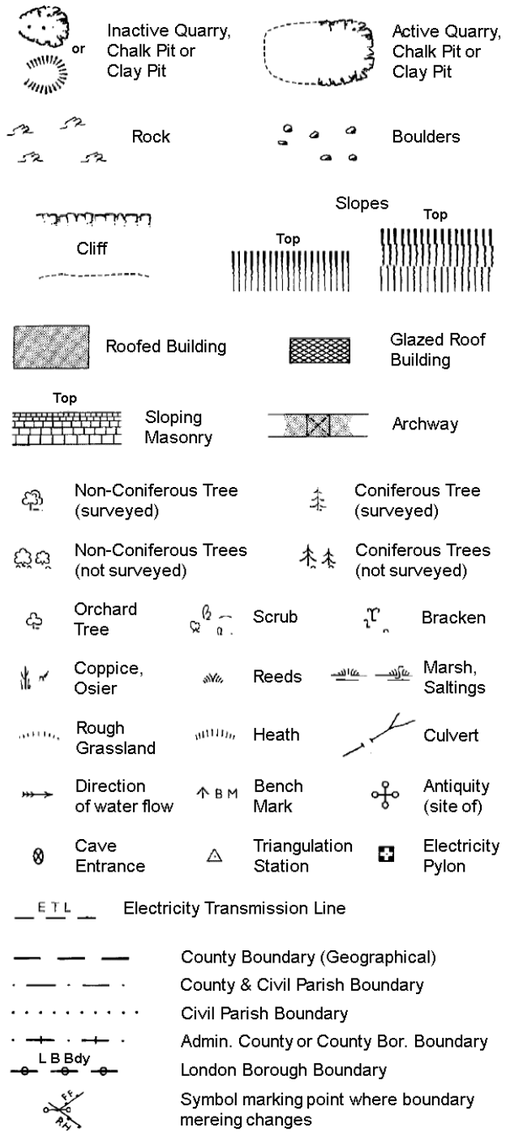
Administrative County & Civil Parish Boundary

Co. Boro. Bdy. County Borough Boundary (England)

Co. Burgh Bdy. County Burgh Boundary (Scotland)

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

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



County Boundary (Geographical)

County & Civil Parish Boundary

Civil Parish Boundary

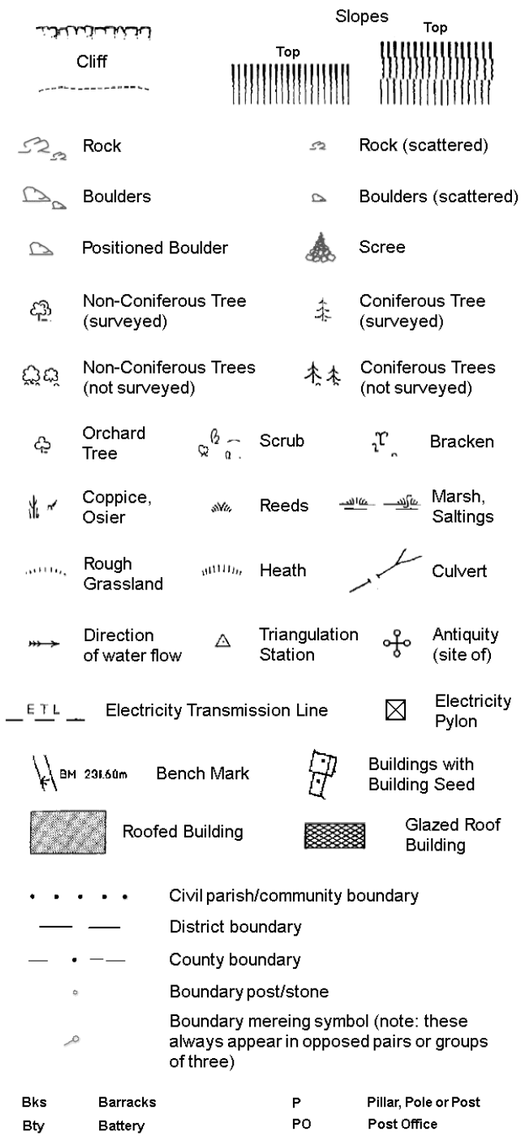
Admin. County or County Bor. Boundary

L B Bdy London Borough Boundary

Symbol marking point where boundary mereing changes

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

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



Civil parish/community boundary

District boundary

County boundary

Boundary post/stone

Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

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

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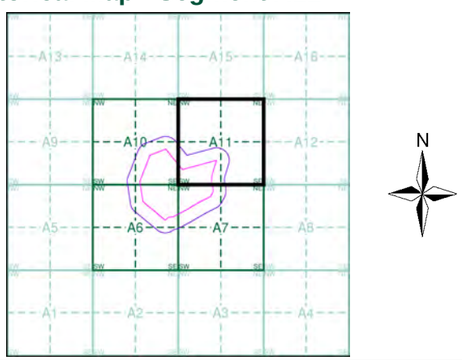
Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Northamptonshire	1:2,500	1886	2
Northamptonshire	1:2,500	1900	3
Northamptonshire	1:2,500	1938	4
Ordnance Survey Plan	1:2,500	1964	5
Ordnance Survey Plan	1:2,500	1973	6
Additional SIMs	1:2,500	1978 - 1988	7
Additional SIMs	1:2,500	1986 - 1988	8
Ordnance Survey Plan	1:2,500	1987	9
Additional SIMs	1:2,500	1991	10
Large-Scale National Grid Data	1:2,500	1993	11
Large-Scale National Grid Data	1:2,500	1994	12
Large-Scale National Grid Data	1:2,500	1996	13
Historical Aerial Photography	1:2,500	1999	14

Historical Map - Segment A11



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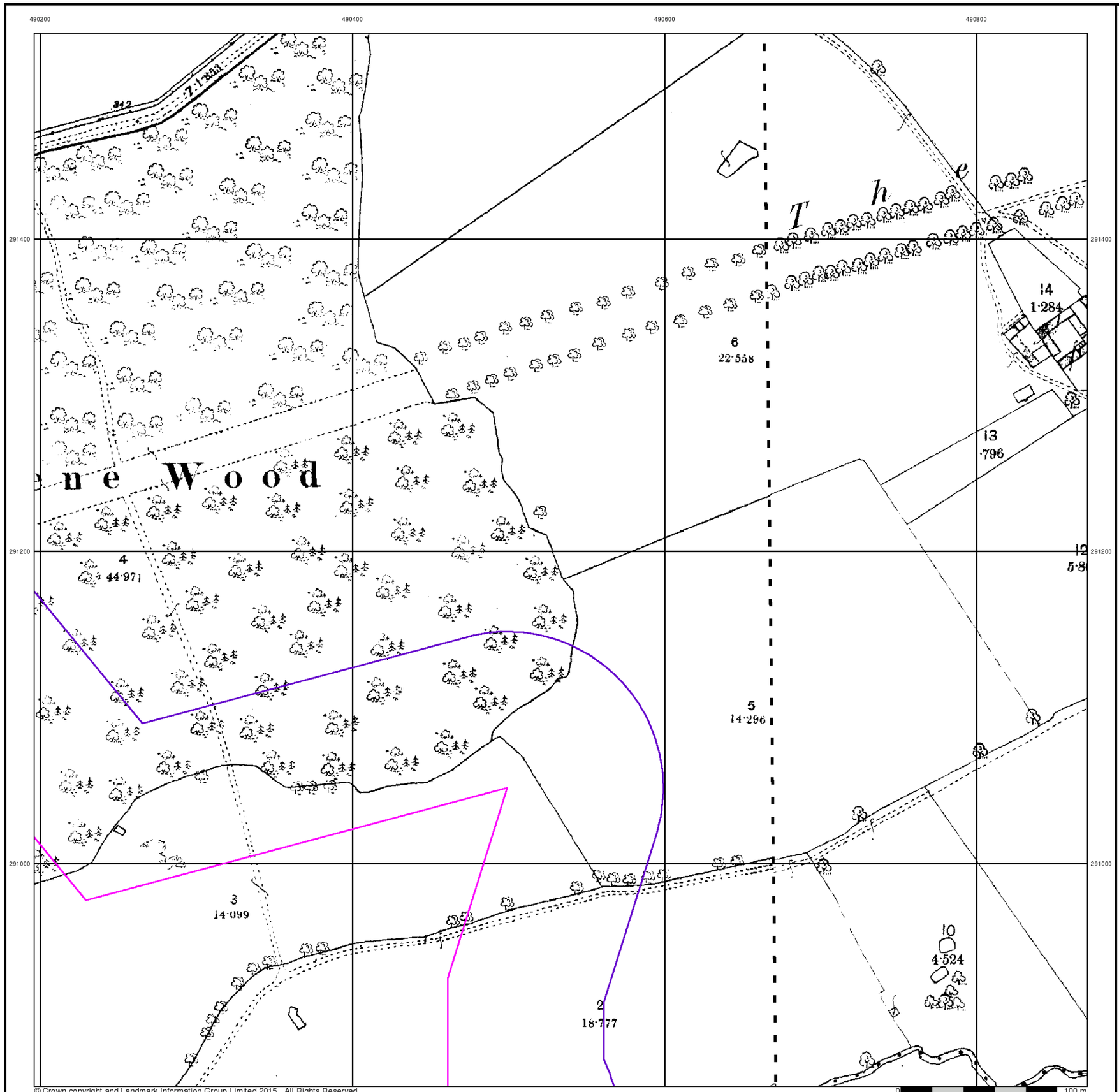

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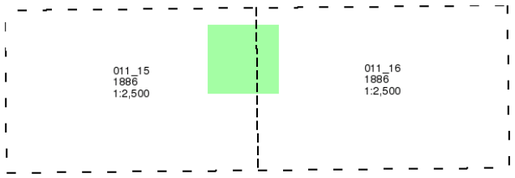
Northamptonshire

Published 1886

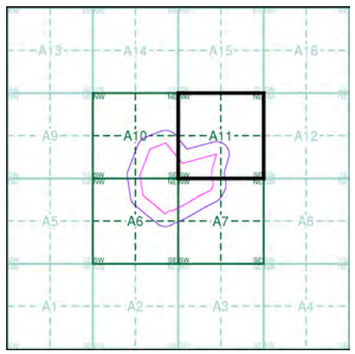
Source map scale - 1:2,500

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 A11



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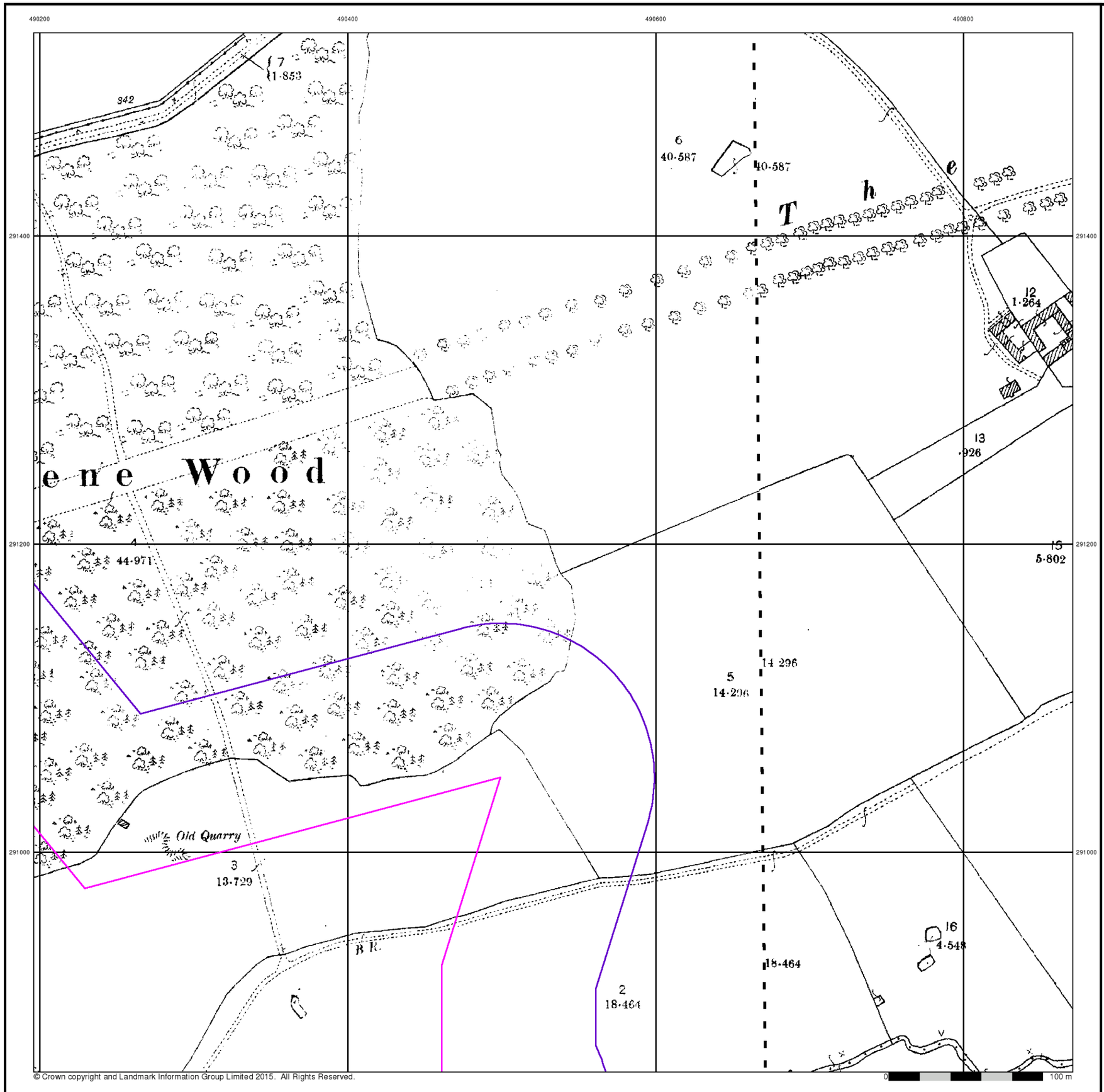

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Northamptonshire

Published 1900

Source map scale - 1:2,500

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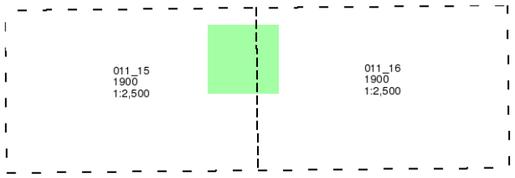
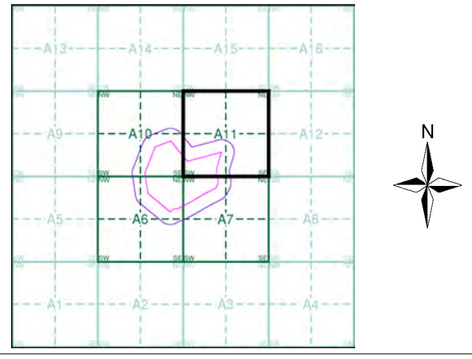


Historical Map - Segment A11



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Customer Ref:	STP3966D
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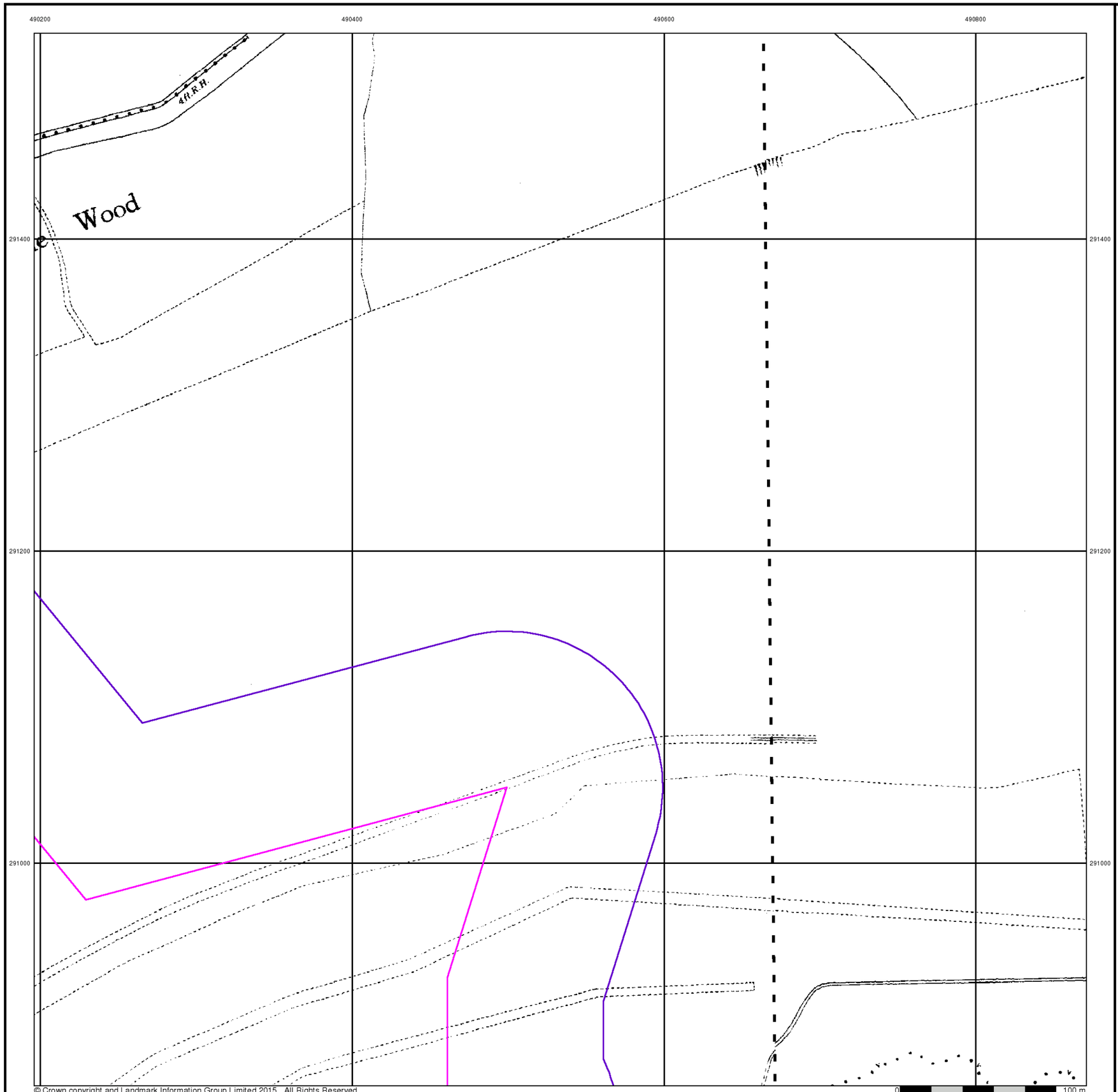
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	100

Site Details

Rockingham Enterprise Area

Landmark INFORMATION GROUP

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



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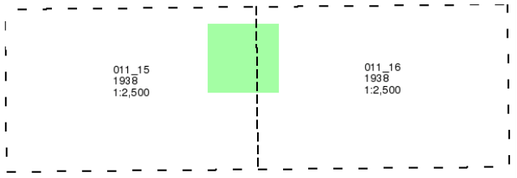
Northamptonshire

Published 1938

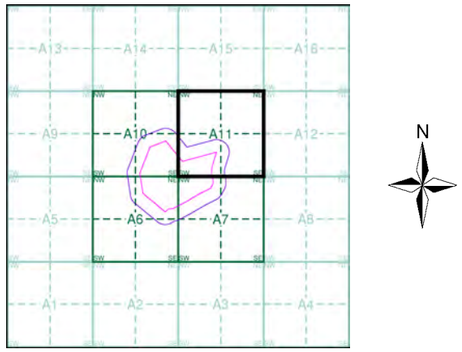
Source map scale - 1:2,500

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 A11



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	100

Site Details

Rockingham Enterprise Area

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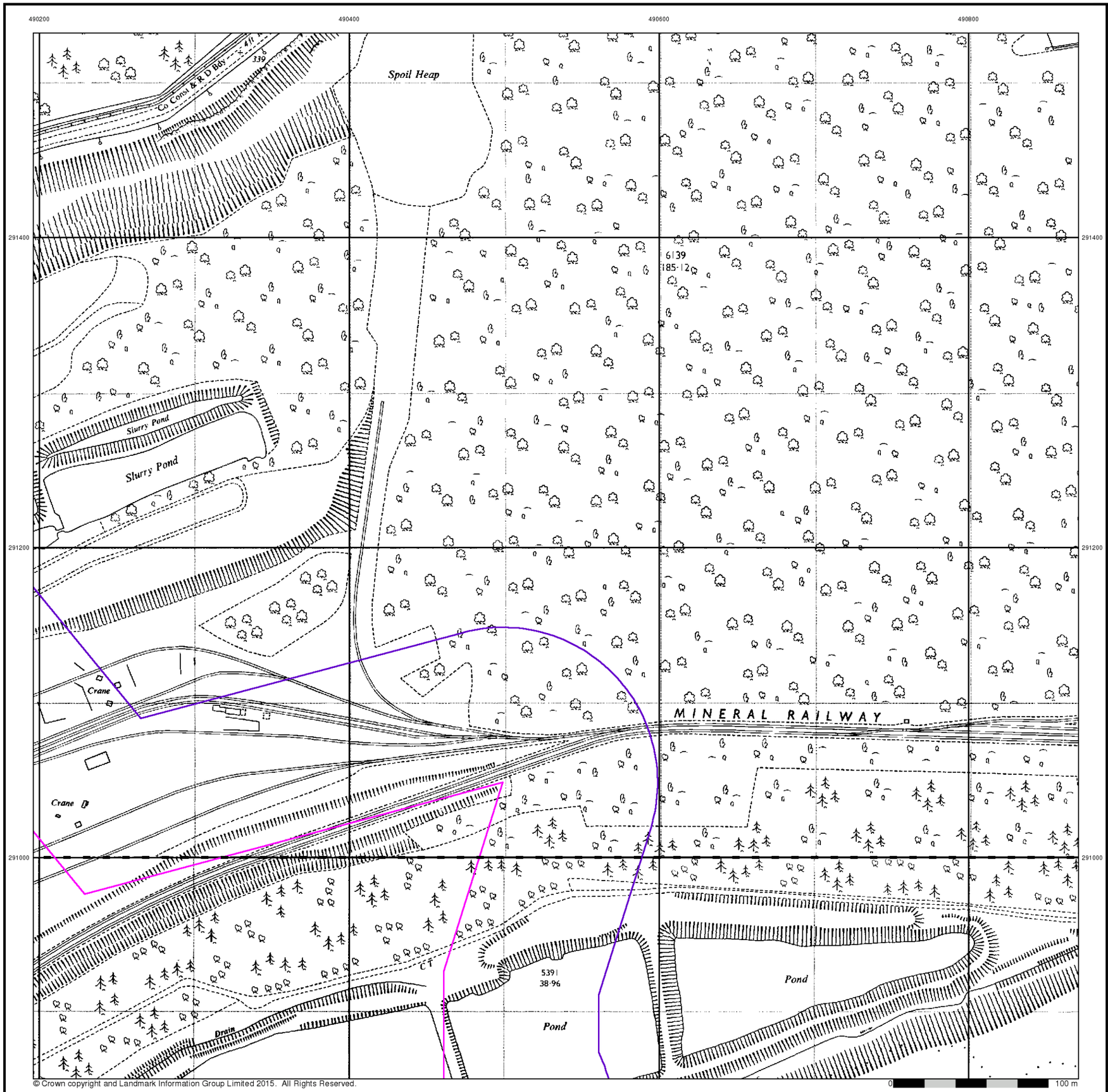

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Ordnance Survey Plan

Published 1964

Source map scale - 1:2,500

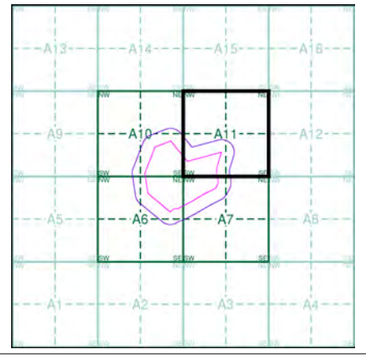
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. 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)

SP9091
1964
1:2,500

SP9090
1964
1:2,500

Historical Map - Segment A11



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
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Site Details

Rockingham Enterprise Area

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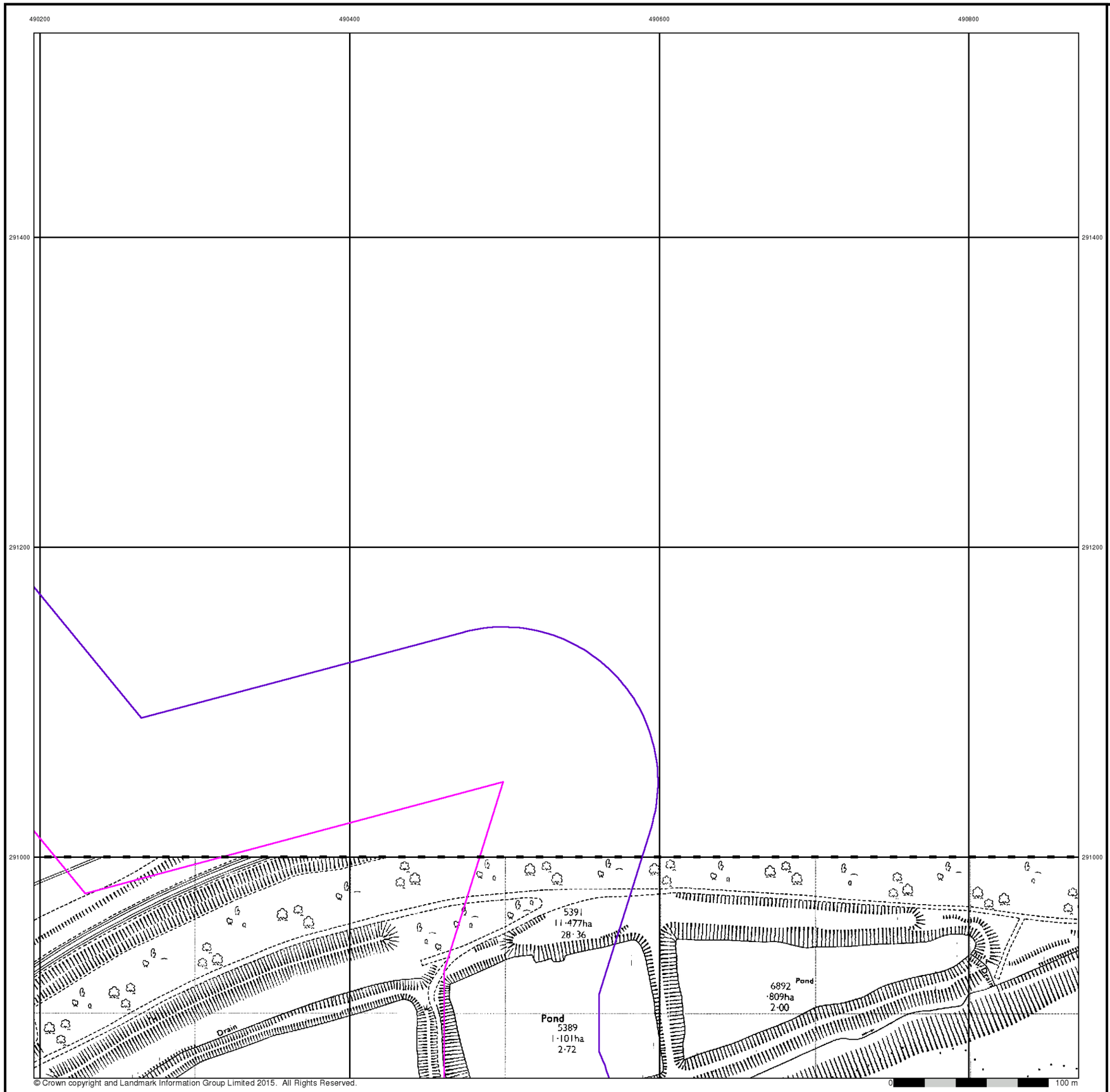

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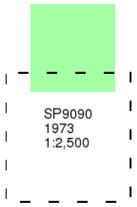
Ordnance Survey Plan

Published 1973

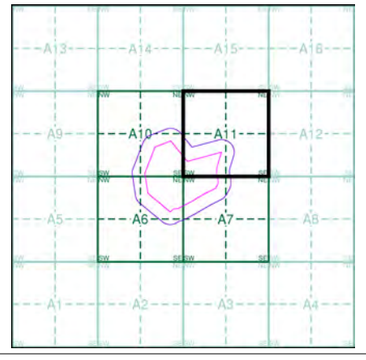
Source map scale - 1:2,500

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 A11



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
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Site Details

Rockingham Enterprise Area

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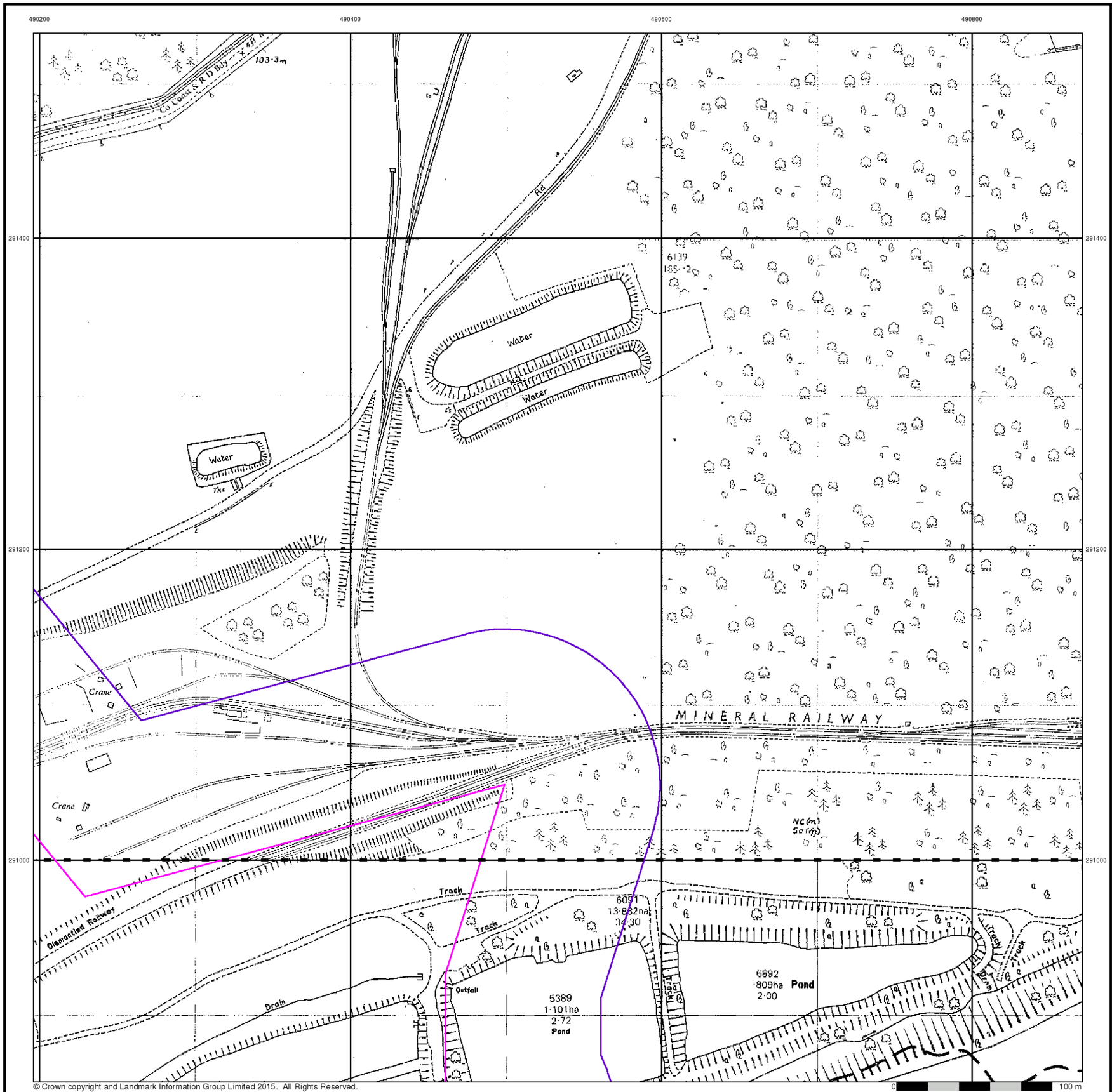

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Additional SIMs

Published 1978 - 1988

Source map scale - 1:2,500

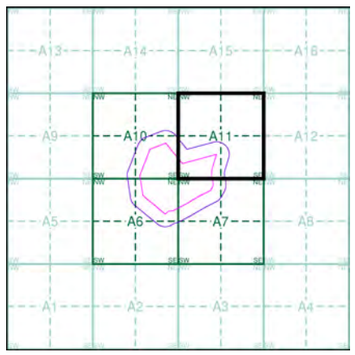
The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps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

Map Name(s) and Date(s)

SP9091
1978
1:2,500

SP9090
1988
1:2,500

Historical Map - Segment A11



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
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Site Details

Rockingham Enterprise Area

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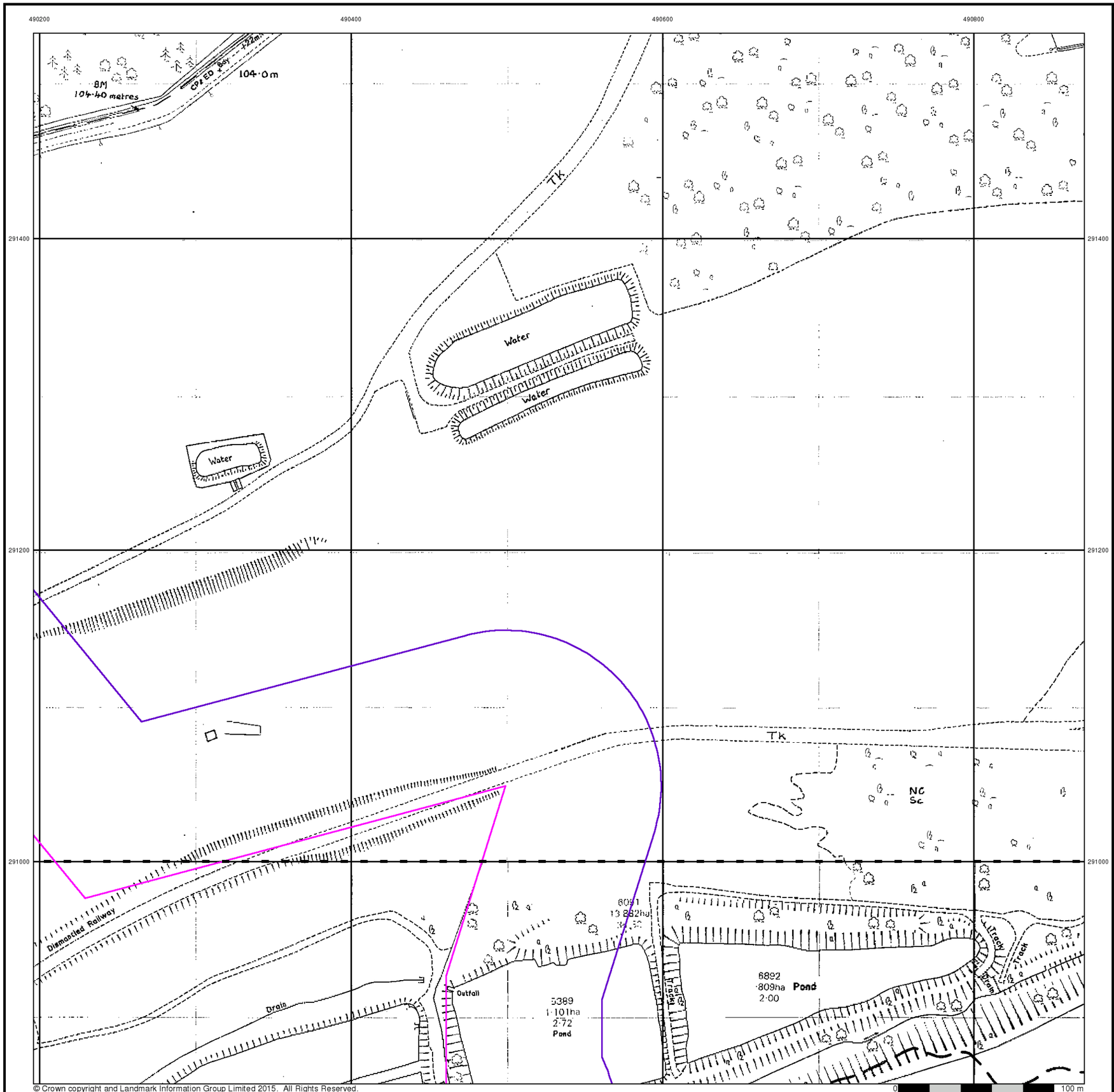

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Additional SIMs

Published 1986 - 1988

Source map scale - 1:2,500

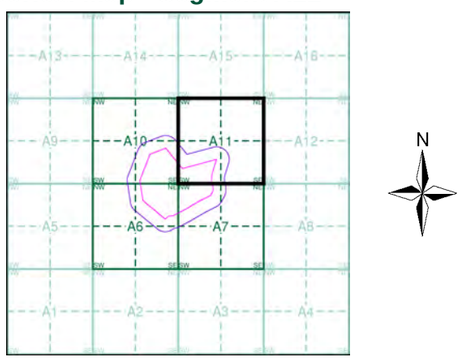
The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps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

Map Name(s) and Date(s)

SP9091
1986
1:2,500

SP9090
1988
1:2,500

Historical Map - Segment A11



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Order Number:	118207619_1_1
Customer Ref:	STP3966D
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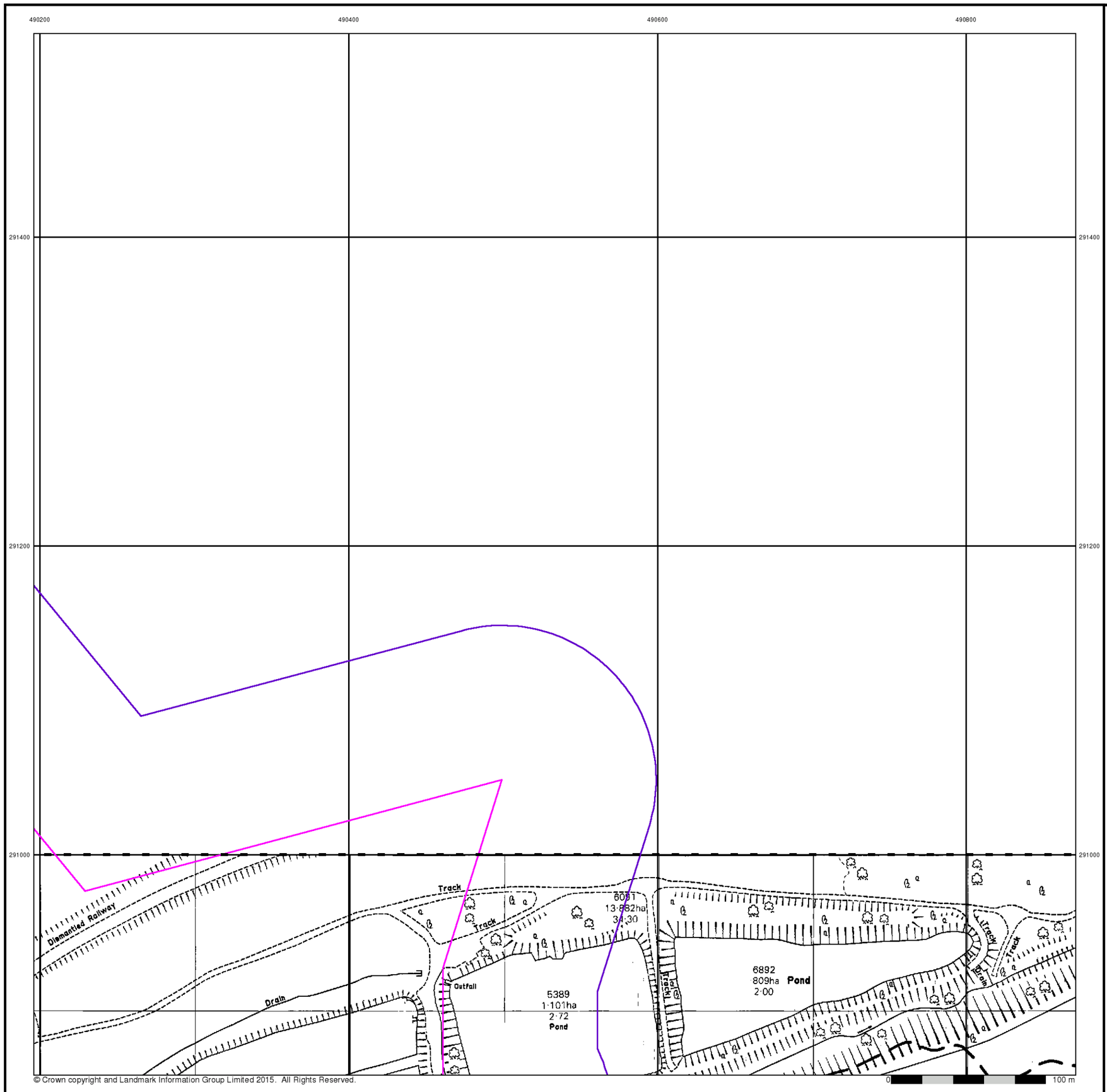

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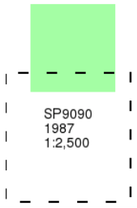
Ordnance Survey Plan

Published 1987

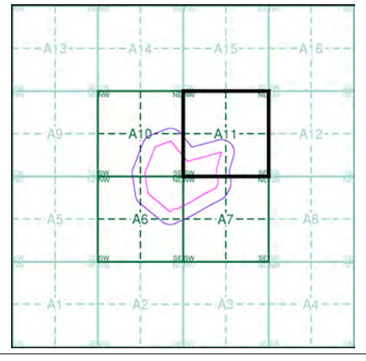
Source map scale - 1:2,500

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 A11



Order Details

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Customer Ref:	STP3966D
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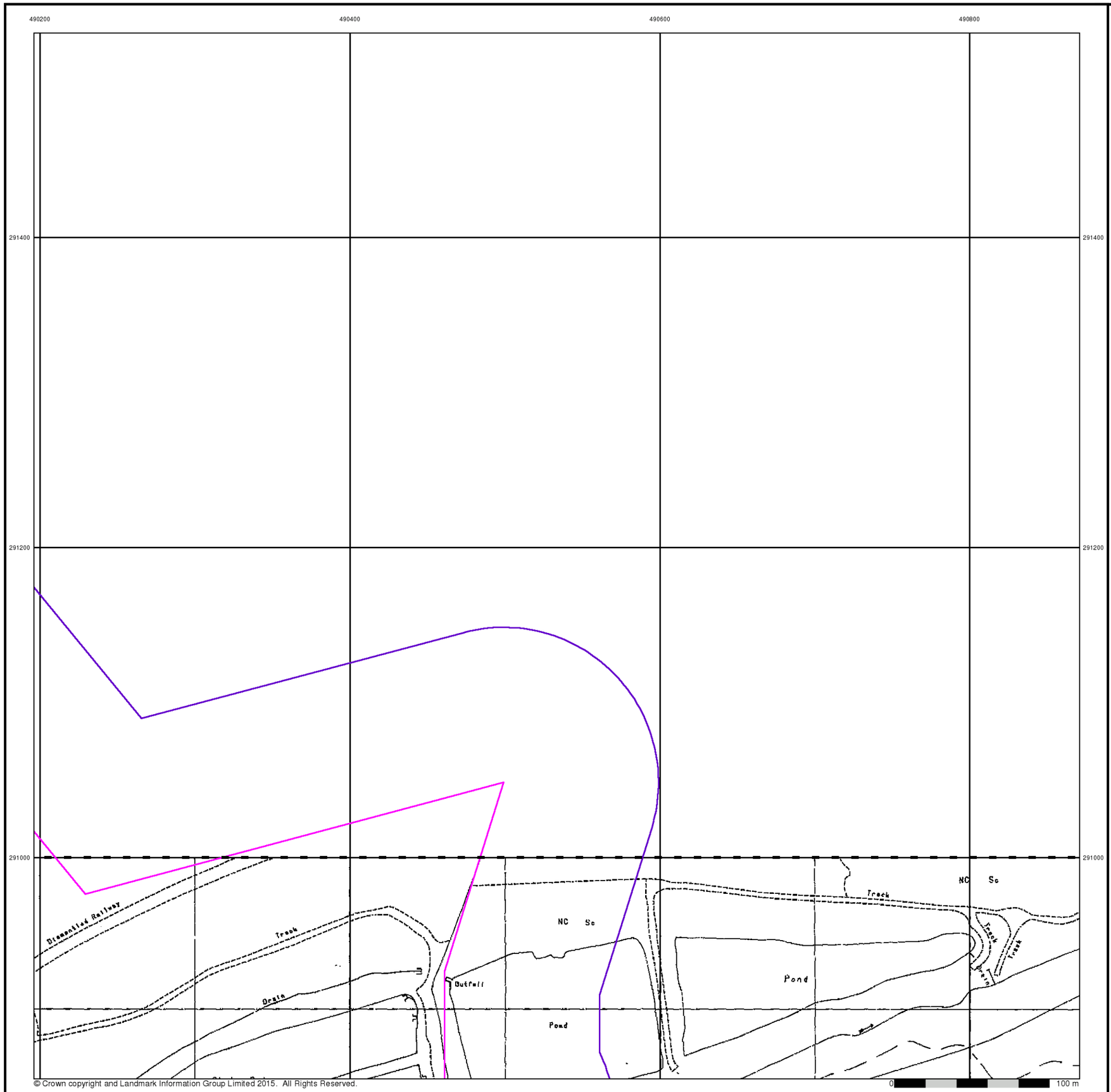

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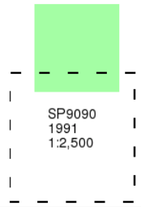
Additional SIMs

Published 1991

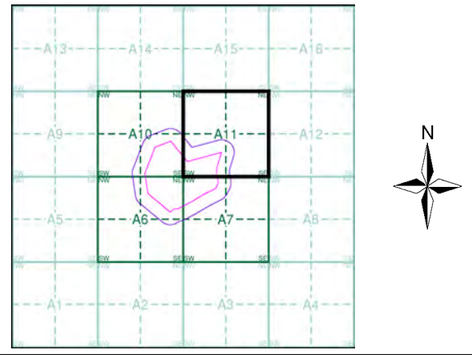
Source map scale - 1:2,500

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 A11



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
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Site Details

Rockingham Enterprise Area

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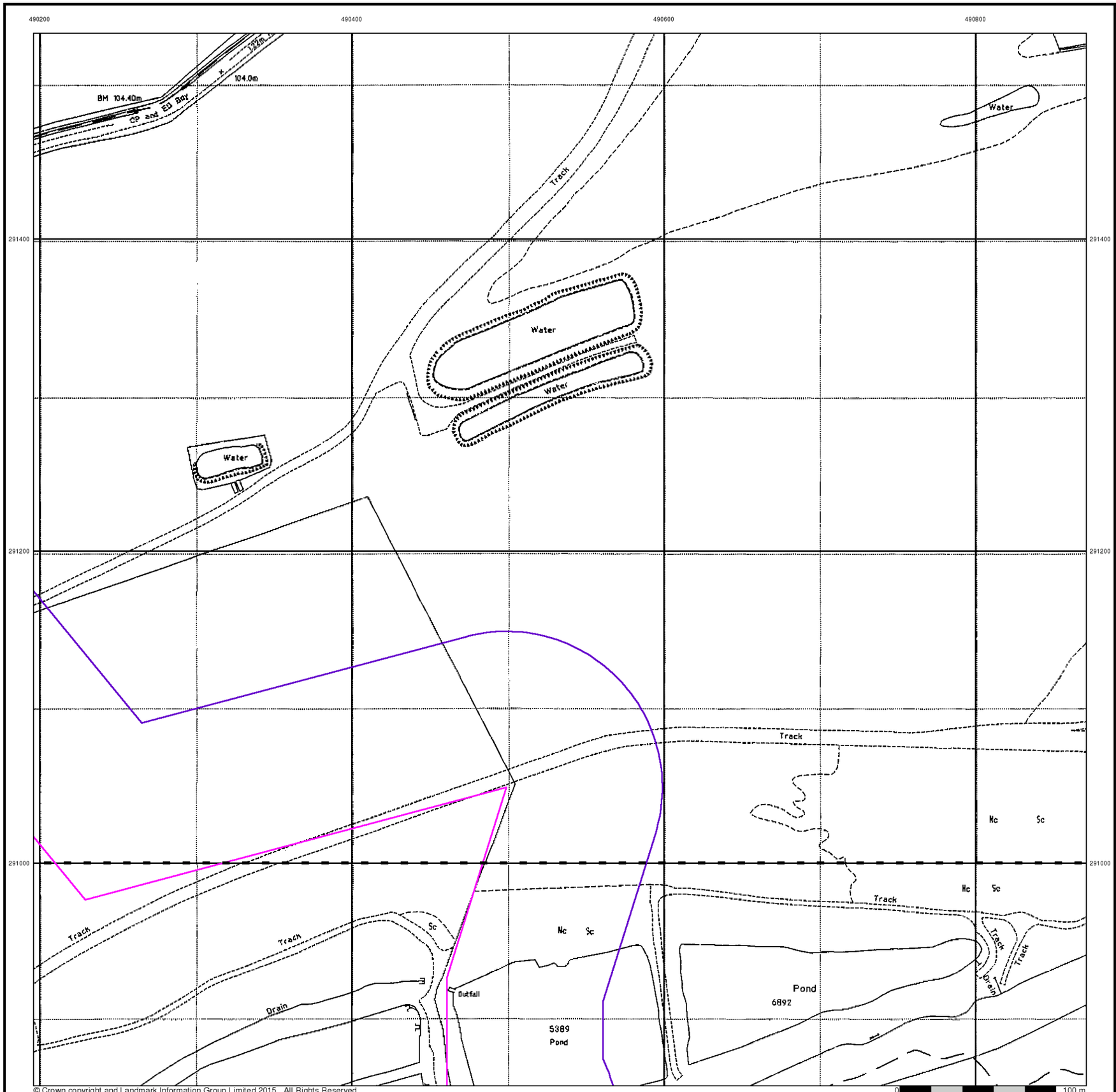

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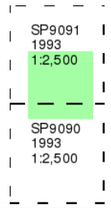
Large-Scale National Grid Data

Published 1993

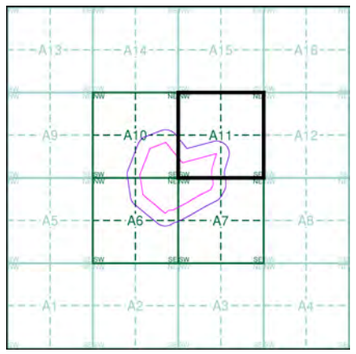
Source map scale - 1:2,500

'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 A11



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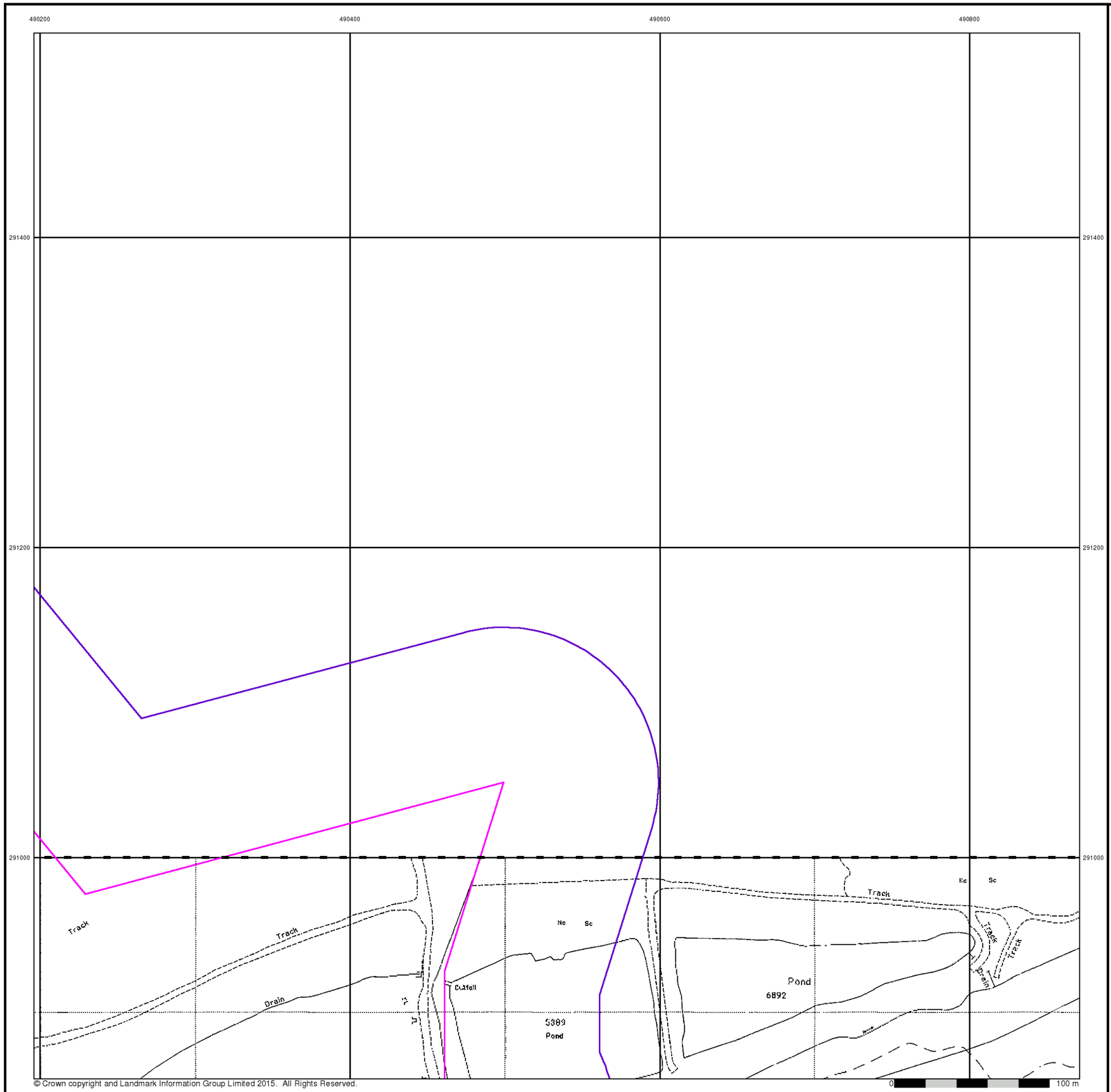

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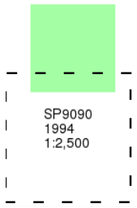
Large-Scale National Grid Data

Published 1994

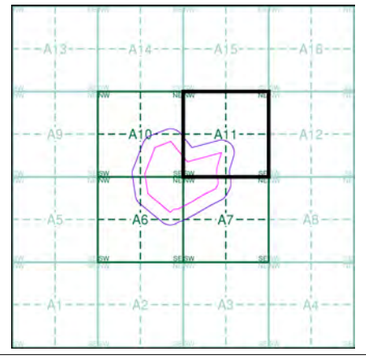
Source map scale - 1:2,500

'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 A11



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Rockingham Enterprise Area

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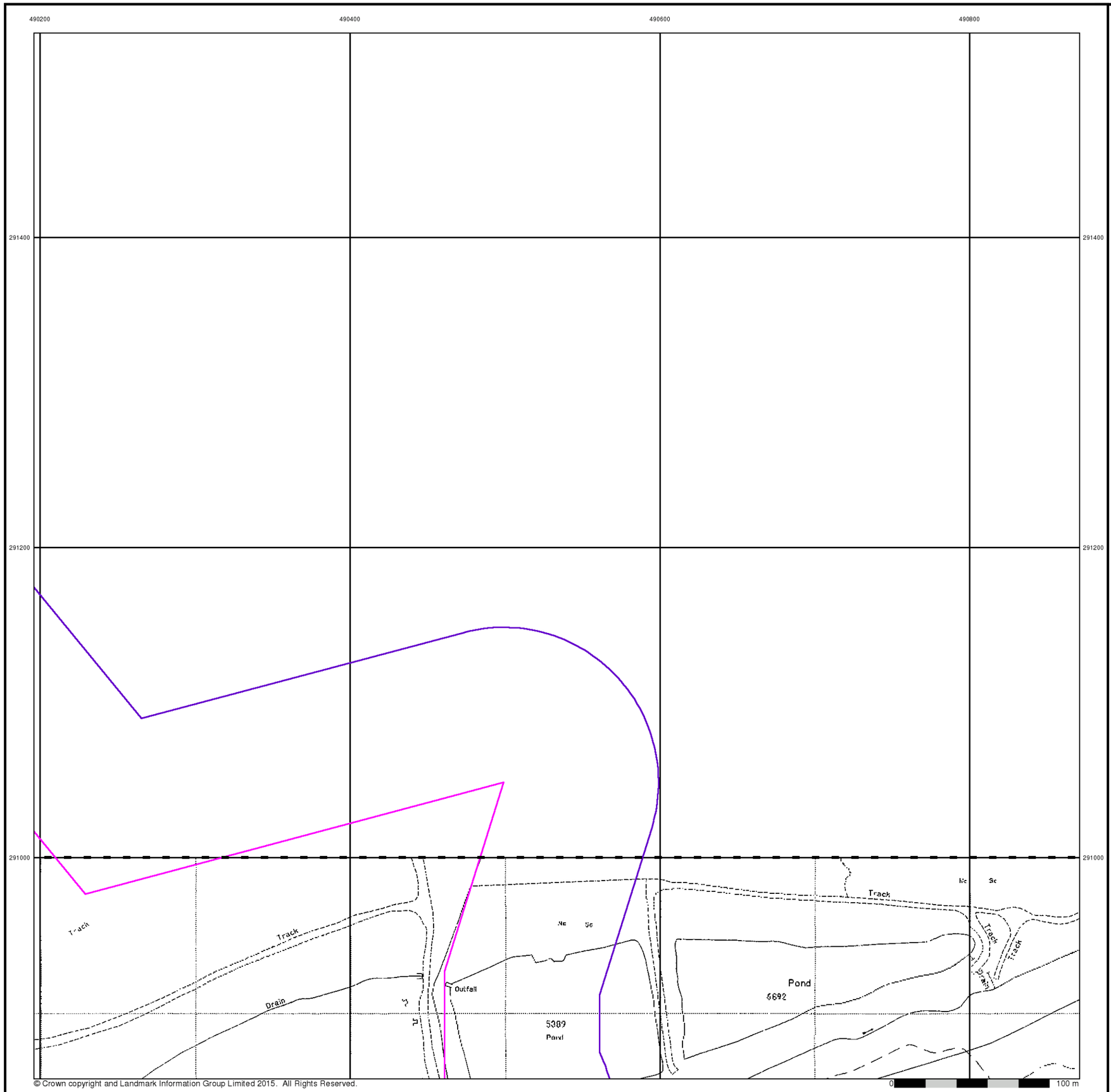

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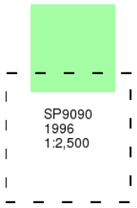
Large-Scale National Grid Data

Published 1996

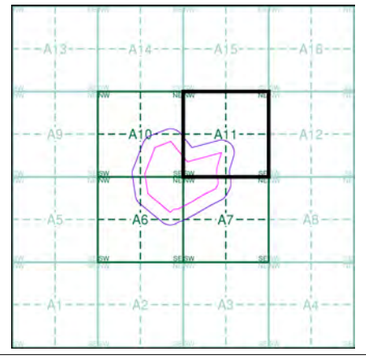
Source map scale - 1:2,500

'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 A11



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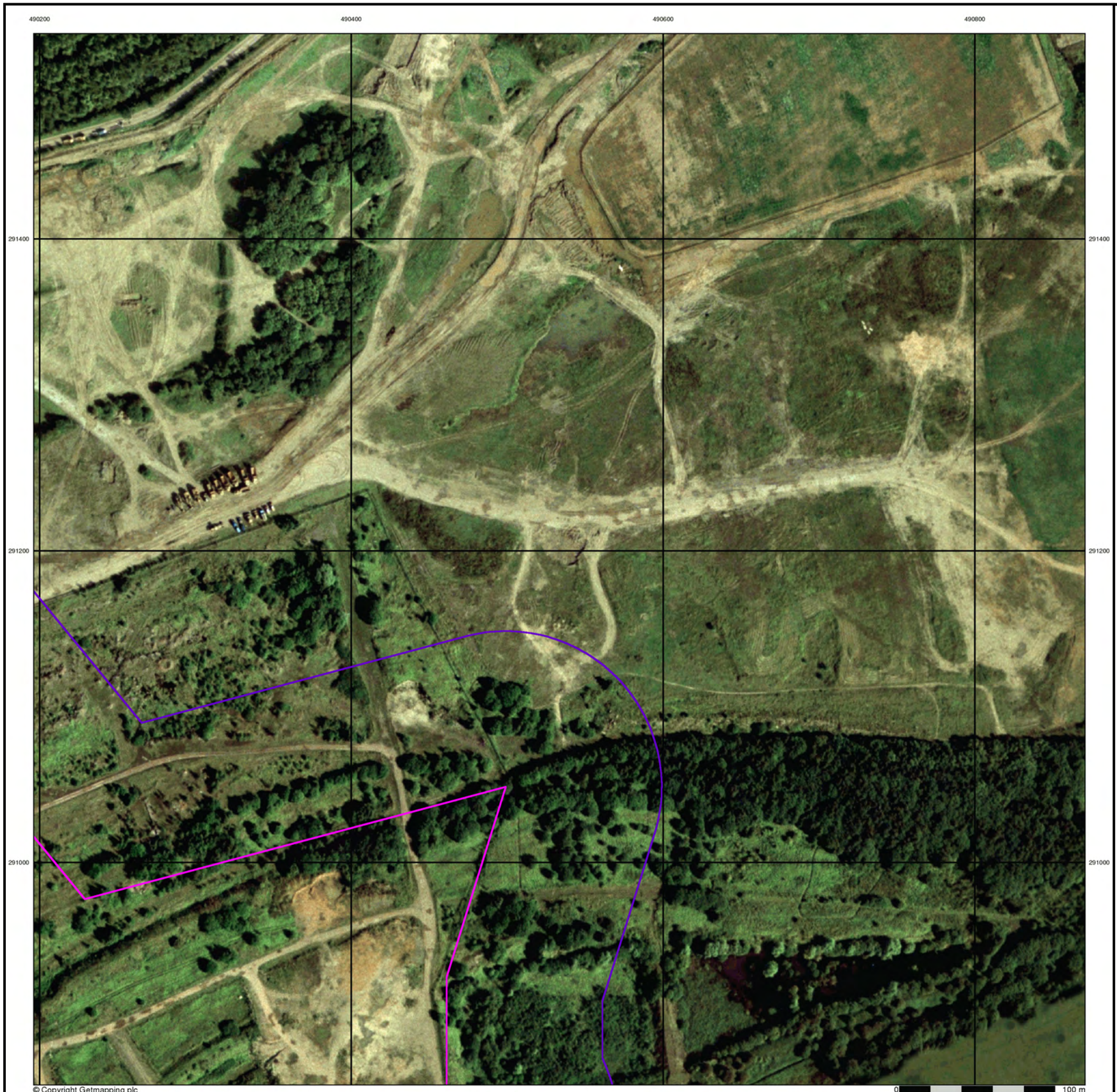

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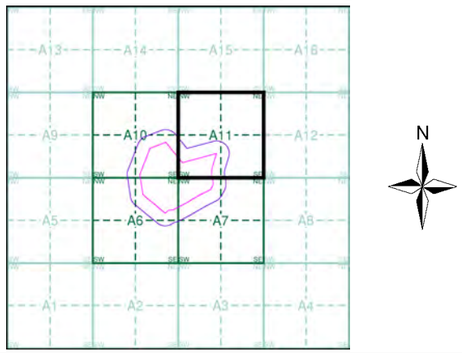
Historical Aerial Photography

Published 1999

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

Historical Aerial Photography - Segment A11



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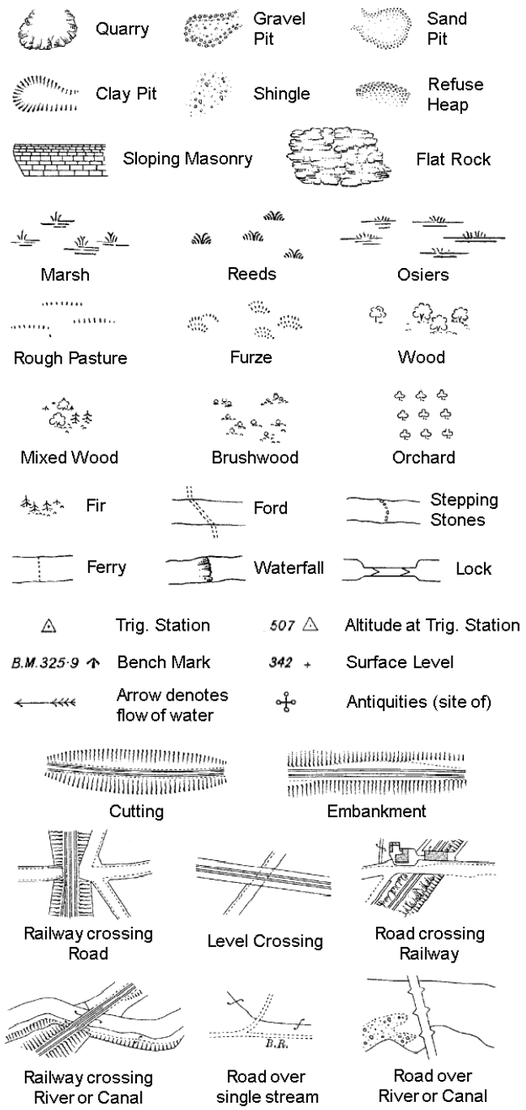
Historical Mapping Legends

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



County Boundary (Geographical)

County & Civil Parish Boundary

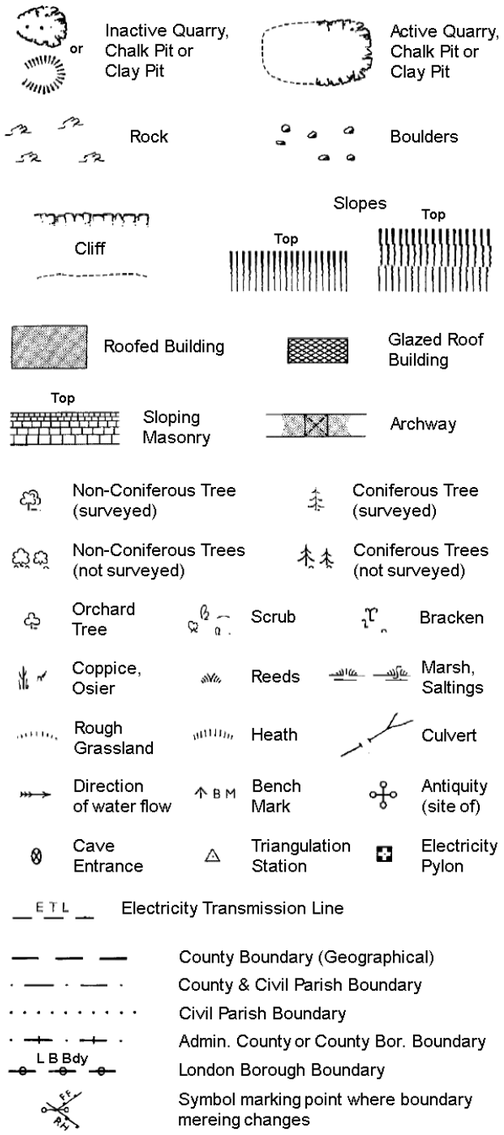
Administrative County & Civil Parish Boundary

Co. Boro. Bdy. County Borough Boundary (England)

Co. Burgh Bdy. County Burgh Boundary (Scotland)

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

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



County Boundary (Geographical)

County & Civil Parish Boundary

Civil Parish Boundary

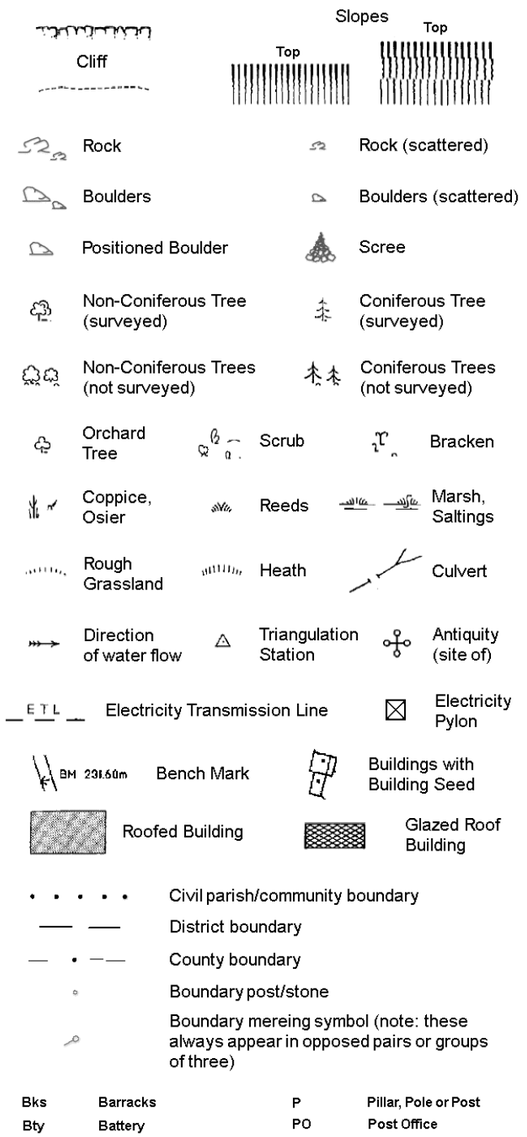
Admin. County or County Bor. Boundary

L B Bdy London Borough Boundary

Symbol marking point where boundary mereing changes

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

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



Civil parish/community boundary

District boundary

County boundary

Boundary post/stone

Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

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

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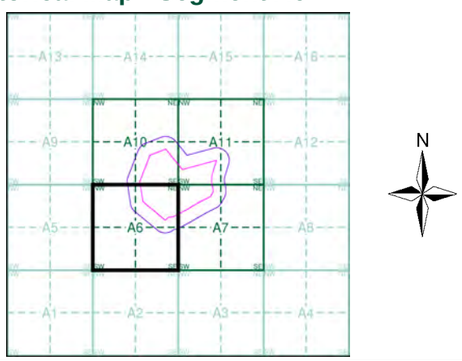
Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Northamptonshire	1:2,500	1886	2
Northamptonshire	1:2,500	1900	3
Northamptonshire	1:2,500	1938	4
Ordnance Survey Plan	1:2,500	1964	5
Ordnance Survey Plan	1:2,500	1973 - 1987	6
Additional SIMs	1:2,500	1980 - 1988	7
Additional SIMs	1:2,500	1983 - 1988	8
Ordnance Survey Plan	1:2,500	1987	9
Additional SIMs	1:2,500	1987 - 1991	10
Large-Scale National Grid Data	1:1,250	1992	11
Large-Scale National Grid Data	1:2,500	1993	12
Large-Scale National Grid Data	1:1,250	1994	13
Large-Scale National Grid Data	1:2,500	1994	14
Large-Scale National Grid Data	1:2,500	1996	15
Historical Aerial Photography	1:2,500	1999	16

Historical Map - Segment A6



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	100

Site Details

Rockingham Enterprise Area

Landmark INFORMATION GROUP

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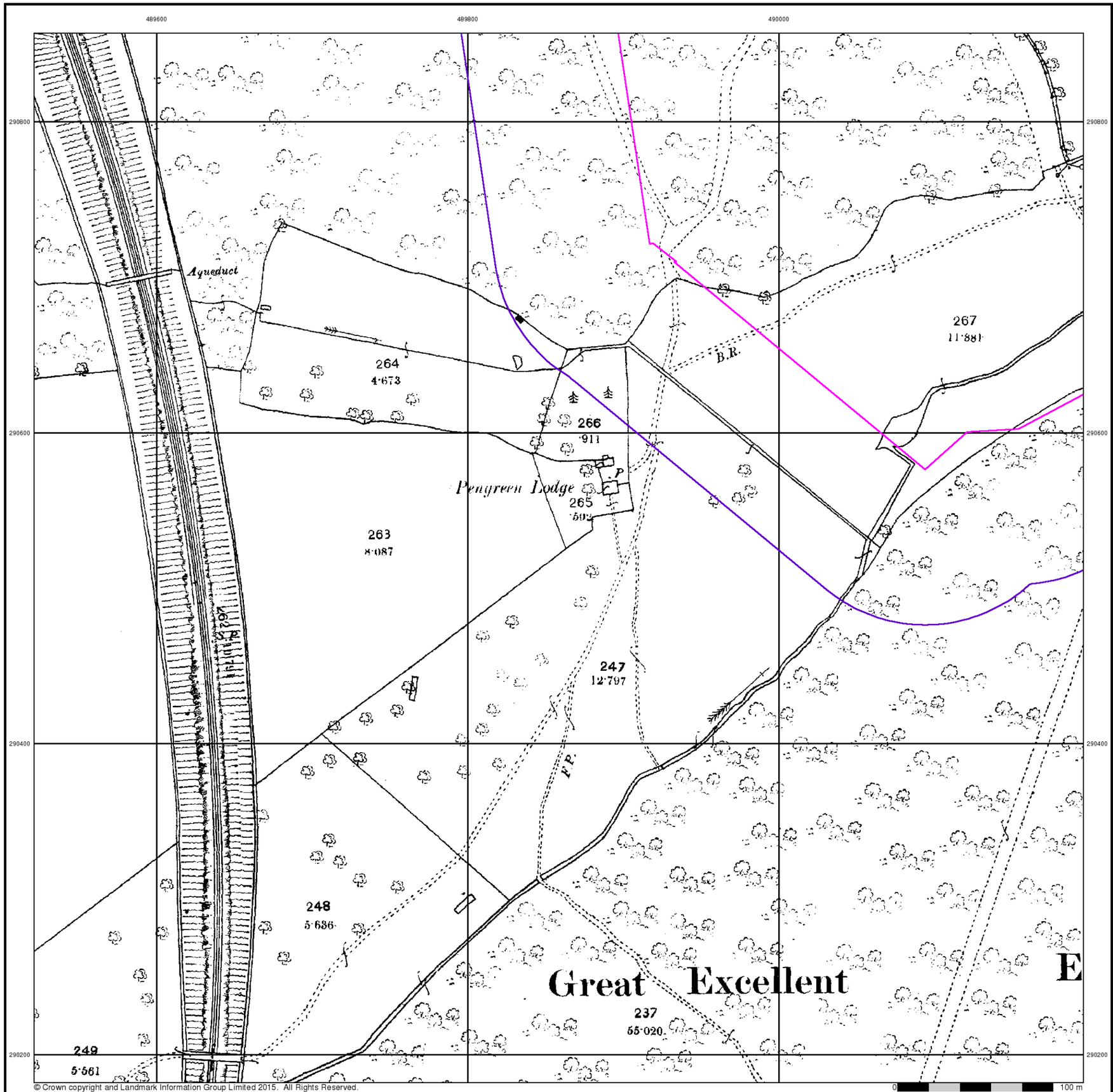
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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Northamptonshire

Published 1886

Source map scale - 1:2,500

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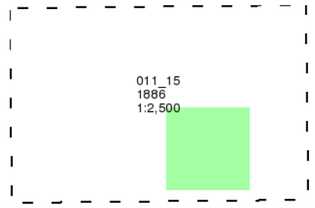
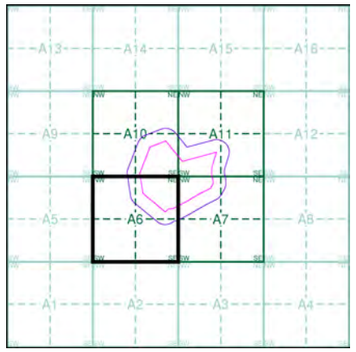
Map Name(s) and Date(s)



Historical Map - Segment A6



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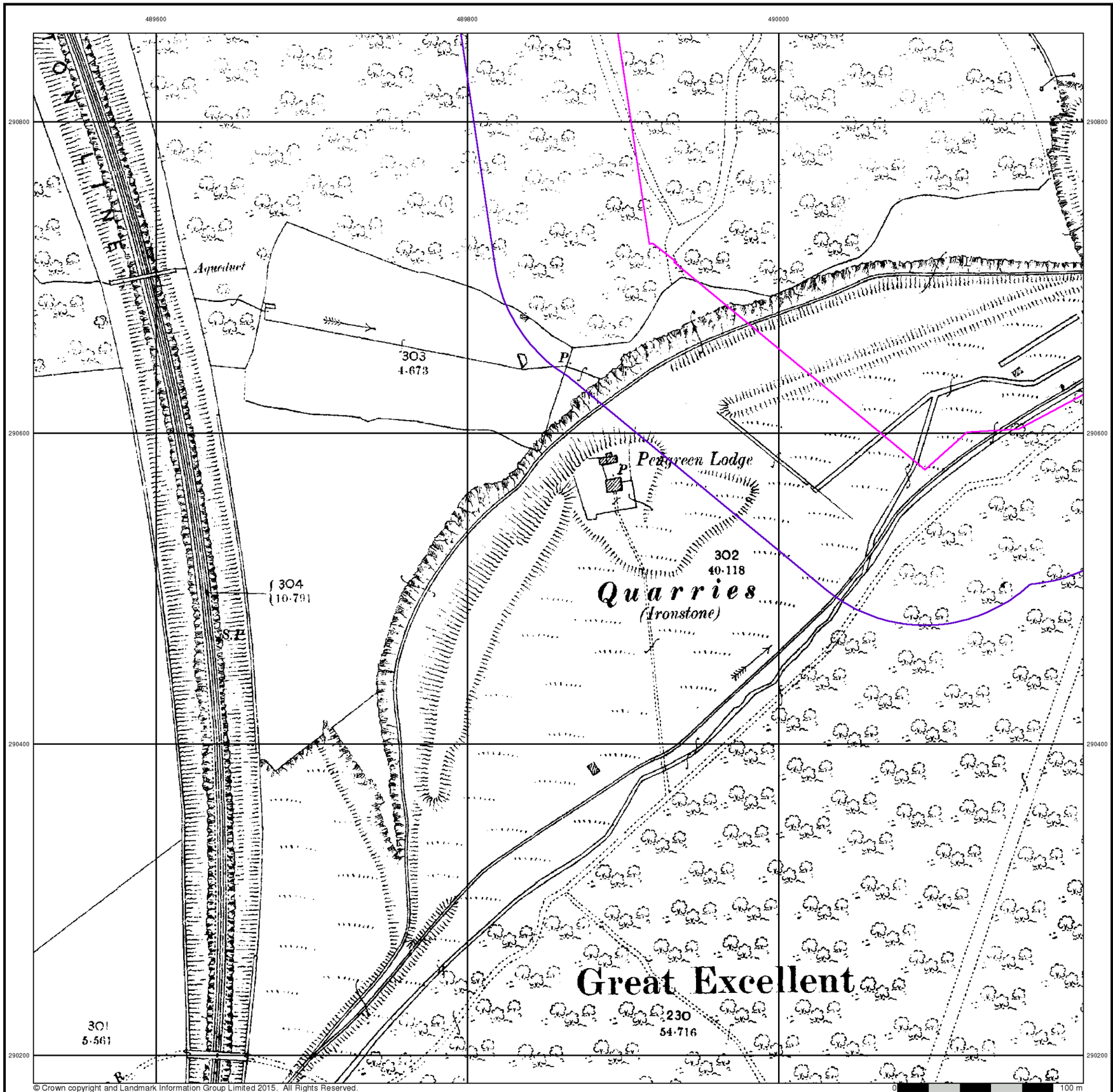

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Northamptonshire

Published 1900

Source map scale - 1:2,500

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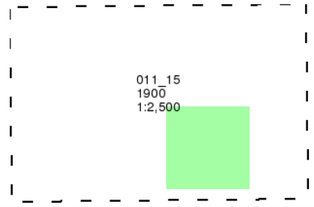
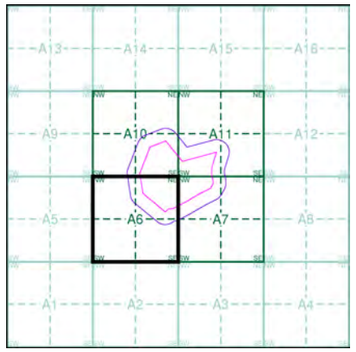


Historical Map - Segment A6



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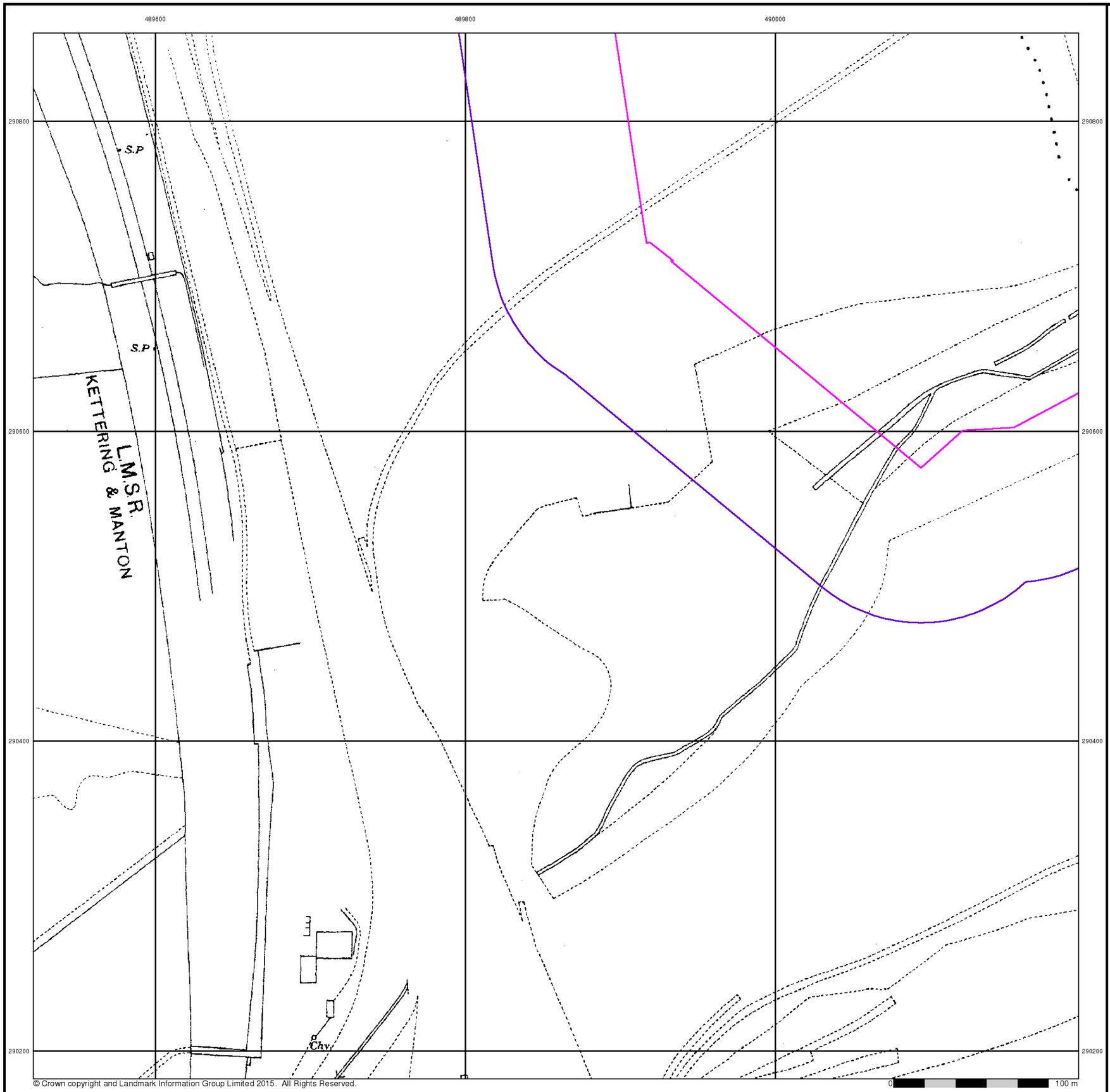

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Northamptonshire

Published 1938

Source map scale - 1:2,500

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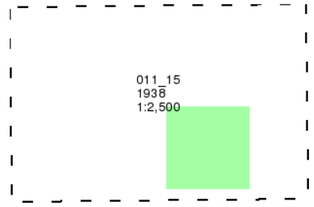
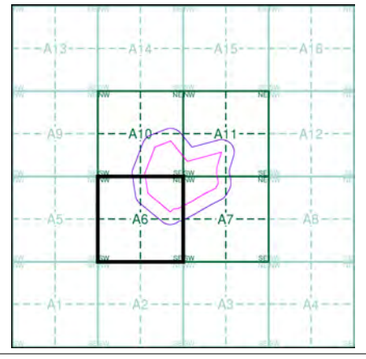


Historical Map - Segment A6



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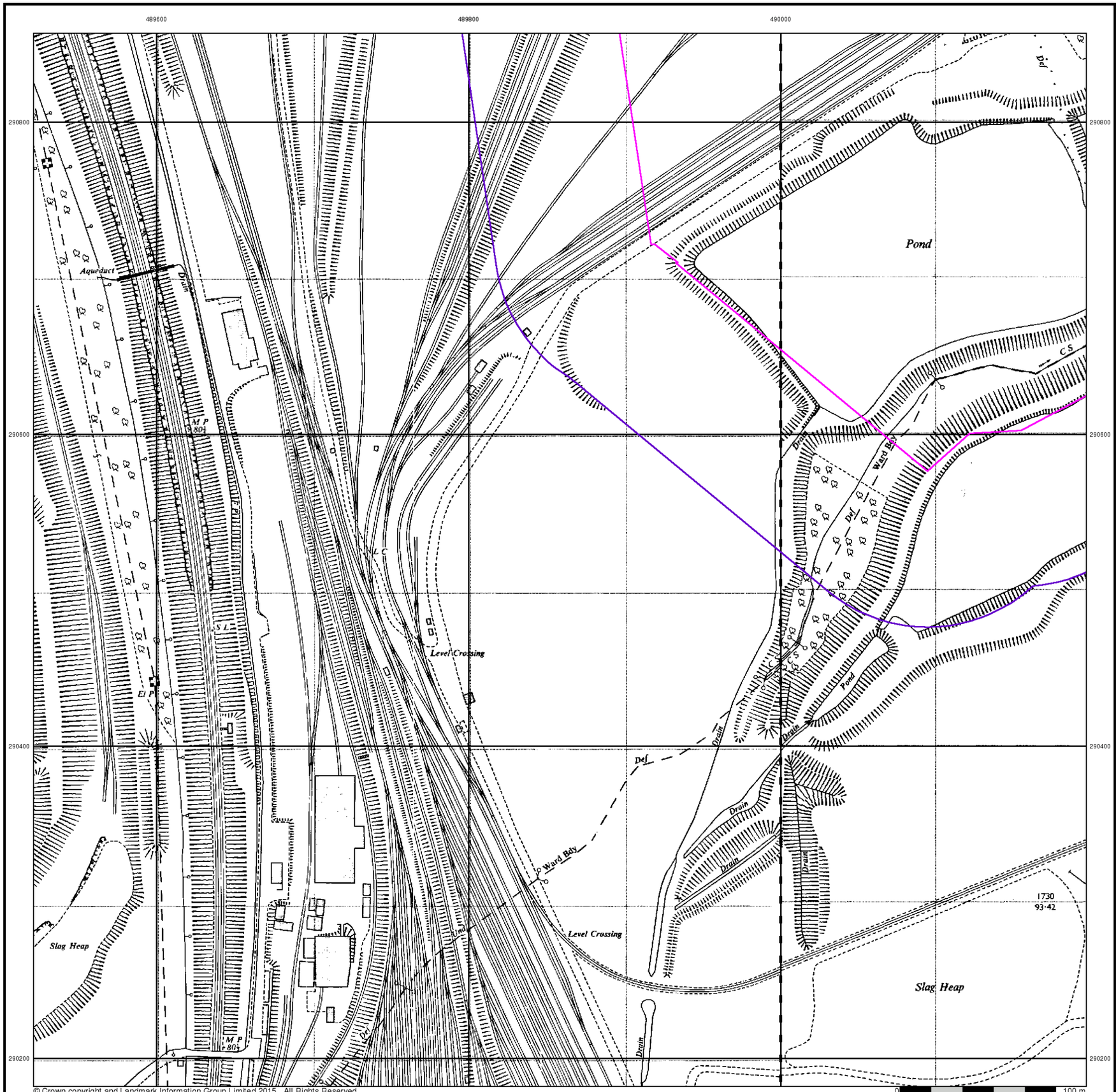

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Ordnance Survey Plan

Published 1964

Source map scale - 1:2,500

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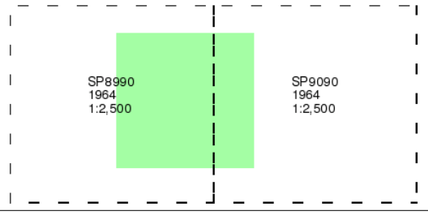
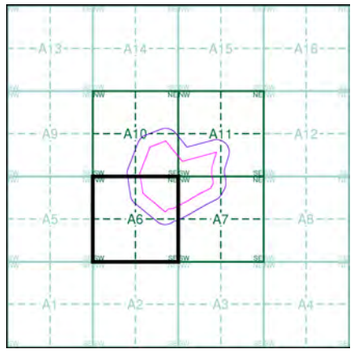


Historical Map - Segment A6



Order Details

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Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	100

Site Details

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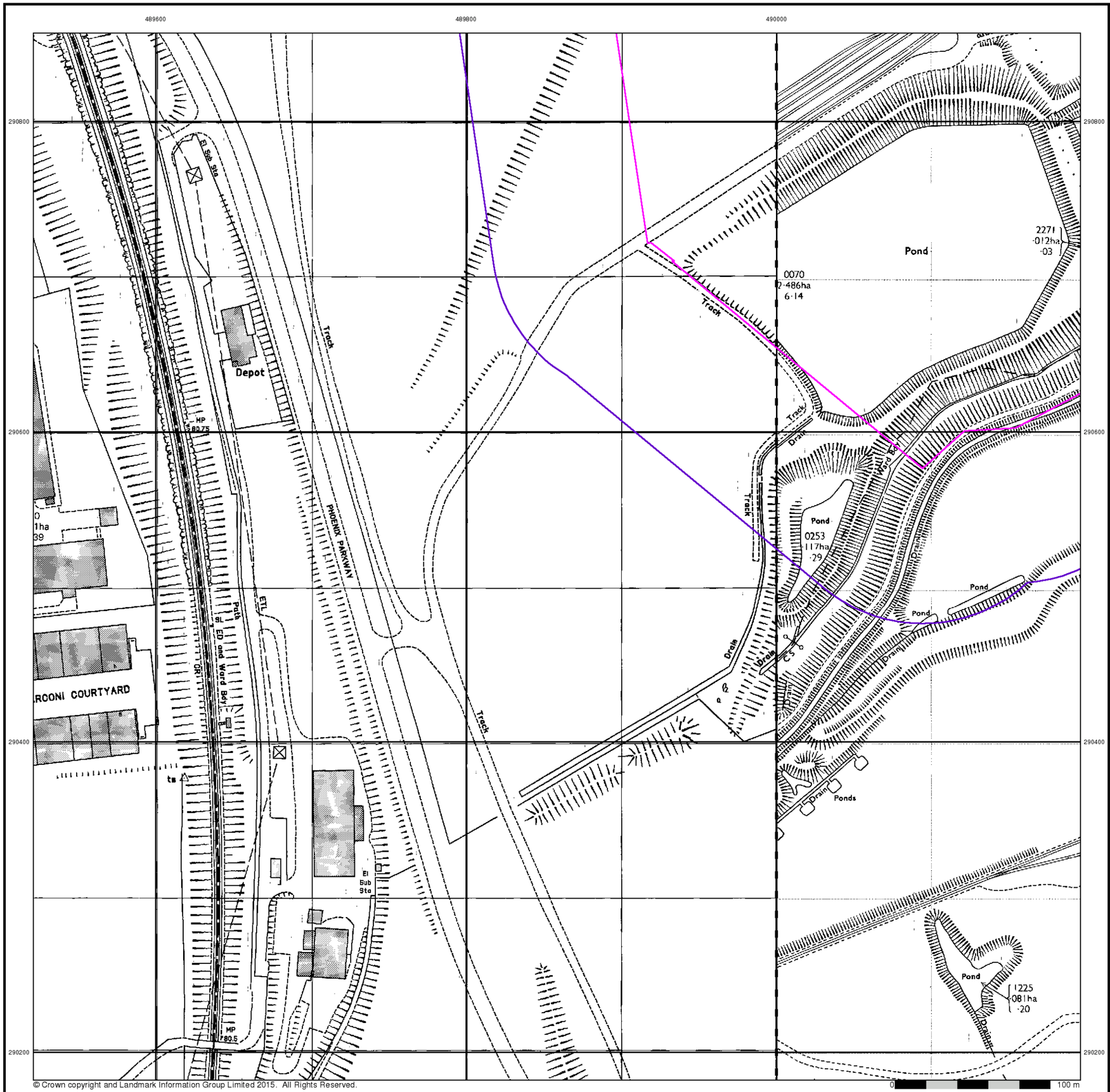

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Ordnance Survey Plan

Published 1973 - 1987

Source map scale - 1:2,500

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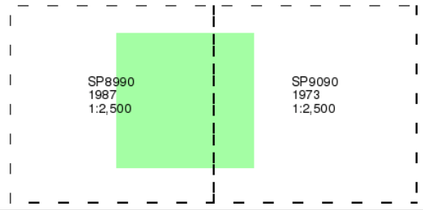
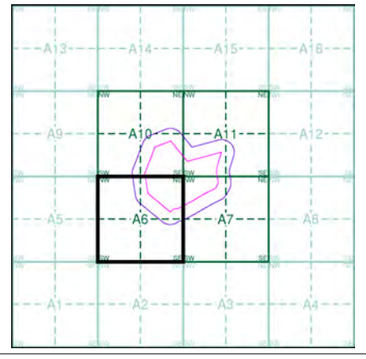


Historical Map - Segment A6



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Customer Ref:	STP3966D
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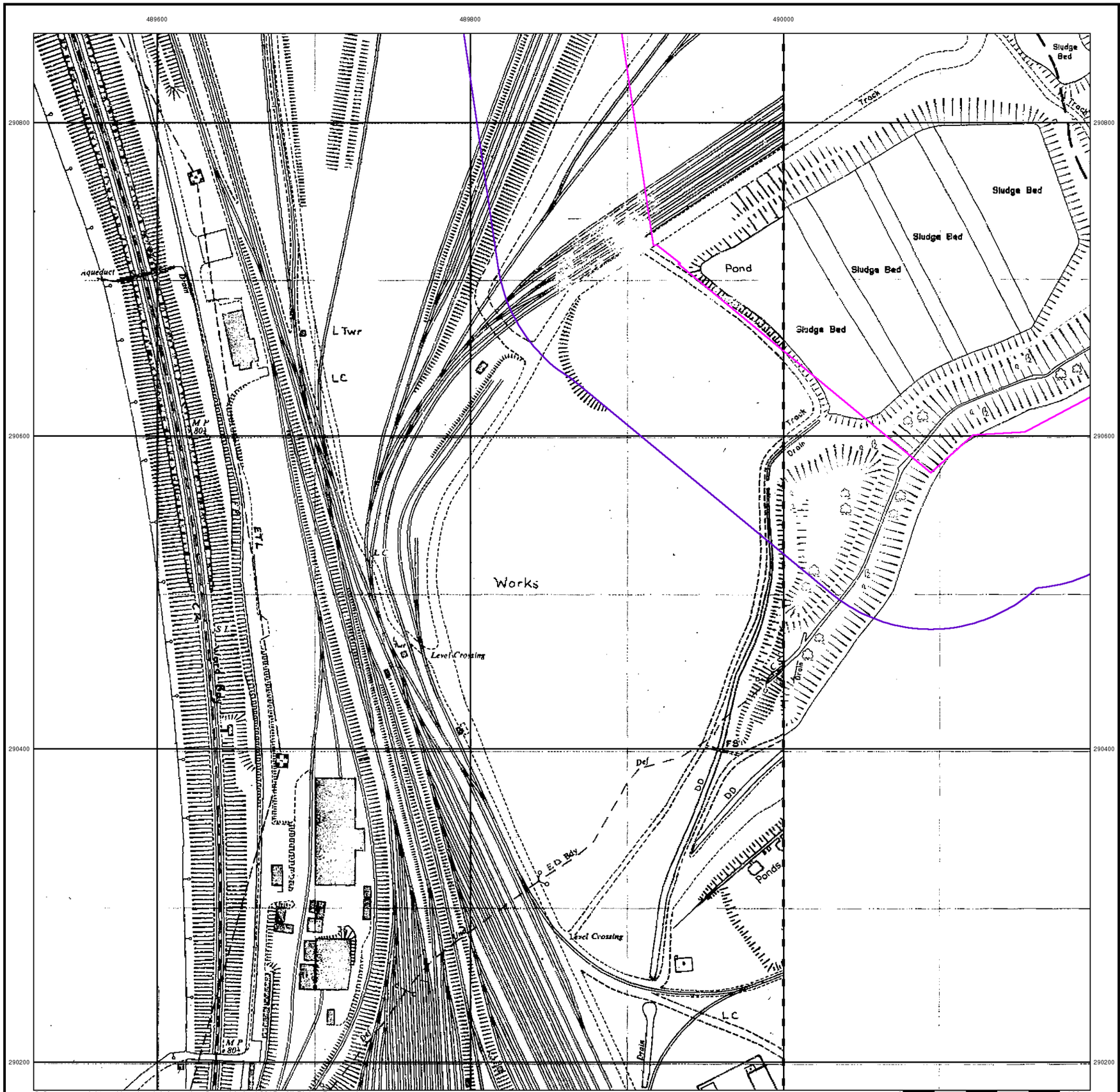

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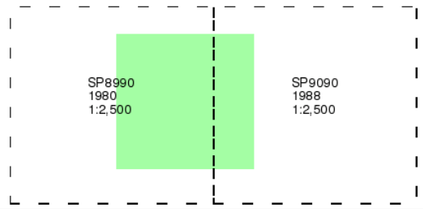
Additional SIMs

Published 1980 - 1988

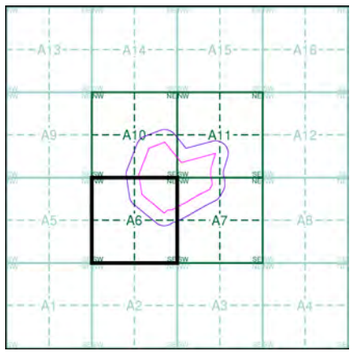
Source map scale - 1:2,500

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 A6



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	100

Site Details

Rockingham Enterprise Area

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Additional SIMs

Published 1983 - 1988

Source map scale - 1:2,500

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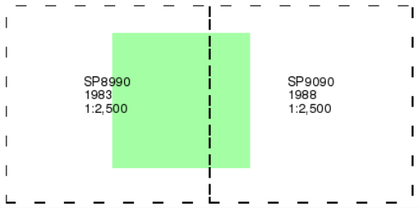
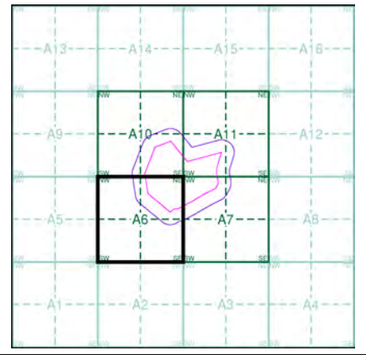
Map Name(s) and Date(s)



Historical Map - Segment A6



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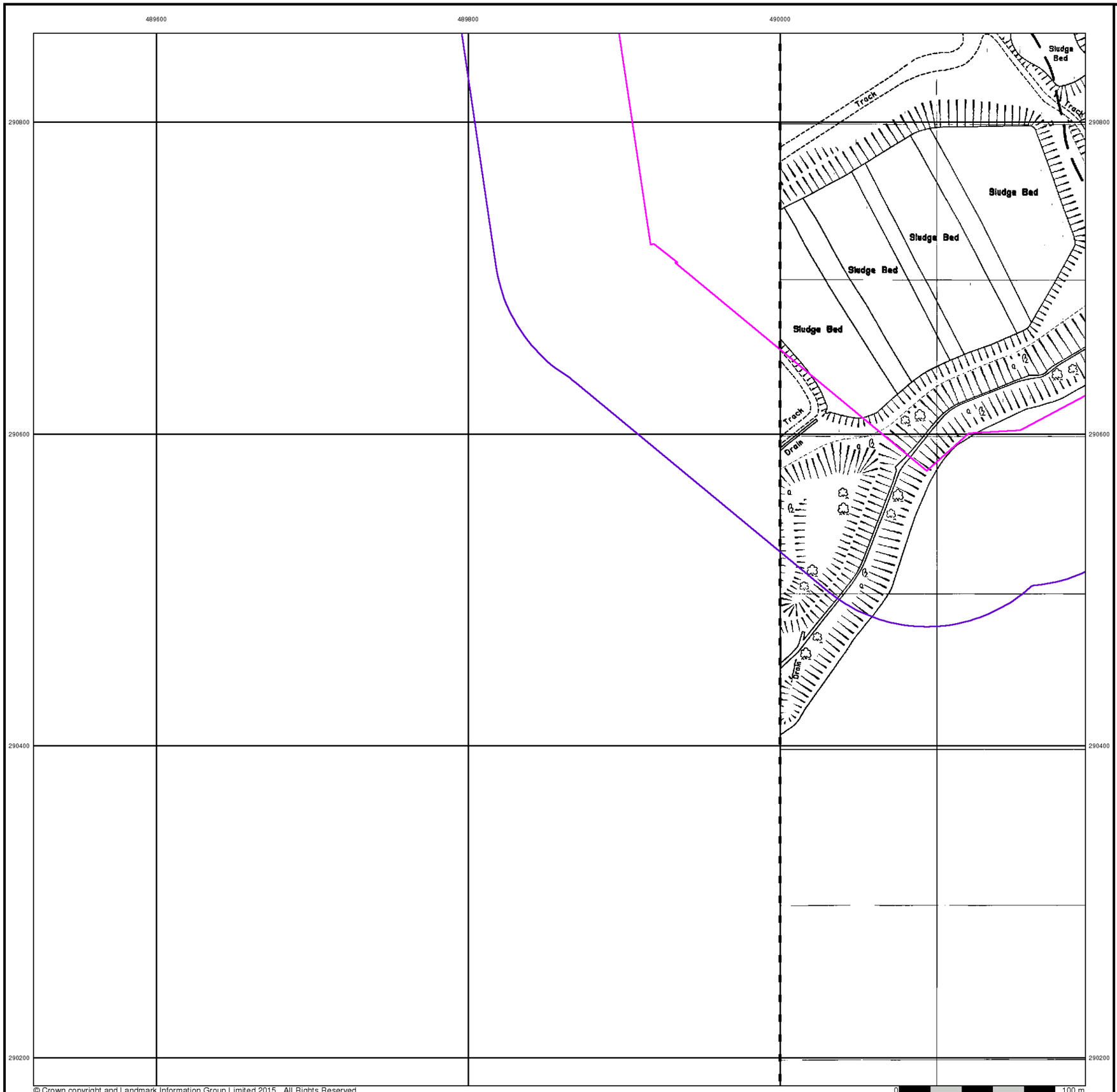

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Ordnance Survey Plan

Published 1987

Source map scale - 1:2,500

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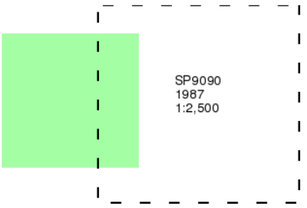
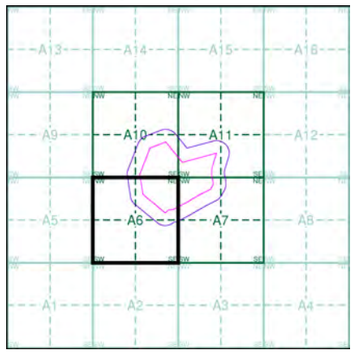


Historical Map - Segment A6



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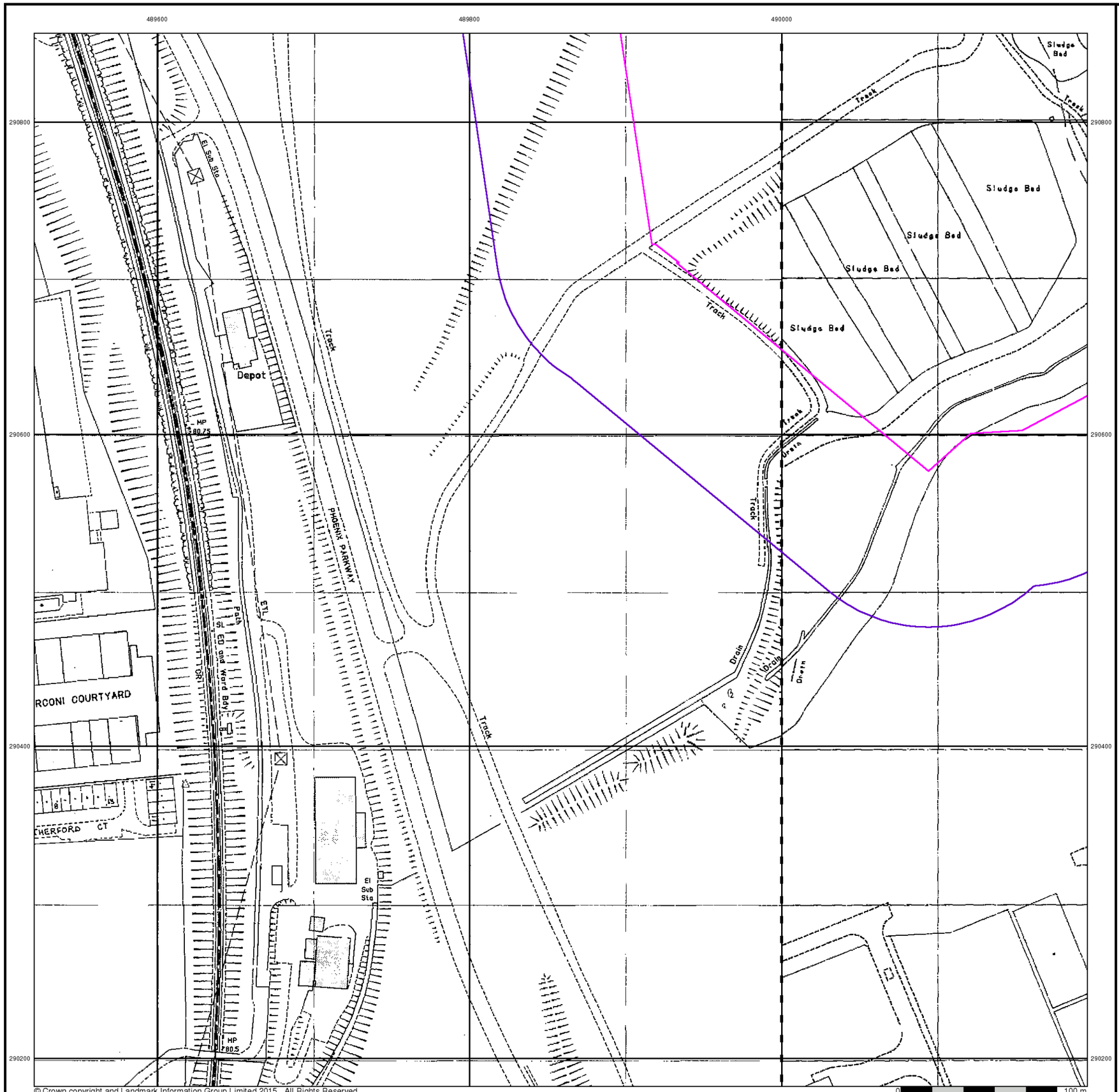

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Additional SIMs

Published 1987 - 1991

Source map scale - 1:2,500

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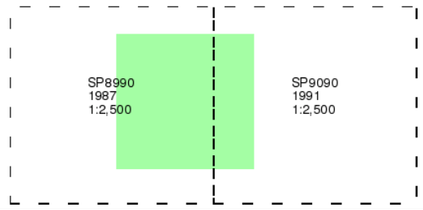
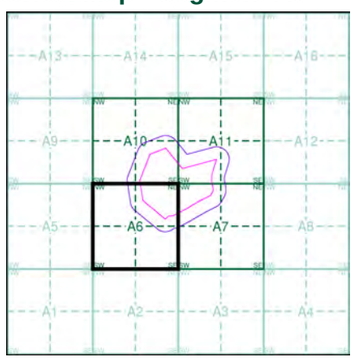
Map Name(s) and Date(s)



Historical Map - Segment A6



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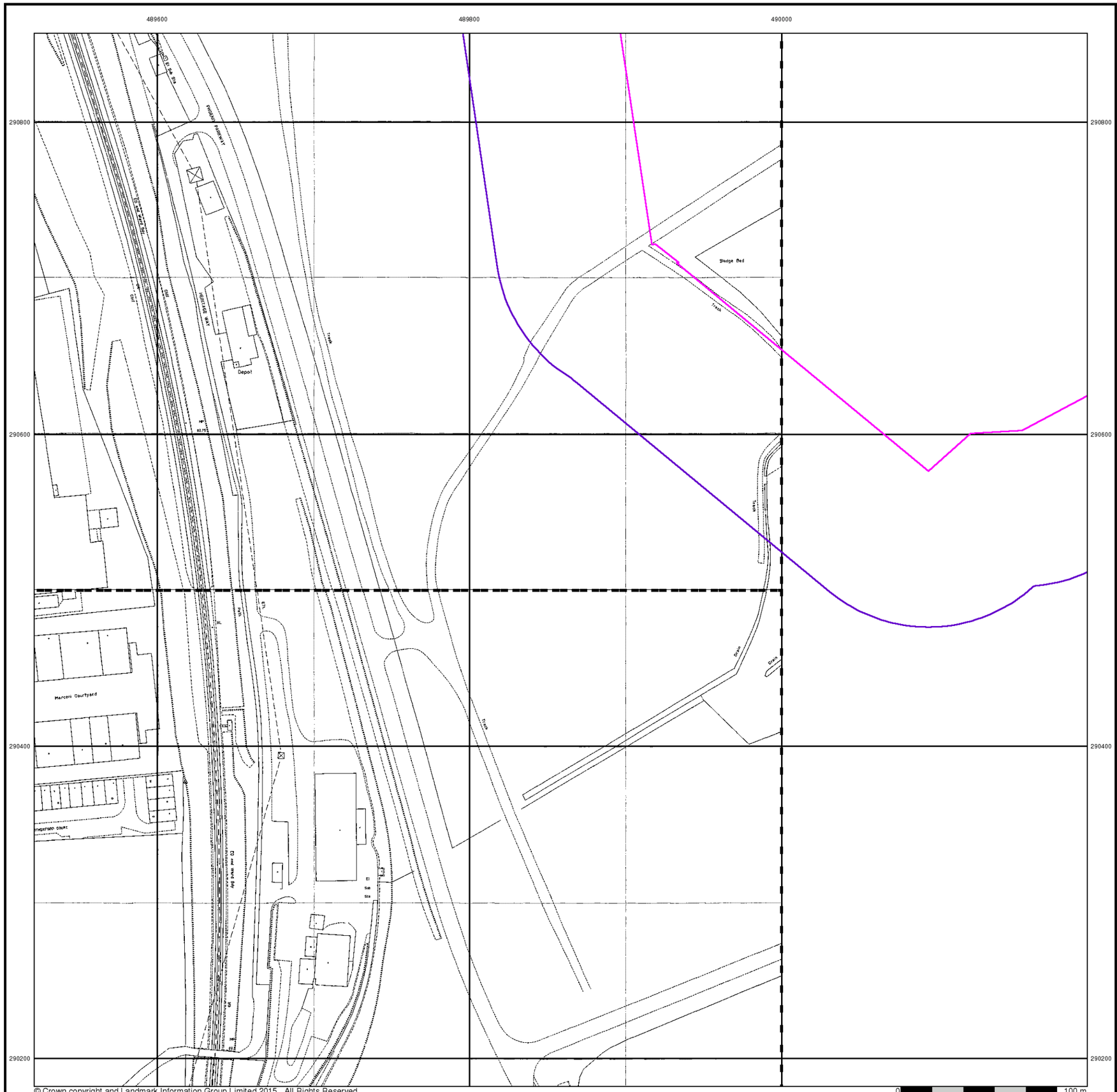

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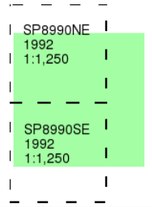
Large-Scale National Grid Data

Published 1992

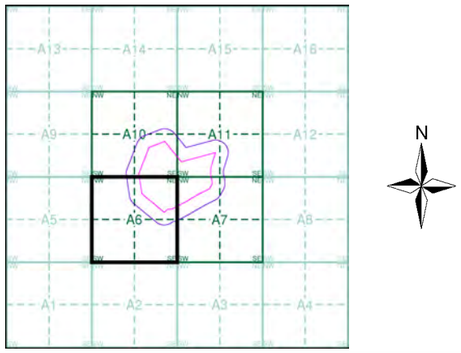
Source map scale - 1:1,250

'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 A6



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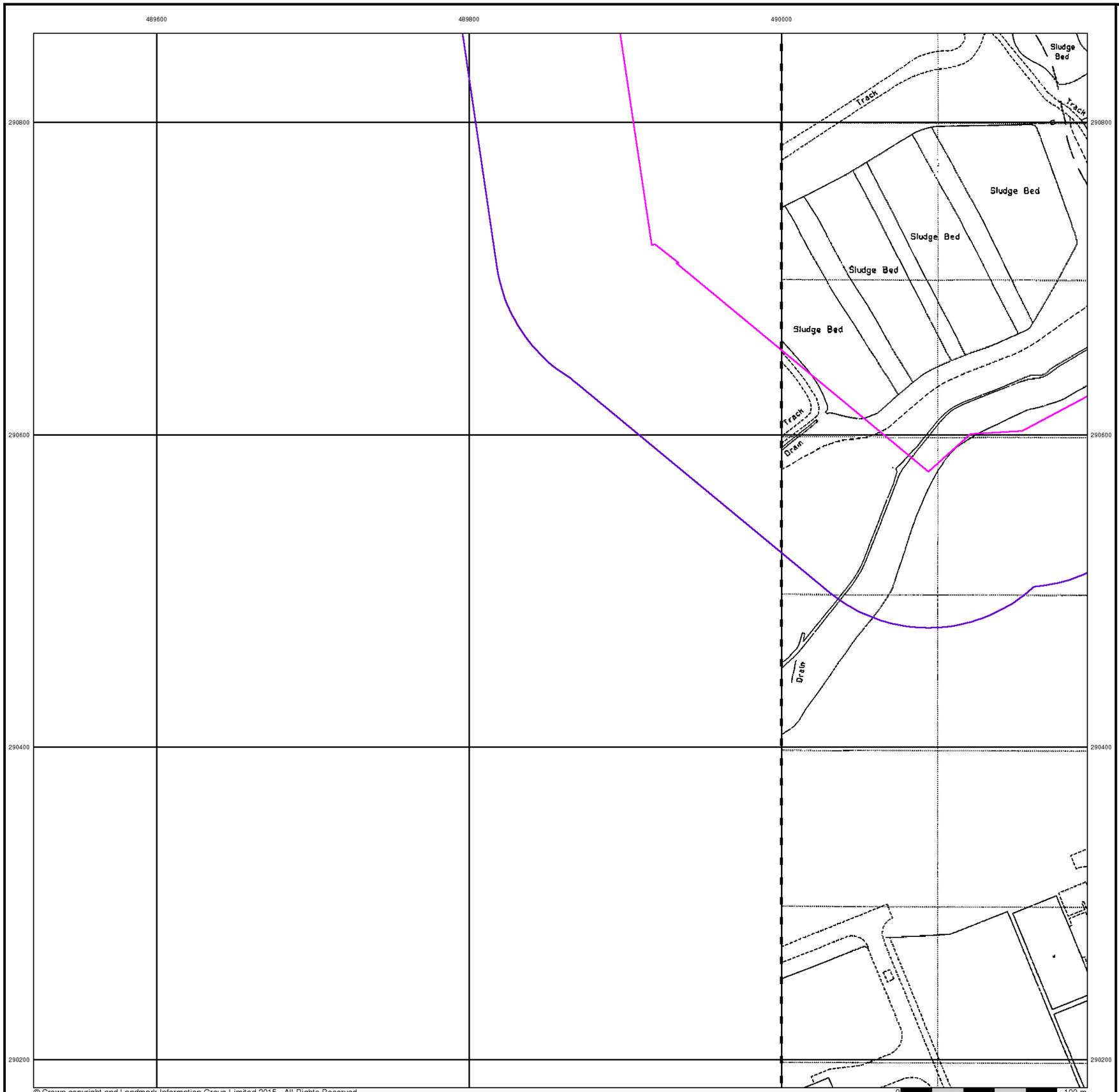

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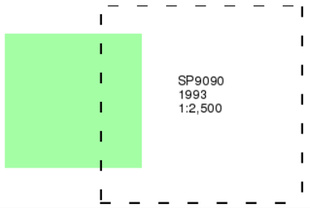
Large-Scale National Grid Data

Published 1993

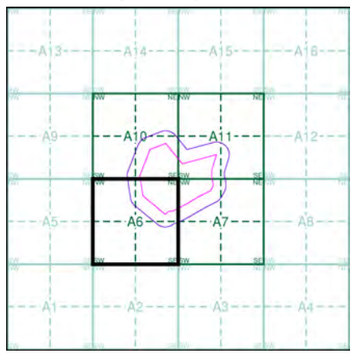
Source map scale - 1:2,500

'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 A6



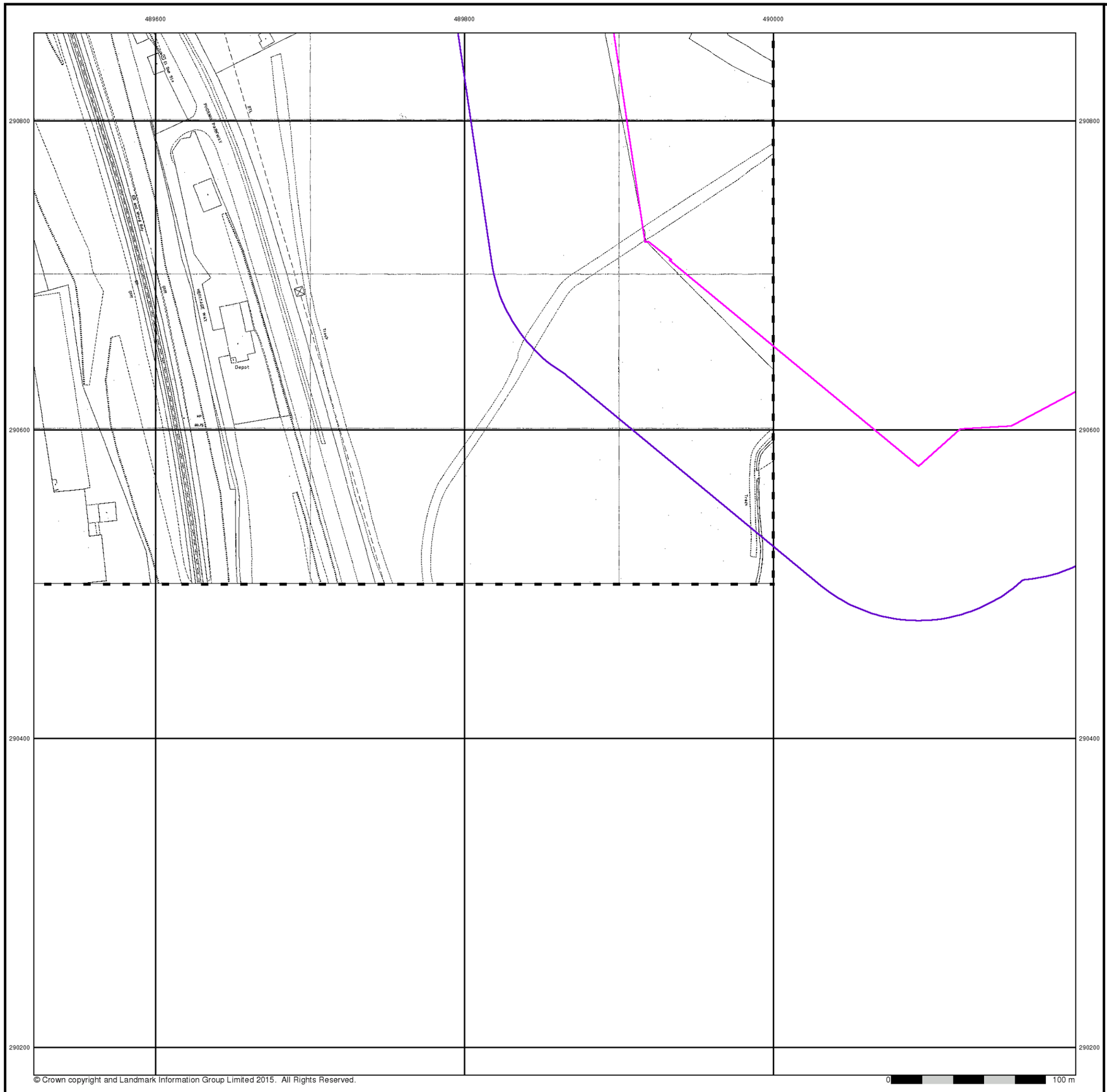
Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	100

Site Details

Rockingham Enterprise Area

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



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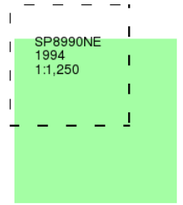
Large-Scale National Grid Data

Published 1994

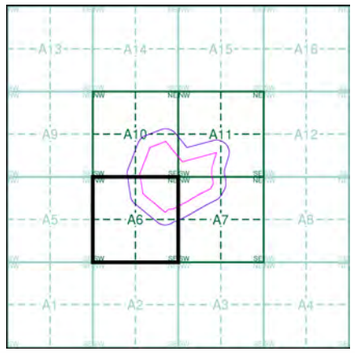
Source map scale - 1:1,250

'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 A6



Order Details

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Site Area (Ha):	21.24
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Site Details

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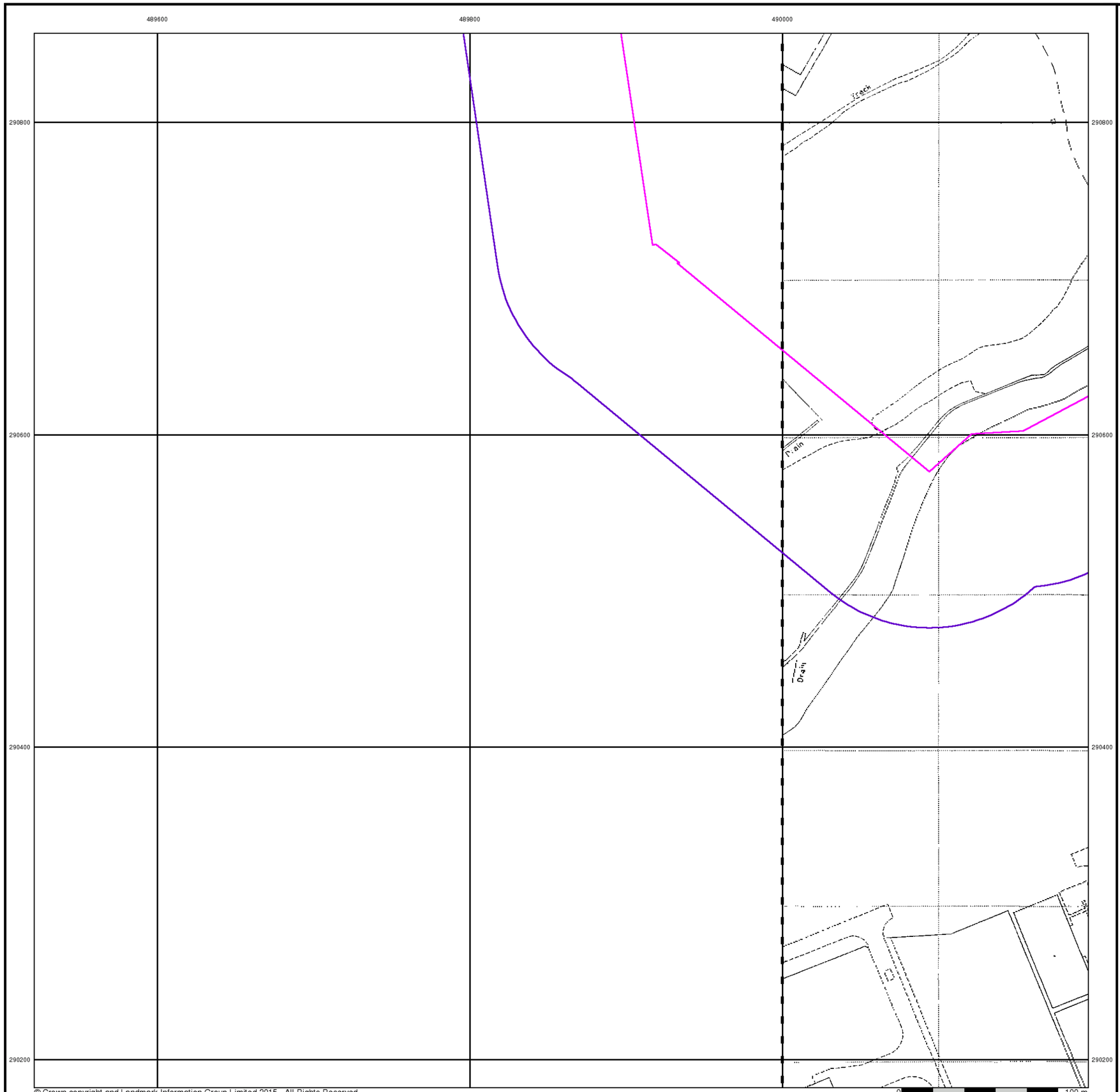

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Large-Scale National Grid Data

Published 1994

Source map scale - 1:2,500

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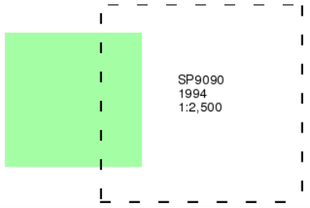
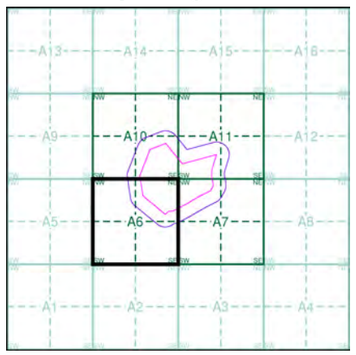


Historical Map - Segment A6



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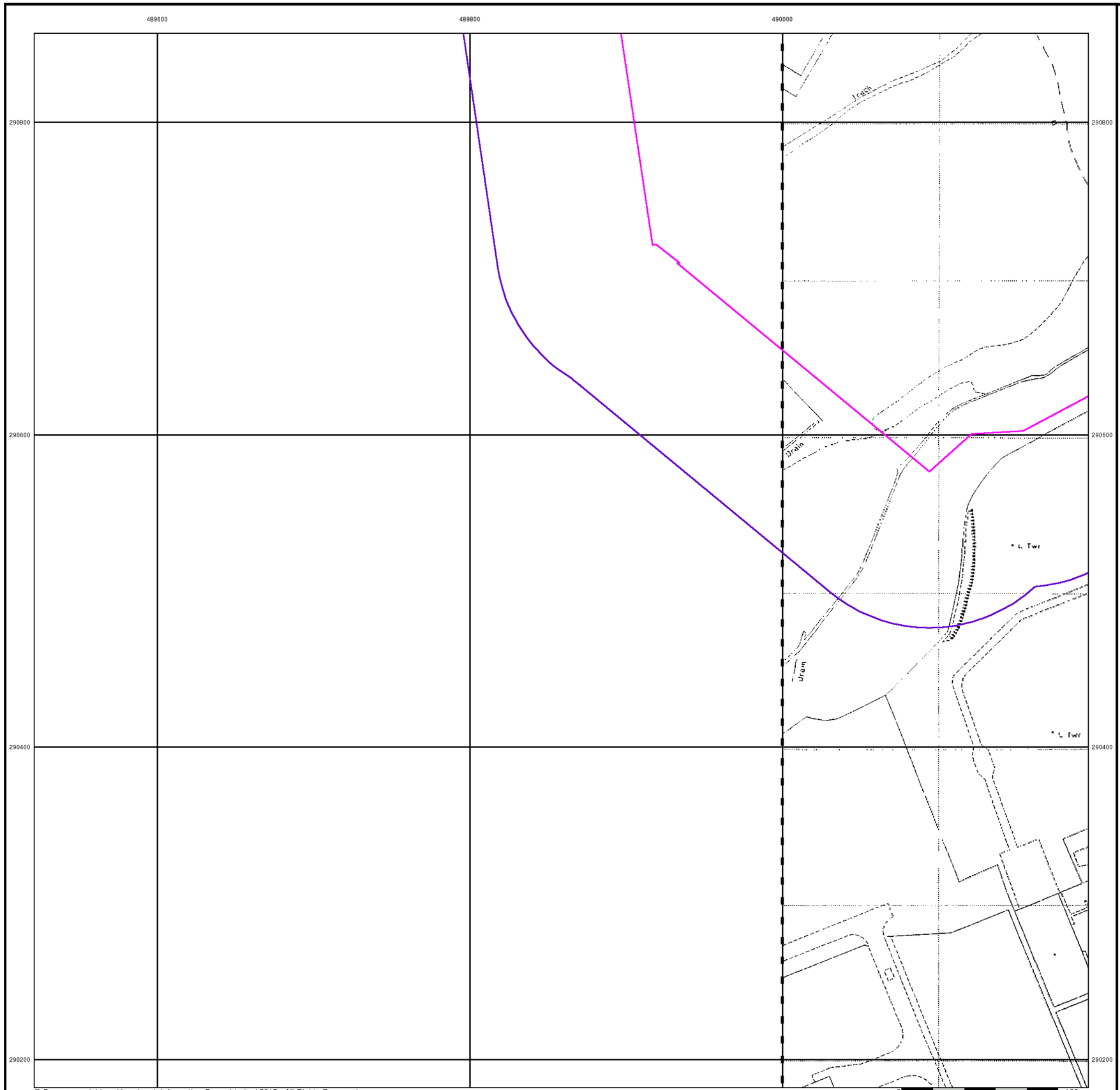

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Large-Scale National Grid Data

Published 1996

Source map scale - 1:2,500

'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.

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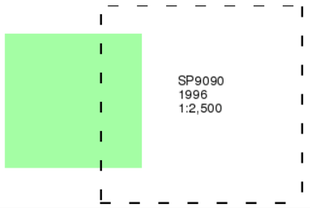
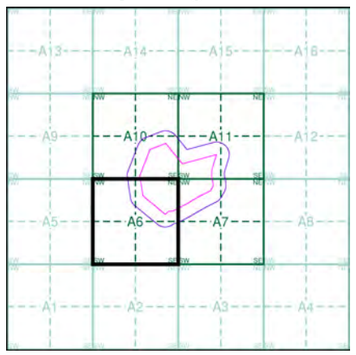


Historical Map - Segment A6



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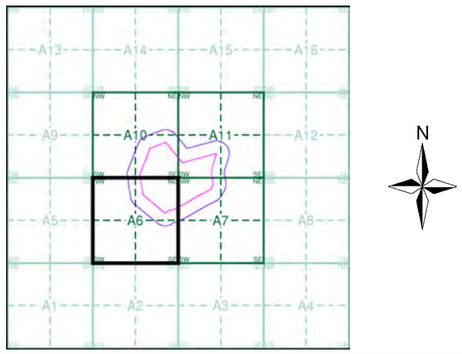
Historical Aerial Photography

Published 1999

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

Historical Aerial Photography - Segment A6



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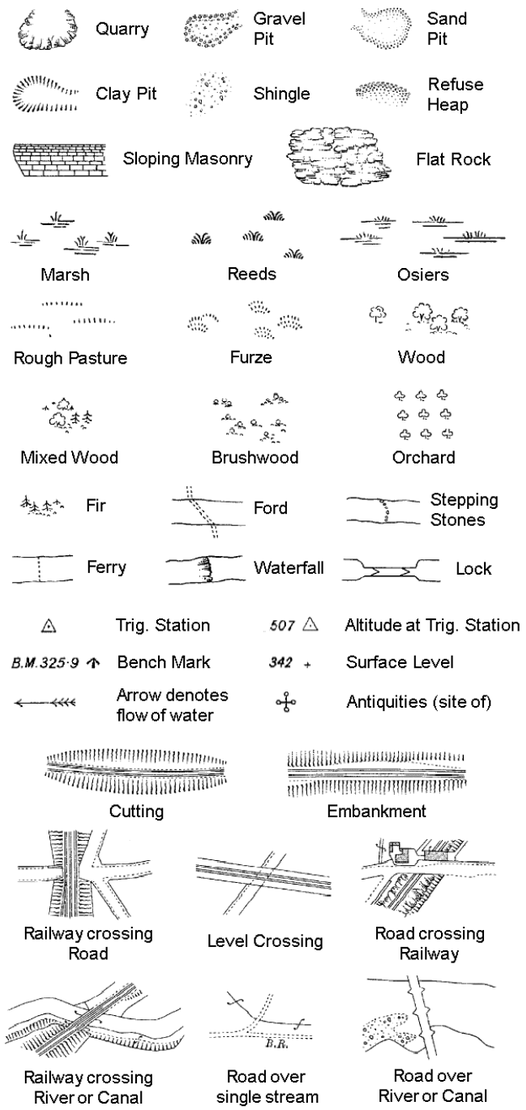
Historical Mapping Legends

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



County Boundary (Geographical)

County & Civil Parish Boundary

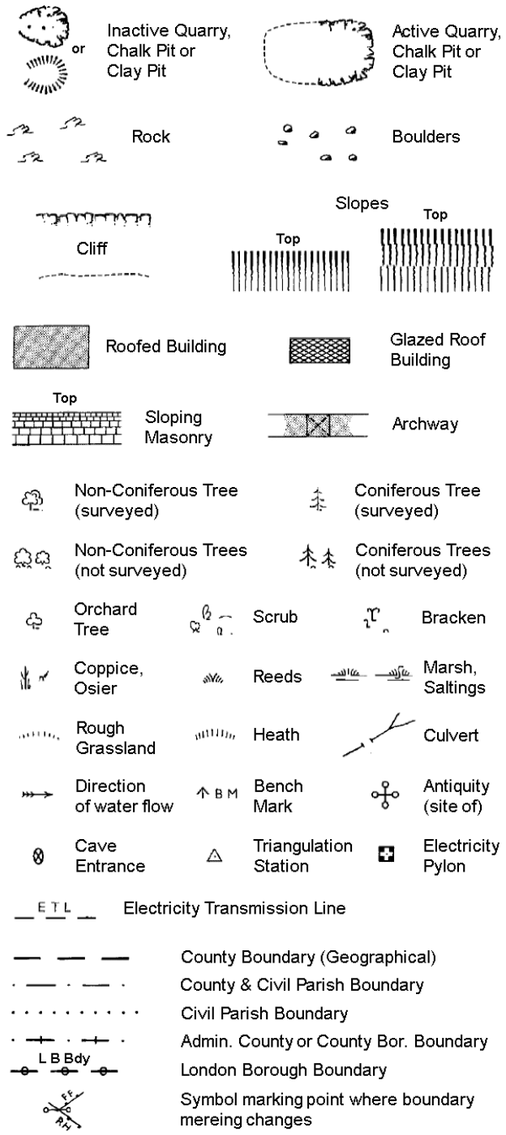
Administrative County & Civil Parish Boundary

Co. Boro. Bdy. County Borough Boundary (England)

Co. Burgh Bdy. County Burgh Boundary (Scotland)

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

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



County Boundary (Geographical)

County & Civil Parish Boundary

Civil Parish Boundary

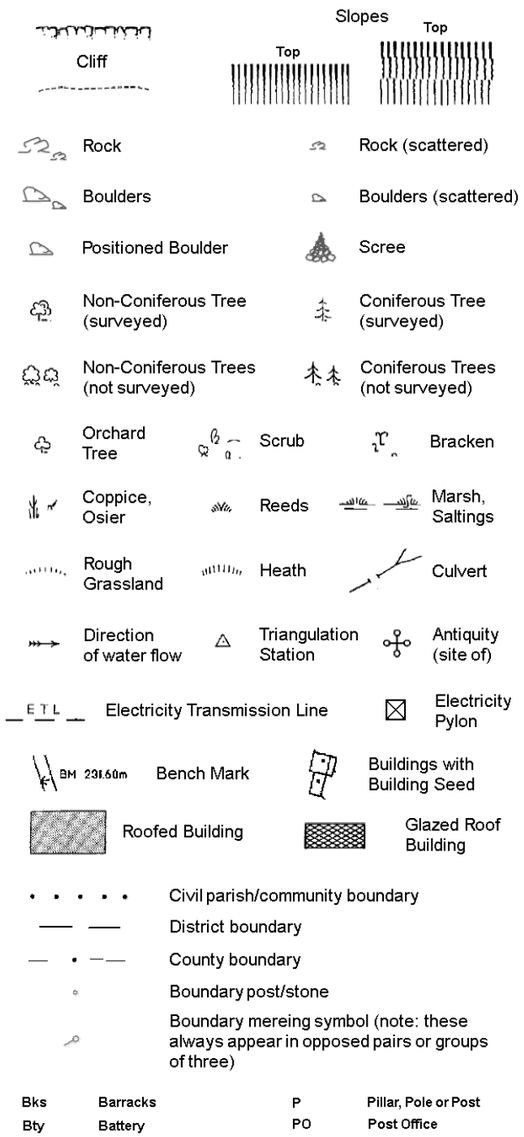
Admin. County or County Bor. Boundary

L B Bdy London Borough Boundary

Symbol marking point where boundary mereing changes

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

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



Civil parish/community boundary

District boundary

County boundary

Boundary post/stone

Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

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

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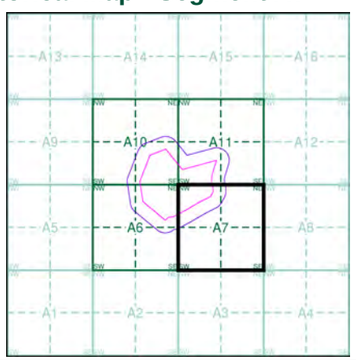
Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Northamptonshire	1:2,500	1886	2
Northamptonshire	1:2,500	1900	3
Northamptonshire	1:2,500	1938	4
Ordnance Survey Plan	1:2,500	1964	5
Ordnance Survey Plan	1:2,500	1973	6
Ordnance Survey Plan	1:2,500	1987	7
Additional SIMs	1:2,500	1988	8
Additional SIMs	1:2,500	1988	9
Additional SIMs	1:2,500	1991	10
Large-Scale National Grid Data	1:2,500	1993	11
Large-Scale National Grid Data	1:2,500	1994	12
Large-Scale National Grid Data	1:2,500	1996	13
Historical Aerial Photography	1:2,500	1999	14

Historical Map - Segment A7



Order Details

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Site Details

Rockingham Enterprise Area

Landmark INFORMATION GROUP
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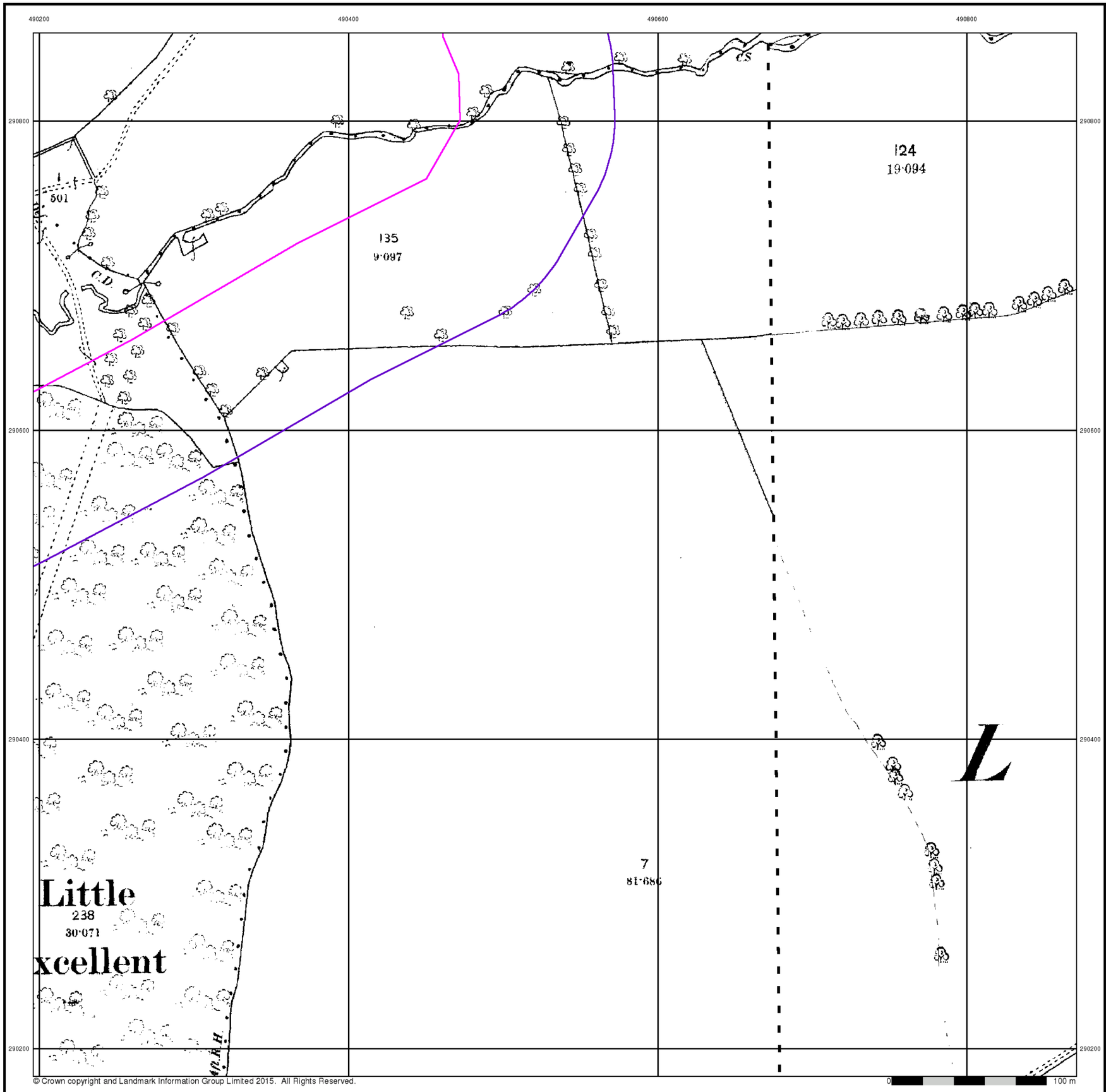

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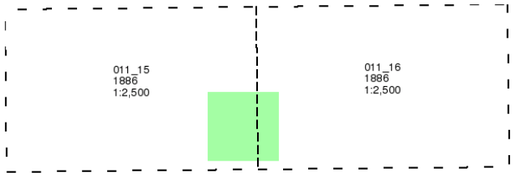
Northamptonshire

Published 1886

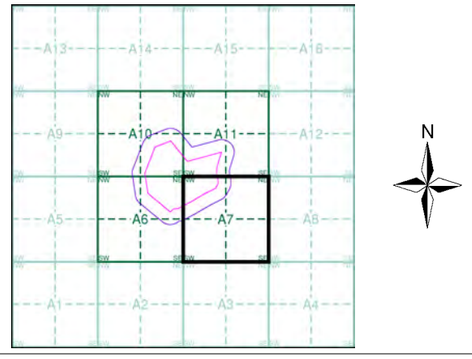
Source map scale - 1:2,500

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 A7



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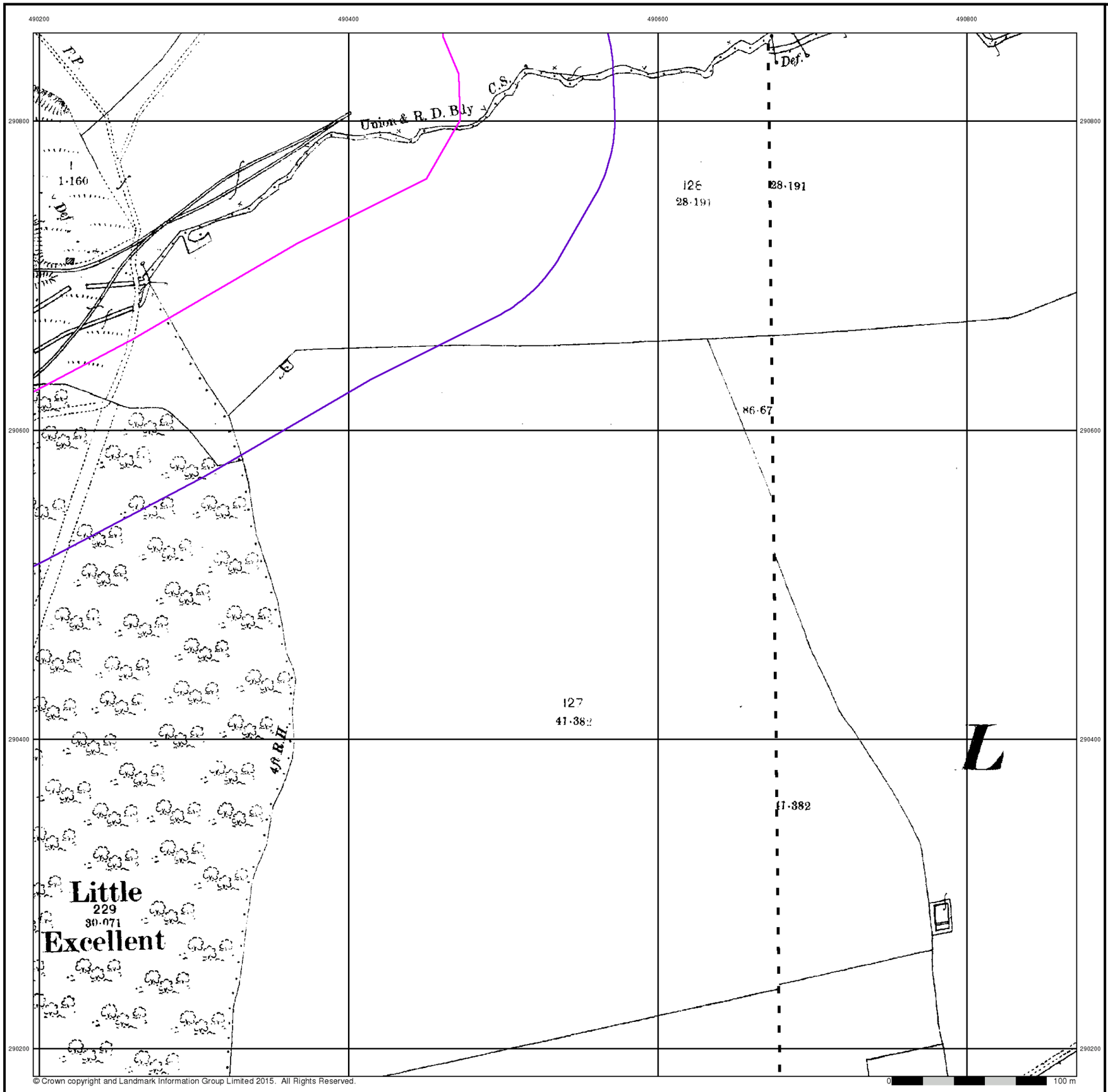

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Northamptonshire

Published 1900

Source map scale - 1:2,500

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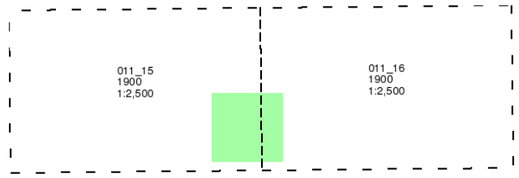
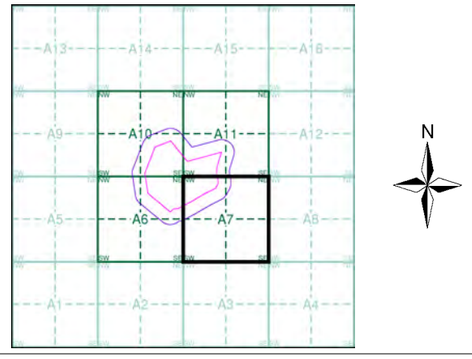


Historical Map - Segment A7



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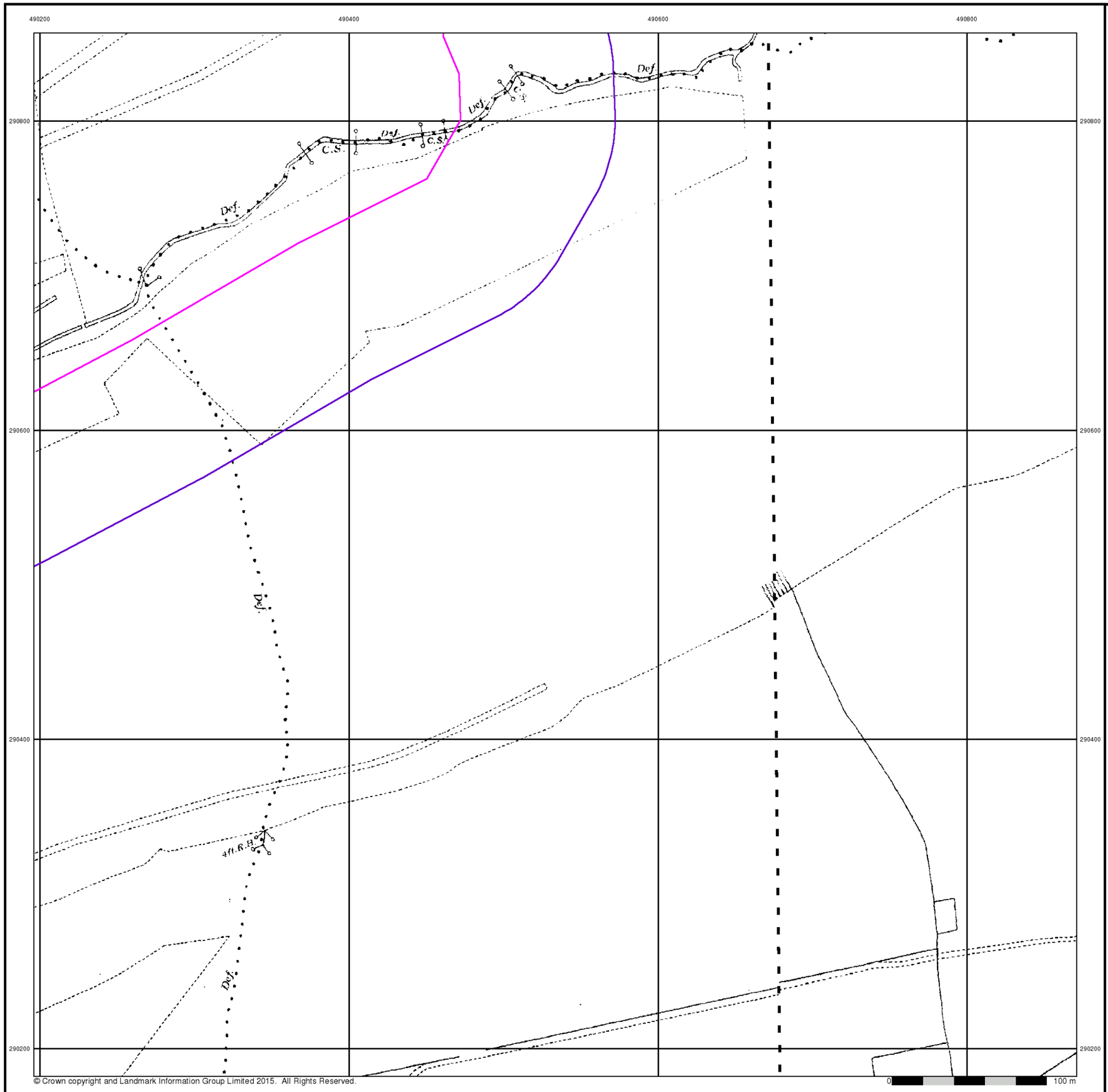

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Northamptonshire

Published 1938

Source map scale - 1:2,500

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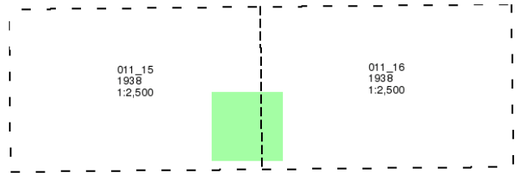
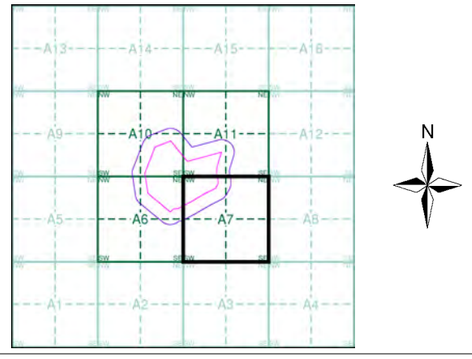


Historical Map - Segment A7



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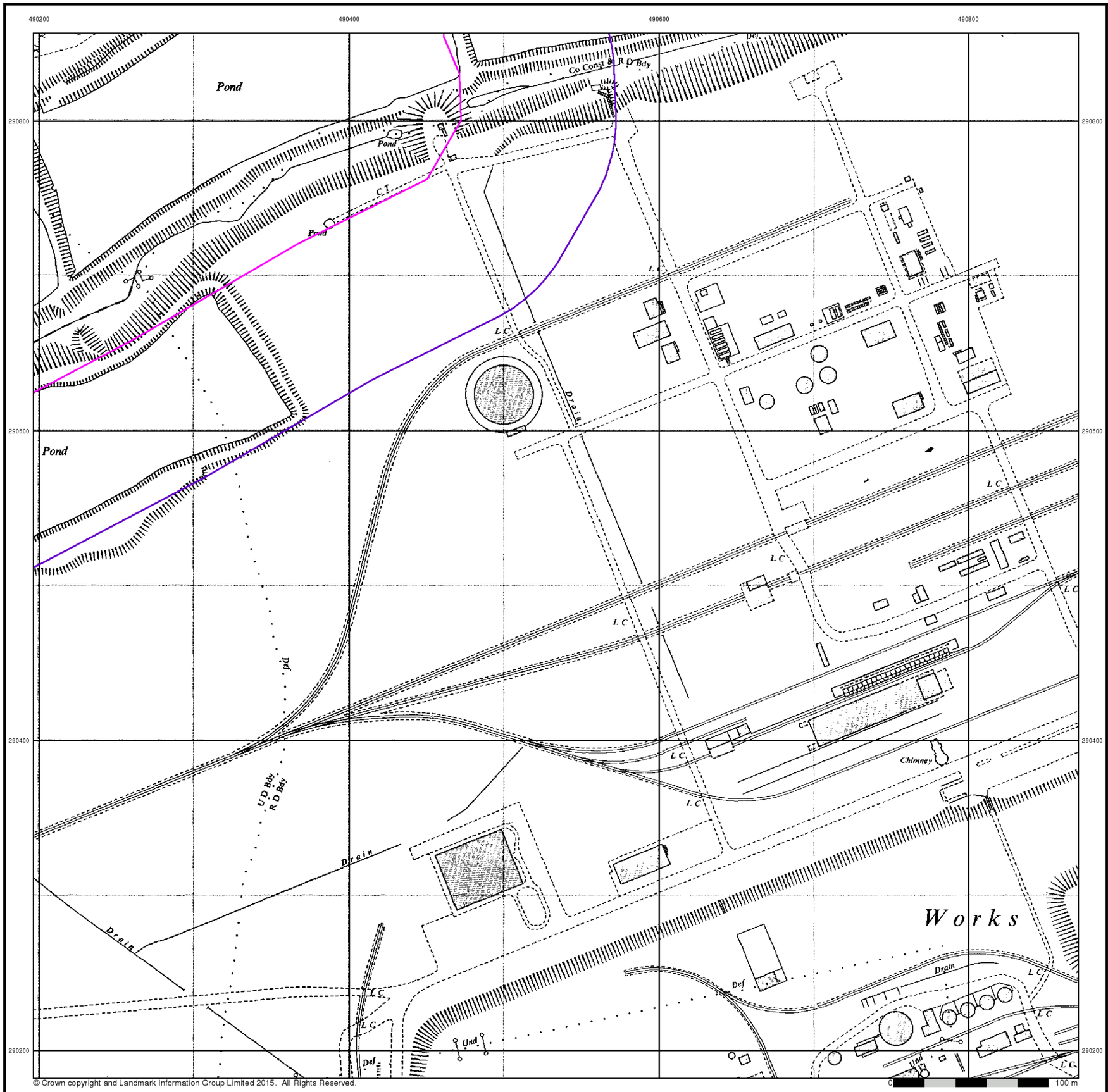

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0 100 m

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Ordnance Survey Plan

Published 1964

Source map scale - 1:2,500

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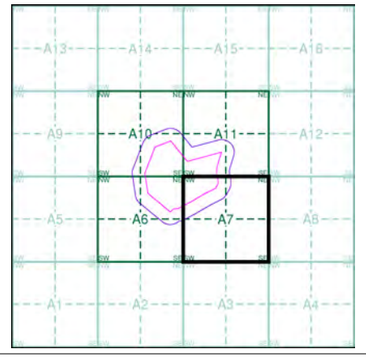
Map Name(s) and Date(s)

SP9090
1964
1:2,500

Historical Map - Segment A7



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Ordnance Survey Plan

Published 1973

Source map scale - 1:2,500

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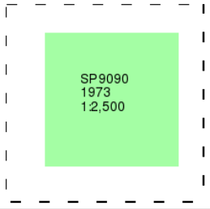

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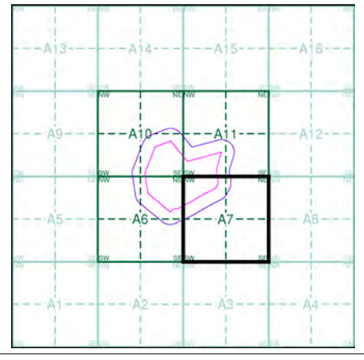

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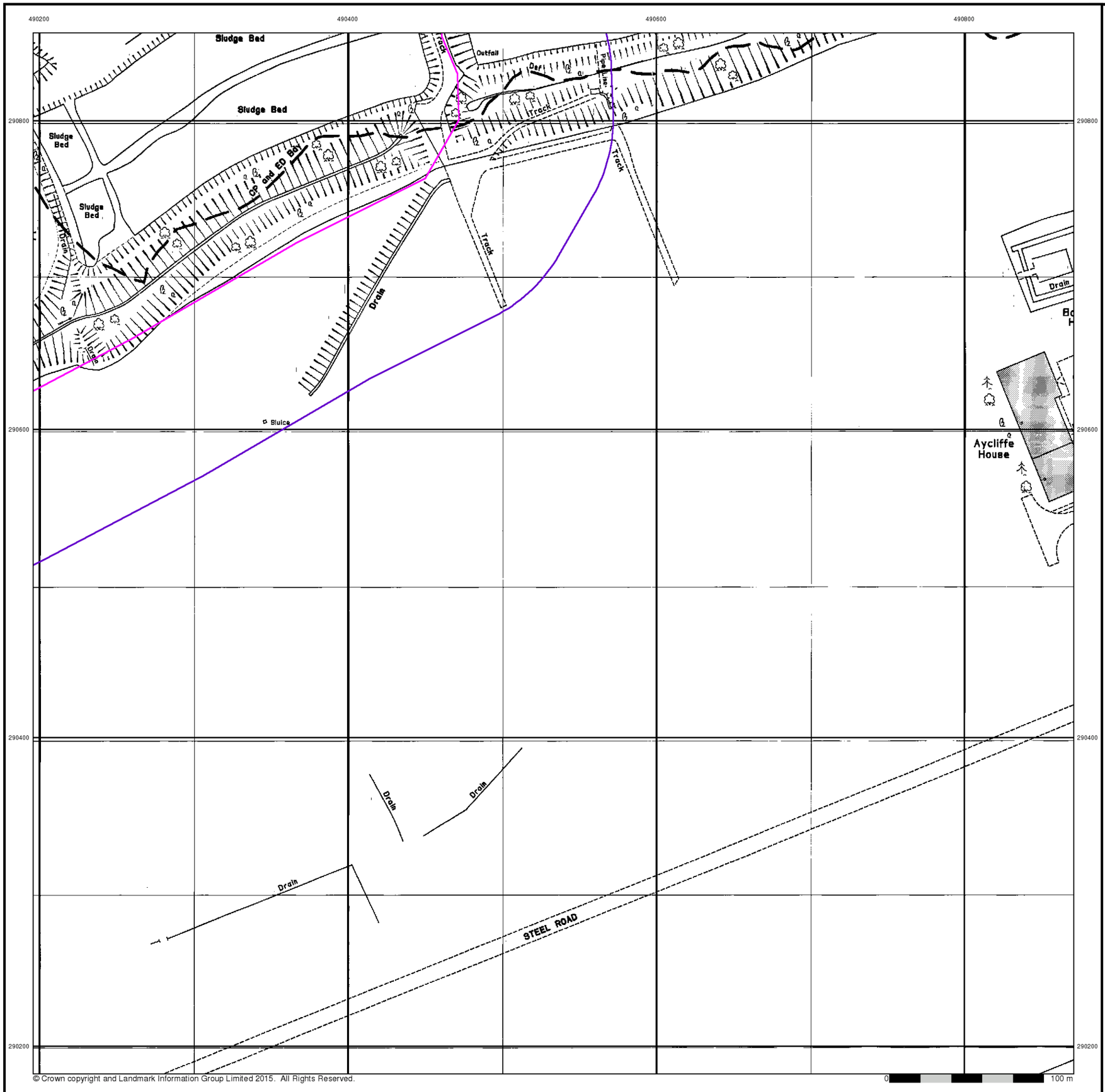

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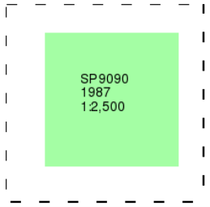
Ordnance Survey Plan

Published 1987

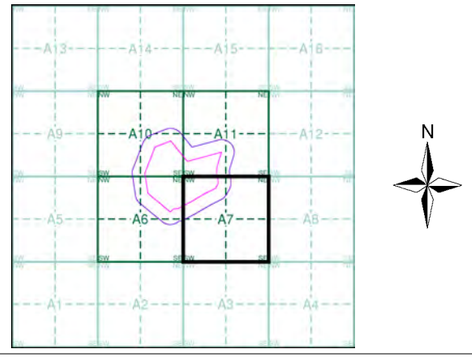
Source map scale - 1:2,500

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 A7



Order Details

Order Number:	118207619_1_1
Customer Ref:	STP3966D
National Grid Reference:	490190, 290880
Slice:	A
Site Area (Ha):	21.24
Search Buffer (m):	100

Site Details

Rockingham Enterprise Area

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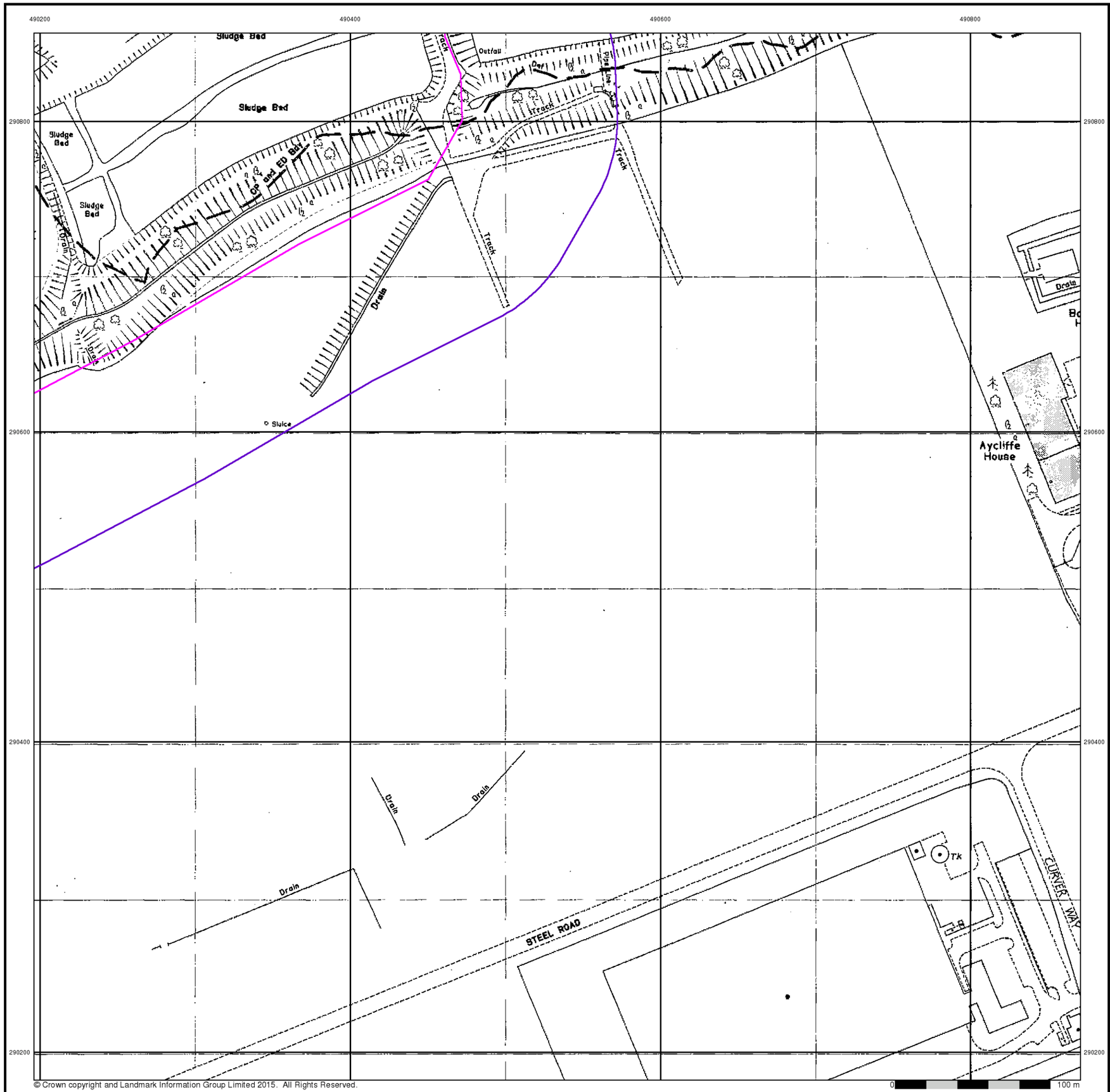

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Additional SIMs

Published 1988

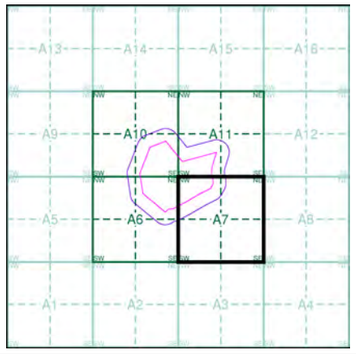
Source map scale - 1:2,500

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)

SP9090
1988
1:2,500

Historical Map - Segment A7



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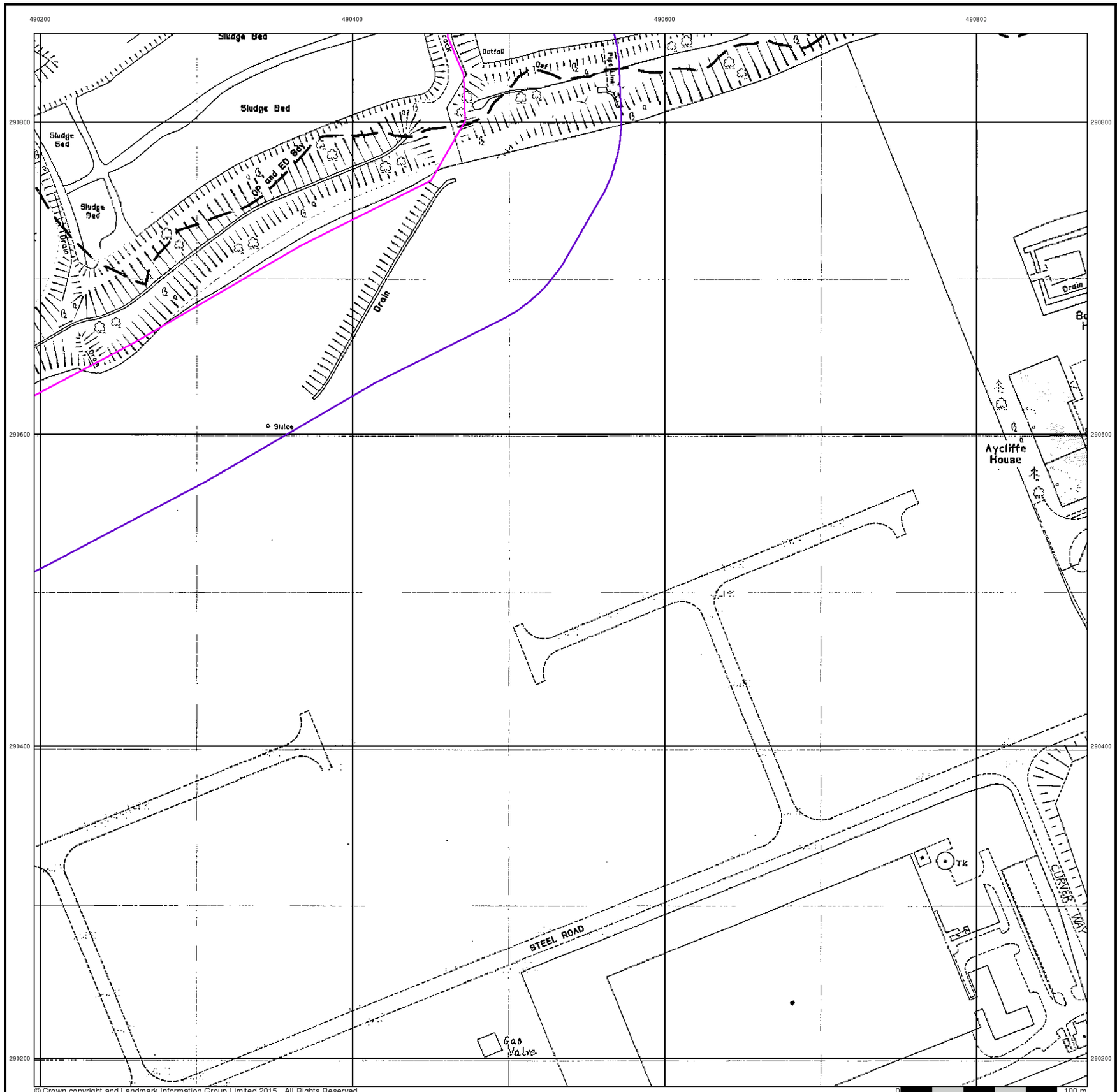

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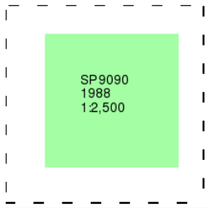
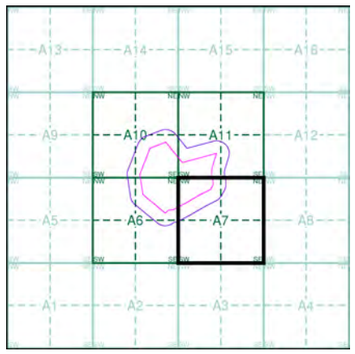


Historical Map - Segment A7



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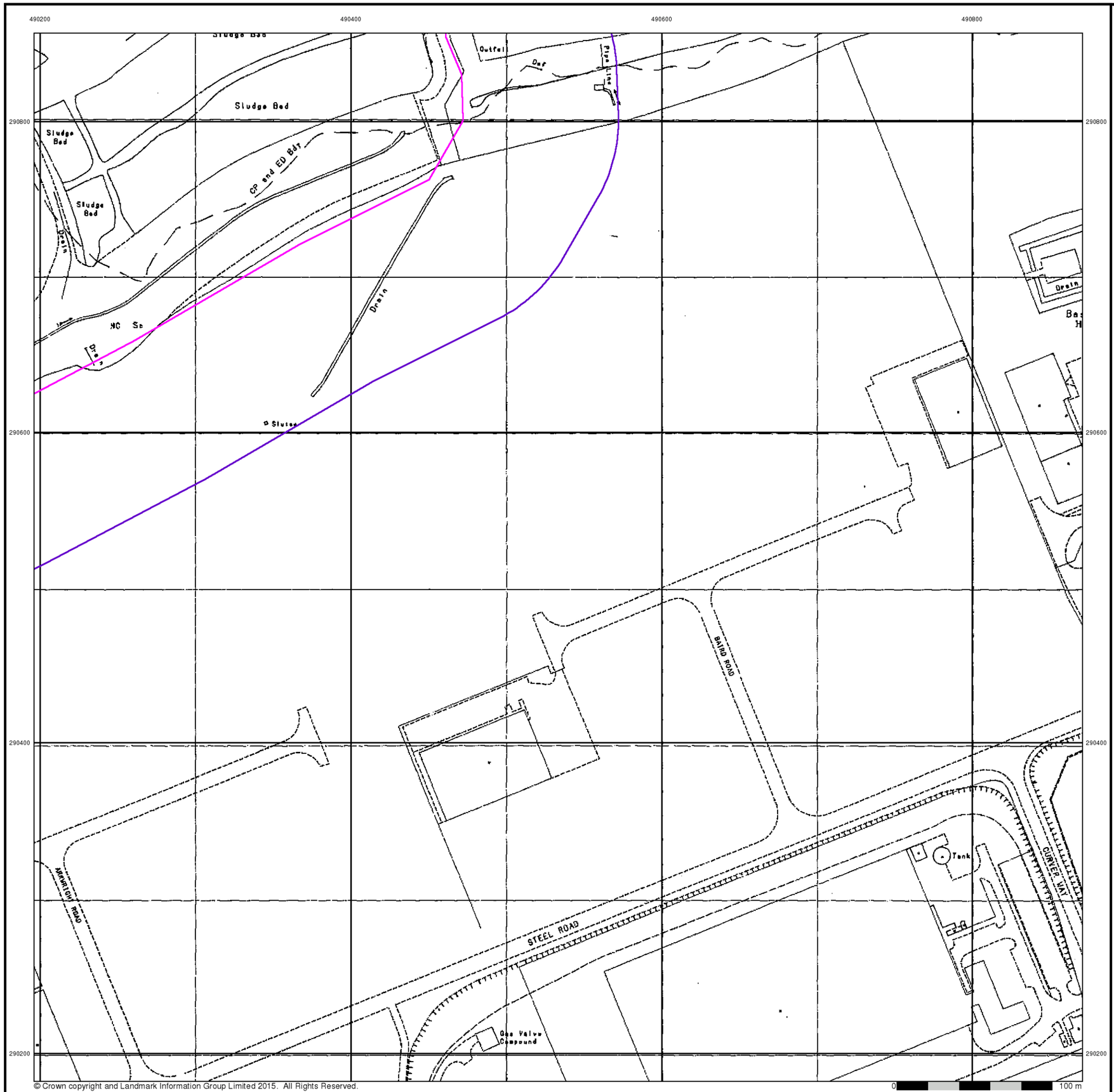

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Additional SIMs

Published 1991

Source map scale - 1:2,500

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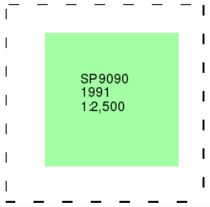
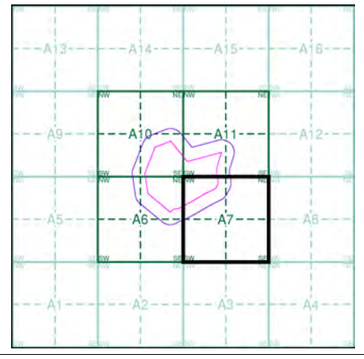


Historical Map - Segment A7



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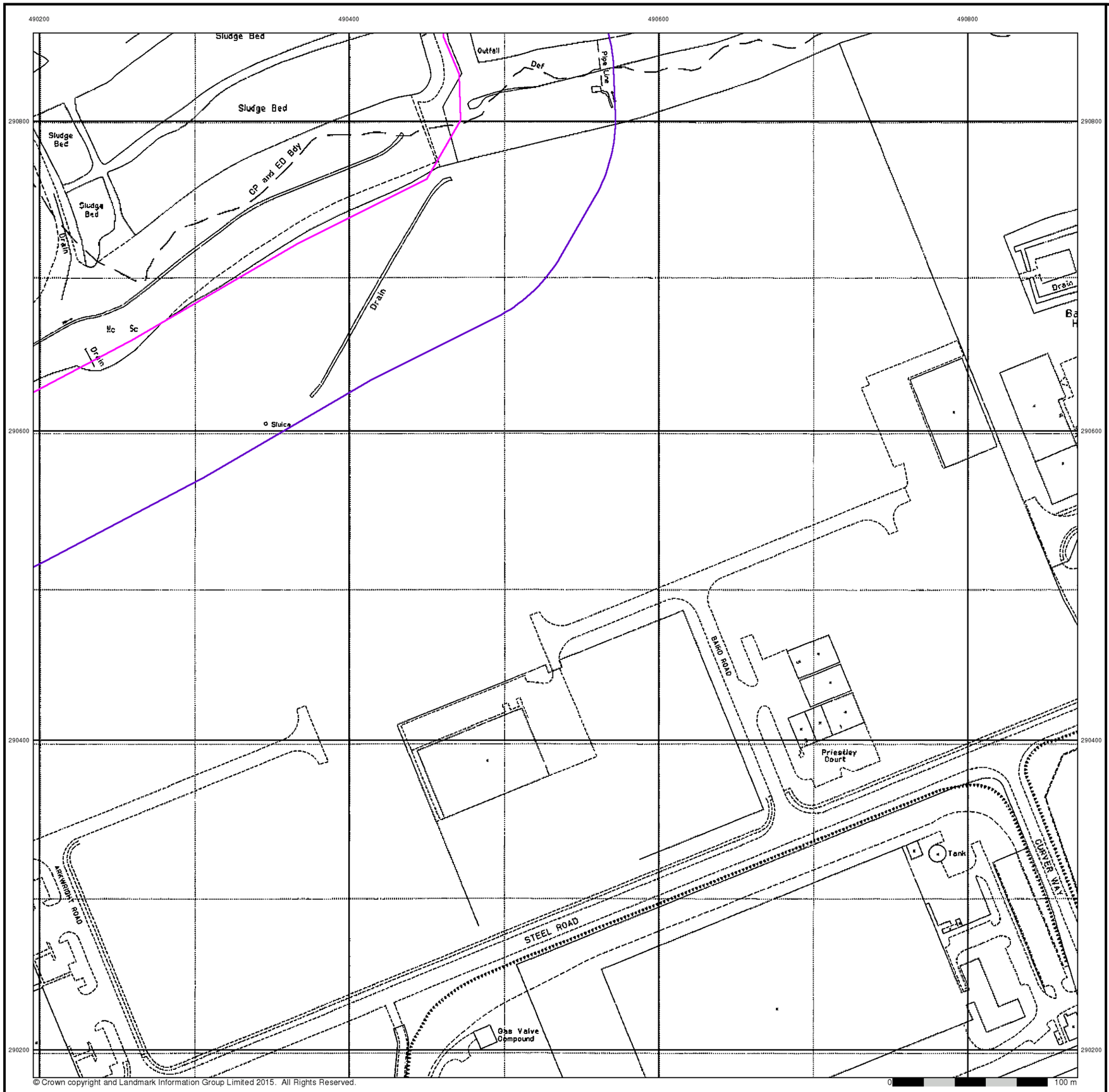

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Large-Scale National Grid Data

Published 1993

Source map scale - 1:2,500

'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.

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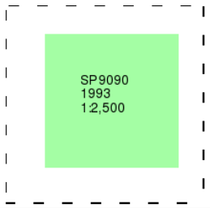
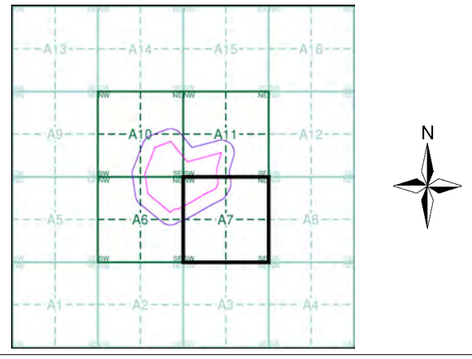


Historical Map - Segment A7



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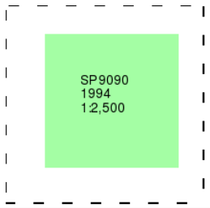

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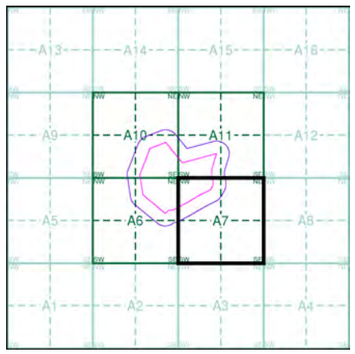

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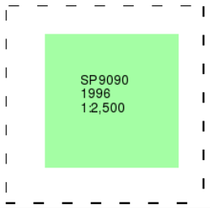
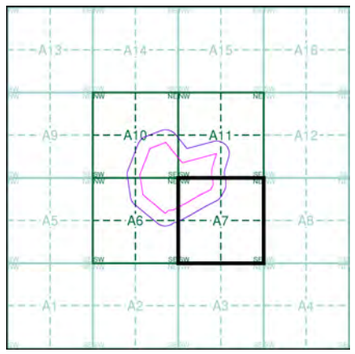


Historical Map - Segment A7



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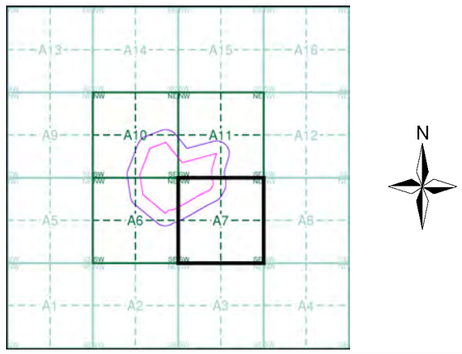
Historical Aerial Photography

Published 1999

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

Historical Aerial Photography - Segment A7



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Site Details

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

UKAS TESTING
2183

Final Report

Report No.:	20-15306-1
Initial Date of Issue:	25-Jun-2020
Client	Storefield Aggregates
Client Address:	Furnace Park Old Telford Way Telford Way Industrial Estate Kettering Northants NN16 8UN
Contact(s):	Group Tom Reid
Project	Telford Way

Quotation No.:		**Date Received:**	18-Jun-2020
Order No.:	8220	**Date Instructed:**	18-Jun-2020
No. of Samples:	1		
Turnaround (Wkdays):	5	**Results Due:**	24-Jun-2020
Date Approved:	25-Jun-2020		

Approved By:

Details: Glynn Harvey, Technical Manager

Chemtest
The right chemistry to deliver results

Results - Soil

Project: Telford Way

Client: Storefield Aggregates			**Chemtest Job No.:**		20-15306
Quotation No.:			**Chemtest Sample ID.:**		1018572
Order No.: 8220			Client Sample Ref.:		FC134
			Client Sample ID.:		Composite
			Sample Location:		Clay
			Sample Type:		SOIL
			Date Sampled:		15-Jun-2020
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-
Moisture	N	2030	%	0.020	26
Chromatogram (TPH)	N			N/A	See Attached
pH	U	2010		4.0	10.6
Arsenic	U	2450	mg/kg	1.0	24
Barium	U	2450	mg/kg	10	120
Cadmium	U	2450	mg/kg	0.10	1.6
Chromium	U	2450	mg/kg	1.0	31
Molybdenum	U	2450	mg/kg	2.0	3.2
Antimony	N	2450	mg/kg	2.0	2.2
Copper	U	2450	mg/kg	0.50	45
Mercury	U	2450	mg/kg	0.10	0.22
Nickel	U	2450	mg/kg	0.50	42
Lead	U	2450	mg/kg	0.50	55
Selenium	U	2450	mg/kg	0.20	1.2
Zinc	U	2450	mg/kg	0.50	130
Chromium (Trivalent)	N	2490	mg/kg	1.0	31
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50
Fuel Type	N	2670		N/A	N/A
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0

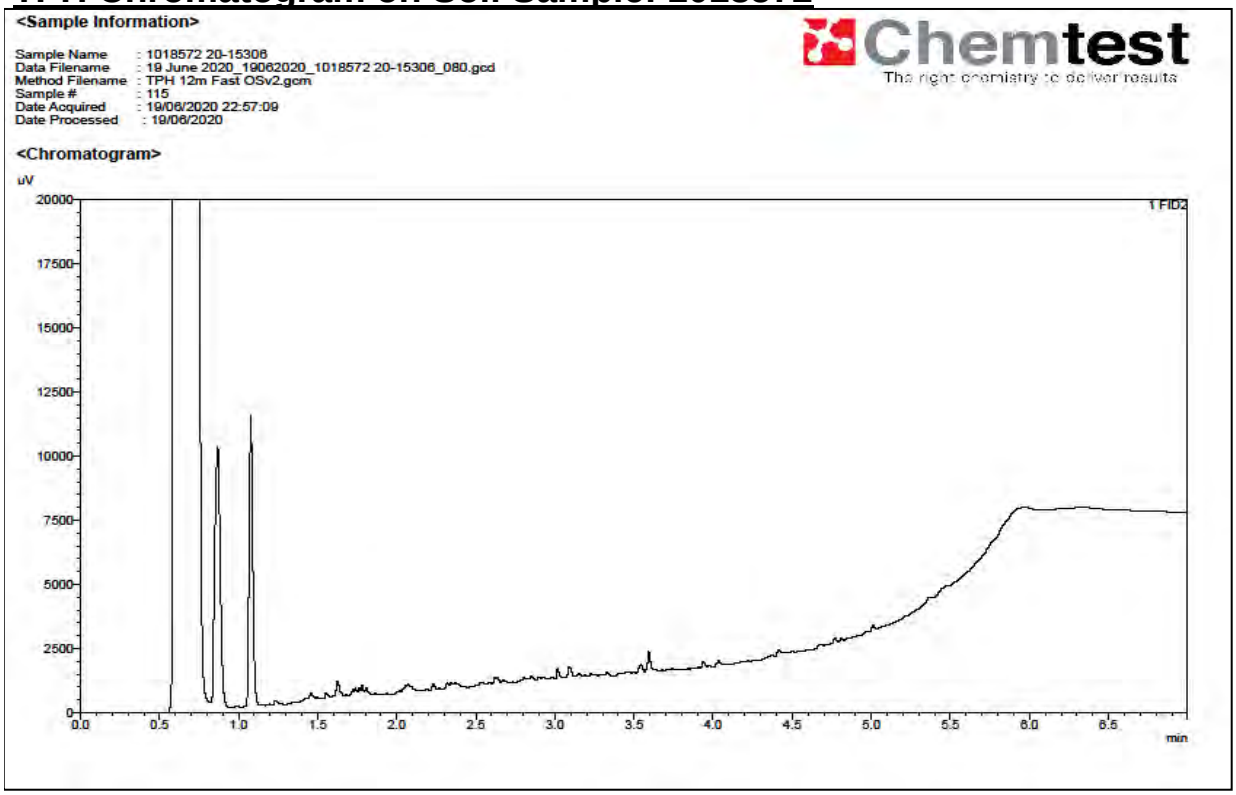
Chemtest
The right chemistry to deliver results

Results - Soil

Project: Telford Way

Client: Storefield Aggregates			**Chemtest Job No.:**		20-15306
Quotation No.:			**Chemtest Sample ID.:**		1018572
Order No.: 8220			Client Sample Ref.:		FC134
			Client Sample ID.:		Composite
			Sample Location:		Clay
			Sample Type:		SOIL
			Date Sampled:		15-Jun-2020
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10
Naphthalene	U	2700	mg/kg	0.10	0.44
Acenaphthylene	U	2700	mg/kg	0.10	0.24
Acenaphthene	U	2700	mg/kg	0.10	0.50
Fluorene	U	2700	mg/kg	0.10	0.47
Phenanthrene	U	2700	mg/kg	0.10	2.7
Anthracene	U	2700	mg/kg	0.10	0.82
Fluoranthene	U	2700	mg/kg	0.10	4.1
Pyrene	U	2700	mg/kg	0.10	4.3
Benzo[a]anthracene	U	2700	mg/kg	0.10	1.7
Chrysene	U	2700	mg/kg	0.10	2.0
Benzo[b]fluoranthene	U	2700	mg/kg	0.10	1.8
Benzo[k]fluoranthene	U	2700	mg/kg	0.10	1.3
Benzo[a]pyrene	U	2700	mg/kg	0.10	1.9
Indeno(1,2,3-c,d)Pyrene	U	2700	mg/kg	0.10	1.3
Dibenz(a,h)Anthracene	U	2700	mg/kg	0.10	0.80
Benzo[g,h,i]perylene	U	2700	mg/kg	0.10	1.5
Total Of 16 PAH's	U	2700	mg/kg	2.0	26
Benzene	U	2760	µg/kg	1.0	< 1.0
Toluene	U	2760	µg/kg	1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0	< 1.0
Total Phenols	U	2920	mg/kg	0.30	1.8

TPH Chromatogram on Soil Sample: 1018572



Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.

Report Information

Key

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

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

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

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

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

UKAS TESTING
2183

Final Report

Report No.:	20-14522-1
Initial Date of Issue:	16-Jun-2020
Client	Storefield Aggregates
Client Address:	Furnace Park Old Telford Way Telford Way Industrial Estate Kettering Northants NN16 8UN
Contact(s):	Group Tom Reid
Project	TELFORD WAY

Quotation No.:		**Date Received:**	10-Jun-2020
Order No.:	8218	**Date Instructed:**	10-Jun-2020
No. of Samples:	1		
Turnaround (Wkdays):	5	**Results Due:**	16-Jun-2020
Date Approved:	16-Jun-2020		

Approved By:

Details: Glynn Harvey, Technical Manager

Chemtest
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Results - Soil

Project: TELFORD WAY

Client: Storefield Aggregates			**Chemtest Job No.:**		20-14522
Quotation No.:			**Chemtest Sample ID.:**		1014957
Order No.: 8218			Client Sample Ref.:		Clay FC133 Composite
			Sample Type:		SOIL
			Date Sampled:		08-Jun-2020
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-
Moisture	N	2030	%	0.020	27
Chromatogram (TPH)	N			N/A	See Attached
pH	U	2010		4.0	10.0
Arsenic	U	2450	mg/kg	1.0	49
Barium	U	2450	mg/kg	10	370
Cadmium	U	2450	mg/kg	0.10	< 0.10
Chromium	U	2450	mg/kg	1.0	49
Molybdenum	U	2450	mg/kg	2.0	7.3
Antimony	N	2450	mg/kg	2.0	9.5
Copper	U	2450	mg/kg	0.50	150
Mercury	U	2450	mg/kg	0.10	0.34
Nickel	U	2450	mg/kg	0.50	82
Lead	U	2450	mg/kg	0.50	230
Selenium	U	2450	mg/kg	0.20	0.58
Zinc	U	2450	mg/kg	0.50	380
Chromium (Trivalent)	N	2490	mg/kg	1.0	49
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50
Fuel Type	N	2670		N/A	PAH
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	52
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	52
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	5.8
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	180
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0

Chemtest
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Results - Soil

Project: TELFORD WAY

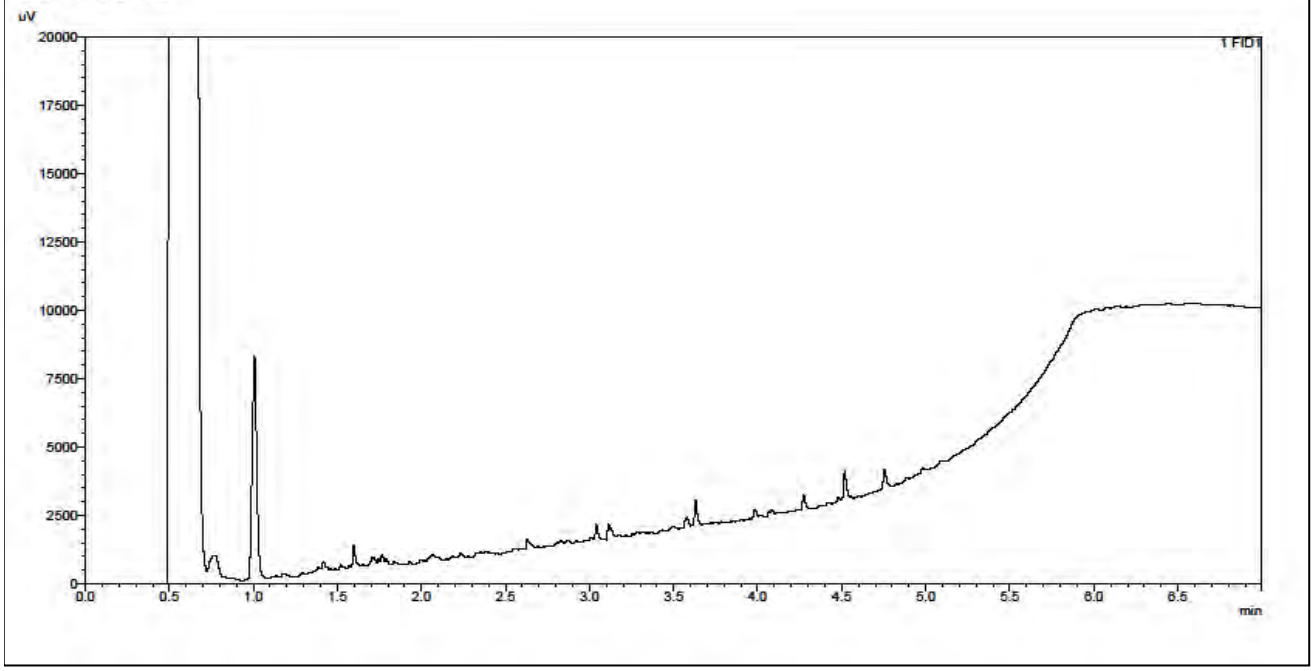
Client: Storefield Aggregates			**Chemtest Job No.:**		20-14522
Quotation No.:			**Chemtest Sample ID.:**		1014957
Order No.: 8218			Client Sample Ref.:		Clay FC133 Composite
			Sample Type:		SOIL
			Date Sampled:		08-Jun-2020
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	190
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	240
Naphthalene	U	2700	mg/kg	0.10	0.37
Acenaphthylene	U	2700	mg/kg	0.10	0.48
Acenaphthene	U	2700	mg/kg	0.10	0.60
Fluorene	U	2700	mg/kg	0.10	0.70
Phenanthrene	U	2700	mg/kg	0.10	3.7
Anthracene	U	2700	mg/kg	0.10	1.9
Fluoranthene	U	2700	mg/kg	0.10	5.9
Pyrene	U	2700	mg/kg	0.10	6.3
Benzo[a]anthracene	U	2700	mg/kg	0.10	2.6
Chrysene	U	2700	mg/kg	0.10	2.6
Benzo[b]fluoranthene	U	2700	mg/kg	0.10	2.5
Benzo[k]fluoranthene	U	2700	mg/kg	0.10	1.3
Benzo[a]pyrene	U	2700	mg/kg	0.10	3.2
Indeno(1,2,3-c,d)Pyrene	U	2700	mg/kg	0.10	2.2
Dibenz(a,h)Anthracene	U	2700	mg/kg	0.10	0.63
Benzo[g,h,i]perylene	U	2700	mg/kg	0.10	2.7
Total Of 16 PAH's	U	2700	mg/kg	2.0	38
Benzene	U	2760	µg/kg	1.0	< 1.0
Toluene	U	2760	µg/kg	1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0	< 1.0
Total Phenols	U	2920	mg/kg	0.30	< 0.30

TPH Chromatogram on Soil Sample: 1014957

<Sample Information>

Sample Name : 1014957 20-14522
Data Filename : 11 June 2020_11062020_1014957 20-14522_129.gcd
Method Filename : TPH 12m Fast OSv2.gcm
Sample # : 65
Date Acquired : 12/06/2020 06:13:22
Date Processed : 12/06/2020

<Chromatogram>



Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.

Report Information

Key

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

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
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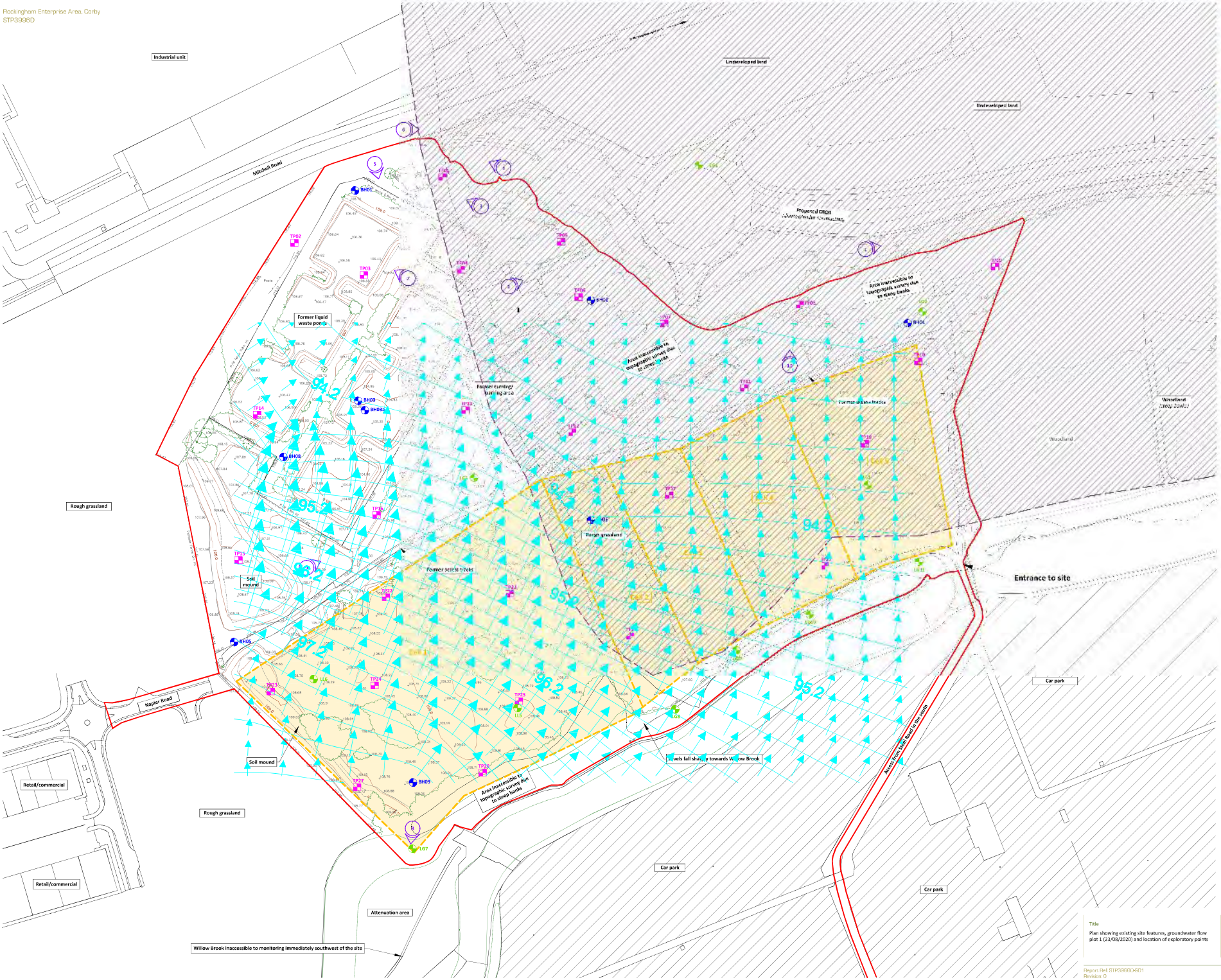
customerservices@chemtest.com



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Key

- Approximate location of proposed borehole formed by Cable and Tool percussive techniques
- Approximate location of proposed trial pit excavation
- Approximate location of proposed water sampling points
- Historic borehole
- Planning application boundary
- Extent of East Northampton Council boundary
- Approximate location and orientation of photographic reference

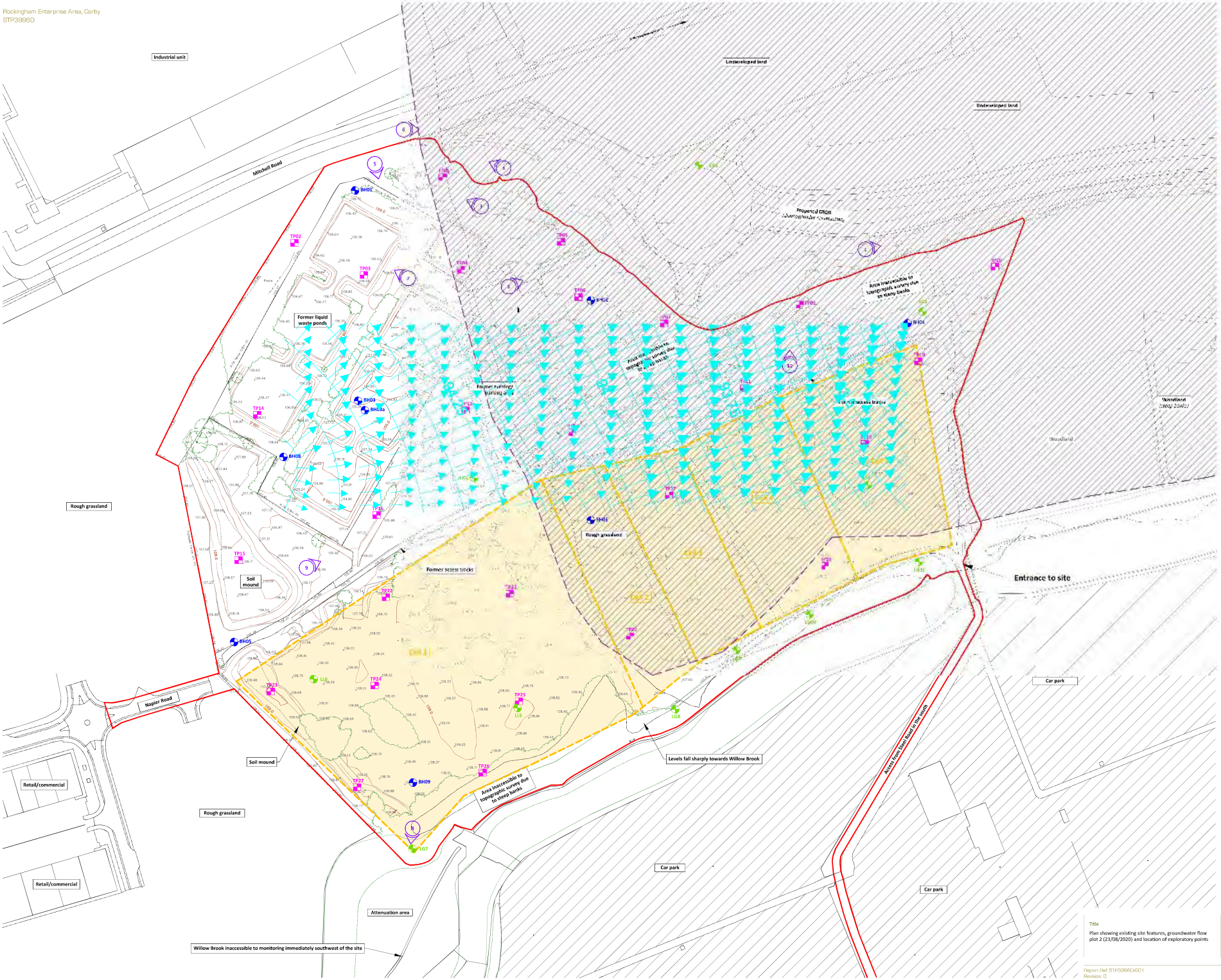
Notes

2. Boreholes BH04, BH05, BH06, BH08 and BH09 were installed as groundwater flow plot.

Title	Scale	Drawing number
Plan showing existing site features, groundwater flow plot 1 (23/08/2020) and location of exploratory points	1:1250 at A1	Appendix L - Sheet 1 of 4

Report Ref: STP3996D-001
Revision: 0

September 2020


Industrial unit
Mitchell Road
Landscaped land
Landscaped land
Former liquid waste ponds
Former tumuli
Former access tracks
Rough grassland
Rough grassland
Soil mound
Soil mound
Napier Road
Retail/commercial
Retail/commercial
Rough grassland
Car park
Car park
Car park
Entrance to site
Levels fall sharply towards Willow Brook
Access from Main Road to the south
Area inaccessible to topographic survey due to steep banks
Area inaccessible to topographic survey due to steep banks
Attenuation area
Willow Brook inaccessible to monitoring immediately southwest of the site
Cell 1
Cell 2
Cell 3
Cell 4
Woodland
Woodland
BH01
BH02
BH03
BH03a
BH04
BH05
BH06
BH07
BH08
BH09
TP01
TP02
TP03
TP04
TP05
TP06
TP14
TP15
TP17
TP19
TP20
TP21
TP22
TP23
TP24
TP25
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TP28
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LG1
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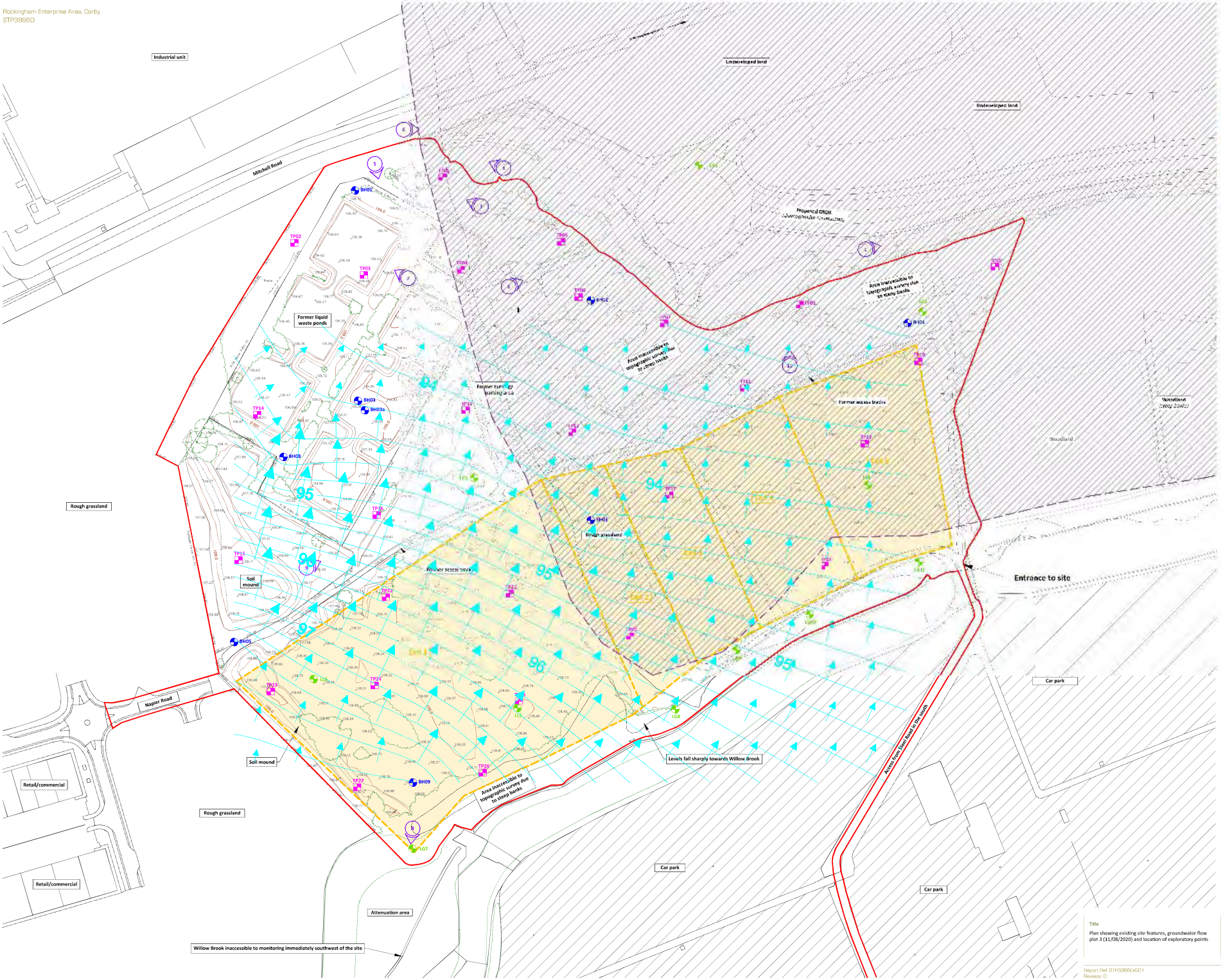

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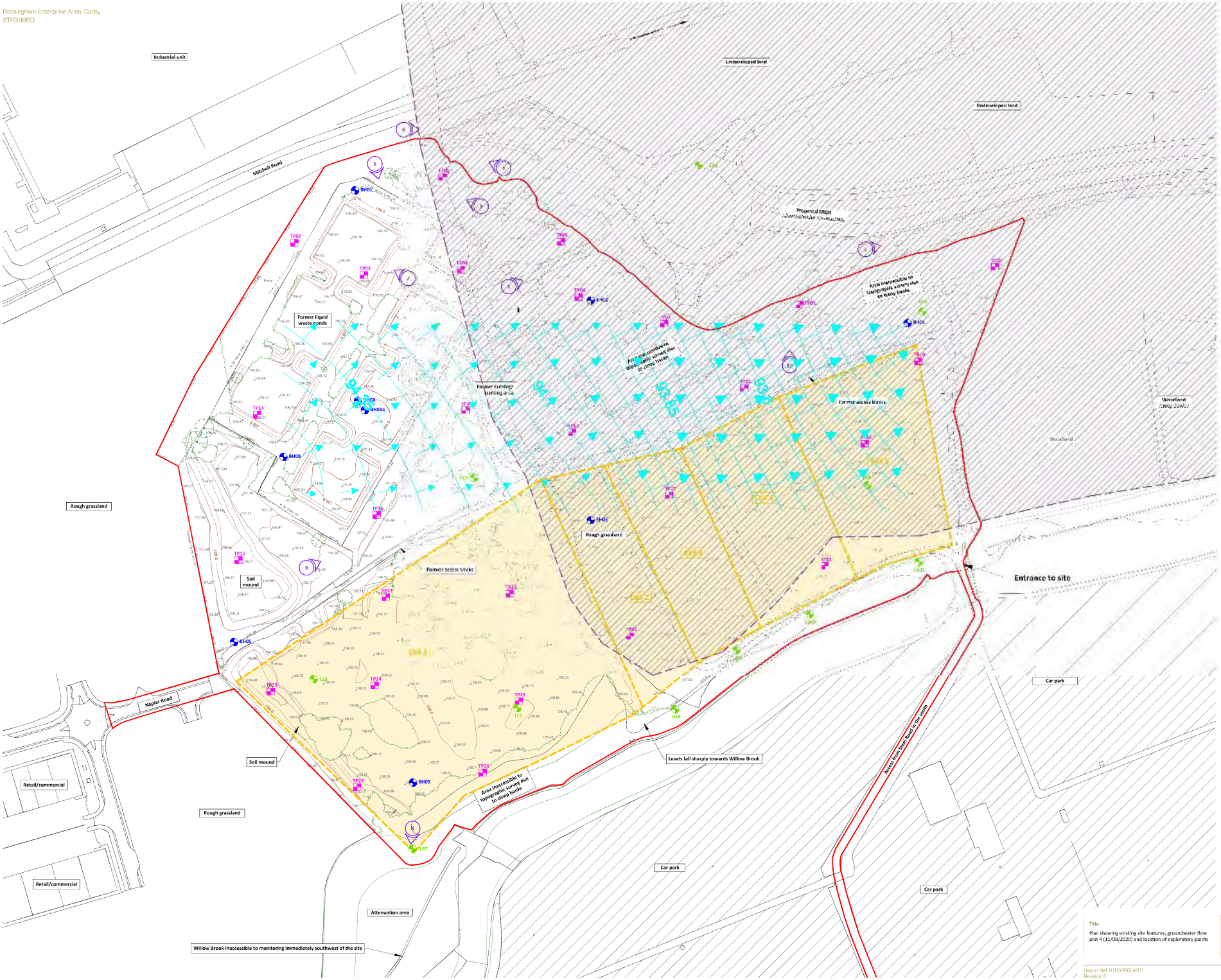
Key

- BH — Approximate location of proposed borehole formed by Cable and Tool percussive techniques
- TP — Approximate location of proposed trial pit excavation
- SP — Approximate location of proposed water sampling points
- Historic borehole
- Planning application boundary
- Extent of East Northampton Council boundary
- Approximate location and orientation of photographic reference

Notes

2. Boreholes BH04, BH05, BH06, BH08 and BH09 were installed as groundwater flow plot.

Title	Scale	Drawing number
Plan showing existing site features, groundwater flow plot 3 (11/08/2020) and location of exploratory points	1:1250 at A1	Appendix L - Sheet 3 of 4



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Key

- Approximate location of proposed borehole formed by Cable and Tool percussive techniques
- Approximate location of proposed trial pit excavation
- Approximate location of proposed water sampling points
- Historic borehole
- Planning application boundary
- Extent of East Northampton Council boundary
- Approximate location and orientation of photographic reference

Notes

1. Boreholes BH04, BH06 and BH08 were utilised for the groundwater flow plot.

Title	Scale	Drawing number
Plan showing existing site features, groundwater flow plot 4 (11/08/2020) and location of exploratory points	1:1250 at A1	Appendix L - Sheet 4 of 4

TATA STEEL

TATA

Short note

To:	Mr. A. Pickford
Copy:	
Reference Source No:	
Project number:	
Author(s):	Dr. D. J. Haynes
Approved by:	
Date of issue:	16 February 2015
Programme manager/ Project leader:	Dr. P. Knight
Circulation approved:	Yes
Keywords:	Property Desk Study

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Subject: Corby Land Quality Historical Review

1. Introduction

This Short Note is a desk based historical review of the land quality for the area shown within the red boundary on Figure 1. The review has been undertaken to inform potential developers regarding potential land quality issues that might be encountered during future development activities and to assist in the planning of any ground investigations that might be required in support of any future planning application.

The area (hereafter known as 'the Site') shown within Figure 1 is approximately 900m to the North of the main Corby Steel Works. The Site area is approximately 33 ha and incorporates a closed but not surrendered landfill site (C17 Landfill permitted under licence EAWML 70559) and a closed, surrendered and remediated former liquid waste treatment facility (C18 North Bank lagoons, previously permitted under EAWML 70560).

2. Geology of the Area

Inspection of the geological map of the area published by the British Geological Survey indicates the local geology of the site prior to quarrying was formed by deposits of Glacial Till (drift geology) overlying at depth the Northamptonshire Sand Formation (Inferior Oolite group), consisting principally of ironstone, overlying Upper Lias Clay (solid geology). The thickness of the Glacial Till is recorded as up to 40 feet (12.2 m). The Ironstone bed of the Northamptonshire Sand Formation can be up to 6m thickness but commonly only 2 to 4 metres was worked.

3. Land Area identification

3.1 General

The whole of the land area shown in Fig 1 was originally designated as potential land available for long term tipping, as shown in the Landfill Site Permit which was granted to British Steel in December 1984 (Fig 2). However, the actual tipping area that has been used is much smaller and constitutes the licensed landfill C17 (licence EAWML 70559), which is shown in detail in Fig 3. A further liquid waste treatment system was installed and operated under a landfill licence for C18 lined

ponds, under licence reference R4910/C/18/RF/EPS dated 14.12.1984. Both of the licensed waste activity areas are shown in Fig.2.

3.2 C17 Closed Landfill

Landfill C17 has been closed since 13/3/2009 and is in after care phase, under Permit Number 70559, Variation Notice Number QP3799NL. Final surrender of the licence is currently being negotiated with the Environment Agency for the landfill although it could take several years to meet the requirements and conditions required by Environment Agency current guidance. The operating area and borehole locations are shown in Fig 3. The borehole logs and sample analyses from LG1, LG2 and LG3 can be used to infer potential land quality adjacent to and between C17 and C18 land areas. The C17 Landfill Area has no development potential until the Landfill licence has been accepted as surrendered by the Environment Agency.

3.2.1 C17 Landfill Site History

Prior to licensing, the site was initially quarried to remove the underlying ironstone for use in the Corby Integrated Iron and Steel Works, and was then subsequently used as dewatering lagoons for blast furnace slurry produced by Corby Integrated Iron and Steel Works.

On closure of Corby Integrated Iron and Steel Works the slurry was removed from the blast furnace lagoons which were subsequently divided into cells using bund walls formed from inert rubble to produce the current landfill site.

3.2.2 Description of the C17 Site Activities

The waste management licence for the Corby Tube Works landfill site (C/17) was issued in 1984 by Northamptonshire County Council and has seen very limited modifications since this date. The licence permitted the disposal of the following waste types:

- Waste Category A - Solid Inert Waste
- Waste Category B – Solid Semi-inert Waste
- Waste Category C – Solid Putrescible Waste (excluding Domestic Waste and Animal Carcases)
- Waste Category D – Difficult Waste

(Asbestos and other Special Wastes were not permitted to be deposited at the site.)

As part of the Permit the landfill has been used for the disposal of controlled wastes from Corby Tube Works; these include neutralisation filter cake from pickling operations, settlement sludge from Weldon Settlement Ponds, non-hazardous industrial wastes and construction/demolition rubble.

The layout of the cells is as shown in Figure 3. There are five separate cells or areas within the licensed site:

- Closed area to west of site (Cells 1 and 2)
- Operational cells and slurry dewatering areas (prior to closure) (Cells 3 and 4)
- Closed area to east of site (Cell 5)

Detailed records exist of the quantities of waste deposited at the site and as required by the waste management licence, these have been reported to the Environment Agency, and its predecessors.

The landfill site closed on 9 November 2004 and until it's closure operated on a dilute and disperse basis and did not have any landfill engineering features, i.e., artificial barriers and liners, capping systems, gas and leachate collection systems.

3.2.3 Area of C17 Surrender

The landfill is currently defined as 'Definitively Closed' by the Environment Agency and ongoing monitoring and management is currently being undertaken by the Environment Department at Tata Corby Tubes. The complete surrender of the licence is being sought for the whole of the licensed landfill site (C/17), as shown in Figure 3.

At the time of the landfill closure, only cells 1, 2 and 5 had been completed with cell 3 being partially filled and cell 4 empty.

Other than a requirement that 'nothing shall be deposited in the final 1 m layer which is likely to interfere with final restoration or subsequent cultivation' the waste management licence did not require the capping of completed areas and so on completion of each operational cell it was covered with 'inert' material and allowed to naturally re-vegetate. Equally no final height profile was specified and as such the completed areas were simply filled to blend in with the surrounding land

The land immediately to the east of the C17 landfill facility consists partly of woodland that has been developed on the quarry backfill material which was deposited sometime prior to 1950 and partly of two remnant blast furnace slurry ponds which have drained and grassed-over. There is no intention to develop the land occupied by these two former lagoons and the woodland area to the north of these lagoons is to remain as a woodland area to contribute its ecological benefits as a green corridor as identified in the Rockingham Development Framework.

3.3 C18 Closed, Remediated and Surrendered former Licensed Lagoons

The Reclamation Lagoons (C18) were located at grid reference SP 900 910 and covered an area of approximately 2ha. Use of this liquid waste treatment area ceased in June 2007. Remediation work was carried out to empty the lagoons, remove and dispose of the liners and the licence for C18 was successfully surrendered in 2010. The area of the C18 submitted for licence surrender and definitive closure is shown in Fig. 4. The Environment Agency agreed Surrender of the site on 19/10/2010. The surrendered landfill site soil surface is clean land with no potential to cause contamination to the environment.

4. Identification of Potential Land Quality Issues in relation to industrial activity in each of the identified areas

4.1 Site History

The Site area was worked for ironstone from 1935 up to early 1950s, on a progressive basis, being followed-up by backfilling with quarry spoil using a 'hill and dale' backfilling system with ridges running roughly east-west direction. At a slightly later stage, the backfill hill and dale has been filled and levelled using 'blast furnace fines and flue dust' to a variable thickness as shown in the following aerial photographs.

Fig 5 shows the Tata Steel land ownership area superimposed on an RAF aerial photograph taken in 1950. The photograph is taken from Clarke Bond planning submission documents for the Corby Northern Orbital Road (CNOR). (Please note, the positioning of the CNOR on this aerial photograph is geographically incorrect and should be ignored (CNOR indicated in blue in Fig 5). The aerial photograph shows that the delineated Tata Steel property area has already been quarried and back-filled in the ‘hill and dale’ formation. There is significant woodland growth on the area that will

subsequently form the C17 landfill area. The aerial photograph shows some lagoon areas that have been formed, but these are located on the south side of Willow Brook and are not those associated with the C17 landfill operations.

At the western side of the photograph there are a number of linear structures which appear to be embankments with rail lines. The western property boundary is very closely aligned with the linear feature and it is very probable that this long standing physical feature defines the property boundary in that location.

In Fig. 6, the rail embankments and fines backfilling operations are clearly visible. The fines were being used to fill the ‘hill and dale’ formations and create a level ground surface. The type of material that has been used in this operation has been identified in other investigation reports and can generally be described as a mixture of 'Blast Furnace Fines and Flue Dust'.

4.2 Site Data and Data from Adjacent Land

4.2.1 Tata Steel land

Borehole log data from borehole installed adjacent to C17 indicate the land quality in the immediate area of the land ownership. The logs indicate a variable thickness of blast furnace slag gravels and 'fines' at the surface (variable thickness 0.5m to 1.5m) underlain by reworked overburden glacial till and Northampton Sand Formation. The sample analysis data from the borehole sample has been collated in a spreadsheet (Table 1) along with data from trial pit and borehole investigations on adjacent land near the northwest and western boundaries of the Tata Steel property (see Figs 7 and 8).

The borehole log for LG1, dated 05/02/2001, indicates the surface layer of made ground is loose dark brown sand and gravel. The gravel is fine medium and coarse ash and slag. This layer extends from the surface to 1.5 metres below which the made ground appears to be reworked glacial till, to a depth of 13.8 metres.
The location of borehole LG1 appears to be within the site of the CNOR road construction and has probably been destroyed.

The borehole log LG2, dated 05/02/2001, indicates a similar surface layer to that of LG1 also from the surface to a depth of 1.5 metres, underlain by reworked glacial till down to a depth of 11 metres. Below this there is a metre of medium dense orange brown sand, which could represent the remnants of the Northamptonshire Ironstone, to a depth of 11.95m below ground level (bgl). At borehole location LG3, dated 26/01/2001, the top surface layer (of similar material to LG1 and LG2) only extends from the surface to a depth of 0.5metre. Below this the borehole indicated the presence of reworked glacial till down to a depth of 9.0m bgl.

4.2.2 Investigations in the adjacent land area

FWS Report 2000 for EPR Corby Ltd (biomass power station investigations) describes the “veneer of iron and steel works waste” as typical of surface material in made ground around much of the Corby district. The material is alkaline and contains relatively high concentrations of sulphate, chloride and some metals - particularly zinc and is typical of flue dust and slag fines. Leaching tests indicate that the heavy metals are not readily soluble.

4.2.3 Land adjacent to the former C18 lagoons (now remediated)

The land adjacent to the former C18 landfill, areas L, C, J and the northern part of Area I in Fig 9 were part of the Shanks and McEwans scrap handling area, which presumably was the de-metalling operations associated with blast furnace slag ladles operations. The area of land where this activity was being undertaken is probably typified by the presence of sporadic large ‘skulls’ of slag and iron which have been left as unprocessed lumps. There is 'spot' evidence of this from the 'current' aerial photograph (Google 2015) of the area, taken at the time when the orbital road was under construction and some of the lumps have been cleared and collected together (Fig 10). The ‘skulls’ adjacent to the former lagoons will need removing prior to the development of that part of the site (Fig. 11).

Consultation with the contractor for the Orbital Road works would be advisable, regarding the best methodology for clearance and materials management, as they have clearly already undertaking such activity in the recent past.

5. Conclusions

Within the identified Tata Steel land ownership, the portion that is currently the closed licensed landfill C17 will not be available for sale or further development until the surrender conditions have been met and the landfill licence successfully surrendered to the Environment Agency. Development of adjacent land is likely to require ground gas monitoring boreholes to be installed and monitored in accordance with best practice.

The former blast furnace sludge lagoons to the east of C17 have been identified as part of a preferred green corridor associated with the Rockingham Development Framework Plan. The area immediately to the north of this, which has woodland growth, is also intended to form part of the green corridor.
The former C18 lagoon area has been closed, remediated and successfully surrendered and is not considered to be a risk to the environment. The surface soils 0 to 1.5m thickness (which may have historically consisted of mixed blast furnace

slag fines and flue dust) have previously been excavated to form the lagoon void space, so these surface materials are no longer present in the footprint of the lagoons.

These surface materials of blast furnace slag and flue dusts may still be present within the surface soils (variable thickness between 0.5 and 1.5 metres) in the wider area around the former C18 lagoon. These soils may therefore be characterised by slightly elevated pH and zinc.

The whole area consists of reworked glacial till that has been backfilled following the removal of the ironstone resource. The fill is likely to be variable in composition and geotechnical behaviour and will be typical of most of the quarried, backfilled and redeveloped areas of Corby, with respect to any development platform that might need to be created.

A small area of concrete cover is present adjacent to the former C18 lagoons and the ground condition below this is not known.

Based on current aerial photography and a site walkover, there are a number of large remnant 'skulls' of slag and metal adjacent to the former lagoons, which will need removing prior to the development of that part of the site. Confirmation of the fate of similar lump skulls adjacent to the new Orbital Road development will also need to be made, if the land immediately adjacent to the Orbital road is to be developed.

The information provided in this report is intended to assist a developer in formulating an appropriate ground investigation according to the development being proposed. The information provided in this document is given in good faith and subject to the limitations and constraints imposed by the methods and information sources described in this report. Tata Steel can accept no liability for the accuracy or reliability of the information relied upon.
There may be other conditions prevailing on the site which have not been revealed by the previous investigations and which have not been taken into account by this report. Responsibility cannot be accepted for any conditions not revealed by the previously completed investigations. Any figure or opinion on the possible configuration of strata, contamination or other spatially variable features between or beyond investigation positions is conjectural and given for guidance only. Confirmation of ground conditions between exploratory holes should be undertaken if deemed necessary.
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Reference Source No.

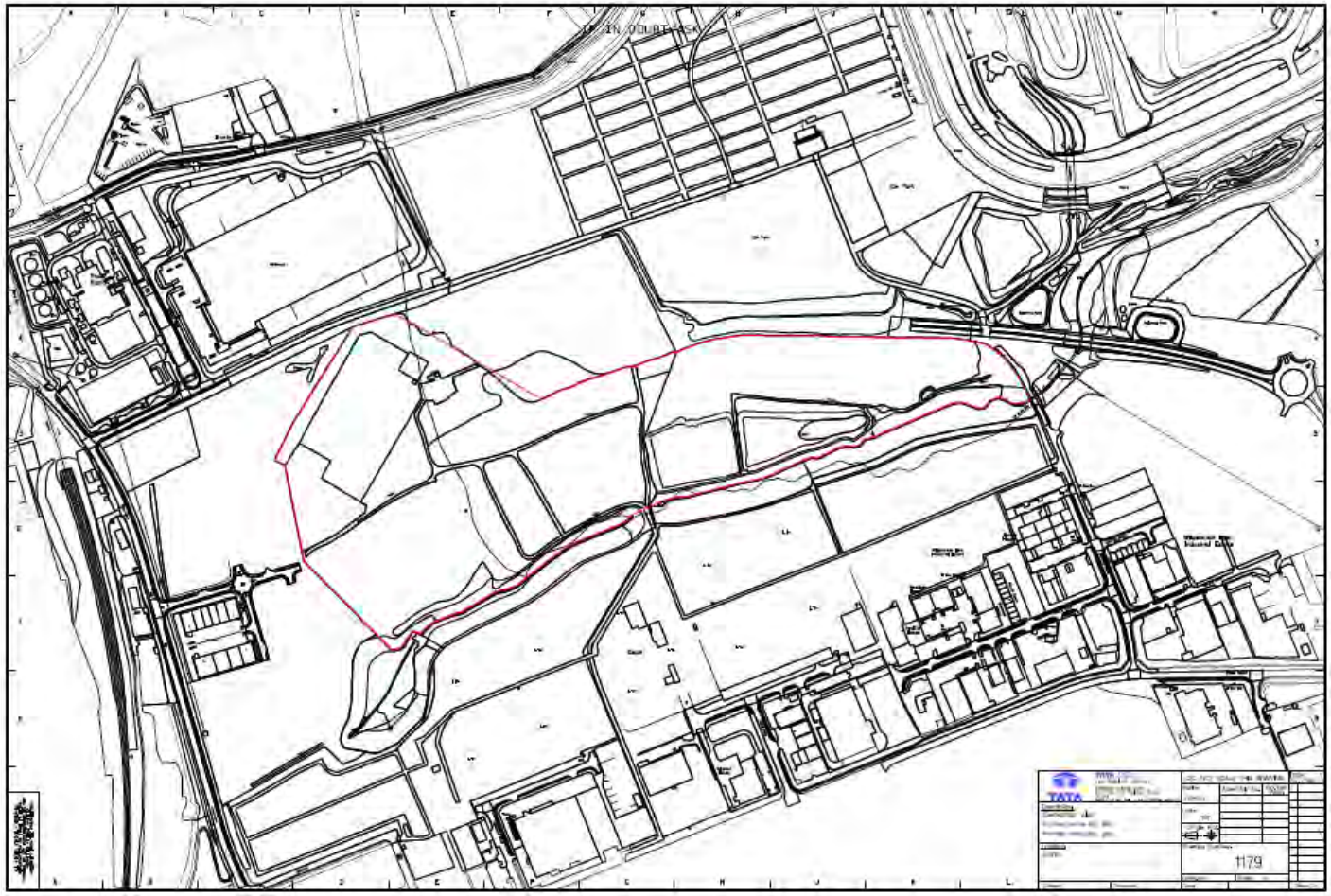

FIGURE 2. Defined Landfill Area Permit dated 1984

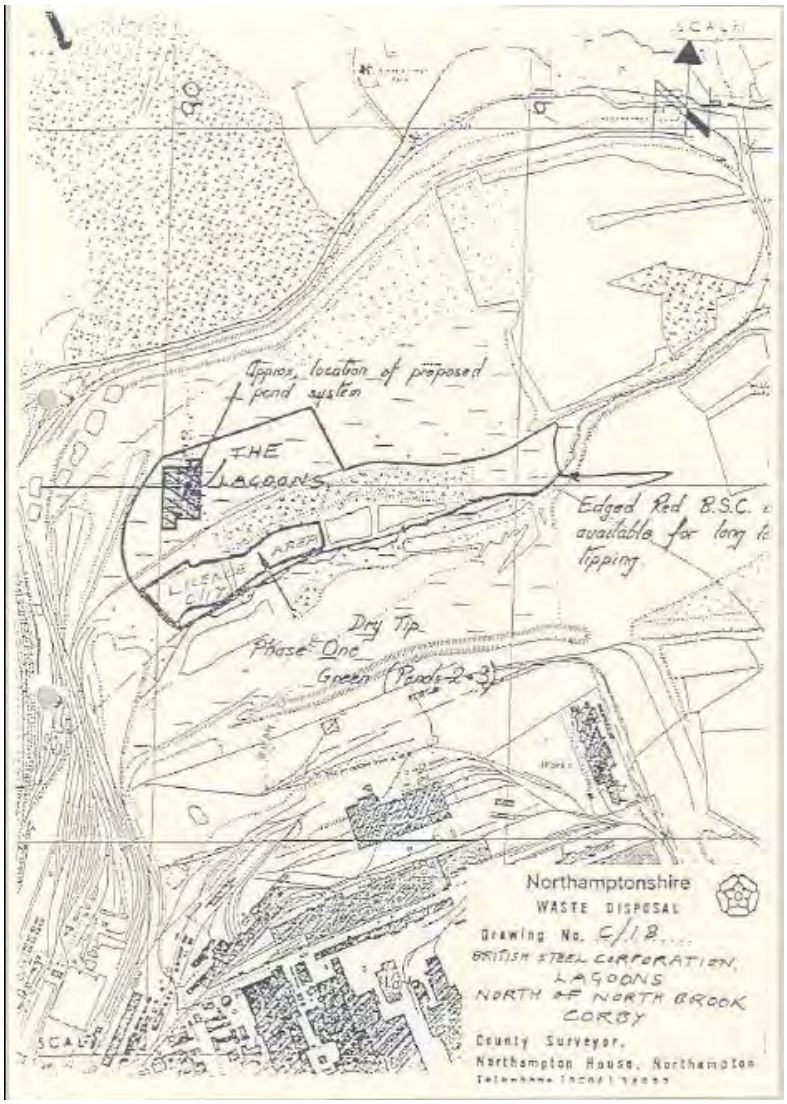

Figure 3. C17 licensed landfill detail plan

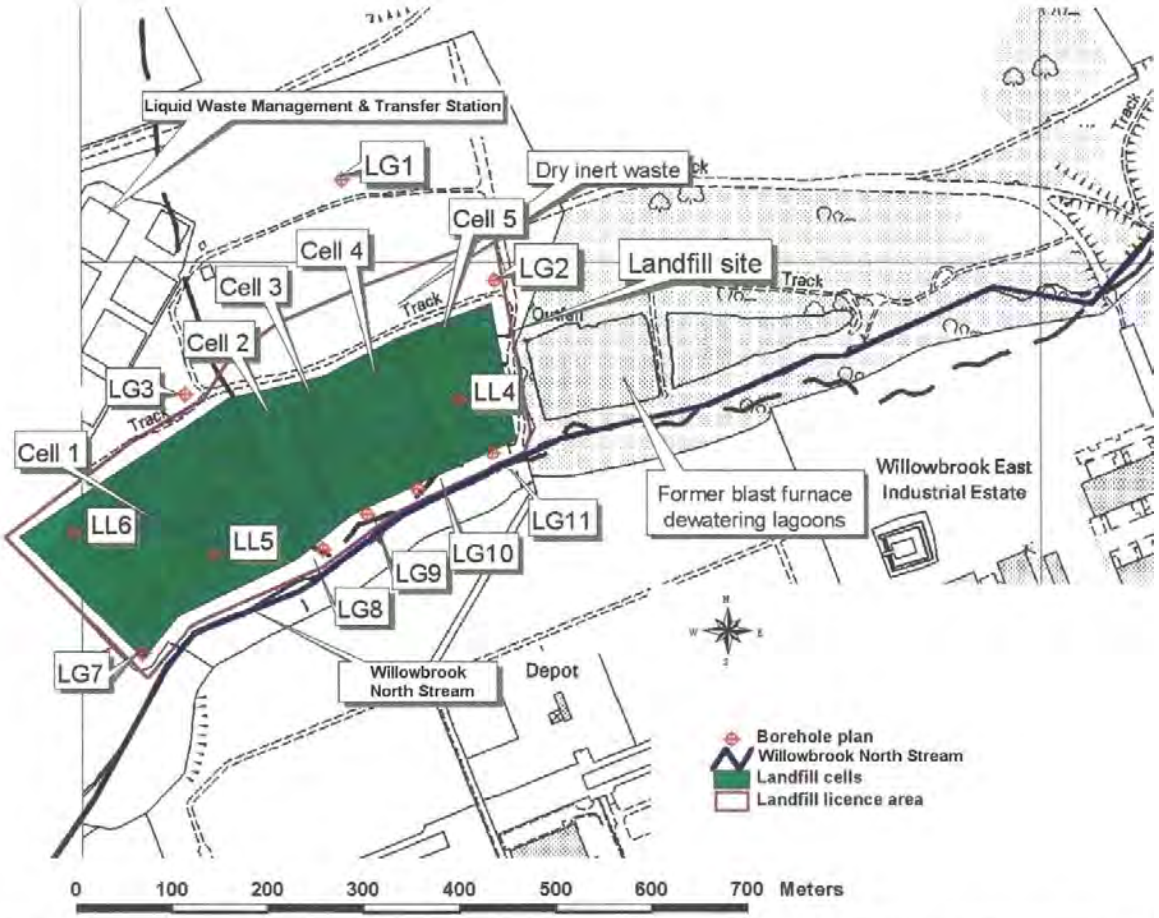

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Figure 4 C18 Operational Site subsequently closed, remediated and licence successfully surrendered

Figure 5 Tata Steel property boundary overlaid on 1950 RAF Aerial Photograph

Figure 6 Tata Steel property with 1952 site backfilling ground levelling operations visible

Figure 7 Adjacent land with some available investigation data from boreholes and trial pits (Wimpey 1990)

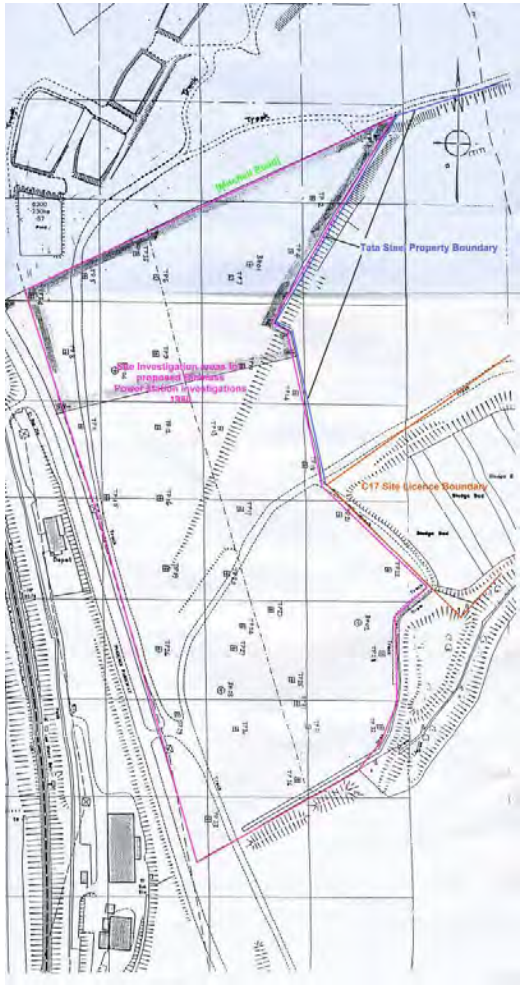

Figure 8 Tata Steel property overlaid on current aerial photograph showing approximate location of CNOR construction

Figure 9 Areas adjacent to C17 and former C18 licensed areas

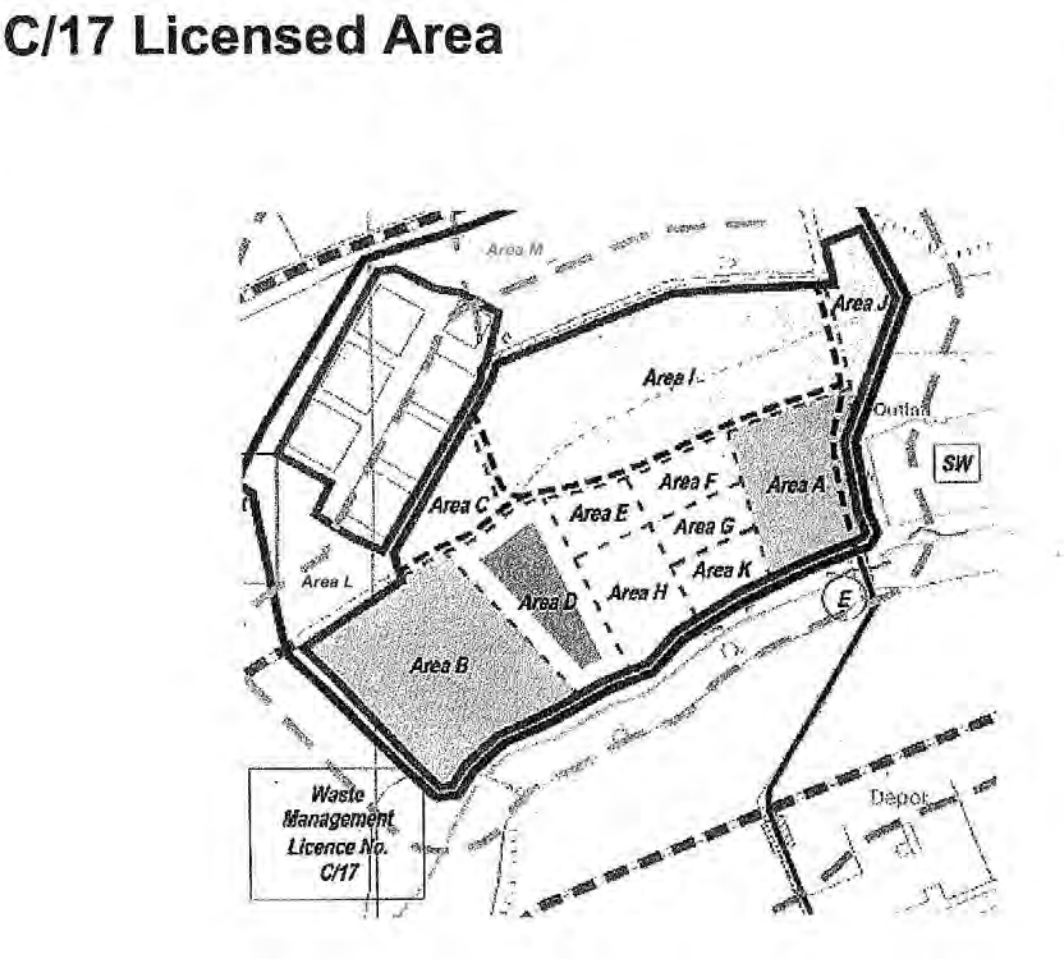

Figure 10 Evidence of Lump Skulls collected from Area M and the wider area as part of CNOR construction

Figure 11 Remnant Lump Skulls still present in Area M immediately adjacent to the C18 site

Figure 12 Concrete slab ground cover adjacent to the C18 site (now partly overgrown as seen in Fig 11)

TABLE 1 Soil Samples from Land adjacent to former C18 lagoons

For use as an indication of the character of the quarry backfill material that might be encountered in tha area for potential sale

Location	Sample Depth m	material type	pH	Total Sulphate %	Sulphide ppm	Cadmium ppm	Arsenic ppm	total Cr	Copper	Lead	Nickel ppm	Zinc	TEM	total CN
Borehole Samples on site Soil Technics 2001														
LG1	1	loose dark brown clayey sand and gravel. Gravel is fine medium and coarse ash and slag.	10.7	1.7	30	<0.5	38	380	53	290	56	490		6.3
LG1	1.5	loose dark brown clayey sand and gravel. Gravel is fine medium and coarse ash and slag.												
LG1	6													
LG1	7		8.1	2.1	2	<0.5	28	32	18	32	26	51		<0.1
LG1	13													
total backfill depth m	14	fine medium and coarse ash and slag extends from 0m to 1.5m depth												
water strike depth m	12													
LG2	1.5	loose dark brown clayey sand and gravel. Gravel is fine medium and coarse ash and slag.	8.3	1.9	20	3.5	44	120	26	1100	42	5100		1.5
LG2	6		7.8	2.1	10	0.9	39	51	17	340	29	1900		0.1
LG2	11		7.9	0.98	2	<0.5	32	96	6.3	39	40	150		<0.1
total backfill depth m	12	fine medium and coarse ash and slag extends from 0m to 1.5m depth												
water strike depth m	11													
LG3	0.5	loose dark brown clayey sand and gravel. Gravel is fine medium and coarse ash and slag.												
LG3	1.5		8.6	2.5	60	<0.5	24	65	16	27	24	170		0.5
LG3	4.5		8.3	1.3	4	<0.5	14	18	8.9	13	14	38		<0.1
LG3	11		8.1	0.77	1	<0.5	6.3	170		41	47	170		<0.1
total backfill depth m	11	fine medium and coarse ash and slag extends from 0m to 0.5m depth												
water strike depth m	--													
Wimpey Investigations 1990														
TP1	1.5	flue dust	7.4	0.51	2850				75	50		440	<500	2
TP2	1.1	flue dust	7.8	0.14	2000				25	55		460	<500	2.8
TP4	1	flue dust			53				55	485		5800	560	8
TP4	2	flue dust and slag	7.9	1.12	25				50	890		3650	<500	338
(TP 10)	0.3	flue dust	7.6	0.74	12				30	405		2200	<500	12
TP14	0.9	slag	7.8	0.18	55				35	45		405	<500	1.8
Wardell Armstrong 1996 Investigations														
TP13	0.9	CLAY - stiff yellow/grey mottled, with stone and coal fragment inclusions and occasional sandstone pieces	8.4	0.87	1.1	<0.5	14	25	15	55	25	320	150	<1
TP17	1.3	CLAY - firm, yellow/brown mottled, with stone and coal fragment inclusions and sandstone pieces	8.1	0.29	1	<0.5	9	20	20	20	30	80	150	<1
TP18	1.3	CLAY - firm, yellow/grey mottled with occasional stone and coal fragment inclusions	8.9	0.3	8.6	1.1	45	220	95	620	120	3400	840	3
TP19	0.4	MADE GROUND - dark red/brown burnt ironstone / limestone with ocassional bricks	8.6	0.37	9.5	5.5	61	210	30	580	95	3600	230	11
TP19	2.6	CLAY - firm, yellow/grey mottled, silty with stone and coal fragment inclusions and sandstone pieces	8.1	1.3	1.3	<0.5	17	40	10	75	25	430	220	<1
TP24	0.4	MADE GROUND - dark red/brown burnt ironstone / limestone with black coke and slag cobbles	8.8	0.21	6.9	1.7	41	200	180	300	85	2100	31	-
TP25	1.8	CLAY - firm, yellow/grey mottled, with stone inclusions and sandstone pieces	7.6	0.96	<0.5	<0.5	29	15	10	20	25	85	120	<1
BH6	1	MADE GROUND Soft to firm grey brown mottled grey slightly sandy (fine) silty clay with occasional chalk and limestone gravel (fine). Some pockets and thin layers of yellow silty fine sand. Occasional pockets and layers of medium dense grey sandy (fine) si	7.4	0.72	<0.5	<0.5	9	20	15	10	20	40	310	<1
BH6	3		7.4	0.72	<0.5	<0.5	12	10	<5	5	25	30	150	<1
BH6	5		7.2	1.6	<0.5	<0.5	27	30	10	10	65	40	340	<1
BH6	9.5		7.3	0.12	<0.5	<0.5	36	55	15	30	40	95	200	<1
FWS 200 and 2001														
EP11	0.0 to 1.0m	flue dust matrix thickness, 1.50m	8.8	0.41		1	110	220	57	380		2100		4
EP12	0.0 to 0.3m	flue dust matrix thickness, 0.3m	9.8	0.26		<0.5	41	370	33	120		700	800	
EP13	0.0 to 0.4m	flue dust matrix, thickness 0.4m	8.8	0.36		1.5	100	230	44	550		3100	640	6
EP14	0.1m	flue dust	8.6	0.67		1.5	120	250	24	450		3400	320	16
(EP15)	0.0 to 0.7m	flue dust matrix, thickness 0.7m	8.8	0.23		3	110	250	35	650		3500	<200	14
(EP15)	0.7 to 1.95m	flue dust matrix, thickness 1.25m	8.8	0.16		0.5	100	250	37	420		2600	560	2
EP18	0.0 to 0.95m	flue dust matrix, thickness 0.95m	8.7	0.27		<0.5	110	280	22	640		4000	480	3
EP18	2.2 to 3.2m	flue dust matrix, thickness 1.1m	8.6	0.37		<0.5	100	240	19	320		2800	<200	3

Corus UK Limited, Corus Tubes, Corby Works

Closure Report For Corby Tubeworks Landfill Site - Waste Management Licence No. C/17 (EAWML 70559)

January 2006

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    1.1 Location
    1.2 Geology of the Area
    1.3 History of the Site
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    4.4 Inspection, Maintenance and Stability

5. Reporting of Significant Environmental Effects

6. Conclusion

7. References

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1. Introduction

A landfill conditioning plan for the Corby Tubeworks landfill site (C/17) was submitted to the Environment Agency in July 2002 for the operation of a non-hazardous landfill site and subsequently an application window of 9 May to 9 November 2004 was allocated by the Environment Agency for the submission of a Pollution Prevention and Control (PPC) application. Following a detailed analysis of the implications and costs of submitting and complying with the requirements of the legislation the decision was made to close the landfill site with effect from 9 November 2004 and the Environment Agency were duly informed.

As a result of the closure the requirements of Regulation 15 of the Landfill (England and Wales) Regulations 2002, as amended, must be complied with to 'definitely close' the landfill site and move into the aftercare phase prior to ultimate surrender of the waste management licence. This closure report is the initial phase in this process and provides the information required by Regulation 15 of the Landfill Regulations.

1.1. Location

The Corby Tubeworks landfill site (C/17) is located at grid reference SP 900 910 about 900 m to the north of the main Corby Tubeworks site and covers approximately 10 ha. The site is bound by the Willowbrook North Stream on the south side, an overgrown area owned by Corus and formerly used for dewatering of blast furnace slurry to the east and the Rockingham Speedway development site to the north. To the north west of the site is the Corus liquid waste management and transfer station (C/18) which consists of seven HDPE lined lagoons which are used for the treatment of oily liquid effluents from the main Corby Tubeworks site.

1.2. Geology of the Area

Inspection of the geological map of the area published by the British Geological Survey indicates the topography local to the site prior to quarrying was formed in deposits of Glacial Till (drift geology) overlying at depth the Northamptonshire Sand Formation over the Upper Lias Clay (solid geology). The thickness of the Glacial Till is recorded on the map to be 40 feet (12.2 m). The Northamptonshire Sand Formation is indicated to be 9 foot (2.74 m) thick.

1.3. History of the Site

Prior to licensing the site was initially quarried to remove the underlying ironstone for use in the Corby Integrated Iron and Steel Works, for which the current Tubeworks is the last remaining part, and was then subsequently used as dewatering lagoons for blast furnace slurry produced from the blast furnaces which formed part of the Integrated Iron and Steel Works.

On closure of the Integrated Iron and Steel Works the slurry was removed from the blast furnace lagoons and they were then divided into cells using bund walls formed from inert rubble to produce the current landfill site.

1.4. Description of the Site

The waste management licence for the Corby Tubeworks landfill site (C/17) was issued in 1984 by Northamptonshire County Council and has seen very limited modifications since this date. The licence permits the disposal of the following waste types:

- Waste Category A - Solid Inert Waste
- Waste Category B – Solid Semi-inert Waste
- Waste Category C – Solid Putrescible Waste (excluding Domestic Waste and Animal Carcases)
- Waste Category D – Difficult Waste

(Asbestos and other Special Wastes were not permitted to be deposited at the site.)

Since licensing the site has been used for the disposal of controlled wastes from Corby Tubeworks; these include neutralisation filtercake from pickling operations, settlement sludges from Weldon Settlement Ponds, non-hazardous industrial wastes and construction/demolition rubble.

The current layout of the cells is shown in Figure 1. There are five separate cells or areas within the licensed site:

- Closed area to west of site (Cells 1 and 2)
- Operational cells and slurry dewatering areas (prior to closure) (Cells 3 and 4)
- Closed area to east of site (Cell 5)

Detailed records exist of the quantities of waste deposited at the site and as required by the waste management licence, these have been reported to the Environment Agency, and its predecessors.

The site closed on 9 November 2004 and until it's closure operated on a dilute and disperse basis and did not have any landfill engineering features, i.e., artificial barriers and liners, capping systems, gas and leachate collection systems.

2. Area of Closure

Closure is being sought for the whole of the licensed landfill site (C/17), as shown in Figure 1. At the time of closure only cells 1, 2 and 5 had been completed with cell 3 being partially filled and cell 4 empty.

Other than a requirement that 'nothing shall be deposited in the final 1 m layer which is likely to interfere with final restoration or subsequent cultivation' the waste management licence did not require the capping of completed areas and so on completion of each operational cell it was covered with 'inert' material and allowed to

naturally revegetate. Equally no final height profile was specified and as such the completed areas were simply filled to blend in with the surrounding land.

Figure 1 gives details of the monitoring infrastructure in place at the site which is discussed in more detail in Section 4 below.

3. Stability

As stated earlier the site operated to fill the former blast furnace slurry lagoons and so waste was only deposited to a height to match the surrounding land. Since there is no waste management licence or planning permission requirement to achieve a final height profile no level surveys have been carried out.

The surrounding areas to the N, W and E are at the same height as the landfilled cells and are rough grassland. The area to the S is a V shaped cutting in which runs the Willowbrook North Stream. The banking between the landfill site and the watercourse is heavily vegetated and there is no evidence (or historical knowledge) of any landslips or stability problems. This banking was in existence at the time of blast furnace slurry disposal into the lagoons when the material deposited would have been of a much higher density and again there are no known stability problems from this time.

4. Monitoring

In 2001 a series of 11 boreholes were drilled down to the underlying Upper Lias Clay and fitted with open tube piezometers for groundwater and landfill gas monitoring, as shown in Figure 1. The borehole logs for these indicate that the area was made ground. Details of the borehole locations are given in the table below.

Code	Borehole objective	Location description	Grid ref. Nearest 1m	Depth
LG1	Monitor upstream between Raceway and C/17	North of licensed site boundary	490252, 291067	14m
LG2	Monitor upstream between western boundary and C/17	West of track junction in north east corner	490112, 290869	12m
LG3	Monitor upstream between Raceway and C/17	North west track junction	490437, 290971	11.5m
LL4	Leachate monitoring point	In cell 5	490389, 290872	13m
LL5	Leachate monitoring point	In cell 1	490104, 290719	10m
LL6	Leachate monitoring point	In cell 1	490006, 290729	14m
LG7	Monitoring between landfill cells and Willowbrook North Stream	South west corner of site	490069, 290626	11m
LG8	Monitoring between landfill cells and Willowbrook North Stream	Between southern track and the brook	490226, 290700	12.5m
LG9	Monitoring between landfill cells and Willowbrook North Stream	Between southern track and the brook	490303, 290739	12.5m
LG10	Monitoring between landfill cells and Willowbrook North Stream	Between southern track and the brook	490359, 290771	12m
LG11	Monitoring between landfill cells and Willowbrook North Stream	Site entrance between track and the brook	490435, 290805	12.2m

A comprehensive landfill gas and ground and surface water monitoring programme has been in operation at the site since this time as discussed below.

4.1. Landfill Gas

Since the installation of the monitoring boreholes landfill gas monitoring has taken place on a monthly basis. The results of the monitoring, in graphical form, are given in Appendix 1 and indicate negligible landfill gas production.

It is proposed to continue with this monitoring regime during the aftercare phase, although it is proposed to reduce the monitoring frequency to 3 monthly. Any deviation from the baseline data will be the trigger for further investigation.

4.2. Leachate/Groundwater

Since the landfill site did not have any engineering barriers any leachate produced from the action of rainwater on the waste mass passes through the waste body and enters the groundwater.

As can be seen from Figure 1, the locations of the groundwater monitoring boreholes are along the southern boundary of the landfill site close to the Willowbrook North Stream and also along the track to the north of the landfill site, and to the southern boundary of the liquid waste management and transfer station (C/18). This is to confirm that the groundwater flow is towards the Willowbrook North Stream and hence determine the groundwater quality upstream and downstream of the site.

Since the installation of the monitoring boreholes monitoring of the groundwater has taken place on a monthly basis, although it should be noted that boreholes LG1-3, LL4 and LG7 have all been dry indicating negligible groundwater flow into the site from upstream. The results of the monitoring, in graphical form, for those boreholes where groundwater has been evident, i.e., LL5-6 and LG8-11, are given in Appendix 2 and indicate no detrimental effect on the environment.

It is proposed to continue with this monitoring regime during the aftercare phase, although it is proposed to reduce the monitoring frequency to 3 monthly. Any deviation from the baseline data will be the trigger for further investigation.

4.3. Surface Water

The locations for surface water sampling of the Willowbrook North Stream upstream and downstream of the landfill site are as follows:

Pen Green Lane	- Grid Ref. SP 8951 9013
NE Corner Eurofleet (Baird Road)	- Grid Ref. SP 9070 9088

Monitoring of these points has been carried out on a monthly basis to identify any potential deterioration/effect on the watercourse from the landfill site. The

results of the monitoring, in graphical form, are given in Appendix 3 and indicate no detrimental effect on the environment.

It is proposed to continue with this monitoring regime during the aftercare phase, although it is proposed to reduce the monitoring frequency to 3 monthly. Any deviation from the baseline data will be the trigger for further investigation.

4.4. Inspection, Maintenance and Stability

Although the landfill site is remote from the main Corby Tubeworks site the adjacent liquid waste management and transfer station (C/18) is still operational and is visited on a regular basis by both on-site waste contractors and Corus personnel. The access to this site runs alongside the landfill site and so this will act as an ad-hoc inspection of the site. On a more formal basis the Section Engineer, Services, has managerial responsibility for both the landfill site (C/17) and liquid waste management and transfer station (C/18) and routinely visited both sites as a requirement of the waste management licences and working plans.

In addition the local Environment Agency Inspector also visits both sites and reports on compliance with the waste management licences.

Although the site is remote from the main Corby Tubeworks site access is only available via a single entrance. This entrance is controlled by cameras and linked to Corus security who log all visitors to the site.

These inspections will highlight any maintenance requirements or stability issues during the aftercare phase.

5. Reporting of Significant Environment Effects

As stated above the site is regularly inspected by both Corus and Environment Agency personnel. These inspections would identify any significant environmental effects, i.e., stability problems, landslips, fire, trespassers, etc. which could have a significant effect on the environment. Additionally the results from the landfill and ground and surface water monitoring would indicate any unseen effects from the landfill migrating to the environment, i.e., leachate production/movement, landfill gas generation, surface and groundwater contamination.

In the event of any significant environmental effects from the landfill site these would be reported to the Section Engineer, Services and Environmental Manager, who would report these to the local Environment Agency Inspector in a timely manner and would document the problem and any remedial action identified or agreed with the Environment Agency.

6. Conclusion

Based on the above information the requirements of Regulation 15 of the Landfill Regulations, as amended, are in place and Corus request that the landfill site (C/17) is

classified as ‘definitively closed’ and request that the Environment Agency inspect the site and approve closure.

7. References

1. The Landfill (England and Wales) Regulations 2002, Statutory Instrument 2002 No. 1559.

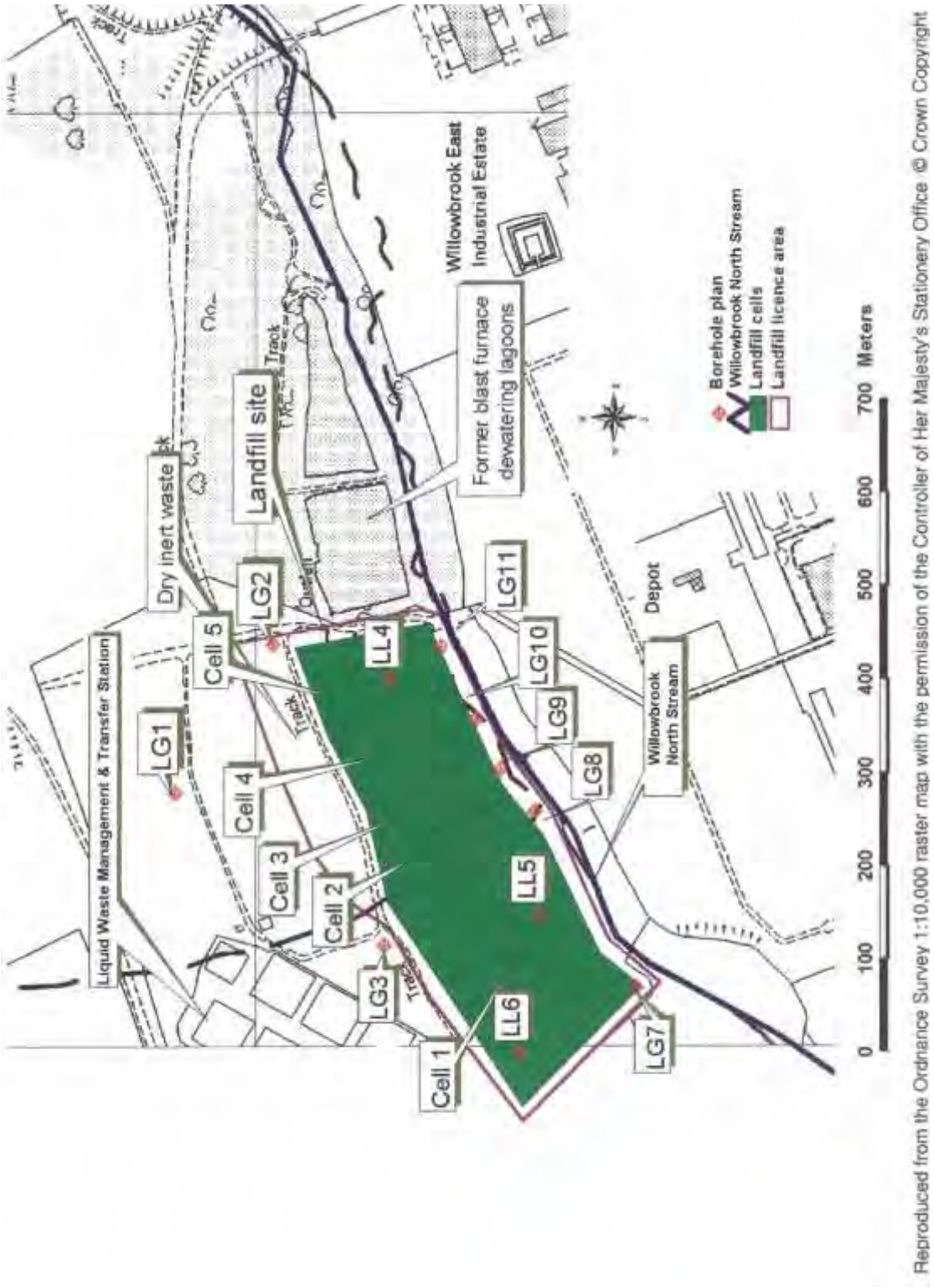
2. The Landfill (England and Wales) (Amendment) Regulations 2004, Statutory Instrument 2004 No. 1375.

3. Landfill Directive, Regulatory Guidance Note 7 (Version 1.1, October 2002), Requirements for Landfills That Stop Operating: Closure and Aftercare. Environment Agency.

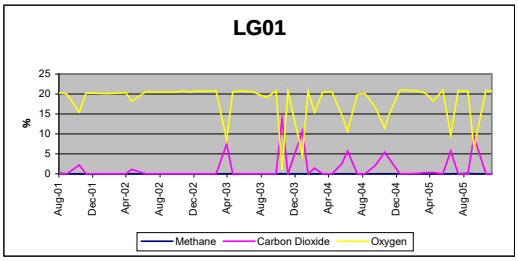
4. Environment Agency Website. Various guidance documents at; http://www.environment-agency.gov.uk/business/

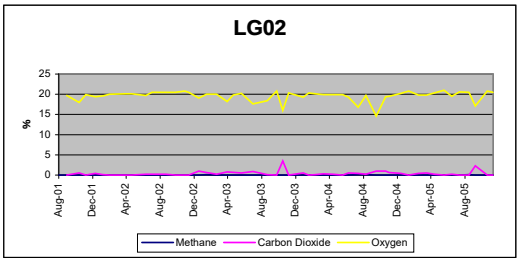
5. Factual Ground Investigation Report. Landfill Site C17, July 2001, Soiltechnics.

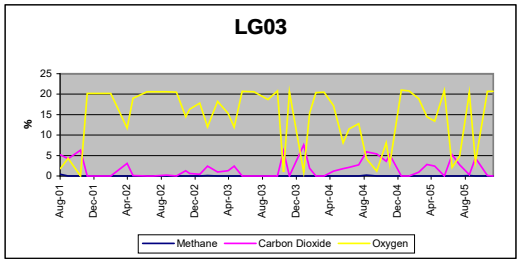
Figure 1 – Corby Tubeworks Landfill Site (C/17)

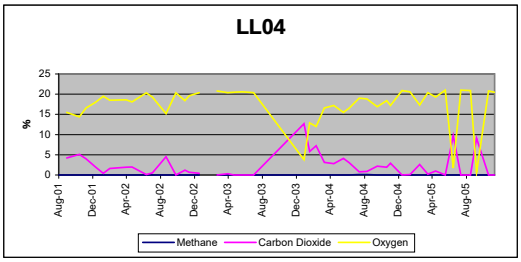


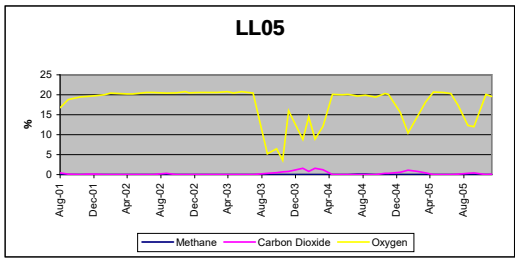
Appendix 1 – Landfill Gas Monitoring Results

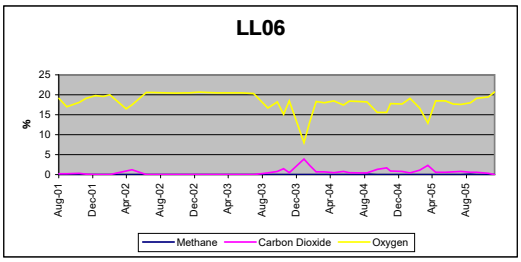


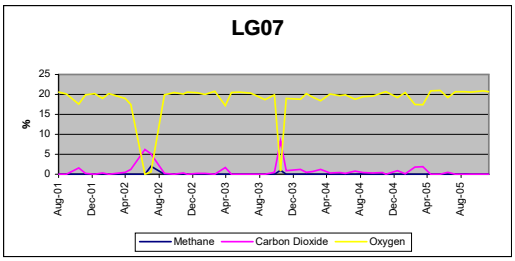


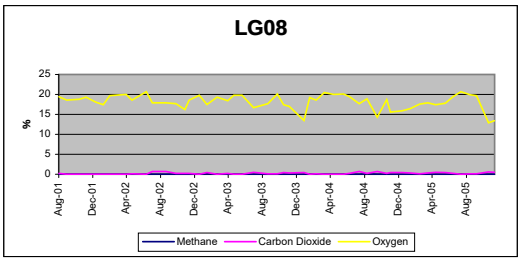


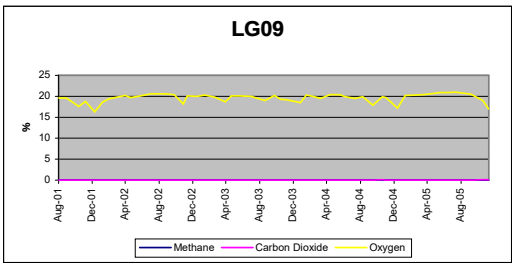


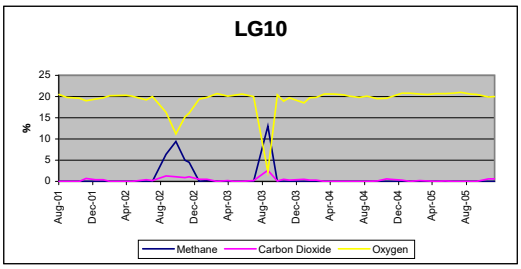


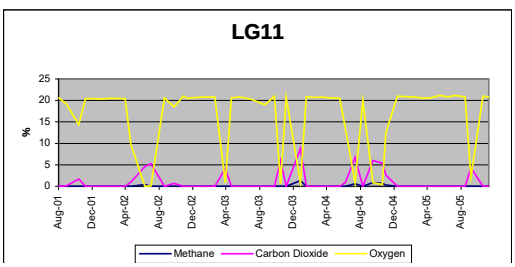






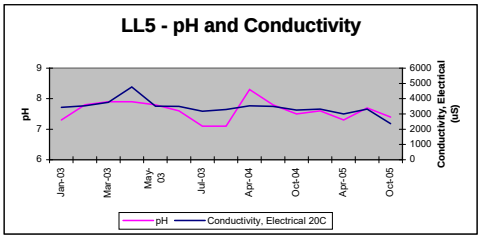


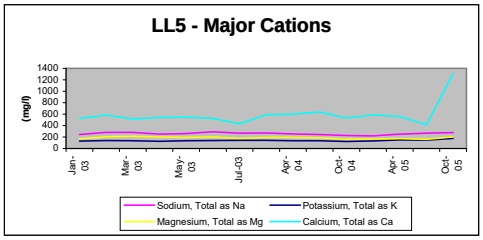


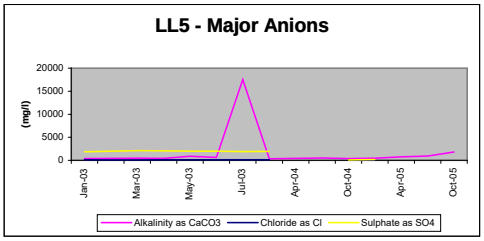


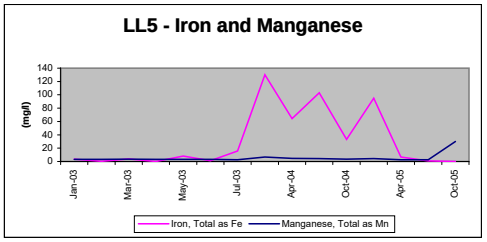
Appendix 2 – Groundwater Monitoring Results

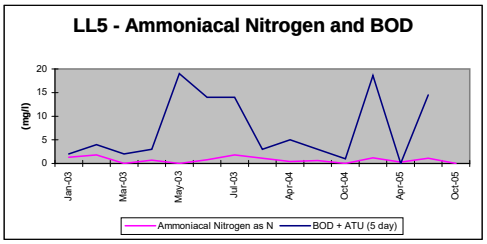
LL5



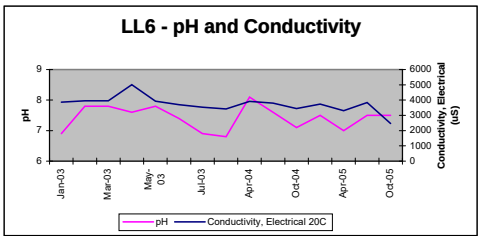


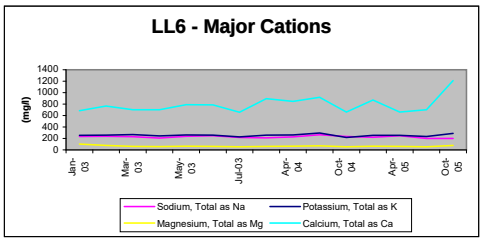


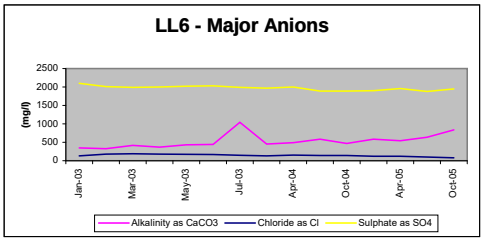


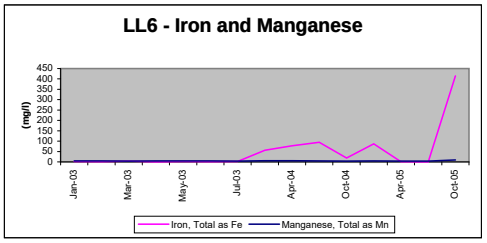


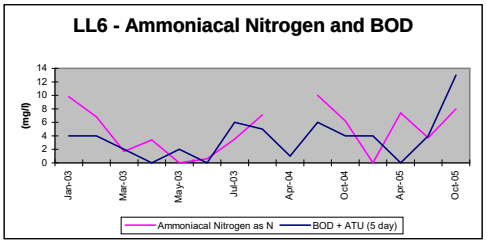
LL6



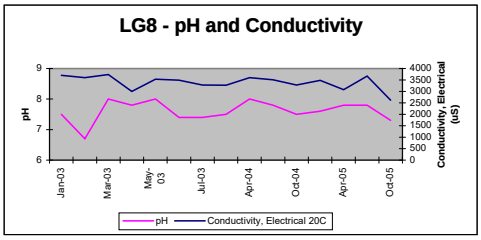


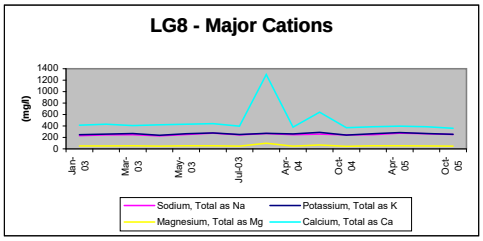


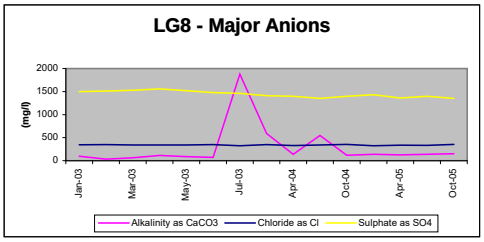


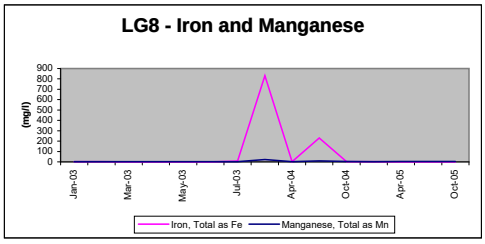


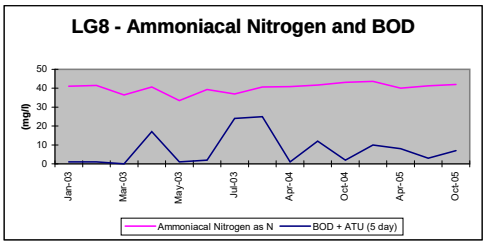
LG8


LG8 - pH and Conductivity
pH
Conductivity, Electrical (uS)
pH
Conductivity, Electrical 20C

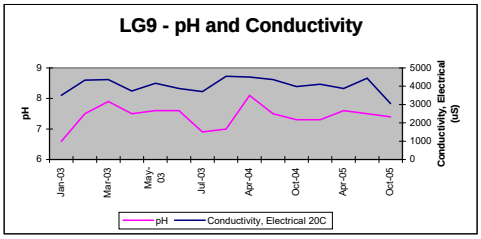

LG8 - Major Cations
(mg/l)
Sodium, Total as Na
Potassium, Total as K
Magnesium, Total as Mg
Calcium, Total as Ca

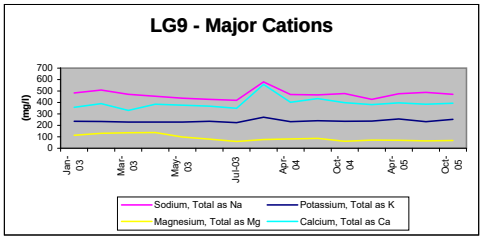

LG8 - Major Anions
(mg/l)
Alkalinity as CaCO3
Chloride as Cl
Sulphate as SO4

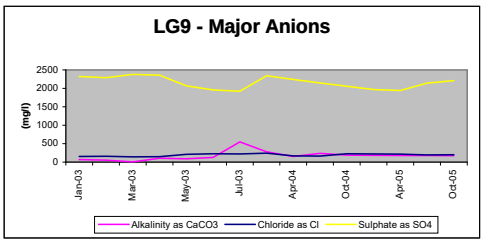

LG8 - Iron and Manganese
(mg/l)
Iron, Total as Fe
Manganese, Total as Mn

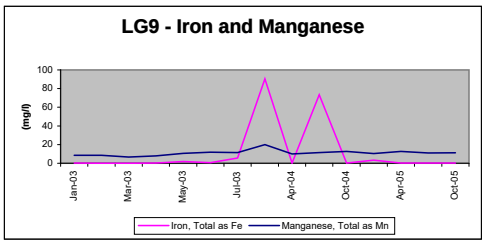

LG8 - Ammoniacal Nitrogen and BOD
(mg/l)
Ammoniacal Nitrogen as N
BOD + ATU (5 day)

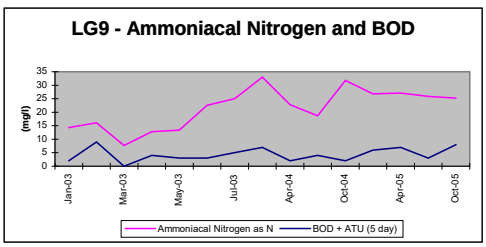
LG9


LG9 - pH and Conductivity
pH
Conductivity, Electrical (uS)
pH
Conductivity, Electrical 20C

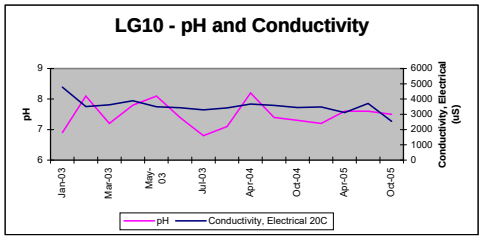

LG9 - Major Cations
(mg/l)
Sodium, Total as Na
Potassium, Total as K
Magnesium, Total as Mg
Calcium, Total as Ca

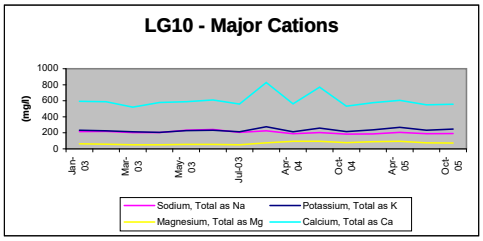

LG9 - Major Anions
(mg/l)
Alkalinity as CaCO3
Chloride as Cl
Sulphate as SO4

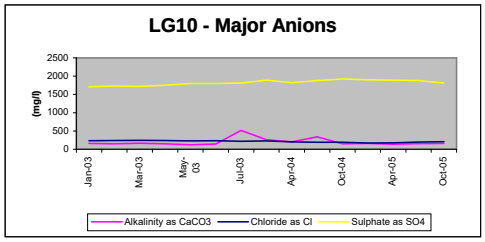

LG9 - Iron and Manganese
(mg/l)
Iron, Total as Fe
Manganese, Total as Mn

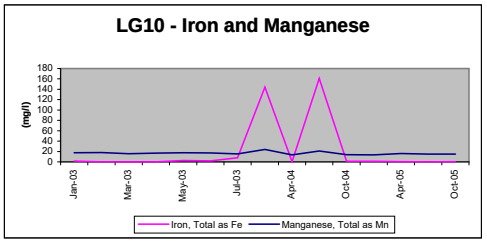

LG9 - Ammoniacal Nitrogen and BOD
(mg/l)
Ammoniacal Nitrogen as N
BOD + ATU (5 day)

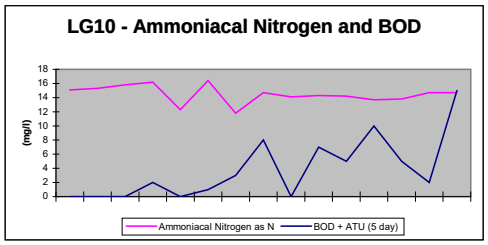
LG10


LG10 - pH and Conductivity
pH
Conductivity, Electrical (uS)
pH
Conductivity, Electrical 20C

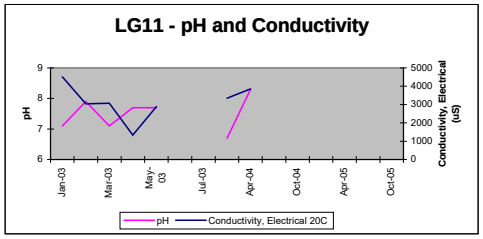

LG10 - Major Cations
(mg/l)
Sodium, Total as Na
Potassium, Total as K
Magnesium, Total as Mg
Calcium, Total as Ca

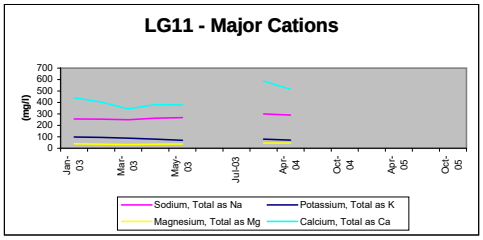

LG10 - Major Anions
(mg/l)
Alkalinity as CaCO3
Chloride as Cl
Sulphate as SO4

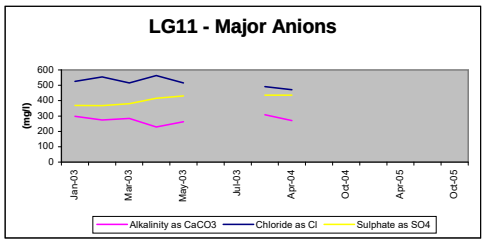

LG10 - Iron and Manganese
(mg/l)
Iron, Total as Fe
Manganese, Total as Mn

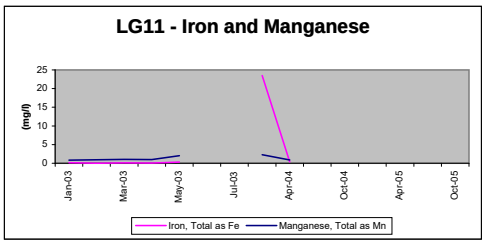

LG10 - Ammoniacal Nitrogen and BOD
(mg/l)
Ammoniacal Nitrogen as N
BOD + ATU (5 day)

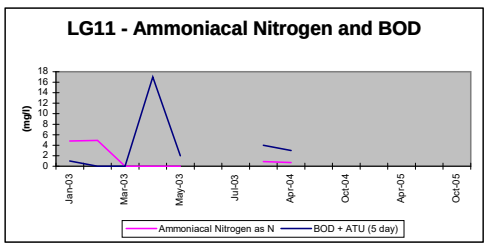
LG11


LG11 - pH and Conductivity
pH
Conductivity, Electrical (uS)
pH
Conductivity, Electrical 20C

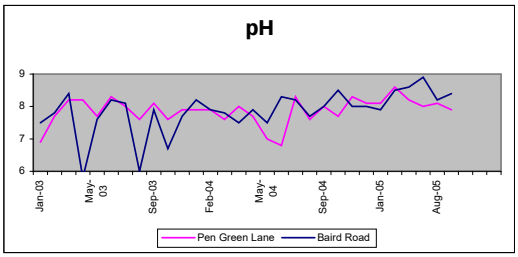

LG11 - Major Cations
(mg/l)
Sodium, Total as Na
Potassium, Total as K
Magnesium, Total as Mg
Calcium, Total as Ca

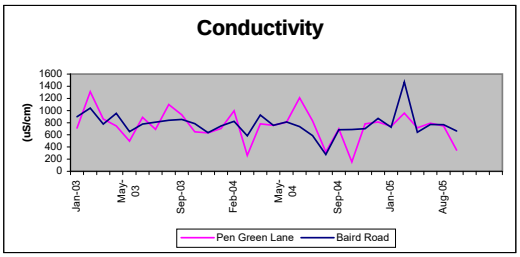

LG11 - Major Anions
(mg/l)
Alkalinity as CaCO3
Chloride as Cl
Sulphate as SO4

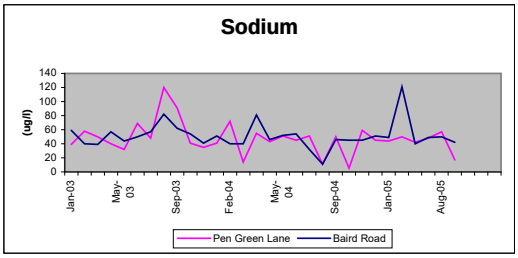

LG11 - Iron and Manganese
(mg/l)
Iron, Total as Fe
Manganese, Total as Mn

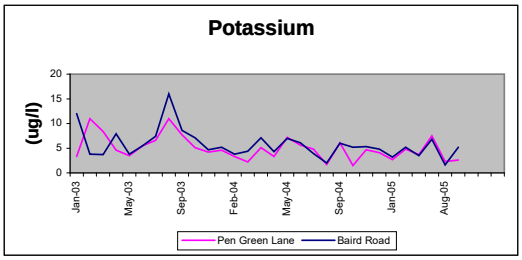

LG11 - Ammoniacal Nitrogen and BOD
(mg/l)
Ammoniacal Nitrogen as N
BOD + ATU (5 day)

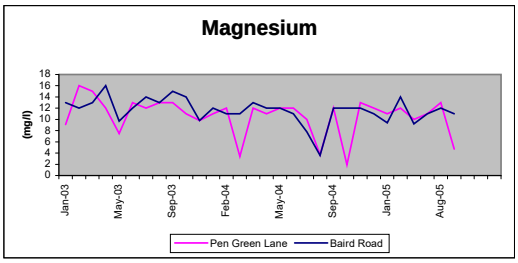
Appendix 3 – Surface Water Monitoring Results

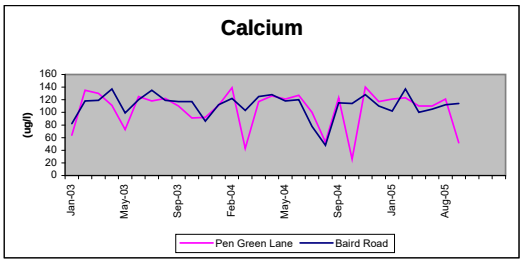


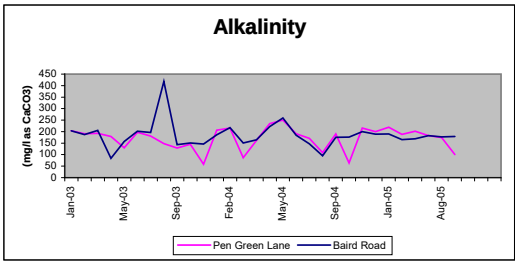


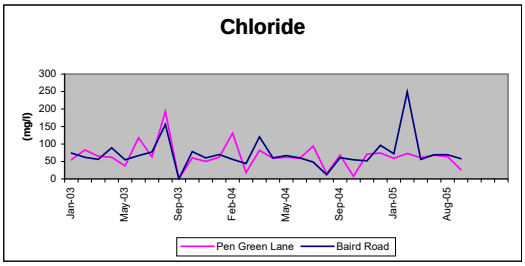


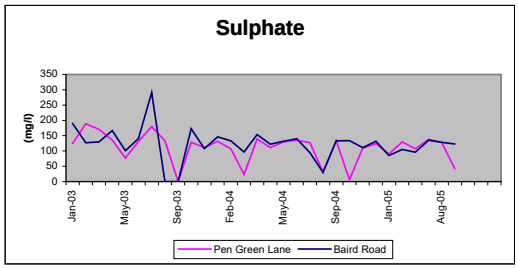


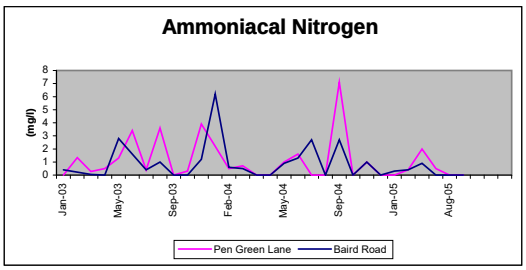


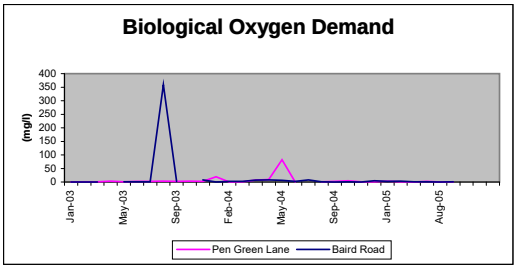






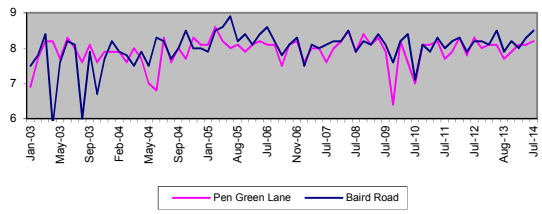




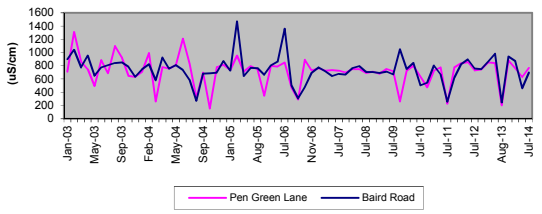


Location **Surface Water Monitoring Results**

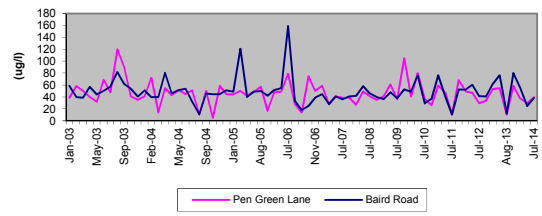
pH



Conductivity



Sodium



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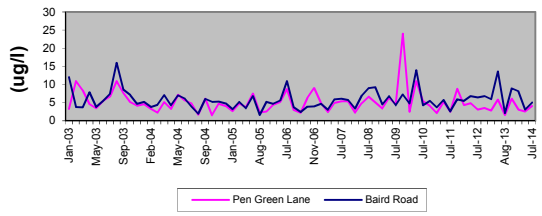

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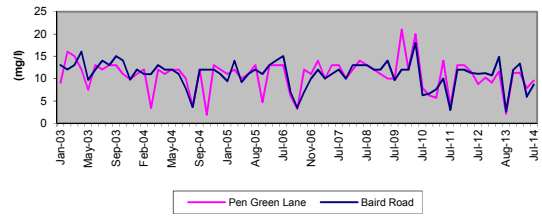

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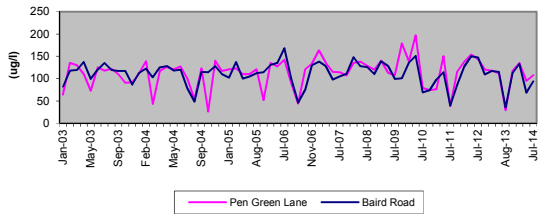

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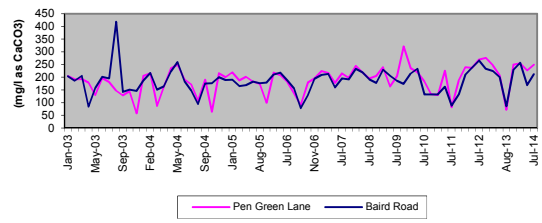

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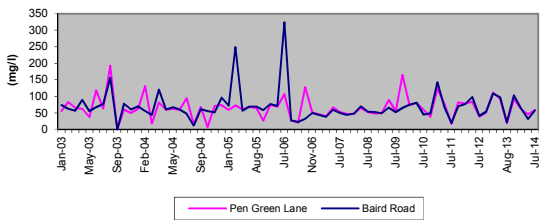

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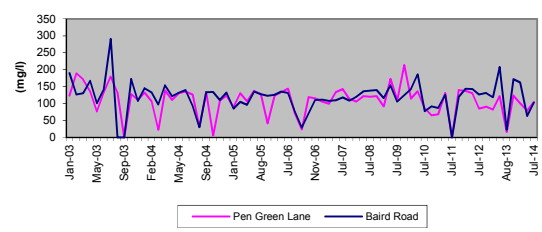

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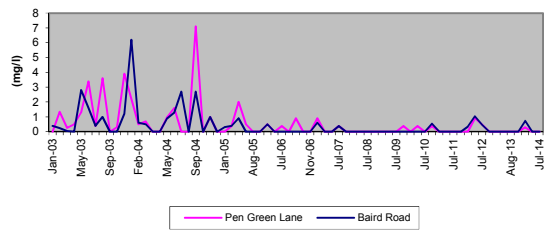

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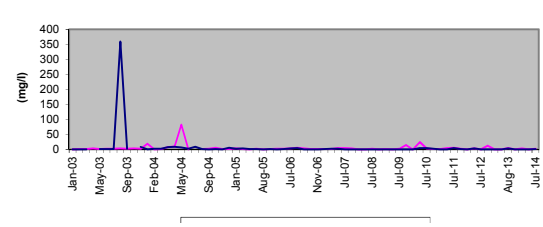

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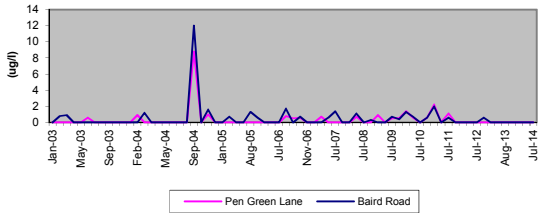

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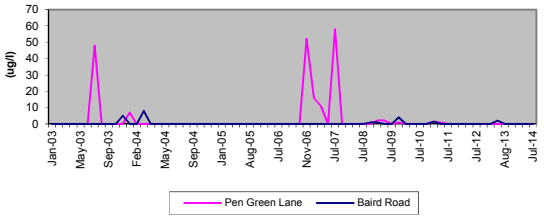

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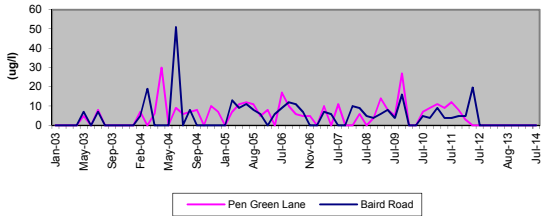

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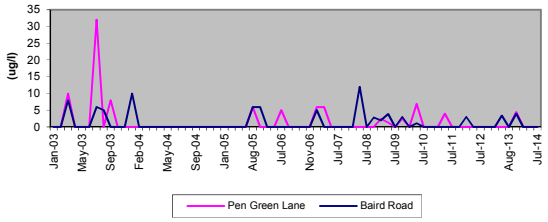

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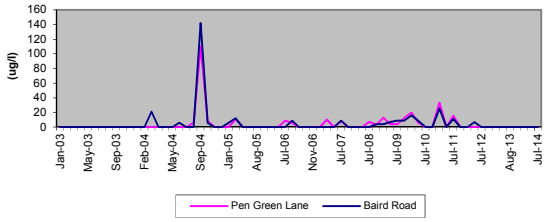

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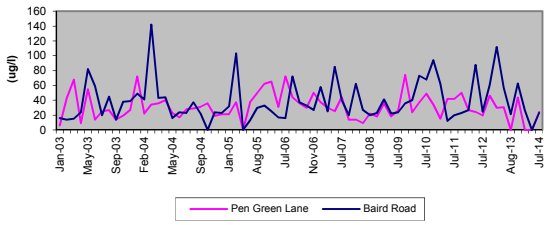

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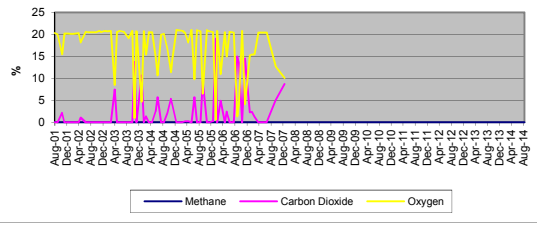

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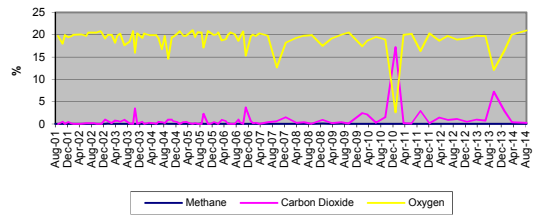

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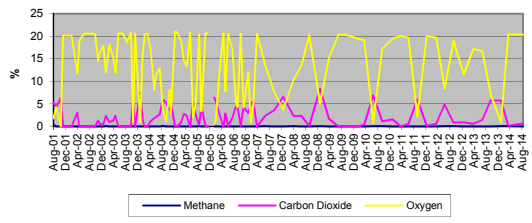

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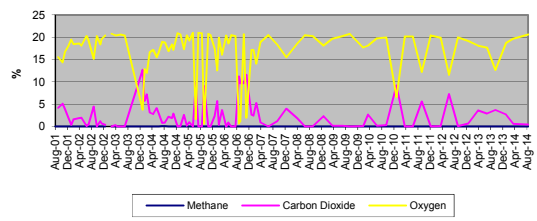

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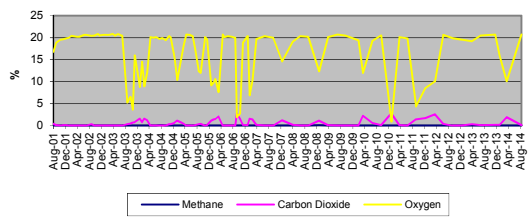

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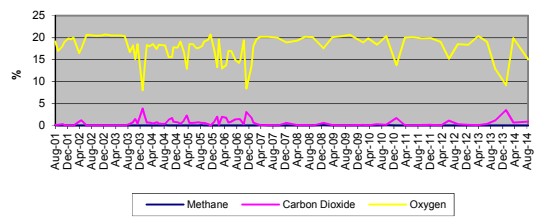

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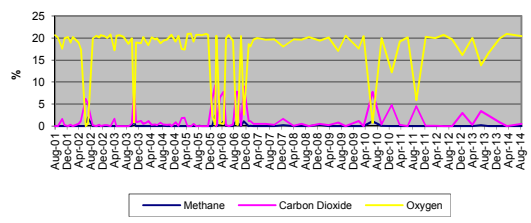

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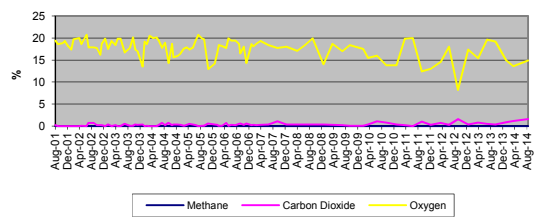

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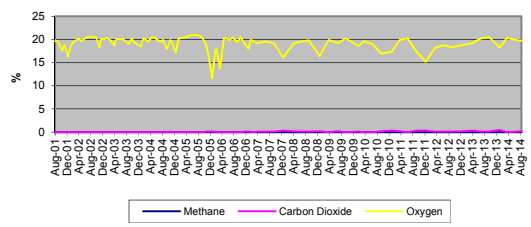

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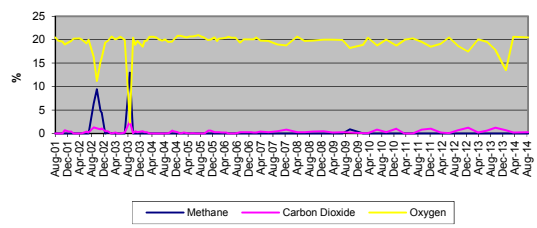

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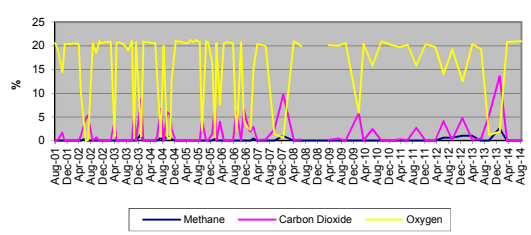

APPENDIX 3

Ground Stability Report (Soiltechnics, June 2023)

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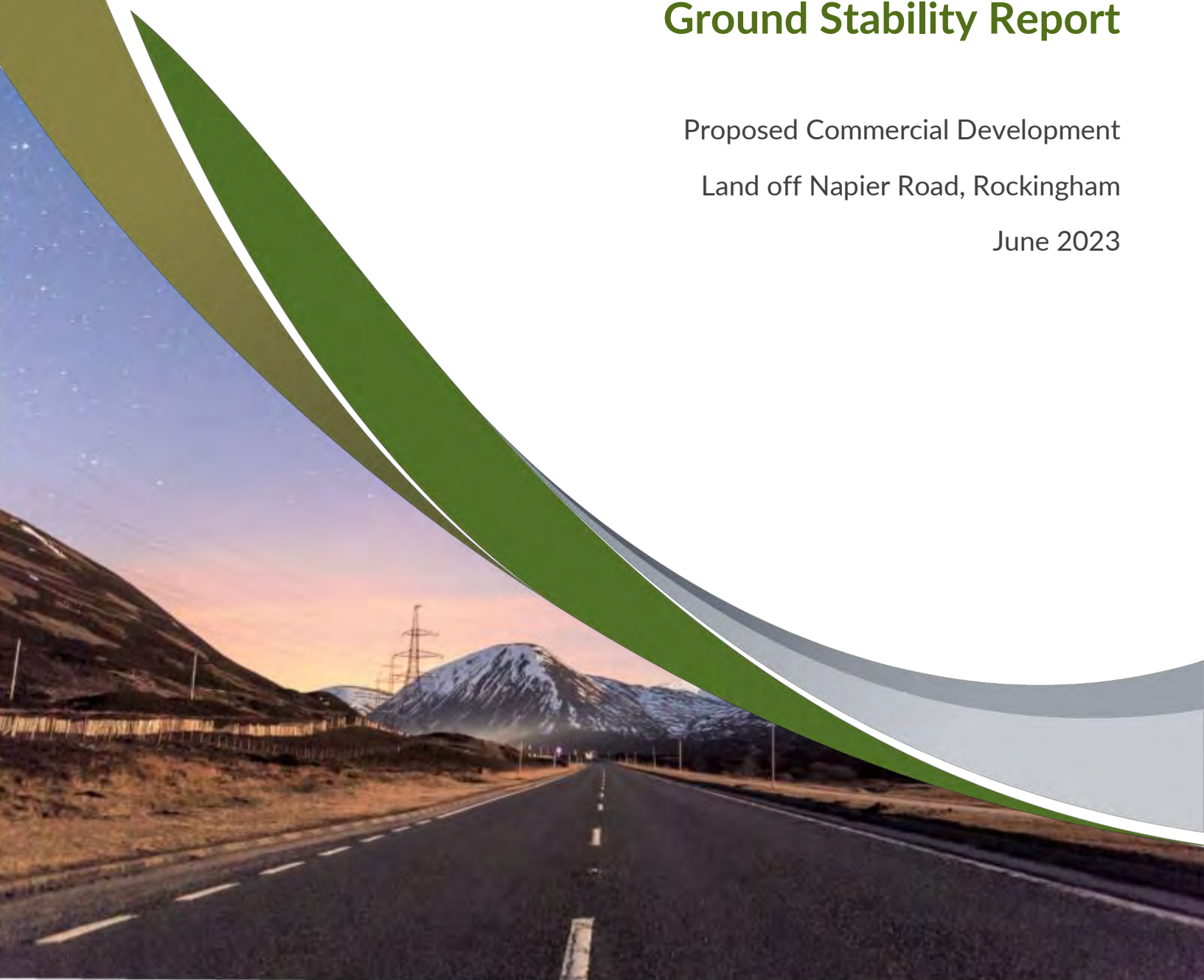
Ground Stability Report

Proposed Commercial Development

Land off Napier Road, Rockingham

June 2023



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Project Details

Site:	Land off Napier Road, Rockingham
Document Title:	Ground Stability Report
Document no.:	STT1234-R01 Rev A
Date:	June 2023
Client:	Storefield Group Limited
Issuing office:	Soiltechnics Ltd Cedar Barn, White Lodge, Walgrave, Northampton. NN6 9PY Tel: 01604 781 877 E-mail: mail@soiltechnics.net

Document history and status

Revision	Date	Description	Author	Reviewer
A	June 2023	First Issue	AW	SD

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Drawing Register

Title	Produced by	Date	Reference
Geotechnical monitoring installation location plan	Soiltechnics	June 2023	D-STP3966D-101

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1 Introduction

1.1 Background

1.1.1 The site is an extensive, former quarry and closed landfill site to the northeast of Corby. The site is currently an undeveloped parcel of land to the north of an existing industrial development, north of Steel Road in Corby. Much of the site is overgrown with rough vegetation. Willowbrook (or North Brook), which drains the northern part of Corby follows the southern boundary, flowing east.

1.1.2 Maps published by the British Geological Survey record the original geology of the site comprised the following sequence of soils:

Stratum	Typical soil type	Thickness (m)
Glacial Till (Boulder Clays)	Clays with stones (glacial deposits)	3.50
Lincolnshire Limestone	Limestone	1.20
Lower Estuarine Series	Interbedded silts, clays and fine sands	7.60
Northampton Sand Formation	Ironstone	2.00
	Grey green sandstone	1.00

Table 1-A: Summary geology

1.1.3 The area was subject to opencast extraction of the iron rich deposits of the Northampton Sands (as a source or iron ore) in the 1940s / 1950s forming part of Dene Quarry. Based on the above, the quarry was probably about 14m deep, and typically the 'overburden' soils (comprising Boulder Clays, Limestone and Estuarines) would have been used to backfill the excavation following removal of the iron ore. The grey green sandstone below the ironstone which typically had little iron content was generally left in place. The backfills would have not been compacted.

1.1.4 A ground investigation was undertaken by Soiltechnics at the site in 2020 which confirms the general sequence described above and thickness of backfilled material.

1.1.5 Subsequent to quarrying activities, the southern part of the site was occupied by Candy filter sludge ponds, with North brook lagoons to the east. These ponds / lagoons were licenced (by the British Steel Corporation) in the mid-1980s to receive industrial and special waste, and liquid sludge.

1.1.6 Records show the site was occupied by waste management facilities licenced to Corby Borough Council, Corus UK ltd, and Tata Steel, between the mid-1980s until around 2010. These facilities included management of industrial and household wastes.

1.1.7 It is understood that the lagoons were emptied by Tata Steel in recent years.

1.1.8 A topographical survey of the site shows site levels are low compared with perimeter site boundary levels to the north. Access to the site can be achieved from link roads to Steel Road to the south, Napier Road to the west, and a new link road (Mitchell Road) to the north.

1.2 Scheme Outline

1.2.1 The site is circa 8-10m lower than the link road to the north. The scheme comprises the development of an engineered platform at the site to facilitate future development as part of the Rockingham Enterprise Area.

1.2.2 Due to the previous site history and nature of soils already present on site, the proposed solution is to raise site levels with inert fill to a new finished ground level (FGL). The site will then be raised further to surcharge the newly placed fill and existing quarry backfill. The surcharge will then be removed and levels reduced to FGL.

1.2.3 This report is based on the project proposals and information outlined above; should the scheme change then it will be necessary to review the conclusions and recommendations presented in this report.

1.3 Brief

1.3.1 This report has been prepared following instructions received from our Client, Storefield Group Limited. The overall brief of works is to assess the geotechnical viability of developing an engineered platform. The environmental impacts are beyond the scope of this report.

1.3.2 The objectives of this report are outlined below:

i) Summarise the intrusive investigation works undertaken and post fieldwork monitoring.
ii) Provide a geotechnical appraisal of the monitoring and comment on the geotechnical viability of the scheme.

1.4 Limitations

1.4.1 Soiltechnics disclaims any responsibility to our Client and others in respect of any matters outside the scope of this report. This report has been prepared with reasonable skill, care and diligence in accordance with the terms of our contract, taking account of the manpower, resources, investigations and testing devoted to it by agreement with our Client. This report is confidential to our Client and Soiltechnics accepts no responsibility of whatsoever nature to third parties to whom this report or any part thereof is made known. Any such party relies upon the report at their own risk.

2 Ground Investigation

2.1 Objectives

2.1.1 In order to assess the viability of a surcharging approach it was agreed that an instrument trial embankment would be constructed. The embankment would be monitored to establish the order of magnitude of settlement which could be anticipated for the project and the likely time it would take for substantial settlement to occur.

2.1.2 The ground investigation scope and location of exploratory holes was determined by Soiltechnics Ltd, based upon our overall brief.

2.1.3 The objectives of the fieldwork were to:

a) Install three vibrating wire piezometers and three extensometers at the location of the trial embankment.
b) Extend the monitoring installations as the trial embankment was constructed.
c) Undertake monitoring Install gas and groundwater monitoring wells and undertake a series of monitoring visits before, during and after embankment construction.

2.2 Fieldwork summary

2.2.1 Fieldwork was undertaken between 10th May and 18th May 2022 and is summarised below. Exploratory hole logs are presented as Appendix B. An exploratory hole location plan is presented in Appendix A.

Exploratory Hole	Method	Installation	Depth (m bgl)	Comments
BH101	Rotary	Extensometer	20.00	Open hole drilling – no recovery.
BH102	Rotary	Vibrating wire piezometer	15.00	Open hole drilling – no recovery.
BH103	Rotary	Extensometer	21.50	Open hole drilling – no recovery.
BH104	Cable percussion	Vibrating wire piezometer	15.38	Suspected natural ground encountered at 95.23m AOD
BH105	Cable percussion	Vibrating wire piezometer	13.21	Suspected natural ground encountered at 95.23m AOD
BH106	Rotary	Extensometer	20.00	Open hole drilling – no recovery.

Table 2-A: Summary of fieldwork undertaken

2.2.2 All soils encountered were described in accordance with BS EN ISO 14688 “Identification and Classification of soil”. Rock was described in accordance with BS EN ISO 14689 “Identification and classification of rock”.

2.2.3 The trial embankment was constructed by the Client and was approximately 20m x 40m in plan area and 4m high. It was constructed between 19 August and 02 September 2022. The soil was placed in layers and compacted prior to placing the next layer. During construction of the trial embankment the installations were extended commensurate with the rate of filling.

2.3 Sampling

2.3.1 During the fieldwork, sampling of soil, rock and groundwater for geotechnical purposes has been undertaken in accordance with BS EN ISO 22475-1 *"Geotechnical Investigation and testing – sampling by drilling and excavation and groundwater measurements".*

2.3.2 Samples collected for chemical analysis have been taken and handled in accordance with BS ISO 18400-105:2017 *"Soil quality — Sampling Part 105: Packaging, transport, storage and preservation of samples".*

2.3.3 Various sampling and sub-sampling methodologies have been adopted as appropriate, with the primary aim of obtaining the highest quality sample class practicable.

2.4 In-situ Testing

2.4.1 The following table summarises the field testing carried out. The results are summarised on individual exploratory hole logs where appropriate and detailed within the Appendices indicated.

Tests	Qty	Applicable standard / guidance	Location of Results
Standard penetration test (SPT)	18	BS EN ISO 22476-3	Included within logs Detailed in Appendix C

Table 2-B: Summary of field testing undertaken

2.5 Monitoring

2.5.1 A summary of the monitoring visits undertaken is outlined in the table below. Results of the vibrating wire piezometers and extensometers are presented in Appendix D and Appendix E respectively.

Date	Purpose
17/05/2022 – 11/07/2022 6 no. visits	Provide baseline monitoring data prior to construction of trial embankment
18/08/2022 – 02/09/2022 6 no. visits	Monitoring during construction of trial embankment
09/09/2022 – 20/06/2023 20 no. visits	Post construction monitoring

Table 2-C: Summary of monitoring

3 Geotechnical Discussion

3.1 Scheme Overview

3.1.1 The following assessments are made on the investigatory data presented in the preceding sections of this report and are made with reference to the specific nature of the development. Should scheme proposals change then it is recommended that the validity of the conclusions of this report in relation to the revised scheme are checked.

3.1.2 The project will comprise the raising of site levels to provide an engineered platform to facilitate future development. The site will be surcharged to induce settlement. The surcharge will then be removed and levels reduced to the design finished ground level.

3.1.3 In view of the ground conditions, the following list summarises the key geotechnical issues that may impact the scheme and will therefore need to be appropriately managed during the lifecycle of the project:

- Excessive total and differential settlement of the existing Made Ground
- Time for settlement to occur

3.2 Geotechnical Category

3.2.1 In accordance with BS EN1997-1:2004 + A1:2013 (Eurocode 7), the project is designated as Geotechnical Category 2. This category includes projects with *conventional types of structures and foundations with no exceptional risk, or difficult ground or loading conditions*. Furthermore, *routine design procedures* are appropriate.

3.2.2 It should be noted that this Report does not constitute a Geotechnical Design Report (GDR) as defined in Eurocode 7. Accordingly, a GDR should be prepared by the designer during the detailed design phase.

3.3 Magnetic Extensometers

3.3.1 The existing Made Ground at the site is conjectured to have been subject to minimal compaction when it was placed. Consequently, the soil will experience notable settlement as the levels are raised, and when the future development buildings are constructed.

3.3.2 A series of three extensometers were installed to monitor the settlement response of the soil to increased loading in the form of a trial embankment. The results are presented in Appendix E. An extract of the results from BH101 is presented as Figure 3-A. It should be noted that Day 0 refers to date of initial reading and therefore prior to construction of the trial embankment. Furthermore, each series label refers to the initial depth to the magnet prior to construction of the trial embankment.

3.3.3 The effect of construction of the trial embankment is clearly visible at circa Day 95. By Day 100 the settlement of the uppermost magnet (black) has already reached 40mm. It is estimated that immediate settlement is complete by circa Day 108 where approximately 55mm of settlement has occurred. Approximately 20mm of consolidation settlement is estimated to occur and be complete by circa Day 300. Creep settlement continues beyond this time but is <5mm and therefore considered negligible.

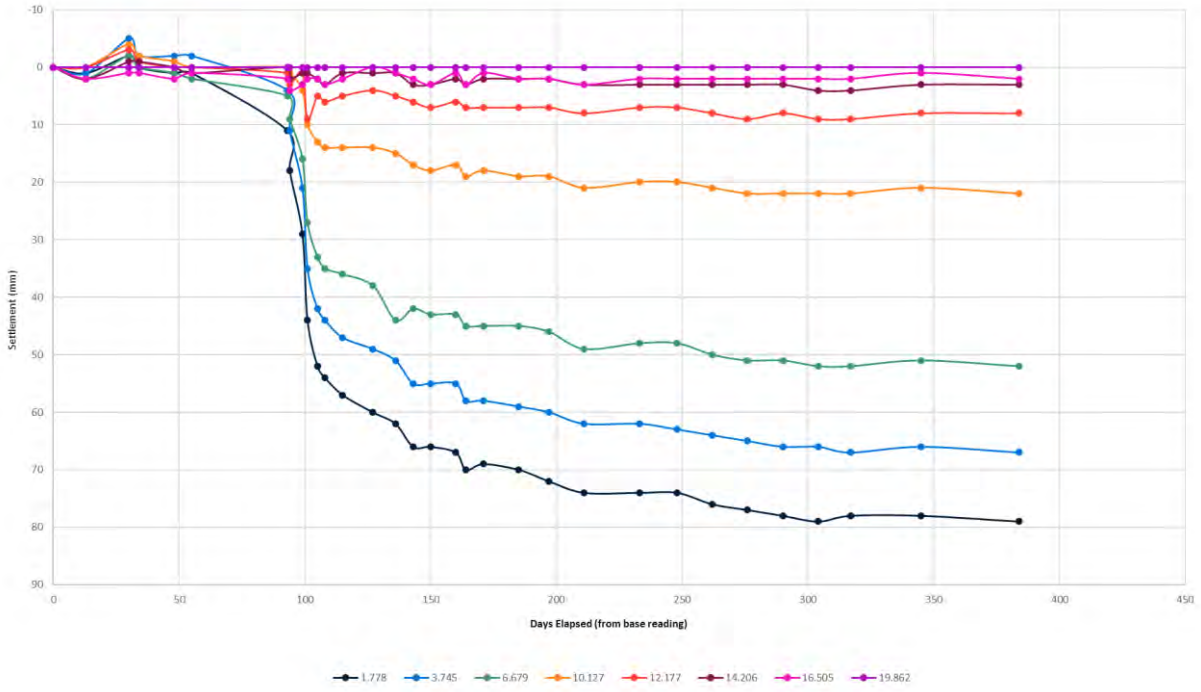

Figure 3-A: Extract of extensometer monitoring results (BH101)

3.3.4 The interpretation from the extensometers BH103 and BH106 is summarised below alongside BH101 for completeness. It should be noted that settlement values quoted are for the uppermost magnet which is considered to be representative of original ground level.

Extensometer	Immediate settlement	Consolidation settlement	Creep settlement
BH101	55mm over 10-15 days	20mm over 200 days	<5mm over 75 days to date
BH103	50mm over 10-15 days	25mm over 140 days	<5mm over 135 days to date
BH106	60mm over 10-15 days	See discussion below	

Table 3-A: Summary of extensometer interpretation

3.3.5 BH106 became unserviceable below 15.529m BGL after 21/09/2022. The cause is unknown. It was therefore not possible to monitor the datum magnet at the base of the borehole after this date. Normally this would render the installation redundant as movement is calculated by determining the difference between the datum magnet and magnet of interest. However, in order to provide indicative information on the movement of the upper magnets, and as settlement of the base magnet has been stable in the remaining boreholes, the last recorded value of the datum magnet has been used for comparison with higher magnet readings after 21/09/2022 in BH106. These results should be viewed with conservatism.

3.4 Vibrating Wire Piezometers

3.4.1 Vibrating wire piezometers were installed below the trial embankment to measure the pore water pressure response to upfilling.

3.4.2 In a clay soil the expected response would be a sudden rise in pore water pressure followed by a decay back to the original pressure level. The rate of decay is a function of the permeability of the soil. In a granular soil the drainage is instantaneous due to high permeability and consequently there is no rise in pore pressure nor subsequent decay.

3.4.3 The monitoring results of the vibrating wire piezometers are presented as Appendix D. An extract of the results from BH102 is presented as Figure 3-B.

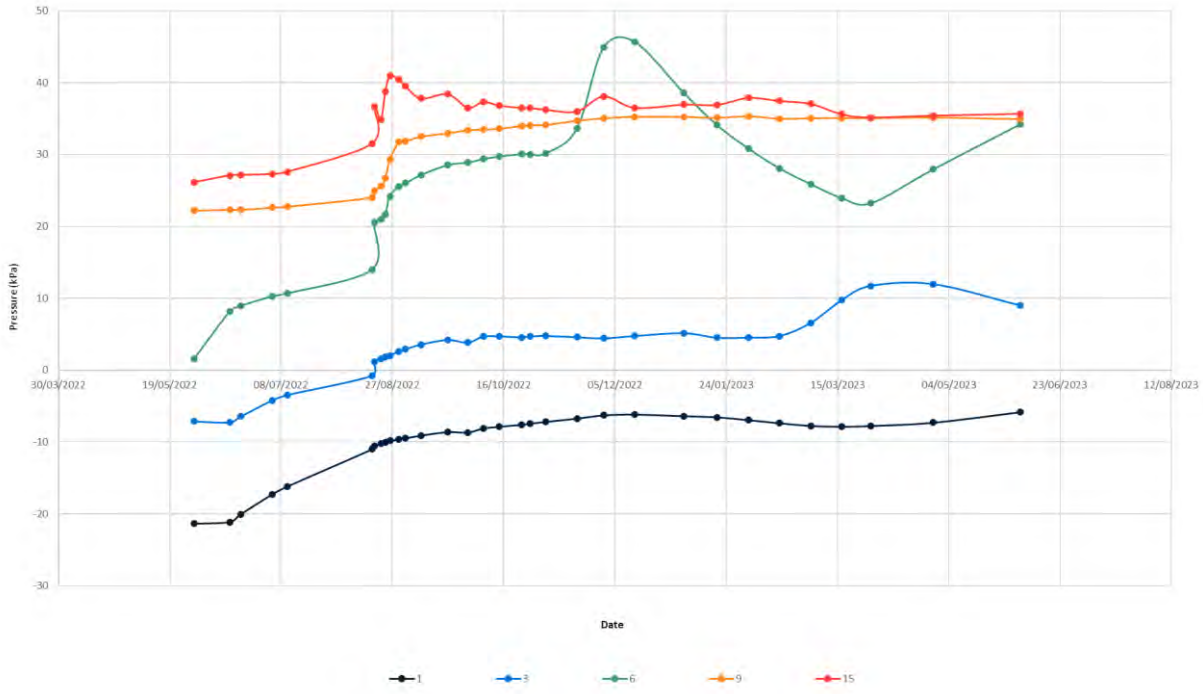

Figure 3-B: Extract of vibrating wire piezometer monitoring results (BH102)

3.4.4 In the above results the response to embankment construction can be seen by the rises in the individual piezometer lines just before 27th August 2023. This is most evident in the deeper piezometers represented by the green, orange, and red lines. It is noted that in this borehole there is no decay following construction.

3.4.5 The piezometer at 6m depth (green line) showed a second rise, peaking on 5th December 2022 and subsequently decaying over a period of 3 months. It is suspected that this is evidence of localised collapse settlement below this depth leading to a sudden rise in pressure. It is noted that such sudden movement has not been recorded in extensometer BH101 circa 2.3m away. The collapse has then migrated upward which possibly explains the corresponding rise seen in the light blue line (3m depth) towards the end of the monitoring period.

3.4.6 The other two vibrating wire piezometers showed limited response to the embankment construction indicating that drainage is relatively good.

4 Conclusions and Recommendations

4.1 Settlement

4.1.1 The monitoring demonstrates that notable surface settlement (80mm) occurs following application of load (circa 80kPa). A significant proportion of the settlement occurred within 2 weeks of construction of the embankment, with the remaining settlement substantially complete within six months. These findings should be used as a predictive tool to design the surcharge. It is recommended that the site is monitored during upfilling to validate the predictive model and provide quantitative evidence to inform removal of the surcharge.

4.2 Rate of filling

4.2.1 The monitoring results from the vibrating wire piezometers showed a limited response to application of load. On this basis no special measures are anticipated to be required to limit rate of filling. It is recommended that normal good practice be adopted when filling the site and that the site should be filled as uniformly as practicable.

4.3 Collapse settlement

4.3.1 The monitoring results recorded possible collapse settlement at a localised scale. Such settlement is common in uncompacted fills and should be accounted for in the next phase of the project.

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Appendix A Drawings

Rockingham Enterprise Area, Corby
STP3996D

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Key

BH — Borehole with vibrating wire piezometer installation

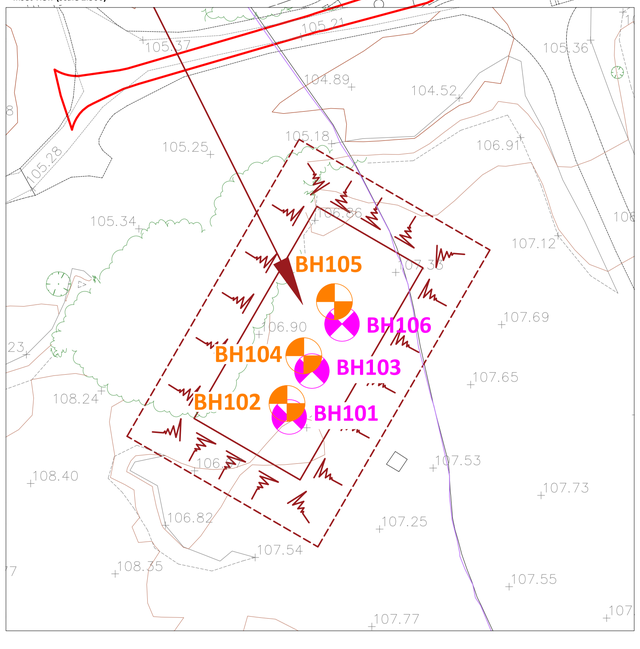
BH — Borehole with Extensometer installation

Indicative route of Corby North Orbital Road (CNOR)

Approximate location of trial embankment circa 40m x 20m x 4m

BH105
BH106
BH104
BH103
BH102
BH101

Inset view (scale 1:500)



Car park

Car park

Car park

Car park

Title	Scale	Drawing number
Geotechnical monitoring installation location plan	1:1250 at A1	101

Report Ref: STP3996D
Revision: 0

June 2023

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Appendix B Exploratory Hole Logs: Boreholes

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INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	OPEN HOLE. No recovery.																		

CONTINUED ON NEXT SHEET

Notes	**Title** Borehole record		**Date(s)** 11/05/2022
	Method Rotary core	**Logged by** NI	**Sheet number** Sheet 1 of 3
Groundwater observations No groundwater encountered.	**Level (m OD)** 107.10	**Compiled by** SA	**Revision** 0
	Co-ordinates 490155mE, 290808mN	**Checked by** AW	**BH101**

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INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE

CONTINUED ON NEXT SHEET

Notes	Title		Date(s)
	Borehole record		11/05/2022
	Method Rotary core	**Logged by** NI	**Sheet number** Sheet 2 of 3
Groundwater observations No groundwater encountered.	**Level (m OD)** 107.10	**Compiled by** SA	**Revision** 0
	Co-ordinates 490155mE, 290808mN	**Checked by** AW	**BH101**

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INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	BOREHOLE TERMINATED AT 20.00m	20.00	87.10																

Notes	**Title** Borehole record		**Date(s)** 11/05/2022
	Method Rotary core	**Logged by** NI	**Sheet number** Sheet 3 of 3
Groundwater observations No groundwater encountered.	**Level (m OD)** 107.10	**Compiled by** SA	**Revision** 0
	Co-ordinates 490155mE, 290808mN	**Checked by** AW	**BH101**

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INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	OPEN HOLE. No recovery.																		

CONTINUED ON NEXT SHEET

Notes	**Title** Borehole record		**Date(s)** 11/05/2022
	Method Rotary core	**Logged by** NI	**Sheet number** Sheet 1 of 2
Groundwater observations No groundwater encountered.	**Level (m OD)** 107.15	**Compiled by** SA	**Revision** 0
	Co-ordinates 490155mE, 290810mN	**Checked by** AW	**BH102**

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INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	BOREHOLE TERMINATED AT 15.00m	15.00	92.15																

Notes	Title		Date(s)
	Borehole record		11/05/2022
	Method Rotary core	**Logged by** NI	**Sheet number** Sheet 2 of 2
Groundwater observations No groundwater encountered.	**Level (m OD)** 107.15	**Compiled by** SA	**Revision** 0
	Co-ordinates 490155mE, 290810mN	**Checked by** AW	**BH102**

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INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	OPEN HOLE. No recovery.																		

CONTINUED ON NEXT SHEET

Notes	**Title** Borehole record		**Date(s)** 11/05/2022
	Method Rotary core	**Logged by** NI	**Sheet number** Sheet 1 of 3
Groundwater observations No groundwater encountered.	**Level (m OD)** 107.52	**Compiled by** SA	**Revision** 0
	Co-ordinates 490159mE, 290815mN	**Checked by** AW	**BH103**

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INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE

CONTINUED ON NEXT SHEET

Notes	**Title** Borehole record		**Date(s)** 11/05/2022
	Method Rotary core	**Logged by** NI	**Sheet number** Sheet 2 of 3
Groundwater observations No groundwater encountered.	**Level (m OD)** 107.52	**Compiled by** SA	**Revision** 0
	Co-ordinates 490159mE, 290815mN	**Checked by** AW	**BH103**

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INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	BOREHOLE TERMINATED AT 21.50m	21.50	86.02																

Notes	**Title** Borehole record	**Date(s)** 11/05/2022
	Method Rotary core **Logged by** NI	**Sheet number** Sheet 3 of 3
Groundwater observations No groundwater encountered.	**Level (m OD)** 107.52 **Compiled by** SA	**Revision** 0
	Co-ordinates 490159mE, 290815mN **Checked by** AW	**BH103**

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INSTALL	STRATA				WATER STRIKES	SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Grass onto soft to firm brownish grey sandy gravelly CLAY. Gravel is fine to coarse angular to subangular brick, concrete and slag. (MADE GROUND)											1.00	1.50	B
												1.70	1.80	D
												1.80	1.90	ES
												2.00	2.50	B
												2.70	2.80	D
												2.80	2.90	ES
											UT=20	3.00	3.45	UT
												3.45	3.50	D
												4.00	4.10	D
												4.20	4.30	ES
						S 4.50 - 4.95	(1) 1	1.60	DRY			4.50	4.95	D
												5.50	4.60	D
												5.60	5.70	ES

CONTINUED ON NEXT SHEET

Notes

Groundwater observations
No groundwater encountered.

Chiselling details	
Depth (m)	Duration (hh:mm)

Drilling details	
Diameter	Base depth (m)
200	9.00
150	15.00

Water added details	
Depth (m)	Water Added (l)

Casing details	
Diameter	Base depth (m)
220	1.60
170	10.00

Title
Borehole record

Date(s)
12/05/2022

Method
Cable tool percussion

Logged by
NI

Sheet number
Sheet 1 of 3

Level (m OD)
107.61

Compiled by
SA

Revision
0

Co-ordinates
490158mE, 290818mN

Checked by
AW

BH104

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INSTALL	STRATA				WATER STRIKES	SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
											UT=8	6.00	6.45	UT
												6.45	6.50	D
												7.00	7.10	D
												7.10	7.20	ES
						S 7.50 - 7.95	(1)	1.60	DRY			7.50	7.95	D
												8.50	8.60	D
												8.60	8.70	ES
											UT=12	9.00	9.45	UT
												9.45	9.50	D
												10.00	10.10	D
												10.10	10.20	ES
						S 10.50 - 10.95	(4) 9	10.50	DRY			10.50	10.95	D
												11.50	11.60	D

CONTINUED ON NEXT SHEET

Notes

Groundwater observations
No groundwater encountered.

Chiselling details		Drilling details	
Depth (m)	Duration (hh:mm)	Diameter	Base depth (m)
		200	9.00
		150	15.00

Water added details		Casing details	
Depth (m)	Water Added (l)	Diameter	Base depth (m)
		220	1.60
		170	10.00

Title
Borehole record

Date(s)
12/05/2022

Method
Cable tool percussion

Logged by
NI

Sheet number
Sheet 2 of 3

Level (m OD)
107.61

Compiled by
SA

Revision
0

Co-ordinates
490158mE, 290818mN

Checked by
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INSTALL	STRATA: DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING: TYPE / DEPTH (m)	SPT TESTING: RESULT	SPT TESTING: CASING DEPTH (m)	SPT TESTING: WATER LEVEL (m)	OTHER IN SITU TESTING: TYPE / DEPTH (m)	OTHER IN SITU TESTING: RESULT	SAMPLING: FROM (m)	SAMPLING: TO (m)	SAMPLING: TYPE
												11.60	11.70	ES
	Grey MUDSTONE with rare sand/sandstone bands.	12.00	95.61								UT=60	12.00	12.45	UT
												12.45	12.50	D
												13.00	13.10	D
												13.10	13.20	ES
						S 13.50 - 13.95	(4) 10	13.50	DRY			13.50	13.95	D
												14.10	15.20	D
												14.50	14.60	D
												14.60	14.70	ES
						S 15.00 - 15.38	(19) 50/225mm	15.00	DRY			15.00	15.30	B
												15.00	15.37	D
												15.20	15.30	ES
	BOREHOLE TERMINATED AT 15.38m	15.38	92.23											

Notes

Chiselling details

Depth (m)	Duration (hh:mm)

Drilling details

Diameter	Base depth (m)
200	9.00
150	15.00

Groundwater observations
No groundwater encountered.

Water added details

Depth (m)	Water Added (l)

Casing details

Diameter	Base depth (m)
220	1.60
170	10.00

Title
Borehole record

Date(s)
12/05/2022

Method
Cable tool percussion

Logged by
NI

Sheet number
Sheet 3 of 3

Level (m OD)
107.61

Compiled by
SA

Revision
0

Co-ordinates
490158mE, 290818mN

Checked by
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INSTALL	STRATA: DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING: TYPE / DEPTH (m)	SPT TESTING: RESULT	SPT TESTING: CASING DEPTH (m)	SPT TESTING: WATER LEVEL (m)	OTHER IN SITU TESTING: TYPE / DEPTH (m)	OTHER IN SITU TESTING: RESULT	SAMPLING: FROM (m)	SAMPLING: TO (m)	SAMPLING: TYPE
	Grass onto soft to firm brownish grey sandy gravelly CLAY. Gravel is fine to coarse angular to subangular brick, concrete and slag. (MADE GROUND)													
	...between 0m and 3m depth, frequent glass, metal, paper and tile.					S 1.00 - 1.30	(16) 50/145mm	1.00	DRY			1.00	1.30	B
												1.70	1.90	D
												1.80	1.90	ES
						S 2.00 - 2.28	(22) 50/130mm	2.00	DRY			2.00	2.50	B
												2.70	2.80	D
												2.80	2.90	ES
						S 3.00 - 3.32	(25) 50/165mm	3.00	DRY			3.00	3.50	B
												3.70	3.80	D
												3.80	3.90	ES
						S 4.00 - 4.24	(25) 50/90mm	4.00	DRY			4.00	4.50	B
												4.50	5.00	B
												4.70	4.80	D
												4.80	4.90	ES
						S 5.00 - 5.45	(1)	5.00	DRY			5.00	5.45	D
												5.50	6.00	B
												5.70	5.80	D

CONTINUED ON NEXT SHEET

Notes

Chiselling details

Depth (m)	Duration (hh:mm)
3.00 - 4.00	02:00

Drilling details

Diameter	Base depth (m)
200	11.45
150	13.00

Groundwater observations

Groundwater encountered at 9m depth. Groundwater at 9m at start of shift 12.05.2022.

Water added details

Depth (m)	Water Added (l)

Casing details

Diameter	Base depth (m)
220	4.00
170	9.00

Title
Borehole record

Date(s)
10/05/2022 - 12/05/2022

Method
Cable tool percussion

Logged by
NI

Sheet number
Sheet 1 of 3

Level (m OD)
107.23

Compiled by
SA

Revision
0

Co-ordinates
490163mE, 290827mN

Checked by
AW

BH105

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INSTALL	STRATA: DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING: TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	OTHER IN SITU TESTING: TYPE / DEPTH (m)	RESULT	SAMPLING: FROM (m)	TO (m)	TYPE
						S 6.00 - 6.45	(2) 5	6.00	DRY			5.80	5.90	ES
												6.00	6.45	D
												6.50	7.00	B
												6.70	6.80	D
												6.80	6.90	ES
						S 7.00 - 7.45	(3) 10	7.00	DRY			7.00	7.45	D
												7.50	8.00	B
												7.70	7.80	D
												7.80	7.90	ES
						S 8.00 - 8.45	(1)	8.00	DRY			8.00	8.45	D
												8.50	9.00	B
												8.70	8.80	D
												8.80	8.90	ES
						S 9.00 - 9.45	(3) 11	9.00	DRY			9.00	9.45	D
	Firm to stiff slightly sandy gravelly CLAY. Gravel is fine to medium angular subangular brick and slag. (MADE GROUND)	9.50	97.73									9.50	10.00	B
												9.70	9.50	D
												9.80	9.90	ES
						S 10.00 - 10.45	(6) 21	9.00	DRY			10.00	10.45	D
												10.50	11.00	B
												10.70	10.80	D
												10.80	10.90	ES
						S 11.00 - 11.45	(7) 19	9.00	DRY			11.00	11.45	D
												11.50	12.00	B

CONTINUED ON NEXT SHEET

Notes

Groundwater observations
Groundwater encountered at 9m depth. Groundwater at 9m at start of shift 12.05.2022.

Chiselling details		Drilling details	
Depth (m)	Duration (hh:mm)	Diameter	Base depth (m)
		200	11.45
		150	13.00

Water added details		Casing details	
Depth (m)	Water Added (l)	Diameter	Base depth (m)
		220	4.00
		170	9.00

Title
Borehole record

Date(s)
10/05/2022 - 12/05/2022

Method
Cable tool percussion

Logged by
NI

Sheet number
Sheet 2 of 3

Level (m OD)
107.23

Compiled by
SA

Revision
0

Co-ordinates
490163mE, 290827mN

Checked by
AW

BH105

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INSTALL	STRATA: DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING: TYPE / DEPTH (m)	SPT TESTING: RESULT	SPT TESTING: CASING DEPTH (m)	SPT TESTING: WATER LEVEL (m)	OTHER IN SITU TESTING: TYPE / DEPTH (m)	OTHER IN SITU TESTING: RESULT	SAMPLING: FROM (m)	SAMPLING: TO (m)	SAMPLING: TYPE
												11.70	11.80	D
												11.80	11.90	ES
	Grey MUDSTONE with rare sand/sandstone bands.	12.00	95.23			S 12.00 - 12.45	(12) 43	9.00	DRY			12.00	12.45	D
												12.50	13.00	B
												12.70	12.80	D
												12.80	12.90	ES
						S 13.00 - 13.26	(25) 50/105mm	9.00	DRY			13.00	13.21	D
	BOREHOLE TERMINATED AT 13.21m	13.21	94.02											

Notes	Chiselling details		Drilling details		Title		Date(s)
	Depth (m)	Duration (hh:mm)	Diameter	Base depth (m)	Borehole record		10/05/2022 - 12/05/2022
			200 150	11.45 13.00	**Method** Cable tool percussion	**Logged by** NI	**Sheet number** Sheet 3 of 3
Groundwater observations Groundwater encountered at 9m depth. Groundwater at 9m at start of shift 12.05.2022.	**Water added details**		**Casing details**		**Level (m OD)** 107.23	**Compiled by** SA	**Revision** 0
	Depth (m)	Water Added (l)	Diameter	Base depth (m)	**Co-ordinates** 490163mE, 290827mN	**Checked by** AW	**BH105**
			220 170	4.00 9.00			

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INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	OPEN HOLE. No recovery.																		

CONTINUED ON NEXT SHEET

Notes	**Title** Borehole record		**Date(s)** 11/05/2022
	Method Rotary core	**Logged by** NI	**Sheet number** Sheet 1 of 3
Groundwater observations No groundwater encountered.	**Level (m OD)** 107.44	**Compiled by** SA	**Revision** 0
	Co-ordinates 490164mE, 290823mN	**Checked by** AW	**BH106**

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INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE

CONTINUED ON NEXT SHEET

Notes	**Title** Borehole record		**Date(s)** 11/05/2022
	Method Rotary core	**Logged by** NI	**Sheet number** Sheet 2 of 3
Groundwater observations No groundwater encountered.	**Level (m OD)** 107.44	**Compiled by** SA	**Revision** 0
	Co-ordinates 490164mE, 290823mN	**Checked by** AW	**BH106**

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INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	BOREHOLE TERMINATED AT 20.00m	20.00	87.44																

Notes	**Title** Borehole record		**Date(s)** 11/05/2022
	Method Rotary core	**Logged by** NI	**Sheet number** Sheet 3 of 3
Groundwater observations No groundwater encountered.	**Level (m OD)** 107.44	**Compiled by** SA	**Revision** 0
	Co-ordinates 490164mE, 290823mN	**Checked by** AW	**BH106**

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Appendix C In Situ Test Results

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Table summarising Standard Penetration Test (SPT) results

Location	Start Depth (m)					Penetration (mm)	
		Seating 1-2	Main 1-4	Total Seating	Total Main	Total Seating	Total Main
BH104	4.50	1/0	1/0/0/0	1	1	150	300
BH104	7.50	1/0	0/0/0/0	1	0	150	300
BH104	10.50	2/2	2/2/2/3	4	9	150	300
BH104	13.50	2/2	2/2/3/3	4	10	150	300
BH104	15.00	9/10	12/16/22	19	50	150	225
BH105	1.00	7/9	22/28	16	50	150	145
BH105	2.00	8/14	26/24	22	50	150	130
BH105	3.00	12/13	20/22/8	25	50	150	165
BH105	4.00	18/7	24/26	25	50	150	90
BH105	5.00	1/0	0/0/0/0	1	0	150	300
BH105	6.00	1/1	1/1/2/1	2	5	150	300
BH105	7.00	1/2	2/2/3/3	3	10	150	300
BH105	8.00	1/0	0/0/0/0	1	0	150	300
BH105	9.00	1/2	2/3/3/3	3	11	150	300
BH105	10.00	3/3	3/5/6/7	6	21	150	300
BH105	11.00	3/4	4/5/5/5	7	19	150	300
BH105	12.00	5/7	9/10/12/12	12	43	150	300
BH105	13.00	15/10	32/18	25	50	150	105

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Appendix D Vibrating Wire Piezometer Monitoring

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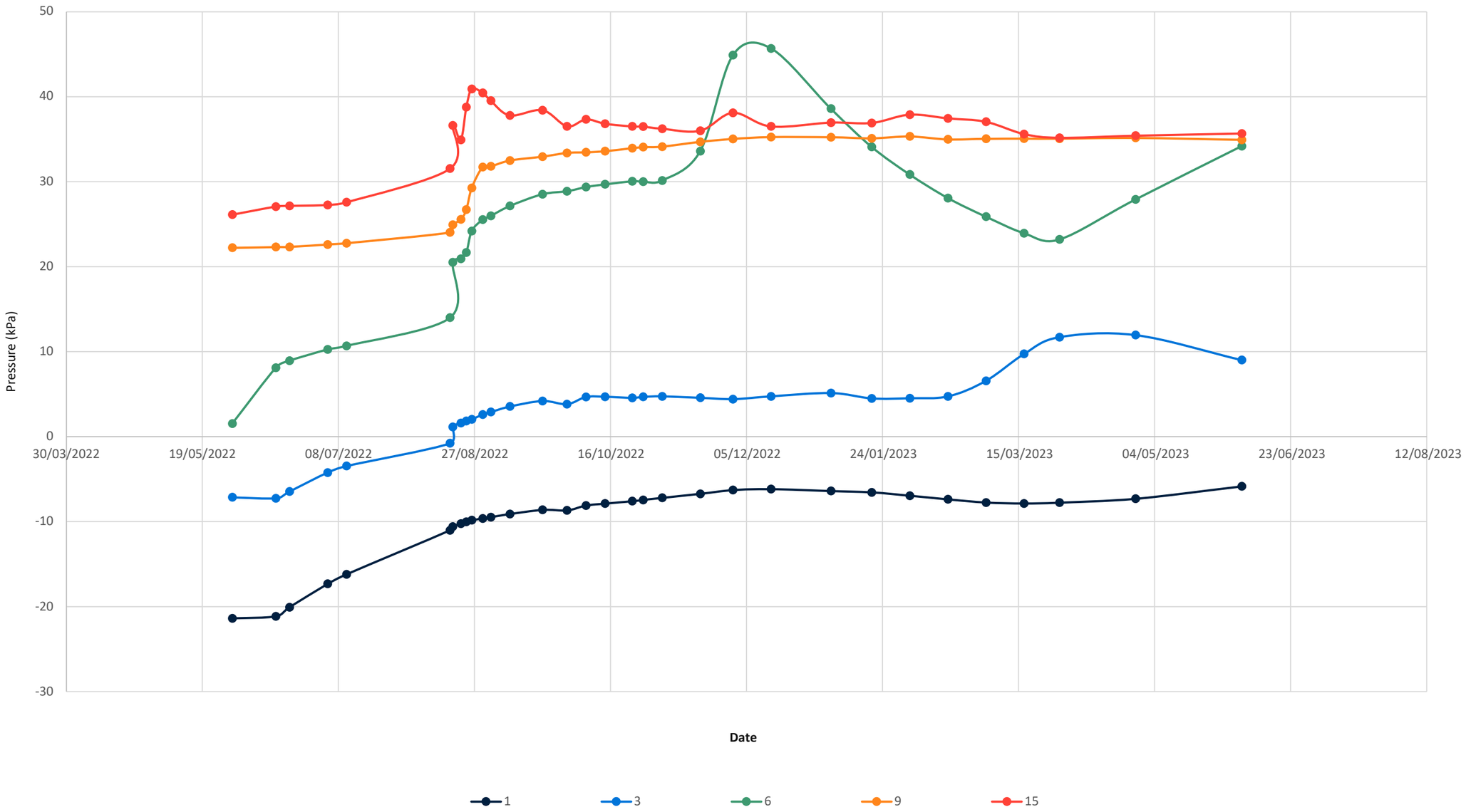
Piezometers (short term) - BH102



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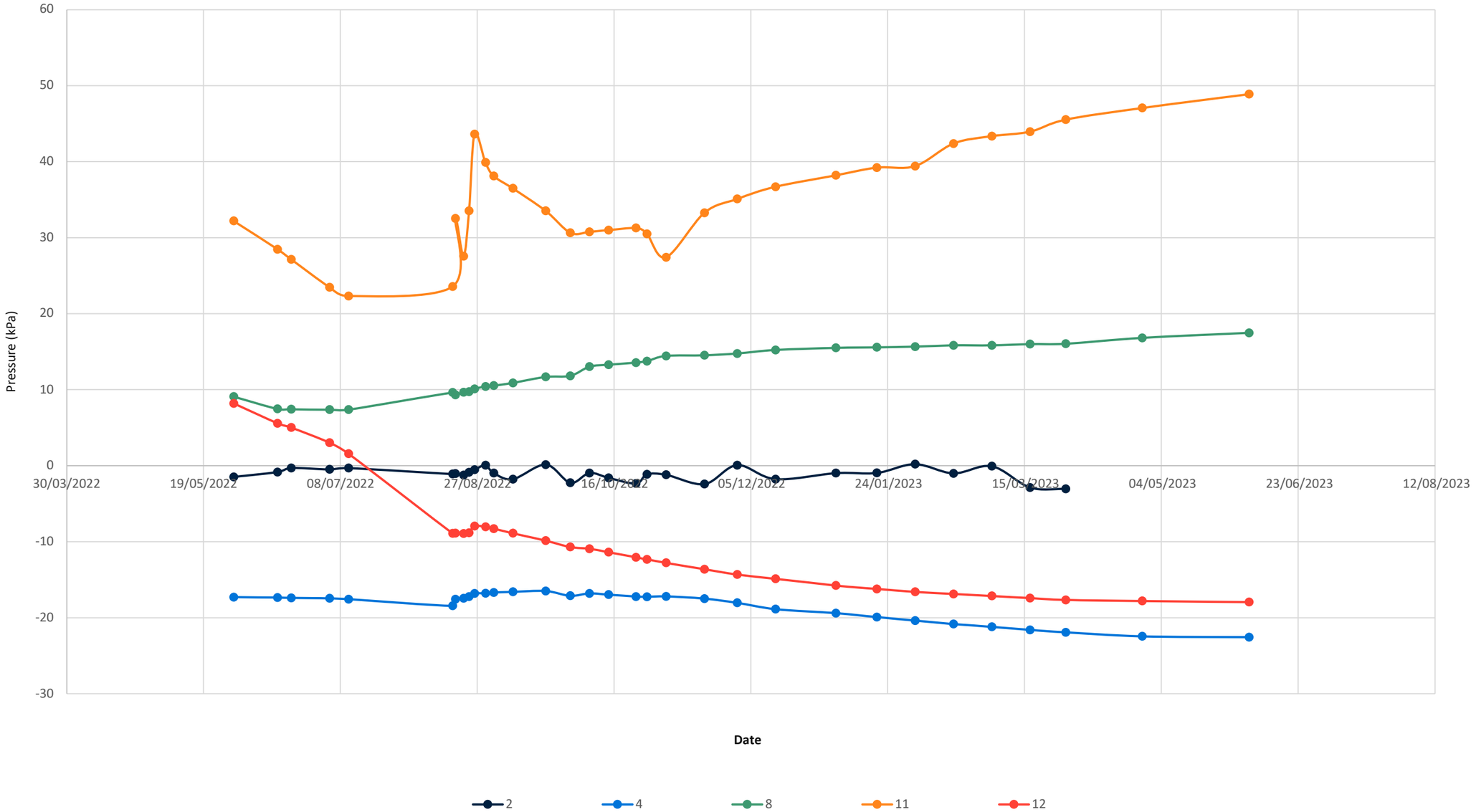
Piezometers (short term) - BH10



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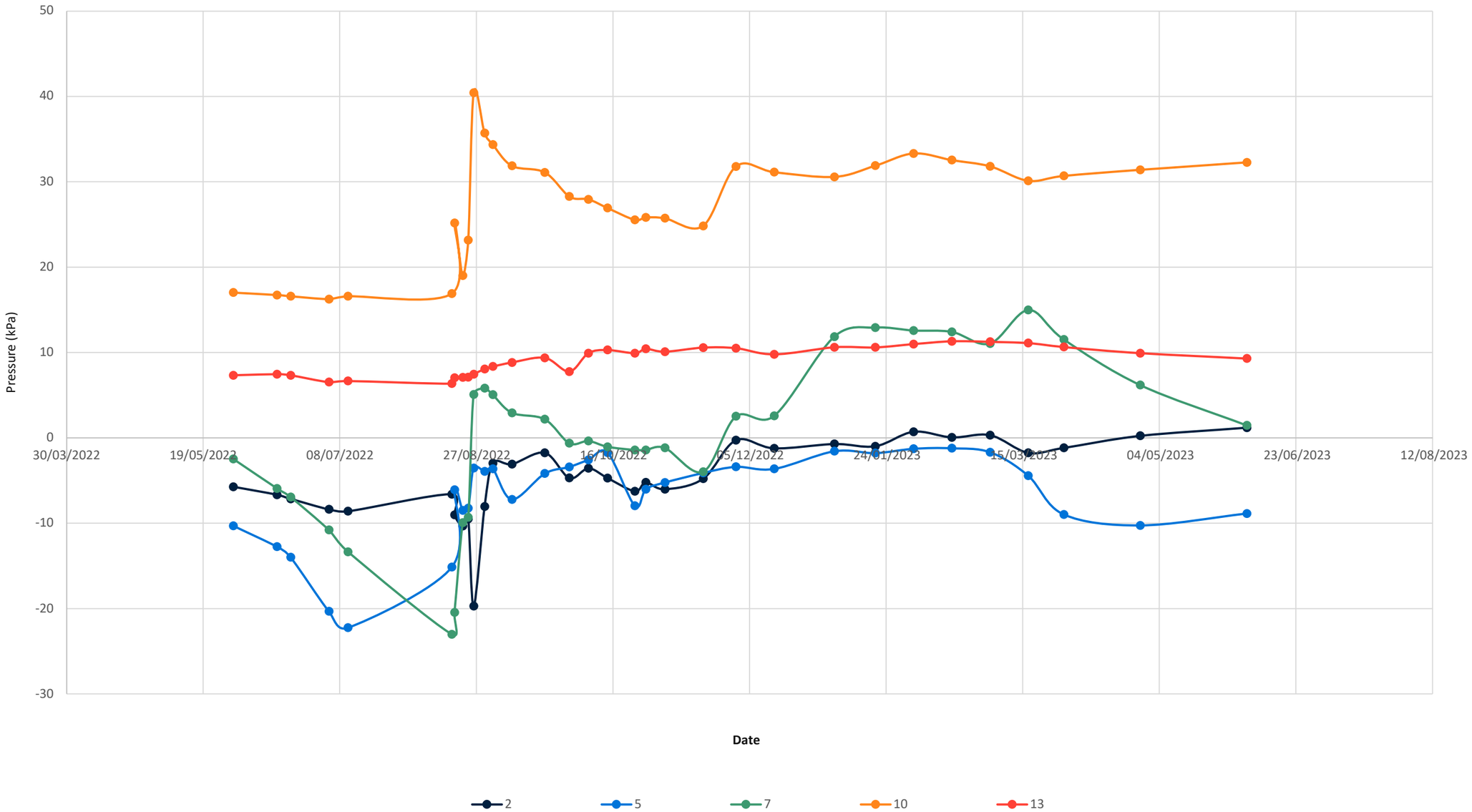
Piezometers (short term) - BH10



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Appendix E Extensometer Monitoring

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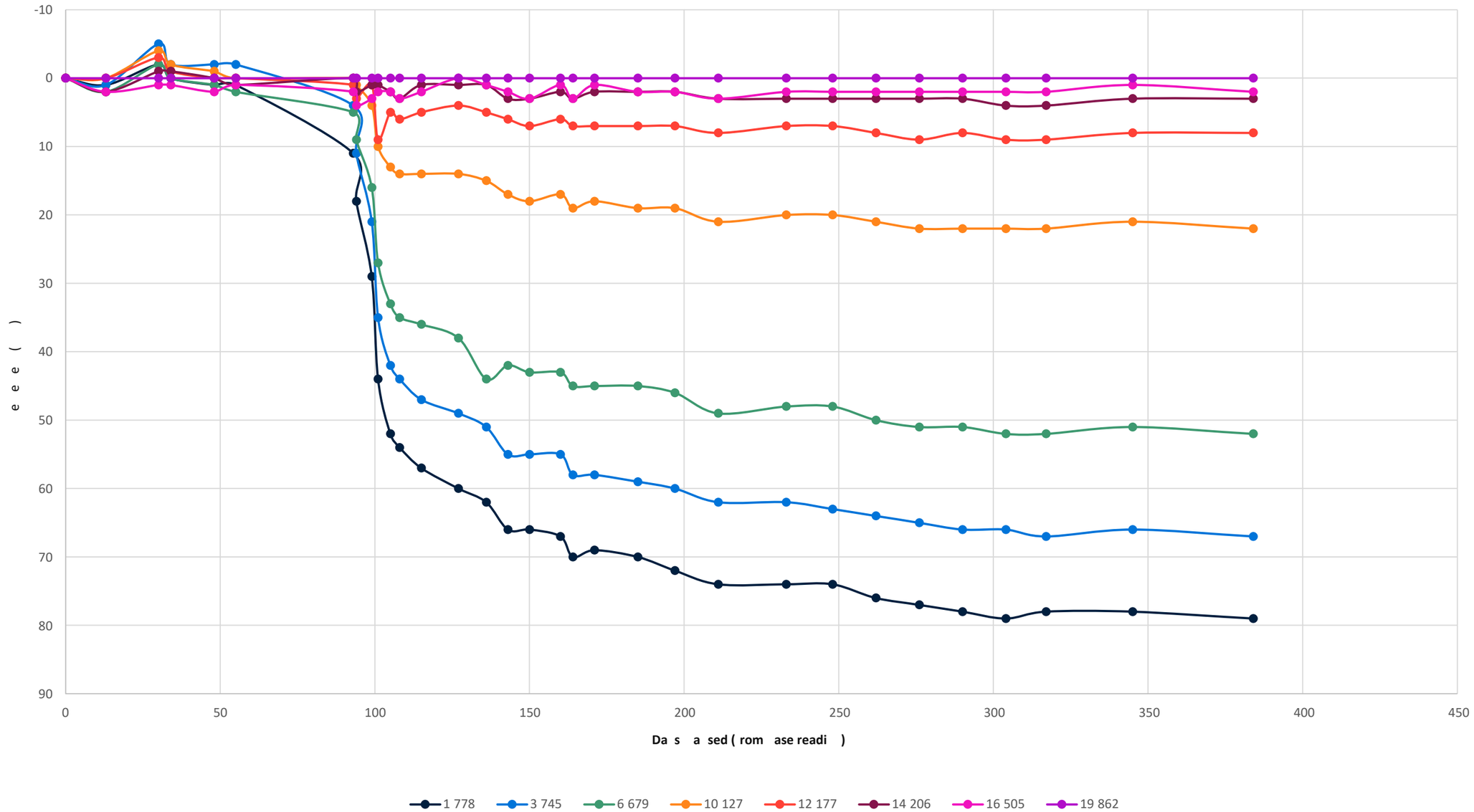
te someters - BH101



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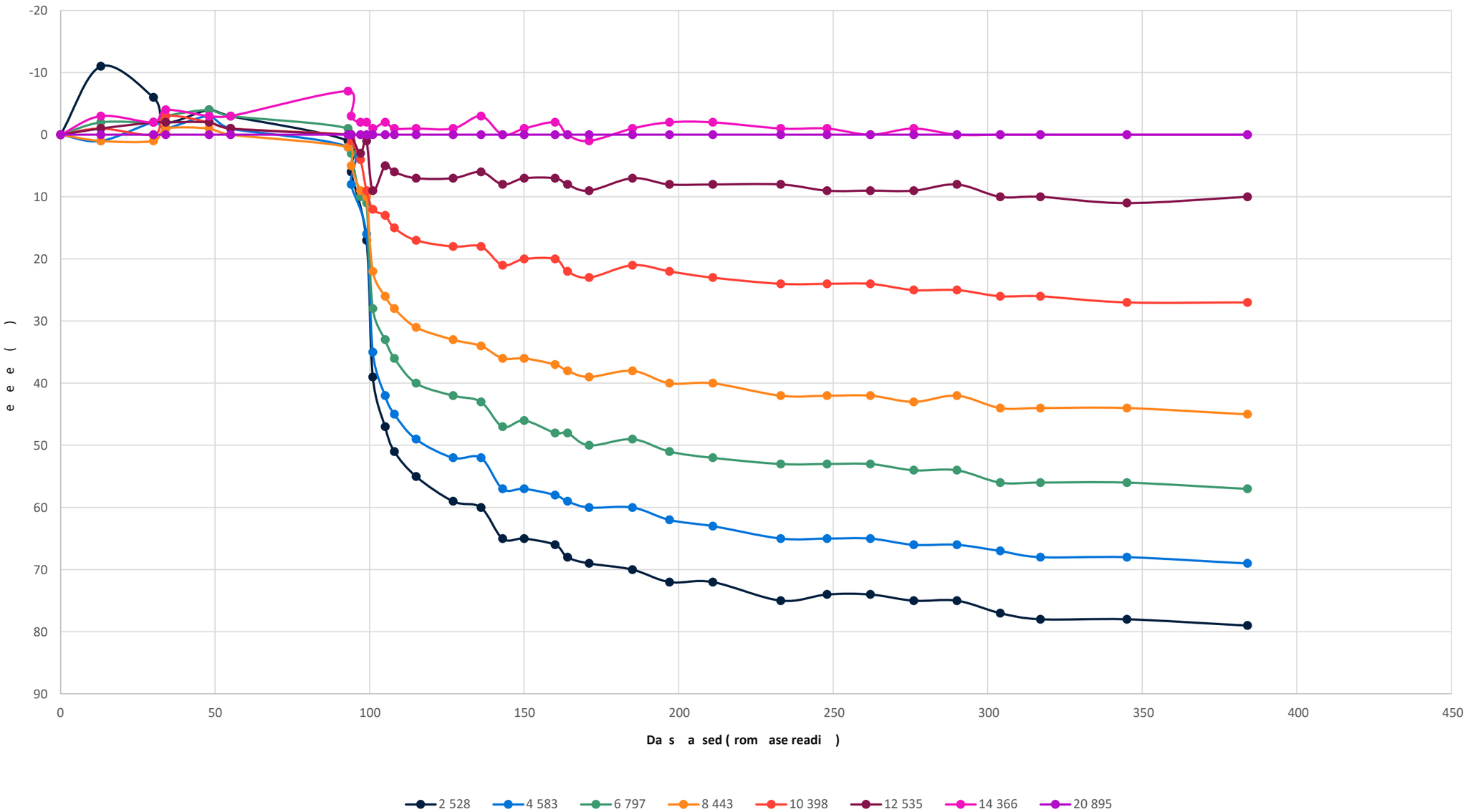
te someters - BH10



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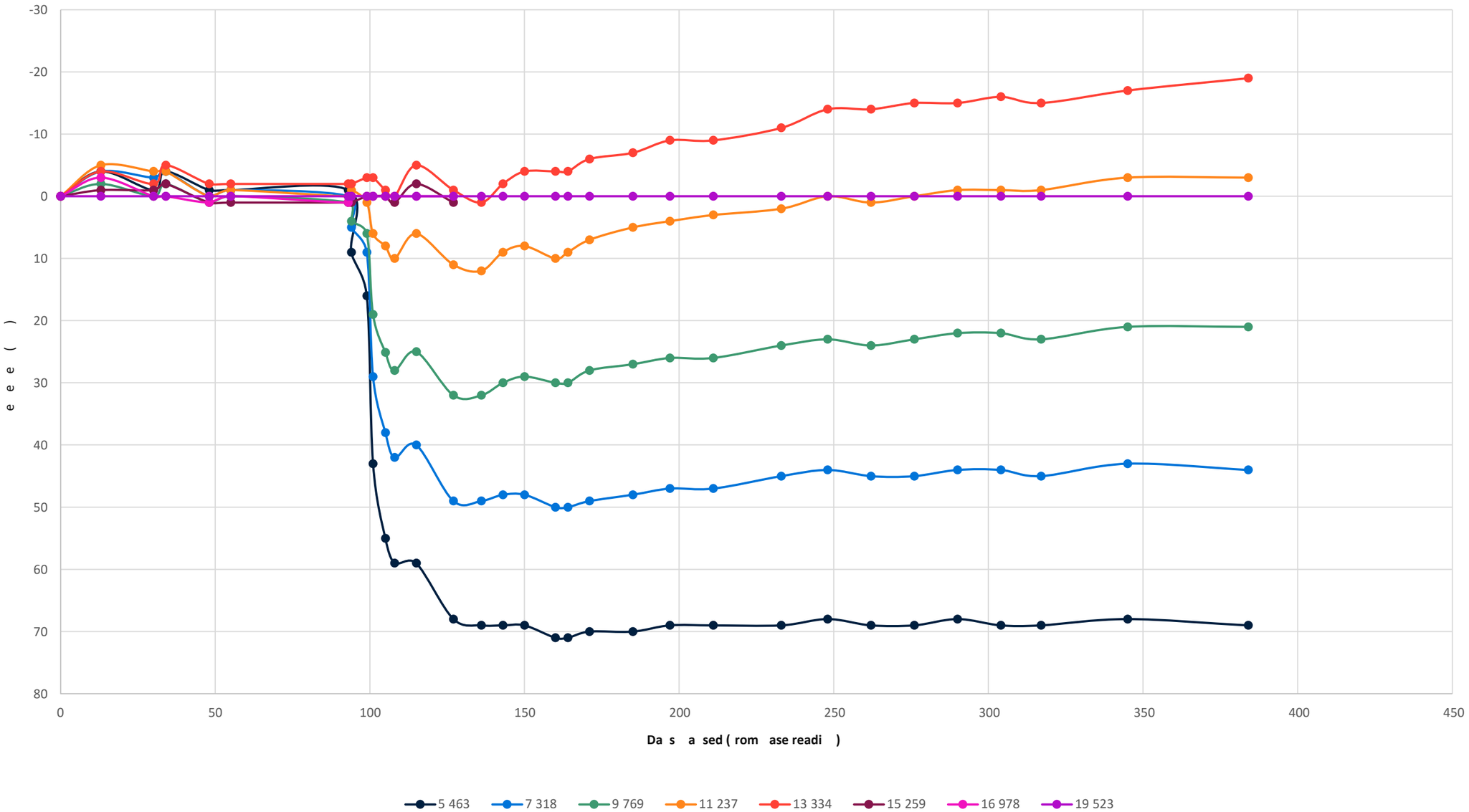

APPENDIX 4

Hydrogeological Risk Assessment (Firth Consultants, November 2023)

firth consultants
environmental risk assessment

Hydrogeological Risk Assessment
Engineered Platform to Facilitate Employment Use
Land off Napier Road
Rockingham Enterprise Area
Corby

Final Report

on behalf of

Storefield Group Limited

Report fc37266

November 2023

REPORT ISSUE RECORD

Report Title:	Hydrogeological Risk Assessment Engineered Platform to Facilitate Employment Use Land off Napier Road Rockingham Enterprise Area Corby
Addressees of the Report:	Storefield Group Limited
Report Status:	Final
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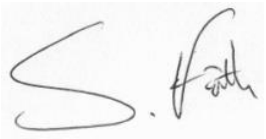
Date of Issue:	20 November 2023
Prepared & Edited by: 	Lynda Keeys BSc (Hons) MSc Environmental Consultant For and on behalf of Firth Consultants Ltd
Approved by: 	Simon Firth BSc MSc FGS CGeol ASoBRA Director For and on behalf of Firth Consultants Ltd

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EXECUTIVE SUMMARY

Firth Consultants Ltd has been commissioned by Storefield Group Limited to conduct a Hydrogeological Risk Assessment (HRA) for the installation of an engineered development platform at land off Napier Road, Rockingham Enterprise Area, Corby, NN17 5DP (hereafter referred to as "the site" – see Figure 1 for location). The development platform is to facilitate development of an employment park which will bring the site back into beneficial use. The construction of the platform is estimated to require import of 686,000 m^3 of material and it is proposed that suitable inert waste material is used including construction and demolition waste and incinerator bottom ash (IBA). The import and placement of inert waste material will require an environmental permit and this HRA is intended to support the permit application process. The objectives of the HRA are to (a) assess the risk to Controlled Waters receptors from the proposed use of inert waste material and (b) to determine whether the proposed restoration will result in overall betterment of groundwater quality.

The site is located in a commercial and industrial area immediately north of the Northern Stream of Willow Brook. The site and surrounding area were used for the extraction of ironstone between the approximately 1900 to the 1950s. The quarry void was then infilled with a variety of materials including reworked natural overburden material and landfilled waste (including industrial, special, liquid sludge, commercial, household and inert). There had been a liquid waste treatment facility ("C18") in the north of the site comprising 7 No. sludge pits. These have subsequently been decommissioned and the waste permit surrendered. There were 2 No. sludge lagoons in the south of the site which were then converted to a landfill ("C17" landfill) for disposal of inert, putrescible and difficult waste. The landfill is understood to be unlined.

Intrusive investigation at the site has shown that it is underlain by up to 16m (but typically 10 to 12m) thickness made ground overlying 0.6 m to 2.9 m thickness of the Northampton Sand Formation (NSF) overlying the Whitby Mudstone Formation. The made ground comprises predominantly reworked natural deposits in the north of the site and 6 to 10m thickness of landfilled waste overlying 5m thickness reworked natural deposits in the south of the site.

The NSF is classified as a Secondary A Aquifer and the Whitby Mudstone Formation is classified as unproductive strata. There are no licensed surface water or groundwater abstractions or Source Protection Zones (SPZs) within 2km of the site.

Groundwater is present in the base of the made ground and in the NSF. Depth to groundwater is generally recorded between 9 and 13 m below ground level (mbgl) and at an elevation of 93 to 100 m above Ordnance Datum (mAOD). Groundwater in the made ground and NSF appears to be in hydraulic continuity and flows to the north with an average hydraulic gradient of 0.02. Average hydraulic conductivity based on slug tests conducted in on-site monitoring wells is estimated to be 0.085 $m.d^{-1}$ for the made ground and 0.22 $m.d^{-1}$ for the NSF. Based on comparison of on-site

groundwater levels with ground elevations in the vicinity of the site, the nearest plausible discharge points for groundwater beneath the site are springs 2.5km north of the site which flow into the River Welland or the Northern Stream of Willow Brook 1.3km or more to the north east of the site.

Soil sampling and analysis of the made ground at the site shows that it contains heavy metals, cyanide (predominantly complex) and PAHs and has leachable concentrations of sulphate, cyanide, mercury and fluoranthene that exceed water quality standards. Groundwater sampling has shown that groundwater quality in the NSF beneath the site has likely been impacted by the historic quarrying and landfilling on and in the vicinity of the site.

A conceptual site model (CSM) of risk was developed for Controlled Waters receptors. The existing made ground and proposed imported inert waste material to form the development platform were considered as sources. Leaching and migration of contaminants in groundwater were considered the key pathways and surface water, either the springs 2.5km north of the site or the Northern Stream 1.3km north east of the site, were considered plausible receptors. The NSF Secondary A aquifer is not considered a viable water supply resource in the vicinity of the site as a result of quarrying and landfilling activities which have reduced its thickness and resulted in poor groundwater quality. As such the NSF has been considered as a pathway rather than a receptor.

Based on the distance to the nearest plausible surface water receptor (1.3km) and estimated groundwater travel time to that receptor (162 years) the risks to Controlled Waters receptors from both the proposed imported inert waste is assessed to be low. In addition, the proposed development as an employment park will likely be largely hard covered resulting in a reduction in leaching from the existing waste deposits leading to an overall betterment in groundwater quality and risk to Controlled Waters receptors.

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1 INTRODUCTION

Firth Consultants Ltd has been commissioned by Storefield Group Limited to conduct a Hydrogeological Risk Assessment (HRA) for the construction of an engineered development platform (to facilitate development of an employment park) at land off Napier Road, Rockingham Enterprise Area, Corby, NN17 5DP (hereafter referred to as "the site"). The site location is shown in Figure 1.

1.1 Background and Objectives

The site is a former ironstone quarry and closed landfill site. In order to bring the site back into beneficial use and facilitate development of an employment park it is proposed to construct an engineered development platform. This will comprise cut and fill operations (predominantly fill) to establish a level platform and will require the import of an estimated 686,000 m^3 of suitable material to create the platform. An ecological wildlife corridor is proposed to be retained along the southern boundary of the site adjacent to Willow Brook where no infilling is proposed.

It Is proposed to use suitable inert waste material (derived predominantly from off-site) to construct the development platform. The northern area of the site will require the greatest fill depth of between approximately 7m to 10m, whereas in the southwest of the site a cut depth of between approximately 1m to 3m will be required (Wardell Armstrong, 2021).

The use of inert waste material for site restoration would require an environmental permit. An HRA would be required to support the permit application to demonstrate that the use of inert waste does not create an unacceptable risk to Controlled Waters receptors. Given the long industrial history of the site and wider area and the environmental setting a qualitative risk assessment is considered appropriate and has been conducted for the site.

The objectives of the HRA are to:

- Assess the risk to Controlled Waters receptors (groundwater and related receptors) from the proposed use of inert waste material to install a development platform; and
- Determine whether the proposed restoration will result in overall betterment of groundwater quality.

1.2 Scope of Work

In order to meet the objectives outlined above the following work was undertaken as part of this HRA:

1. Desk study review of relevant data including the development proposals, topographic, geological and hydrogeological maps and available reports and available leachate and groundwater monitoring data for the site.
2. Development of a hydrogeological conceptual site model (CSM) of risk for the installation of the development platform with inert waste. This identifies potential sources, pathways and Controlled Waters receptors and makes a qualitative assessment of plausible source-pathway-receptor combinations. This considers groundwater and any associated abstractions and surface waters as potential receptors and existing landfill waste and associated leachate and the imported inert waste material as potential sources.
3. Qualitative Risk Assessment (DQRA). A qualitative assessment of the risk to Controlled Waters receptors from importing inert waste to construct the proposed development was undertaken.
4. Preparation of a report that describes the work conducted.

1.3 Available Information

The following reports relating to the site have been used to prepare this HRA:

- Soiltechnics, 2020. Ground Investigation Report. Engineered Platform to Facilitate Employment Use, Land off Napier Road, Rockingham Enterprise Area, Corby. Report No.: STP3996D- G01. September 2020.
- Storefield, 2021. Preliminary Construction Management Plan for Phoenix Parkway Enabling Works. January 2021.
- Wardell Armstrong, 2021. Phoenix Parkway, Waste Recovery Plan, December 2021. GM11841. Draft.
- Tata Steel, 2012. Four Yearly Review of Hydrological Risk Assessment letter report dated 22 October 2012.
- Corus, 2006. Closure Report for Corby Tubeworks Landfill Site–- Waste Management Licence No. C/17 (EAWML 70559). January 2006.

In addition, the following site data relating to the site not contained within these reports were obtained and reviewed:

- Groundwater analytical data from 2003 to 2020 from Tata Steel;

- Borehole logs for additional wells, groundwater level data and groundwater analytical data and hydraulic conductivity tests from 2022 and 2023 from Soiltechnics; and
- Waste acceptance criteria (WAC) tests for the IBA material that is proposed to be imported.

1.4 Guidance

The HRA has been conducted in accordance with relevant Environment Agency (EA) guidance, in particular the following:

- EA, 2021. Land contamination risk management (LCRM)–- How to assess and manage the risks from land contamination. Available at: https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm
- EA, 2018. Groundwater risk assessment for your environmental permit. Available at https://www.gov.uk/guidance/groundwater-risk-assessment-for-your-environmental-permit Last updated 3 April 2018
- EA, 2017a. Protect groundwater and prevent groundwater pollution. Available at https://www.gov.uk/government/publications/protect-groundwater-and-prevent-groundwater-pollution/protect-groundwater-and-prevent-groundwater-pollution Last updated 14 March 2017
- EA, 2017b. Groundwater protection technical guidance. Available at https://www.gov.uk/government/publications/groundwater-protection-technical-guidance/groundwater-protection-technical-guidance Last updated 14 March 2017
- EA, 2016. Managing and reducing land contamination: guiding principles (GPLC). Available at https://www.gov.uk/government/publications/managing-and-reducing-land-contamination Last updated13 April 2016.

1.5 Report Format

This report provides a HRA based on the proposed use of inert waste to install a development platform at the site. Section 2 describes the site setting and ground conditions, including geography, hydrology, geology, hydrogeology and soil and groundwater quality. Section 3 presents the conceptual site model (CSM) of risk and qualitative risk assessment and Section 4 provides conclusions.

2 SITE SETTING AND GROUND CONDITIONS

2.1 Geography

The site is located off Napier Road (off Phoenix Parkway, A6116), Rockingham Enterprise Area, Corby, NN17 5DP and is centred on National Grid Reference (NGR) 490190, 290850 as shown on Figure 1. The site is an irregular shaped plot of rough grassland which occupies an area of approximately 20 hectares.

The site is located in an industrial/commercial area approximately 2.3 km to the northeast of Corby town centre. The site is bounded by Earlstree Industrial Estate to the west, the northern stream of Willow Brook with Willowbrook East Industrial Estate beyond to the south, Weldon North Industrial Estate to the east, Mitchell Road with Corby power station to the north (and Gretton Brook Road beyond) and Rockingham Speedway and associated car park to the northeast.

The site was originally a former ironstone quarry (most likely Brookfield Quarry) which was one of many in the area supplying the Corby Steelworks located approximately 1 km to the south. The site together with surrounding land was subsequently used as a landfill site and formed part of North Brook Landfill Site. This has resulted in an undulating topography with ground levels ranging from approximately 104 to 109 mAOD over the majority of the site. There are a 7No.depressions approximately 2.5m deep in the northwest of the site which are the remnants of dewatering lagoons associated with the former landfill (see Section 2.2). Mitchell Road to the north of the site is at an elevation of 115 to 116 mAOD, approximately 8m to 10m higher than adjacent levels on site. In the south of the site ground elevation slopes steeply downwards to Northern Stream (Willow Brook) at an elevation of approximately 97 to 100 mAOD.

2.2 Site History

A detailed site history together with historical maps is included in Soiltechnics (2020) and is summarised below.

The site was part of a deciduous woodland until 1900 when a large ironstone quarry encroached onto the site from the south-west. Between 1938 and 1952 the remainder of the site and the surrounding land had become part of the quarry with associated railways and infrastructure. By 1964 two large lagoons are evident in the south of site (used as dewatering lagoons for blast furnace slurry from the nearby Iron and Steel Works), while the eastern area remains as woodland and railway and infrastructure (cranes/buildings storage areas) and small slurry lagoons are recorded in the north. By 1982-87 the lagoons in the south are labelled sludge beds (part of landfill site) and the railway in the north is no longer

present. An additional sludge bed is located offsite immediately to the south and two drainage ponds are located offsite to the east (adjacent to the southern area).

By 1987-92 three new square sludge beds (liquid management and transfer site) have been built in the north-west of the site which increase in number to seven by 1999. At this time the sludge beds in the south of the site and offsite to the south have been infilled. By 2006 drainage features are located in the south-east of the site and the offsite ponds to the east have been infilled. The seven square sludge beds (liquid management and transfer site) have been removed by 2017 and no structures remain on site (although, as discussed in Section 2.1, topographic depressions remain).

The whole area was extensively quarried for ironstone which supplied Corby Iron and Steel Works to the south of the site and many were subsequently infilled and / or used as landfill sites. The main historic landfills in the vicinity of the site shown in the Envirocheck report (included in Soiltechnics, 2020), the Environment Agency historical landfill map (EA, 2023a) and the historic landfill sites map (Catchment Based Approach, 2023) are shown in Figure 2 and listed in Table A below.

It is understood that following the closure of the Iron and Steel Works the slurry was removed from the lagoons in the south of the site which were then divided into cells using inert rubble to form landfill cells. This landfill area (known as the Corby Tube Works landfill or C17 site) was issued with a waste management licence in 1984 (EAWML 70559) and licensed for Category A (solid inert), B (solid, semi inert), C (solid putrescible) and D (difficult) wastes, but excluded asbestos and other special waste. The landfill operated until 2004 and was classified as “Definitively Closed” by the Environment Agency on 19 December 2008. The remaining uncapped areas were in-filled with inert wastes, as agreed with the Environment Agency. The landfill does not incorporate any engineering features, i.e. no liner, impermeable capping or gas / leachate management systems (Soiltechnics, 2020). The landfill permit has yet to be surrendered.

The Former liquid waste treatment facility in the north west of the site (known as C18) which comprised the 7No. sludge beds and operated under licence number EAWML 70560 ceased operation in June 2007. Remediation work was carried out to empty the lagoons and remove and dispose of the liners. The EA agreed the surrender of the WML in October 2010, i.e. this part of the site is considered to be closed, surrendered and remediated.

Table A: Summary of historic landfills on and in the vicinity of the site

Site Name	Distance and direction from site	Dates waste received	Waste Type
On-site landfills			
British Steel, North Brook lagoons (C18)	7 lagoons in north-west of site	1970–- 1984	Industrial, Special and liquid sludge
Candy Filter Sludge Ponds	2 ponds in south of site	1970–- 1984	Special waste and liquid sludge (western most pond includes inert)
Tata Steel / Corus, North Brook Landfill Site (C17)	South of site	1984–- 2009	Industrial Waste Landfills (in closure, permit not surrendered)
British Steel, Gretton Brook Road Deene.	On site and extends offsite to the north / north-west and east	1950–- 1986	Inert and Industrial
Corby Borough Council, Deene Quarry	On site and extends offsite to the north / north-west and east	1987 - ?	Household, Commercial and Industrial Waste
Off-site landfills			
Candy Filter Sludge Ponds	2 ponds: 2m and 130m east	1970–- 1984	Special waste and liquid sludge
Candy Filter Sludge Ponds, Corby	50m south	1970 to 1984	Special waste and liquid sludge
Candy Filter Sludge Ponds, Off Gretton Brook Road	7 ponds ~300m north-west & 2 ponds ~235m north-east	1970 to 1984	Special waste and liquid sludge
British Steel Corby Works–- Dry Tip (Rail Haulage) & Refractory Tip, Gretton Road	350m north-east	1980–- 1986	Inert and industrial
Deene Quarry, Gretton Brook Road,	460m / 675m north-east	1987-1996	Household, Commercial and Industrial Waste Landfills (in closure, permit not surrendered)
Refractory Tip, Gretton Road West	730m north-west	1980–- 1986	Inert, industrial and liquid sludge
Works Dry Tip, Gretton Road Gulley, Off Gretton Road	990m north-east	1980–- 1985	Inert, commercial, household and liquid sludge

2.3 Hydrology

The nearest main watercourse in the vicinity of the site is Northern Stream (of Willow Brook) which runs along the southern site boundary. The site is shown to be in the catchment of this watercourse and in 2019 it was classified as Moderate for ecological and Fail for chemical quality due to mercury and polybrominated diphenyl ethers (PBDE) (EA, 2022a).

Gretton Brook which is culverted along the majority of its length is located approximately 300m to the north of the site and is classified as part of Willow Brook (Nene) – see below.

Southern Stream (of Willow Brook) is located approximately 2km south of the site and in 2019 was also classified as Moderate for ecological and Fail for chemical quality. This watercourse failed due to the presence of mercury, perfluorooctane sulphonate (PFOS) and PBDE (EA, 2022b).

The Northern Stream and Southern Stream both flow to the east / north-east and join together forming Willow Brook (Nene) approximately 2 km north-east of the site. Willow Brook becomes the River Nene further downstream to the north-east. Land immediately to the north of the site is in the catchment of Gretton Brook / Willow Brook (Nene). In 2019 this was classified as Moderate for ecological and Fail for chemical quality due to presence of mercury, PFOS and PBDE (EA, 2022c).

Further north beyond Brookfield Plantation are the catchments of Fineshade Brook and the River Welland (from the confluence of Langton Brook to confluence of the River Gwash) which are classified as Good and Moderate for ecological respectively and Fail for chemical quality due to presence of mercury and PBDE (EA 2023b).

It is noted that mercury, PFOS and PBDE were not monitored in UK rivers prior to 2019 and PFOS and PBDE are a common cause of chemical failures in UK rivers due to their recent inclusion in the EA's analytical suite.

Based on EA Light Detection and Radar (LiDAR) data, the elevation of Northern Stream is approximately 100 mAOD close to the south west corner of the site and approximately 97 mAOD close to the south east corner of the site.

There are ten active discharge consents within 1km of the site. One relates to the discharge of final/treated sewage effluent to land, three relate to either trade or final/treated sewage effluent discharging to Gretton Brook, two relate to either trade or final/treated sewage effluent discharging to the Northern Stream of Willow Brook and four relate to the discharge of other matter to the Southern Stream of Willow Brook (Envirocheck report included in Soiltechnics, 2020). The locations of these licensed discharges are shown on Figure 1.

There are no active licensed surface water abstractions within 2km of the site.

Data from the nearest weather station (Wittering, located approximately 2km north-east of the site) indicates that the average annual rainfall for the area for the period 1981 to 2010 was 613.6 mm (Met Office, 2022).

2.4 Geology

The British Geological Survey (BGS) online geology viewer (BGS, 2022) and the BGS 1:50,000 solid and drift sheet 171 for Kettering (BGS, 2002) indicate that the site is underlain by Infilled Ground (opencast ironstone workings and major limestone or sand and gravel quarries which maybe partly of completely backfilled) overlying the Northampton Sand Formation (NSF). The NSF is described as a sandy ironstone which is greenish grey where fresh, weathering to brown limonitic sandstone. This lies on the Whitby Mudstone Formation (a medium to dark grey fossiliferous mudstone and siltstone with rare fine-grained calcareous sandstone beds and limestone nodules) (BGS, 2022).

The site and surrounding area have been extensively quarried. Based on nearby BGS logs (SP89SE222, SP89SE143, SP89SE227 and SP89SE228 – see Figure 1 for locations and Appendix 1 for logs) the original geology would likely have comprised approximately 2 to 3.5 m thickness of Oadby Member Glacial Till (diamicton–- clay with chalk and flint fragments) underlain by up to 1.5m thickness of Lower Lincolnshire Limestone (LLL) Member, 4 to 6 m thickness Grantham Formation (formerly known as the Lower Estuarine Series, described as mudstones, sandy mudstones and argillaceous siltstone-sandstone) and 4 to 5 m thickness of the NSF. Investigations on site indicate that all of the Oadby Member, LLL, Grantham Formation and the majority of the NSF have been removed as a result of quarrying and the resultant void has been infilled with up to 16m (and typically 10 to 12m) thickness of made ground. The made ground generally comprises reworked natural deposits (glacial till, Grantham Formation [sandstone, siltstone and mudstone] and NSF) other than in the south of the site where waste associated with the C17 landfill is located.

A summary of the geology beneath the site (based on the available information including the Soiltechnics 2020 intrusive investigation) is presented in Table B below.

Table B: Geological Summary

Geological Unit (from surface downwards)	**Approx. thickness at site (m)** [1]		**Description**
	North	**South**	
Made Ground: Former Iron and Steel Works waste	0 to 0.8	Generally absent	Flue dusts, coke fines, slag and refractory rubble and occasional areas of blast furnace materials (dark grey fine to medium sand) in the east
Made Ground: Landfilled waste	Absent	6 to 10 Base at ~99.5 mAOD	Paper, metal cans, plastic, glass, wood, cloth and some brick and concrete fragments in a matrix of sandy clay with some fine to coarse flint gravel
Made Ground: Largely reworked natural deposits	11 to >16	~ 5	Grey gravelly clay (glacial derived soils), cream brown clayey, gravelly sand or gravelly clay (Grantham Formation derived) or orange brown gravelly sands (Northampton Sand derived), with frequent cobbles and boulders of sandstone. Gravels comprised of limestone and sandstone
Northampton Sand Formation (NSF)	0.6 to 2.9		Orange brown clayey gravelly sand, with gravels comprising ferruginous sandstone.
Whitby Mudstone Formation	49 to 58 [2]		Stiff, grey clay encountered at depths between 12.8m and 15.1m below ground level

Notes: 1. From Soiltechnics, 2020 unless stated otherwise
2. BGS, 2002

Schematic cross-sections of the geology at the site are shown in Figures 4 to 6. The location of the cross-sections along with site investigation locations are shown in Figure 3.

2.5 Hydrogeology

2.5.1 Aquifer classifications

The NSF is classified as a Secondary A aquifer (Defra, 2022). These are permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. The underlying Whitby Mudstone Formation is classified as unproductive strata (largely unable to provide usable water supplies and are unlikely to have surface water and wetland ecosystems dependent on them).

Although the NSF is classified as a Secondary A aquifer, extensive quarrying activities in the vicinity of the site and wider Corby area have removed significant quantities of the NSF

leaving limited thicknesses of these deposits. Therefore the usefulness of the remaining aquifer is considerably reduced in the vicinity of the site.

The Lower Lincolnshire Limestone (LLL) and the Grantham Formation which overlie the NSF (where quarrying activities have not been undertaken) are classified as Principal and Secondary (undifferentiated) aquifers, respectively. Principal aquifers are layers or rock or deposits that have high intergranular and/or fracture permeability meaning they usually provide a high level of water storage and may support water supply and/or river base flow on a strategic scale, whereas Secondary (undifferentiated) aquifers which are aquifers where it is not possible to apply either a Secondary A or B definition because of the variable characteristics of the rock type and have only a minor value (EA, 2017a). It is noted that these aquifers are limited in extent and thickness and are unlikely to provide a viable water supply in the vicinity of the site. The superficial Oadby Member Glacial Till which generally overlies the bedrock where the Ironstone has not been quarried is classified as a Secondary (undifferentiated) aquifer.

2.5.2 Source protection zones and licensed abstractions

There are no Source Protection Zones (SPZs) or licensed groundwater abstractions within 2km of the site (Envirocheck report included in Soiltechnics, 2020).

2.5.3 Groundwater levels

Eleven gas and groundwater monitoring wells (LG01 to LG03, LL04 to LL06, LG07 to LG11) were installed in and around the C17 landfill in the south of the site in 2001. These were reported to have been drilled through the made ground and terminated on the Whitby Mudstone Formation between 10 to 14 mbgl. Groundwater levels were measured roughly quarterly from January 2003 until March 2021 and more recent levels were measured between January and March 2022 and in March 2023. The locations of these wells are shown on Figure 3 and a hydrograph presenting the groundwater level data is shown in Figure A below. Note that several wells (LG1, LG2, LG3 and LL4) were often dry and datum levels were not available for LL5 and LG10 therefore these well have not been included in the hydrograph.

The wells are thought to be screened in the made ground and given that the landfill was not lined it is assumed that these data represent the natural groundwater level as they are likely to be in hydraulic continuity with the remaining NSF.

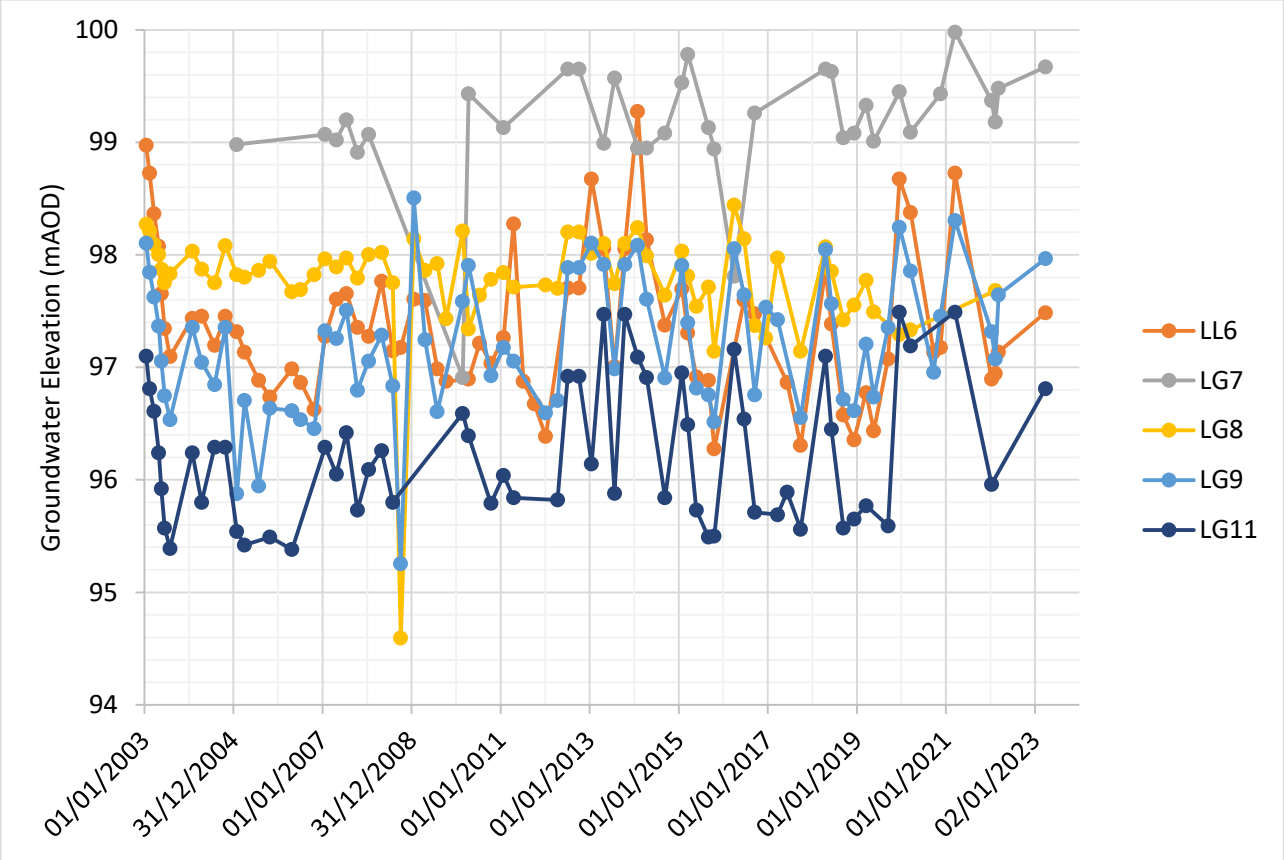

Figure A: Hydrograph of groundwater levels in south of site since 2003

This hydrograph shows that groundwater levels in the south of the site range from between approximately 95.5 mAOD and 100 mAOD with an annual fluctuation of between approximately 1.5 m to 2 m. The highest groundwater levels generally occur between January and April and the lowest occurring in September and October.

Seven additional wells (BH01, BH02, BH04, BH05, BH06, BH08 and BH09) were installed at the site by Soiltechnics in 2020 (Soiltechnics, 2020). Two of these (BH01 and BH02) located in the north of the site encountered obstructions in the made ground and were therefore not installed deep enough to encounter the groundwater and another well (BH08) has subsequently been lost. These three wells were replaced with BH01B, BH02B and BH08B in May 2022 the logs for which are included in Appendix 2. See Figure 3 for well locations.

It is noted that although the replacement wells were drilled and installed to the base of the NSF, BH01B and BH02B were dry on the two subsequent monitoring rounds in June 2022 and March 2023 and BH08B was dry in March 2023. This is likely to be due to the higher elevation of the NSF layer in the north of the site (See Figures 4 and 5) resulting in the aquifer being dry in this part of the site.

The Soiltechnics groundwater level monitoring data is presented as a hydrograph in Figure B below. This shows that groundwater levels have been relatively stable over the monitored period. The interpreted piezometry based on the measured groundwater levels from 30th March 2023 is shown in Figure 7. This indicates that the groundwater flow direction is to the north with an average hydraulic gradient of approximately 0.02.

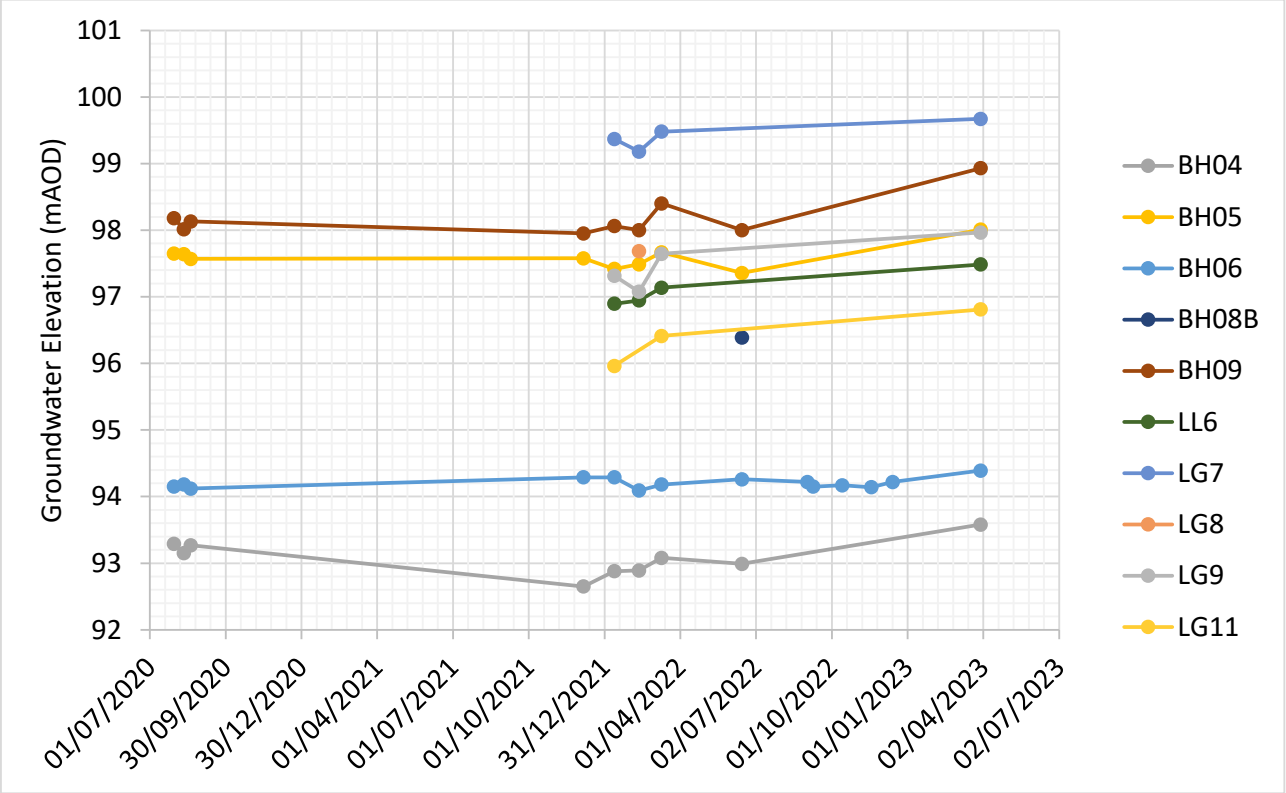

Figure B: Hydrograph of groundwater levels on site since July 2020

As discussed in Section 2.3 the elevation of Northern Stream (of Willow Brook) to the south of the site ranges from approximately 100 mAOD (near the south west corner of the site) to 97 mAOD (near the south east corner). The surface water level of the stream is higher than the groundwater elevation beneath the site indicating that groundwater at the site will not discharge to the stream. It is possible that leakage through the stream bed provides recharge to groundwater.

Likewise, Gretton Brook, located approximately 300 m north of the site has an elevation (based on LiDAR data) ranging from approximately 113 mAOD (north of the site) to 103 mAOD (north-east of the site), i.e. also higher than groundwater at the site and therefore not a potential point of discharge.

It is possible that groundwater flows north from the site and then turns east to discharge to Northern Stream or Gretton Brook at some point further downstream where surface water elevations are lower. Based on LiDAR data the nearest plausible point of discharge would be the Northern Stream beyond Gretton Road approximately 1.3km north east of the site.

Alternatively, groundwater from the site could be discharging to springs on the escarpment slope at Gretton, approximately 2.5km north of the site. These springs mark the boundary between the NSF and the underlying Whitby Mudstone and form surface streams which flow north-west to join the River Welland.

2.5.4 Aquifer Properties

Falling and rising head tests ("slug" tests) were conducted in five on-site monitoring wells (BH04, BH05 BH06, BH08 and BH09) in June 2022. The tests were conducted by quickly lowering or raising a 'slug' into each well. The recovery of water levels was then monitored with time using a pressure transducer data logger set to record every second.

Firth Consultants analysed the data using the Bouwer and Rice analysis method (Appendix 3). The results of this analysis are presented in Table C below.

Table C: Hydraulic Conductivity Estimates from Falling Head Tests

Well	Screened Interval (mbgl)	Predominant Screened Lithology (Saturated)	Test	Hydraulic Conductivity	
				$m.s^{-1}$	$m.d^{-1}$
BH04	11 to 11.68	Made Ground	1 – slug in	8.30×10^{-07}	0.072
BH05	9 to 10.76	Made Ground	1 – slug in	1.13×10^{-06}	0.098
BH06	12 to 15	NSF	1 – slug in	3.13×10^{-06}	0.27
			2–- slug in	3.00×10^{-06}	0.26
			2–- slug out	1.55×10^{-06}	0.13
BH08	11.5 to 12.6	NSF	1 – slug in	2.63×10^{-08}	0.002
BH09	11 to 13.47	NSF?	1 – slug in	2.41×10^{-07}	0.021
			2–- slug in	2.65×10^{-06}	0.23

The estimated hydraulic conductivity of the Made Ground / landfilled material ranges from 0.072 to 0.098 $m.d^{-1}$ and has an average of 0.085 $m.d^{-1}$ whereas the estimated hydraulic conductivity of the Northampton Sand Formation is generally higher ranging from 0.002 to 0.27 $m.d^{-1}$ with an average of 0.15 $m.d^{-1}$. The majority of the values are consistent with the lithological descriptions of the screened sections. The exception to this is test 1 for BH08 and BH09 where unexpectedly low hydraulic conductivities were calculated for the NSF. The values obtained for BH06 and BH09 test 2 are more consistent with the lithological descriptions. And therefore the average of these of 0.22 $m.d^{-1}$ is considered to be a more representative value to the NSF.

2.6 Gas, Soil and Groundwater Quality

A detailed review of available historical data is provided in Soiltechnics report (2020). The main points of note are:

- Regular gas monitoring between 2004 and 2014 indicated that generally methane concentrations ranged from 0 to 2.5%, carbon dioxide was generally less than 5% and oxygen was around 20%.
- Groundwater monitoring undertaken between 2003 and 2014 indicated elevated levels of zinc and iron across the site with the highest concentrations recorded between July 2003 and April 2007.
- An offsite investigation to the west recorded elevated levels of zinc contamination which was attributed to the widespread presence of flue dusts from the former blast furnaces during quarrying activities.
- Surface water monitoring of North Stream (Willow Brook) between 2003 and 2014 recorded concentrations of copper above EQS in both up- and down-stream samples. Therefore, it was considered that the concentrations were reflective of the wider area and could not attributed to the site.
- An investigation undertaken by FWS Consultants Limited for Corus UK Limited on a neighbouring site to the west concluded that no significant contamination was identified in the natural quarry backfill. However five areas were identified for remediation due to substantial ammonia, phenol and tar associated with iron and steel work waste and high lead and zinc associated with blast furnace slurry.

Intrusive investigation was undertaken at the site by Soiltechnics in 2020. This involved the excavation of 27 trial pits up to a depth of 4 mbgl and the drilling of nine boreholes up to a depth of 16.5 mbgl with seven installed as monitoring wells, along with associated soil, surface water and groundwater sampling. Soiltechnics drilled and installed a further three monitoring wells (BH01B, BH02B and BH08B) up to a depth of 14 mbgl in May 2022 and conducted additional rounds of water sampling in 2022 and 2023. The investigation locations are shown in Figure 3 and the results of the soil and groundwater sampling undertaken by Soiltechnics are discussed below.

2.6.1 Soil

Eighteen soil samples of the made ground from depths ranging from 0.1mbgl to 12 mbgl were taken for chemical analysis (Soiltechnics, 2020) and analysed for pH, metals, sulphides, total and free cyanide, phenol, water soluble sulphate, polycyclic aromatic hydrocarbons (PAH), total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene

and xylenes (BTEX), volatile organic compounds (VOCs) and semi-VOCs (sVOCs). These data are presented in Table 1.

All BTEX, VOCs and sVOCs were recorded below method detection limits. TPH was recorded either less than the method detection limit or at low concentrations (less than 500 $mg.kg^{-1}$ total TPH) with the exception of one sample taken from TP23 at 0.7 mbgl location in the south-west corner of the site In the C17 landfill area) which recorded a total TPH concentration of 3234 $mg.kg^{-1}$ (the majority being aliphatic and aromatic in the C12 to C21 range).

A summary of other chemical concentrations is provided in Table D below. The highest concentrations have generally been detected within the waste deposits in the C17 landfill.

Table D: Summary of soil analysis from 2020

Determinand	Units	Range in concentrations [2]	Average conc.
pH	pH units	7.4 – 8.3	7.85
Total Cyanide	$mg.kg^{-1}$	<2 – 148	16
Complex Cyanide	$mg.kg^{-1}$	<2 – 148	15
Free Cyanide	$mg.kg^{-1}$	<2 – 7	<2
Water soluble sulphate as SO4 (2:1)	$mg.L^{-1}$	29 – 1710	538
Sulphide	$mg.kg^{-1}$	<5 – 69	18
Water soluble nitrate as NO3 (2:1)	$mg.kg^{-1}$	<3 – 79	32
Arsenic		6–- 96	38
Boron	$mg.kg^{-1}$	<1 – 4.2	1.6
Cadmium	$mg.kg^{-1}$	<0.2 – 9.2	1.0
Chromium, total	$mg.kg^{-1}$	12–- 338	80
Copper	$mg.kg^{-1}$	5–- 150	41
Lead	$mg.kg^{-1}$	12–- 5010	415
Mercury	$mg.kg^{-1}$	<1 – 1.7	<1
Nickel	$mg.kg^{-1}$	10–- 67	31
Vanadium	$mg.kg^{-1}$	25–- 924	151
Zinc	$mg.kg^{-1}$	42–- 24000	2807
Total Phenol	$mg.kg^{-1}$	<2 – 3	<2
Naphthalene	$mg.kg^{-1}$	<0.1 – 0.18	0.11
Benzo(a)pyrene	$mg.kg^{-1}$	<0.1 – 5.18	1.05
Total PAHs	$mg.kg^{-1}$	<1.6 – 66.6	12.67

Six soil samples of the made ground were taken for leachate analysis at depths of up to 2.5 mbgl. The analytical suite include metals, cyanides, sulphate, sulphide, nitrate, phenols and PAHs. The analytical results are presented in Table 2 and a summary of the detected

concentrations is provided in Table E below. This table also provides UK drinking water standards (DWSs) and freshwater environmental quality standards (EQSs) for comparison.

Soil leachate concentrations were below DWS with the exception of sulphate and below EQS with the exception of cyanide, mercury and fluoranthene. Phenols, sulphide, nitrate, the majority of metals and the heavier end PAHs were recorded below their respective method detection limits.

Table E: Summary of soil leachate analysis from 2020

Determinand	Units	Range in concentrations [2]	Average conc.	UK DWS[1]	EQS [2]
pH	pH units	8.0 – 8.5	8.17	6.5 to 9.5	-
Total Cyanide	µg.L^{-1}	<5–- **36**	**11.8**	50	1
Sulphate as SO4	µg.L^{-1}	6–- 315	90.3	250	400
Boron	µg.L^{-1}	8 – 392	129	1000	-
Mercury	µg.L^{-1}	0.06 – **0.64**	<0.0001	1	0.07
Zinc	µg.L^{-1}	<2 – 5	<2	-	27.74 [3]
Naphthalene	µg.L^{-1}	<0.01 – 0.02	<0.01	-	2
Acenaphthene	µg.L^{-1}	<0.01 – 0.09	0.043	-	-
Fluorene	µg.L^{-1}	<0.01 – 0.07	0.028	-	-
Phenanthrene	µg.L^{-1}	<0.01 – 0.13	0.08	-	-
Anthracene	µg.L^{-1}	<0.01 – 0.04	0.028	-	0.1
Fluoranthene	µg.L^{-1}	<0.01 – **0.06**	**0.032**	-	0.0063
Pyrene	µg.L^{-1}	<0.01 – 0.04	0.022	-	-

1) UK Drinking Water Standard (DWS). Statutory Instruments 2016 No. 614. Water, England and Wales. The Water Supply (Water Quality) Regulations 2016 unless otherwise stated.
2) UK Environmental Quality Standard (EQS) for freshwater (average annual or long-term) unless stated otherwise. UK EQS from https://www.gov.uk/guidance/surface-water-pollution-risk-assessment-for-your-environmental-permit.
3) EQS for zinc is calculated using m-BAT tool based on a pH of 8.00, DOC of 4.47 mg/l and calcium of 135.61 mg/l (average of Environment Agency monitored values in Willow Book North Deene Park Foot Bridge [EA, 2022d]).

Underlined denotes an exceedance of DWS.
BOLD denotes an exceedance of EQS.

2.6.2 Groundwater

Various rounds of groundwater sampling have been conducted by Soiltechnics at the site as detailed below:

- July 2020. Groundwater samples obtained from 4 No. wells (BH04, BH06, BH08 and BH09)

- January to March 2022. 3 No. monthly rounds of groundwater sampling from 7No. wells (BH04, BH05, BH06, BH09, LG9, LG11, and LL6)
- September to December 2022. 4 No. monthly rounds of groundwater sampling from BH06 (note this was specifically conducted to assess impacts from a trial embankment surcharging study)
- March 2023. Groundwater samples obtained from 4 No. wells (BH04, BH05, BH06 and BH09)

Note that monitoring wells BH01, BH01B, BH02, BH02B and BH08B are dry and so groundwater samples have not been obtained from these wells.

Groundwater samples were analysed for ammoniacal nitrogen, sulphate, chloride, cyanide, phenols, metals, PAHs, speciated TPH, BTEX, VOCs and SVOCs. These data are presented in Table 3 and detections are summarised in Table F below. UK DWS and EQS are also shown in this table for comparison. The laboratory certificates are presented in Soiltechnics (2020) and in Appendix 4.

Table F: Summary of groundwater quality data on site from July 2020 to March 2023

Determinand	Units	Range in detected concentrations	Average conc.	DWS[1]	EQS[5]
pH	pH units	6.8 – 8.7	7.3	6.5 to 9.5	6 to 9
Total/Complex Cyanide	µg.L^{-1}	<5 – **211**	**74**	50	1
Sulphate as SO4	mg.L^{-1}	538–- 5570	1667	250	-
Ammoniacal Nitrogen as NH4	µg.L^{-1}	157–- **190000**	**19505**	500	389[6]
Chloride	mg.L^{-1}	8–- 394	97	250	-
Nitrate	mg.L^{-1}	<0.5–- 267	15	50	-
Nitrite	mg.L^{-1}	<0.5 – 4.5	<0.5	0.5	-
Arsenic	µg.L^{-1}	<5–- 46	8.8	10	50
Antimony	µg.L^{-1}	<5	<5	5	-
Boron	µg.L^{-1}	251–- 8530	2296	1000	-
Cadmium	µg.L^{-1}	<0.4 – **3.6**	**0.6**	5	0.25[7]
Chromium	µg.L^{-1}	<5–- **31**	**7.2**	50	4.7
Copper	µg.L^{-1}	<5–- **51**	**14.9**	2000	13.53[8]
Lead	µg.L^{-1}	<5–- **598**	**49**	10	5.36[8]
Manganese	µg.L^{-1}	35–- **10000**	**3979**	50	219.55[8]
Mercury	µg.L^{-1}	<0.05	<0.05	1	0.07
Nickel	µg.L^{-1}	<5–- **90**	**19.5**	20	10.05[8]
Selenium	µg.L^{-1}	<5–- 48	<5	10	-
Zinc	µg.L^{-1}	20–- **5010**	**421**	-	27.74[8]
Phenol	µg.L^{-1}	<10–- **23**	<10	-	7.7

Determinand	Units	Range in detected concentrations	Average conc.	DWS[1]	EQS[5]
Naphthalene	µg.L^{-1}	<0.01 – 0.3	<0.01	-	2
Acenaphthene	µg.L^{-1}	<0.01 – 0.03	<0.01		-
Fluorene	µg.L^{-1}	<0.01 – 0.02	<0.01		-
Phenanthrene	µg.L^{-1}	<0.01 – 0.07	<0.01		-
Anthracene	µg.L^{-1}	<0.01 – 0.03	<0.01		0.1
Fluoranthene	µg.L^{-1}	<0.01 – **0.04**	<0.01	-	0.0063
Pyrene	µg.L^{-1}	<0.01 – 0.04	<0.01	-	-
TPH Aliphatic >C6–- C8	µg.L^{-1}	<10 – 11	<10	15000[2]	-
TPH Aliphatic >C12 – C16	µg.L^{-1}	<10 – 16	<10	300[2]	-
TPH Aliphatic >C16 – C21	µg.L^{-1}	<10 – 47	<10	300[2]	-
TPH Aliphatic >C31 – C34	µg.L^{-1}	<10 – 14	<10	300[2]	-
TPH Aromatic >C12 – C16	µg.L^{-1}	<10 – 18	<10	90[2]	-
TPH Aromatic >C16 – C21	µg.L^{-1}	<10 – 47	<10	90[2]	-
cis-1,2-Dichloroethene	µg.L^{-1}	<5–- 11	<5	50[3]	
Diethyl phthalate	µg.L^{-1}	<0.1 – 0.1	<0.1	15000[4]	-
Dibutyl phthalate	µg.L^{-1}	<0.1 – 20.3	1.2	900[4]	-
Bis(2-ethylhexyl)phthalate	µg.L^{-1}	<0.1 – 0.2	<0.1	5.6[4]	1.3

1) UK Drinking Water Standard (DWS). Statutory Instruments 2016 No. 614. Water, England and Wales. The Water Supply (Water Quality) Regulations 2016 unless otherwise stated.
2) TPH DWS World Health Organization (WHO) guideline values for TPH fractions in drinking water (cited in CL:AIRE, 2017).
3) WHO Guidelines for Drinking Water Quality. 4th Edition. 2017.
4) USEPA Regional Screening Level (RSL) for Tap Water. RSL Summary Table (TR=1E-06, HQ=1) November 2022.
5) UK Environmental Quality Standard (EQS) for freshwater (average annual or long-term) unless stated otherwise. UK EQS from https://www.gov.uk/guidance/surface-water-pollution-risk-assessment-for-your-environmental-permit.
6) EQS for ammonia based on a Type 7 river i.e. alkalinity over 200 mg/l CaCO3 (average of Environment Agency monitored values in Willow Book North Deene Park Foot Bridge is 206 mg.L^{-1} CaCO3 [EA, 2022d]).
7) EQS for cadmium depends on hardness of water. Based on Class 5 water body i.e. the hardness is >200 mg CaCO3/l (average of Environment Agency monitored values in Willow Book North Deene Park Foot Bridge is 206 mg.L^{-1} CaCO3 [EA, 2022d]).
8) EQS for copper, lead, nickel and zinc are calculated using m-BAT tool based on a pH of 8.00, DOC of 4.47 mg/l and calcium of 135.61 mg/l (average of Environment Agency monitored values in Willow Book North Deene Park Foot Bridge [EA, 2022d]).

Underlined denotes an exceedance of DWS
BOLD denotes an exceedance of EQS.

It is noted that all BTEX are recorded below their respective method detection limits in all groundwater samples. The majority of PAHs, TPH fractions and all VOCs with the exception of cis-1,2-dichloroethene in one sample (11 µg.L^{-1} in BH08) are also below method detection limits. All SVOCs are below method detection limits with the exceptions of diethyl phthalate, dibutyl phthalate and bis(2-ethylhexyl)phthalate.

The majority of substances were recorded at concentrations below their respective DWS or EQS. Concentrations in groundwater consistently above DWS or EQS are discussed below:

- Cyanide: Total cyanide and complex cyanide were detected in all wells. The analytical detection limit of 5 $\mu g.L^{-1}$ exceeds the EQS of 1 $\mu g.L^{-1}$. The DWS of 50 $\mu g.L^{-1}$ was exceeded in samples from BH09, LG7, LG9 and LG11, all of which are located within, or adjacent to, the C17 landfill. The highest concentrations were generally detected in BH09 which is up-hydraulic gradient of the site and indicates that background groundwater quality is impacted with cyanide.
- Sulphate: Concentrations of sulphate are above the DWS of 250 $mg.L^{-1}$ at all locations during all monitoring rounds. The highest concentrations are generally recorded at BH04 in the east of the site.
- Ammoniacal nitrogen (as NH_4) exceeded the DWS of 500 $\mu g.L^{-1}$ and the EQS of 389 $\mu g.L^{-1}$ at all locations sampled and in all but three samples (two from BH06 and one from LG11) taken since July 2020. The highest concentrations were generally recorded at BH08 and BH09 in the west of the site. Based on the interpreted groundwater piezometry (Figure 7), BH09 is up-hydraulic gradient of the site and indicates that background groundwater quality is impacted with ammoniacal nitrogen.
- Nitrate: Nitrate was consistently recorded above the DWS of 50 $mg.L^{-1}$ at LG11. Nitrite was also recorded above the DWS at this location.
- Boron: Concentrations of boron above the DWS of 1000 $\mu g.L^{-1}$ were consistently recorded at BH06, BH09, LL6, LG9 and LG11.
- Copper: Sporadic exceedances of the EQS for copper of 13.53 $\mu g.L^{-1}$ were recorded across the site.
- Lead: The concentrations of lead exceed DWS and EQS in the majority of groundwater samples. The highest concentrations (up to 598 $\mu g.L^{-1}$) have been detected in BH06 screened within the NSF below the C17 landfill.
- Manganese has been consistently recorded above the DWS and EQS in the majority of wells.
- Nickel exceeded the calculated EQS of 10.05 $\mu g.L^{-1}$ at all locations with the exception of BH09, LG7, LG9 and LG11. Concentrations were also consistently above the DWS of 20 $\mu g.L^{-1}$ at BH04 and BH06 which are within or down-hydraulic gradient of the C17 landfill.
- Zinc. Concentrations of zinc were consistently recorded above the calculated EQS of 27.74 $\mu g.L^{-1}$ at all groundwater sample locations. The majority of the concentrations were less than 100 $\mu g.L^{-1}$ except at BH06 where concentrations were higher up to 5010 $\mu g.L^{-1}$.

2.6.3 Surface water

Soiltechnics have obtained surface water samples from North Stream of Willow Brook on several occasions:

- July 2020. One sample was obtained from location SP02 downstream of the site.
- January to March 2022. 3No. rounds of monthly samples from 3No. locations: SW1 (upstream), SW2 (downstream) and SW3 (midstream). Location SW2 is from the same location at SP02.

The sample locations are shown on Figure 3. Sample were analysed for ammoniacal nitrogen, sulphate, chloride, cyanide, phenols, metals, PAHs, speciated TPH, BTEX, VOC and SVOC. These data are presented in Table 4 and a summary of detected concentrations is provided in Table G below together with EQS for comparison. The laboratory certificates are presented in Soiltechnics (2020) and in Appendix 4.

Table G: Summary of surface water quality data on site from July 2020 to March 2022

Determinand	Units	Range in detected concentrations	Average conc.	EQS [1]
pH	pH units	8.0 – 8.3	8.2	6 to 9
Total/Complex Cyanide	µg.L^{-1}	<5 – **21**	**9.6**	1
Sulphate as SO4	mg.L^{-1}	60–- 107	91.8	400
Ammoniacal Nitrogen as NH4	µg.L^{-1}	178 – 324	244	389 [2]
Chloride	mg.L^{-1}	55 – 89	73	-
Nitrate	mg.L^{-1}	2.9 – 19.4	12.3	-
Nitrite	mg.L^{-1}	<0.5 – 0.9	<0.5	-
Arsenic	µg.L^{-1}	<5	<5	50
Antimony	µg.L^{-1}	<5	<5	-
Boron	µg.L^{-1}	68 – 788	560	-
Cadmium	µg.L^{-1}	<0.4	<0.4	0.25 [3]
Chromium	µg.L^{-1}	<5	<5	4.7
Copper	µg.L^{-1}	6 – **22**	9.5	13.53 [4]
Lead	µg.L^{-1}	<5 – **7**	<5	5.36 [4]
Manganese	µg.L^{-1}	9 – **305**	63	219.55 [4]
Mercury	µg.L^{-1}	<0.05 – **0.15**	<0.05	0.07
Nickel	µg.L^{-1}	<5	<5	10.05 [4]
Selenium	µg.L^{-1}	<5	<5	-
Zinc	µg.L^{-1}	22–- **120**	**68.2**	27.74 [4]
Acenaphthene	µg.L^{-1}	<0.01–- 0.28	<0.01	-
Fluorene	µg.L^{-1}	<0.01–- 0.56	<0.01	-
Phenanthrene	µg.L^{-1}	<0.01–- 0.89	<0.01	-
Anthracene	µg.L^{-1}	<0.01–- **0.28**	<0.01	0.1

Determinand	Units	Range in detected concentrations	Average conc.	EQS [1]
Fluoranthene	µg.L^{-1}	<0.01–- **0.47**	<0.01	0.0063
Pyrene	µg.L^{-1}	<0.01–- 0.3	<0.01	-
Benzo(a)anthracene	µg.L^{-1}	<0.01–- 0.04	<0.01	-
Chrysene	µg.L^{-1}	<0.01–- 0.03	<0.01	-

1) UK Environmental Quality Standard (EQS) for freshwater (average annual or long-term) unless stated otherwise. UK EQS from https://www.gov.uk/guidance/surface-water-pollution-risk-assessment-for-your-environmental-permit.
2) EQS for ammonia based on a Type 7 river i.e. alkalinity over 200 mg/l CaCO3 (average of Environment Agency monitored values in Willow Book North Deene Park Foot Bridge is 206 mg.L^{-1} CaCO3 [EA, 2022d]).
3) EQS for cadmium depends on hardness of water. Based on Class 5 water body i.e. the hardness is >200 mg CaCO3/l (average of Environment Agency monitored values in Willow Book North Deene Park Foot Bridge is 206 mg.L^{-1} CaCO3 [EA, 2022d]).
4) EQS for copper, lead, nickel and zinc are calculated using m-BAT tool based on a pH of 8.00, DOC of 4.47 mg/l and calcium of 135.61 mg/l (average of Environment Agency monitored values in Willow Book North Deene Park Foot Bridge [EA, 2022d]).

BOLD denotes an exceedance of EQS.

Total phenols, all TPH fractions, BTEX, VOCs and SVOCs (with the exception of one detection of dibenzofuran at the detection limit) are below their respective method detection limits. The metals antimony, arsenic, cadmium, chromium, nickel and selenium are also recorded below their method detection limits.

Lead, mercury and PAHs had concentrations recorded above their respective EQS on one occasion with subsequent monitoring recording concentrations below method detection limits. Concentrations of manganese were all recorded less than the EQS with the exception of one sample from SW1 (upstream) in March 2022.

Concentrations in surface water consistently above the EQS are discussed below:

- Copper: Concentrations of copper at SW3 (midstream sample) were recorded above the EQS in January and February 2022 monitoring rounds. Concentrations in March 2022 were significantly lower and less than the EQS. Concentrations at SW1 (upstream) and SW2 (downstream) were all recorded below the EQS.
- Cyanide: Concentrations of total and complex cyanide were recorded above the method detection limit and EQS in March 2022 at SW1 and for all sampling rounds at SW2 and SW3.
- Zinc: Zinc concentrations were recorded above EQS in February and March 2022 monitoring rounds at SW1 and for all sampling rounds at SW2 and SW3.

3 RISK ASSESSMENT

3.1 Conceptual Site Model

A conceptual site model (CSM) of risk has been developed for the proposal to form a development platform using imported inert waste material to aid future commercial development at the site. This identifies potential sources, pathways and controlled waters receptors and determines which combination of these are plausible linkages. Plausible contaminant linkages are then qualitatively assessed to determine whether the proposed restoration using inert waste material could pose an unacceptable risk to water resources.

3.1.1 Sources

Potential sources of contamination at the site are described below:

Existing Made Ground

The northern part of the site was infilled between 1950 to 1986 (licensed from 1980) with inert and industrial waste. Site investigation data indicates that the majority of infill is reworked natural deposits up to approximately 16 mbgl with occasional thin (0.8m thick) areas of former Iron and Steel Works waste. The southern part of the site (former sludge beds) were used as a landfill from 1984 which was licensed to accept inert, special and liquid sludge waste. This part of the site has approximately 5m of reworked natural deposits overlain by 6 to 10m thickness landfilled waste.

Soil sampling and analysis of the made ground at the site shows that it contains heavy metals, cyanide (predominantly complex) and PAHs and has leachable concentrations of sulphate, cyanide, mercury and fluoranthene that exceed water quality standards.

Groundwater is present beneath the site within the NSF and base of the made ground which are likely to be in hydraulic continuity. Groundwater sampling shows that groundwater beneath the site has elevated concentrations (with respect to water quality standards) of complex cyanide, ammoniacal nitrogen, sulphate, manganese and zinc and more sporadic exceedances of boron, copper, lead and nickel. Whilst the waste deposits on-site (and in particular the C17 landfill) are likely to be a contributor to this groundwater contamination, there is evidence that background concentrations of some substances (in particular ammoniacal nitrogen and cyanide) are also elevated which may be the result of the legacy of landfilling in the wider area.

Imported Inert Material to Cap the Site

It is proposed to raise the level of the site to create a level development platform using approximately 686,000 m^3 of suitable imported inert waste materials. The acceptance protocol and compliance testing regime for the imported waste material are detailed in the Preliminary Construction Management Plan (Storefield, 2021) and are designed to ensure that no unsuitable material is deposited at the site.

The imported inert waste material will be predominantly comprised of construction and demolition waste. Inert waste has low leachability and therefore presents a low hazard to groundwater. Nevertheless, the inert waste is considered as a plausible source (along with the existing made ground).

There is also a proposal to import incinerator bottom ash (IBA). Waste Acceptance Criteria (WAC) tests of representative samples of IBA (included as Appendix 5) show that this material meets the criteria for inert waste landfills with the exception of slight exceedances of antimony, chloride, sulphate and total dissolved solids. Given that groundwater quality beneath the site is currently impacted by the site historical uses (including relatively high concentrations of sulphate and chloride) these exceedances are not considered significant in terms of risk to groundwater and related receptors.

3.2 Pathways

Possible migration pathways of contamination from the identified sources are:

- **Leaching of contaminants to groundwater**. Potential contamination in both the historical waste infill and in the proposed future inert waste could partition to the dissolved phase in pore water in the unsaturated zone. Leached contaminants could then migrate downwards with infiltrating rainwater through the made ground to groundwater in the NSF. Attenuation within the unsaturated zone (retardation, dispersion and biodegradation) will reduce the concentrations and flux of contaminants to groundwater. Dilution with the receiving groundwater will further reduce concentrations.
- **Dissolved phase migration in groundwater**. The available information indicates that groundwater in the made ground and NSF at the site is in hydraulic continuity and flows to the north. The point of discharge for groundwater from the site is not known but could be springs on the escarpment slope at Gretton 2.5 km north of the site or the Northern Stream beyond 1.3 km north east of the site. Groundwater could therefore provide a migration pathway to these surface water bodies.

Attenuation within the saturated zone (retardation, dispersion and biodegradation) will reduce the concentrations of contaminants along the groundwater flow pathway.

The length of time for groundwater to reach the possible surface water discharge points can be estimated using the following equation based on Darcy's Law:

$$t = \frac{L.n_e}{K.i}$$

Where

t = groundwater transit time (d)

L = distance to receptor (m)

n_e = effective porosity

K = hydraulic conductivity ($m.d^{-1}$)

i = hydraulic gradient ($m.m^{-1}$)

Using the average estimated hydraulic conductivity of the NSF (0.22 $m.d^{-1}$) and estimated hydraulic gradient of 0.02 (see Sections 2.5.3 and 2.5.4) and assuming an effective porosity of 0.2 (reasonable for the NSF), groundwater is estimated to take at least 162 years to travel 1.3 km to the nearest plausible surface water receptor. As such, significant attenuation of contamination is likely to occur along the groundwater flow pathway.

- **Discharge to surface water.** Any contamination that does reach surface water via groundwater flow from the site will be diluted by surface water flow, reducing risk further.
- **Induced leachate migration as a result of surcharging with imported material.** Up to 10m thickness of imported material will be emplaced on top of the existing made ground at the site. This is anticipated to compress the existing made ground materials and could result in displacement of leachate within that material. However, the intrusive investigation and subsequent groundwater monitoring conducted by Soiltechnics has shown that, other than the basal 1 or 2m, the made ground is largely dry and as such, displacement of leachate is likely to be minimal and so this pathway is not considered further.

3.3 Receptors

Potential receptors considered for this assessment are water resources and users of those resources. These are discussed below:

- **Groundwater**. The NSF that underlies the site is classified as a Secondary A aquifer. However extensive quarrying activities in the vicinity of the site and wider Corby area have removed significant quantities of the NSF leaving limited thicknesses of these deposits. Furthermore, the presence of historic landfills both on and off the site have impacted background groundwater quality in the NSF. As a result, the NSF in the vicinity of the site is unlikely to be a plausible water supply resource and as such is considered as a pathway rather than a receptor.
- **Groundwater Abstractions / users of Abstractions.** The site is not within a SPZ and there are no licensed groundwater abstractions or SPZs within 2km of the site. Therefore groundwater abstractions are not considered further in this assessment.
- **Surface Water.** Based on groundwater and ground elevations, the nearest plausible surface water receptors are Northern Stream (Willow Brook) approximately 1.3km east of the site or springs 2.5km north of the site which lead to the River Welland. It is noted that both water bodies were classified in 2019 as Moderate for ecological and Fail for chemical quality under the WFD requirements.
- **Surface Water Abstractions / users of Abstractions.** There are no surface water abstractions within 2km of the site and so surface water abstractions are therefore not considered further.

3.4 Plausible Contaminant Linkages

Table H lists the possible source-pathway-receptor combinations and makes a qualitative assessment of the risk from each. Contaminant linkages rated with a risk of “low” are considered highly unlikely to create an unacceptable risk and do not require further consideration. Contaminant linkages rated with a risk of “medium” or “high” require further consideration.

Table H: Assessment of contaminant linkages

Source	Pathway	Receptor	Risk	Justification
Existing made ground (including landfill waste material)	Leaching and dissolved-phase migration and discharge to surface water	Springs / River Welland / Northern Stream (Willow Brook)	Low to **Med**	Groundwater at the site flows to the north and likely discharges either to springs 2.5km north of the site that flow into the River Welland or to the Northern Stream (Willow Brook) beyond 1.3km north east of the site. Based on site data, groundwater is estimated to take at least 162 years to flow to the nearest surface water discharge point and as such significant attenuation of contamination is likely to occur along the groundwater flow pathway. Dilution in the receiving surface water body will further reduce risk.
Future inert waste (including IBA) imported to form development platform	Leaching and dissolved-phase migration and discharge to surface water	Springs / River Welland / Northern Stream (Willow Brook)	Low	The inert waste has a low hazard potential and is unlikely to cause a significant impact to groundwater quality relative to the impact from the existing historic waste. As discussed above, natural attenuation along the groundwater flow path and dilution in surface water will further reduce the risk.

As shown in Table H, the risk to Controlled Waters receptors from the proposed imported inert waste is qualitatively assessed to be low. The risk from the existing made ground (including the C17 landfill) is assessed to be low to medium.

The proposed development of the site for employment use will likely result in much of the site being hard covered thereby reducing infiltration through the existing made ground. This will reduce leaching of contaminants from the waste material and will likely result in an overall betterment of groundwater quality and long-term reduction in risks to Controlled Waters receptors.

4 CONCLUSIONS

As described in Section 1.1 this HRA has been conducted to:

- Assess the risk to Controlled Waters receptors (groundwater and related receptors) from the proposed use of inert waste material (including IBA) to install a development platform; and
- Determine whether the proposed restoration will result in overall betterment of groundwater quality.

The following conclusions are made from the HRA work conducted:

- The site and surrounding area has been extensively quarried for ironstone and subsequently infilled with a variety of materials including reworked natural material and industrial wastes;
- At the site itself the made ground comprises predominantly reworked natural material in the north and landfilled waste overlying reworked natural material in the south. The made ground is underlain by 0.6 to 2.9m thickness of remnant NSF which overlies the Whitby Mudstone Formation;
- Groundwater is present within the base of the made ground and underlying NSF and flows to the north. Based on groundwater and ground elevations, groundwater from the site is likely to discharge to Northern Stream (of Willow Brook) beyond 1.3km north east of the site or springs on the escarpment slope 2.5 km north of the site.
- Soil sampling and analysis of the made ground at the site shows that it contains heavy metals, cyanide (predominantly complex) and PAHs and has leachable concentrations of sulphate, cyanide, mercury and fluoranthene that exceed water quality standards. Groundwater sampling has shown that groundwater quality in the NSF beneath the site has likely been impacted by the historic quarrying and landfilling on and in the vicinity of the site;
- A conceptual site model (CSM) of risk was developed for Controlled Waters receptors. This identified the following plausible source-pathway-receptor combinations:
    - Risk to surface water (Northern Stream / springs) from the existing made ground deposits via leaching and dissolved phase migration in groundwater; and

- Risk to surface water (Northern Stream / springs) from the proposed imported inert waste (including IBA) via leaching and dissolved phase migration in groundwater.

Note that the NSF was considered as a pathway rather than a receptor on the basis of its reduced thickness (as a result of quarrying) and poor background groundwater quality.

- The risk from these linkages was qualitatively assessed to be low to medium for the existing made ground and low for the imported waste. The proposed development is likely to result in a large proportion of the site being hard covered and this will reduce infiltration and leaching from the existing made ground resulting in betterment of groundwater quality and a reduction in risks to Controlled Waters receptors.

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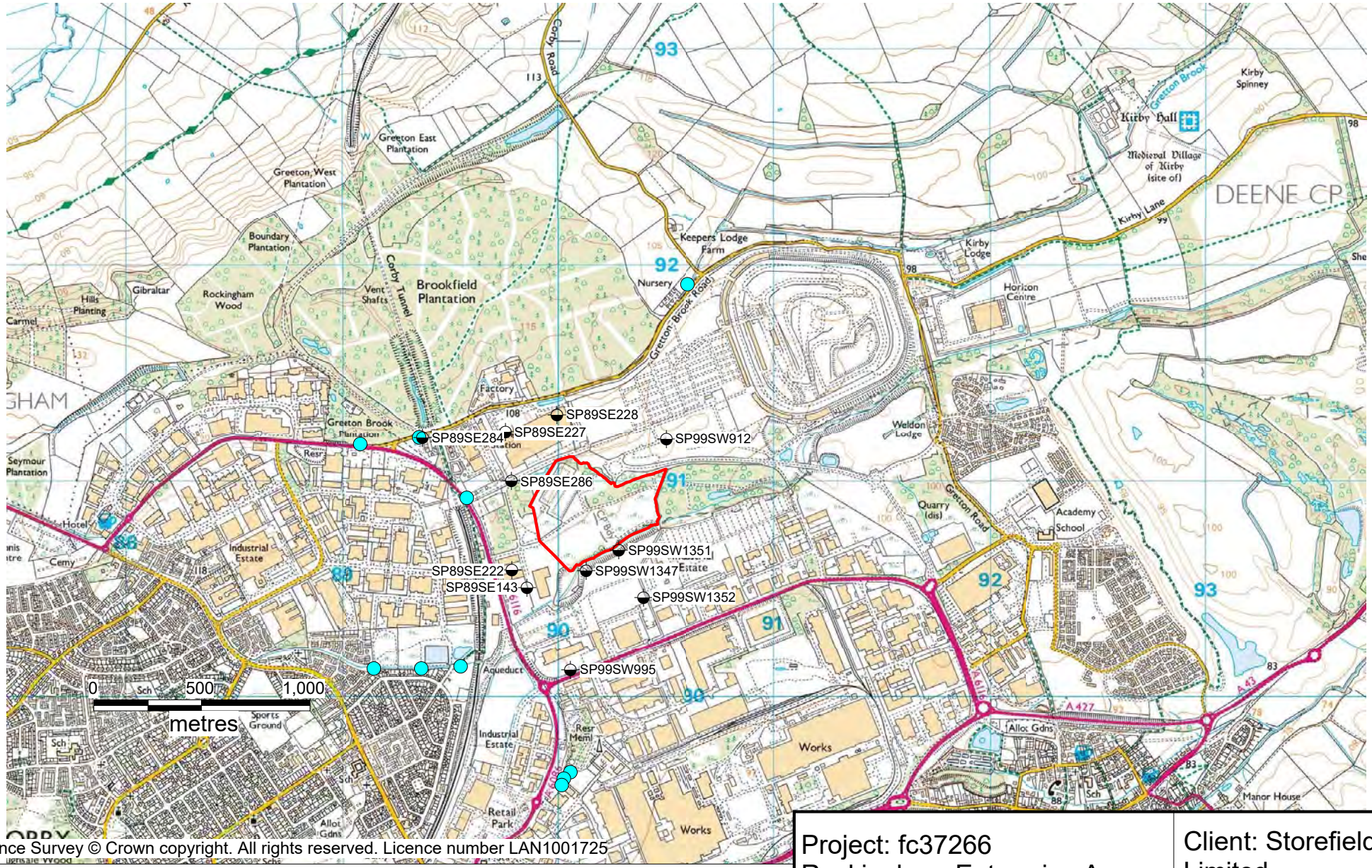
FIGURES



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Site

Licensed discharge consent

Borehole on BGS database

Project: fc37266
Rockingham Enterprise Area

Client: Storefield Group Limited

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environmental risk assessment
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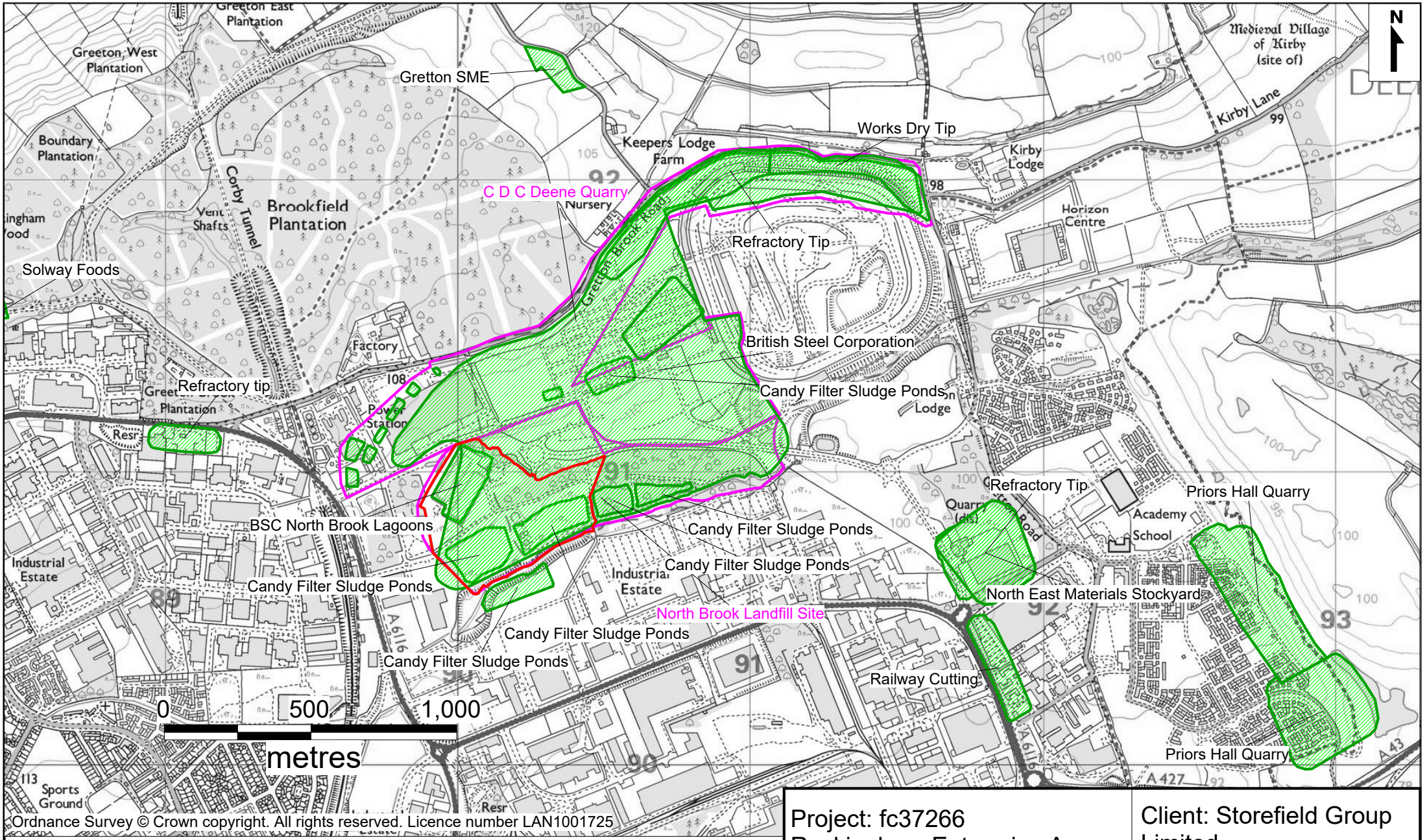
Tel: 0117 379 0022
www.firthconsultants.co.uk

Figure 1

Scale: as shown

Date: 08/06/23

Site location



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Site

Historic landfill

Currently permitted (but closed) landfill site

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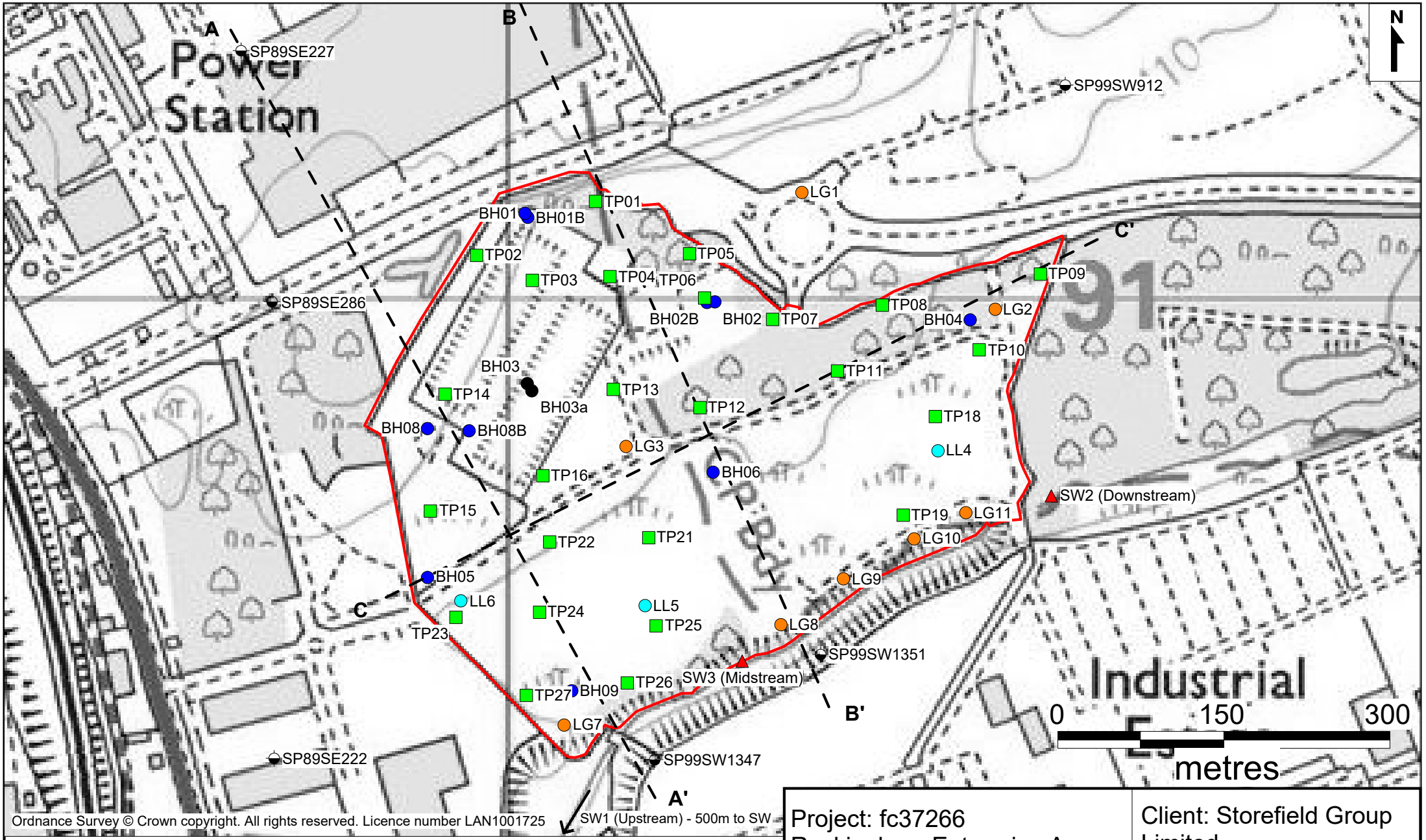
Figure 2

Scale: as shown

Date: 08/06/23

Historic landfills in vicinity of site



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- Borehole on BGS database
- Historic gas monitoring well
- Historic leachate monitoring well
- Soiltechnics trial pit
- Soiltechnics borehole
- Soiltechnics monitoring well
- Site
- Location of cross-section
- Surface water monitoring location

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Figure 3

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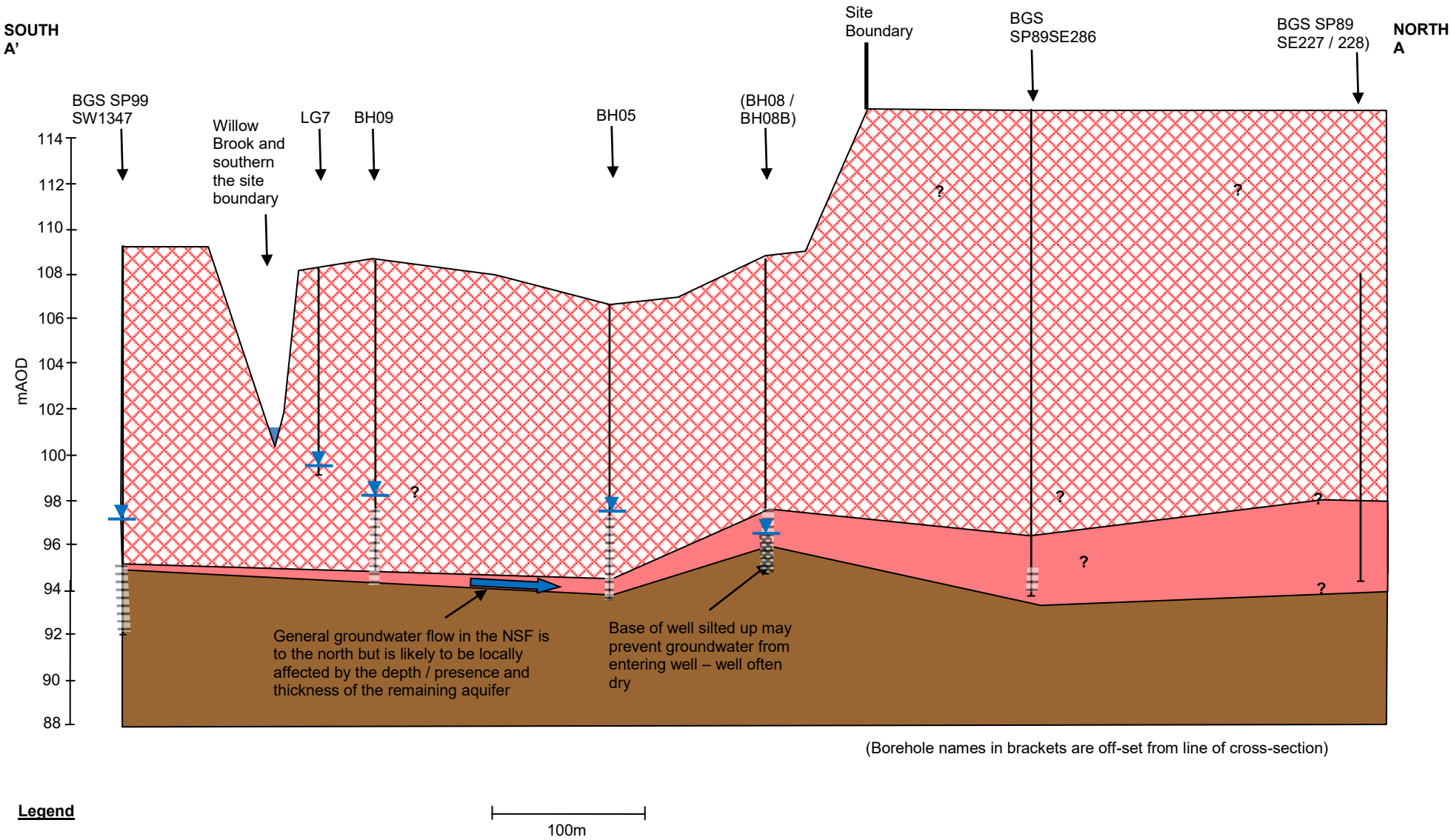
Date: 08/06/23

Site investigation locations



(Borehole names in brackets are off-set from line of cross-section)

Legend

- Made Ground / Infilled Waste
- Northampton Sand Formation (NSF)
- Whitby Mudstone Formation
- Groundwater Level

100m

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Figure 4	South-North (west) Schematic Geological Cross Section (A - A')
Scale: see key	
Date: 08/06/23	

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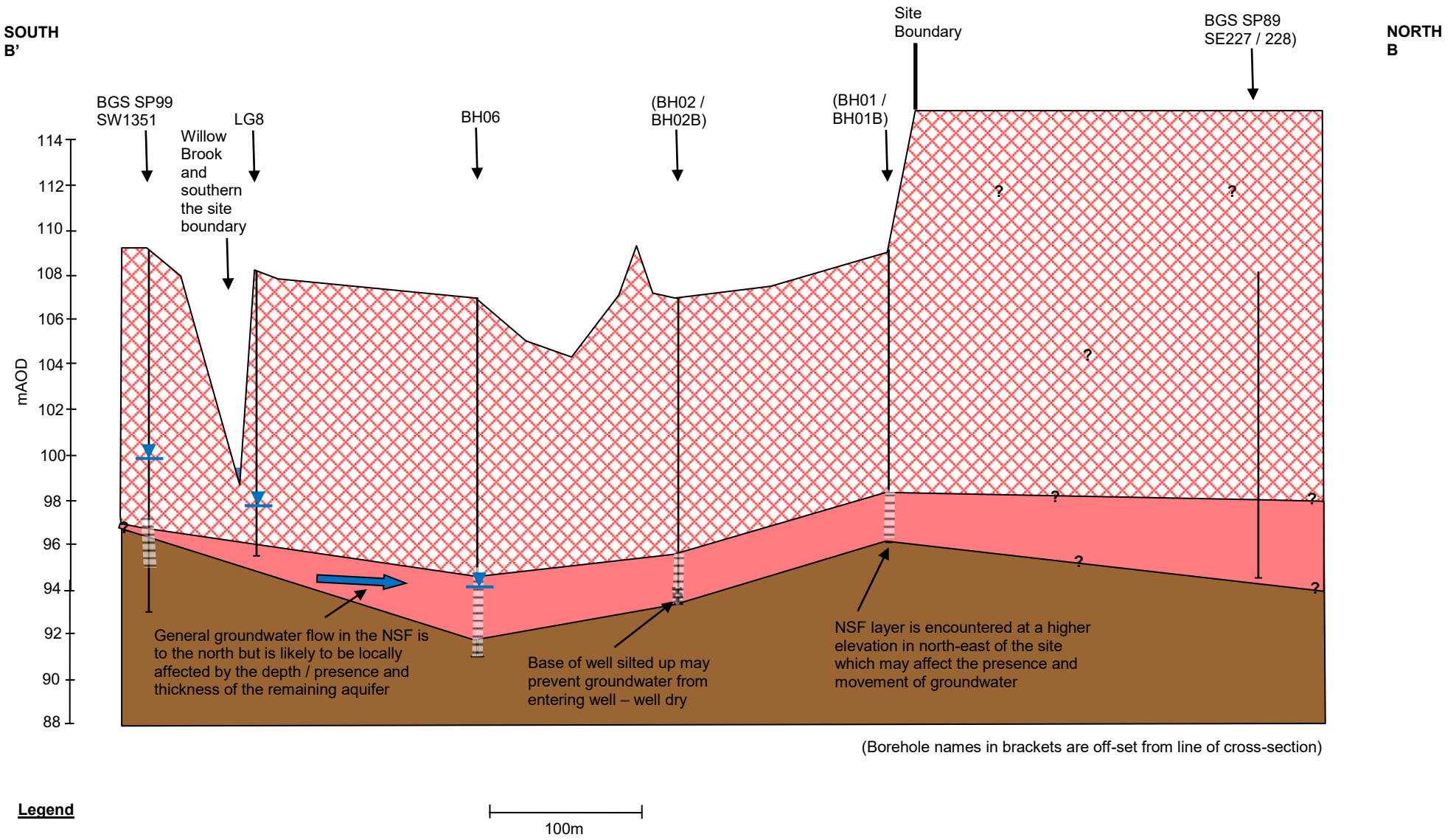

Project: fc37266 Corby	Client: Storefield Group Limited
Figure 5 Scale: see key Date: 08/06/23	South-North (east) Schematic Geological Cross Section (B- B')

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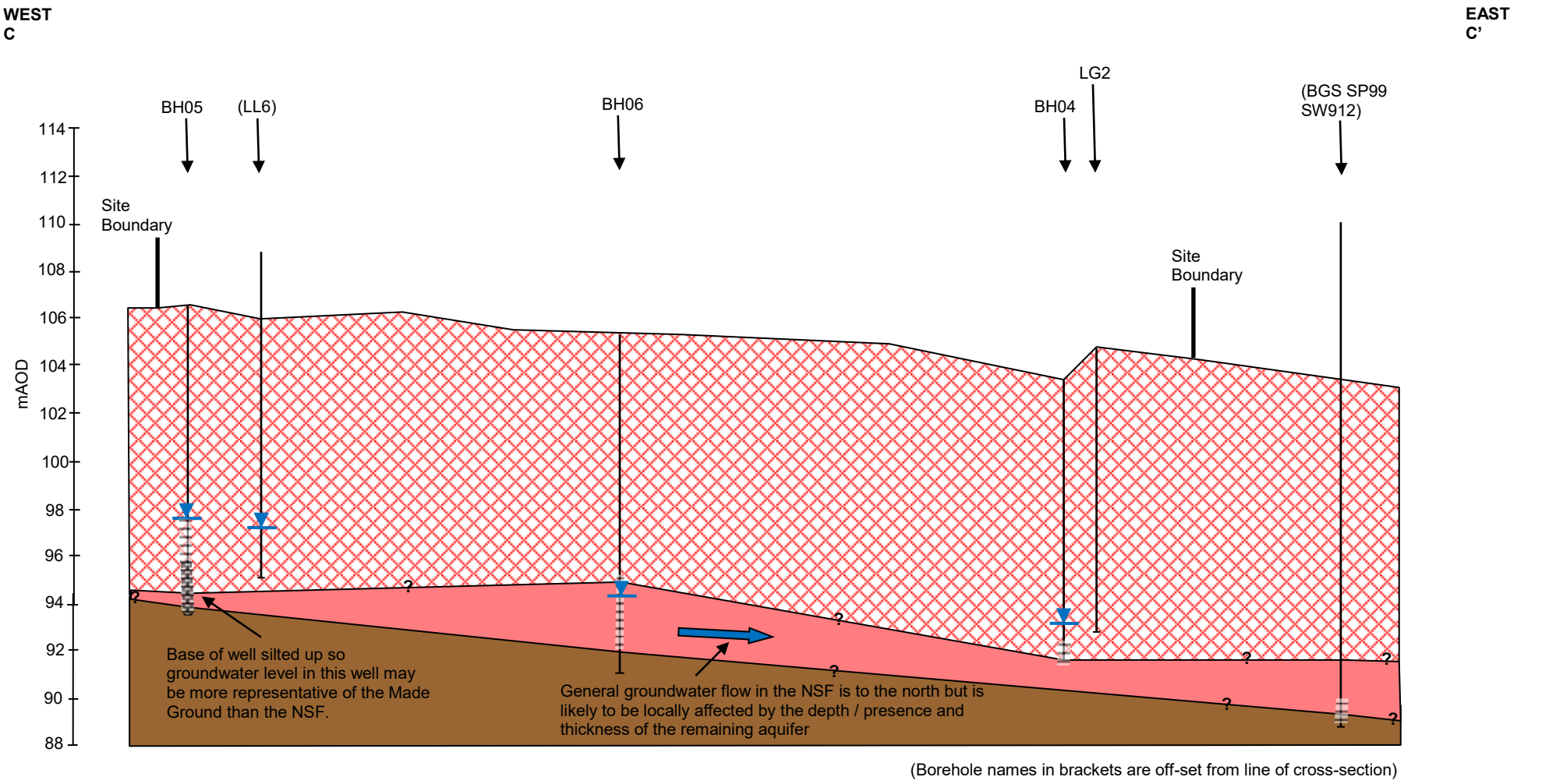

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Figure 6	West - East Schematic Geological Cross Section (C- C')
Scale: see key	
Date: 20/04/23	

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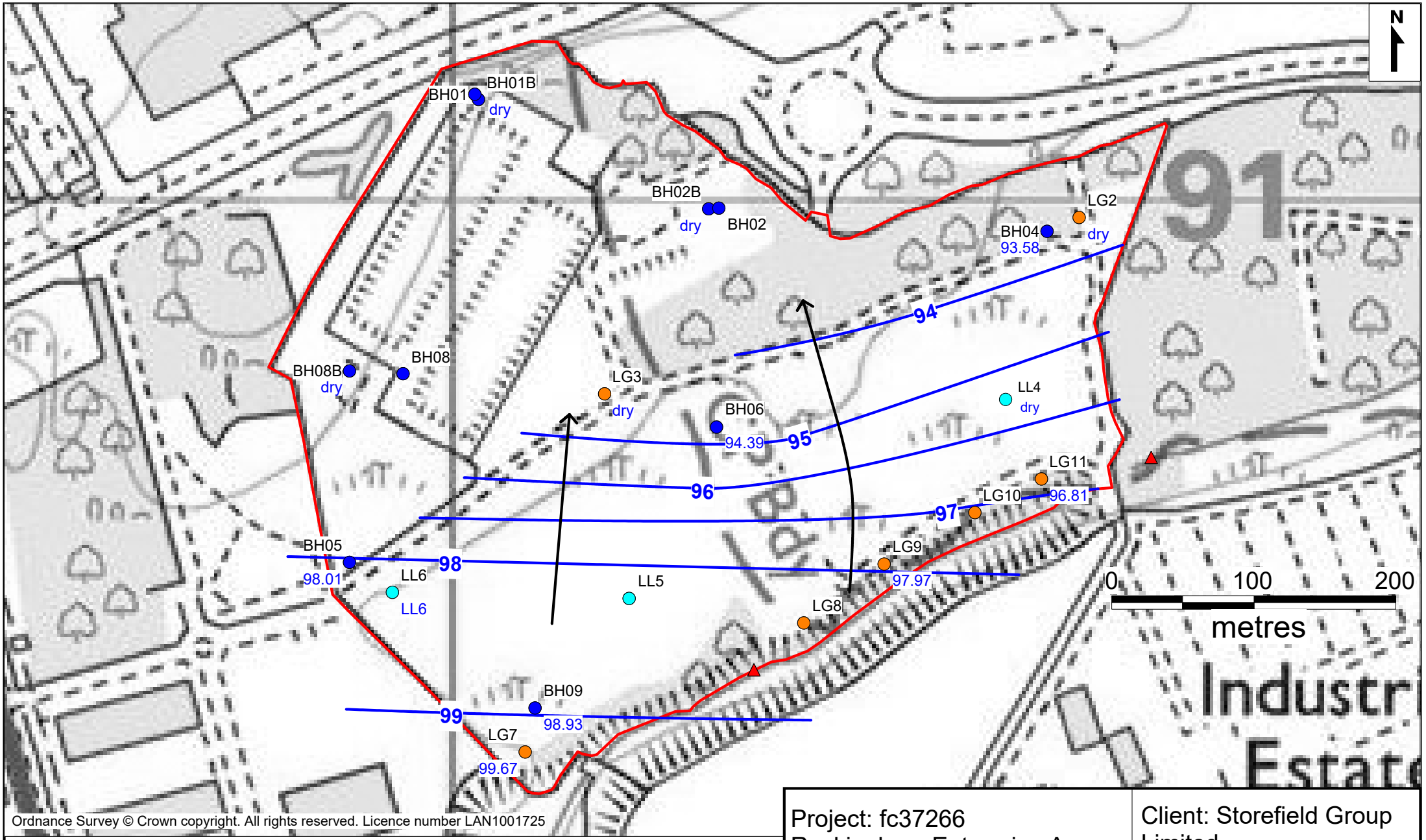

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Site
Historic gas monitoring well
Historic leachate monitoring well
Soiltechnics monitoring well
98.93 Groundwater level on 30/3/23 (mAOD)
Piezometric contour
Surface water monitoring location
Direction of groundwater flow

Project: fc37266
Rockingham Enterprise Area

Client: Storefield Group Limited

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Figure 7

Scale: as shown

Date: 08/06/23

Groundwater piezometry

TABLES

Table 1: Soil Analytical Results

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Sample location			BH05	BH06	BH09	TP03	TP03	TP05	TP09	TP10	TP18	TP19	TP21	TP23	TP23	BH01	BH05	BH09	TP09	TP19	TP20
Depth (m)			11	12	7	1	2	1	3	2	2	1	1	0.7	3.5	0.1	0.1	0.1	0.1	0.1	0.1
Sample date			13/07/20	13/07/20	13/07/20	13/07/20	13/07/20	13/07/20	13/07/20	13/07/20	13/07/20	13/07/20	13/07/20	13/07/20	13/07/20	30/07/20	30/07/20	30/07/20	30/07/20	30/07/20	30/07/20
Determinand	**Unit**																				
pH	pH units		7.4	7.8	7.6	7.7	8	8	8.1	8	7.7	7.8	7.4	8	8.3	8.2	7.7	7.7	8.1	7.9	7.7
Total Cyanide	mg/kg		<2	<2	148	<2	<2	<2	<2	<2	<2	<2	<2	<2	5	<2	9	14	79	14	<2
Complex Cyanide	mg/kg		<2	<2	148	<2	<2	<2	<2	<2	<2	<2	<2	<2	5	<2	9	14	79	7	<2
Free Cyanide	mg/kg		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	7	<2
W/S Sulphate as SO4 (2:1)	mg/l				567	1710				357				948			60			93	29
W/S Sulphate as SO4 (2:1)	g/l				0.57	1.71				0.36				0.95			0.06			0.09	0.03
Sulphide	mg/kg				<5	<5				<5				69			18			16	<5
Organic Matter	%		1.6	1.5	2.9	1.1	1	0.7	0.6	1.8	2	1.2	1.2	1.7	1.7	4.7	9.4	3.3	3.8	7.9	4.7
Loss on ignition at 450oC	%		3.2	2.2			2	2.2	1.4		2.9	2.4	2.3	4.6		7.4		8.7	9.2		
Water soluble Nitrate (2:1) as NO3	mg/kg				<3	<3				5				<3			76			79	55
Water soluble Nitrate (2:1) as NO3	mg/l				<1.5	<1.5				2.3				<1.5			38.1			39.4	27.4
Arsenic	mg/kg		60	63	66	28	21	17	34	40	7	16	6	22	72	19	22	96	79	28	22
Beryllium	mg/kg		<0.5	0.8	3.8	<0.5	<0.5	<0.5	<0.5	1.4	0.8	<0.5	0.7	<0.5	1.1	2	2.4	3.4	3.8	2.3	1.5
W/S Boron	mg/kg		<1	<1	2.7	<1	<1	<1	1.5	4.2	3.3	<1	1.4	1	1.7	<1	<1	3.8	1.6	<1	<1
Cadmium	mg/kg		0.3	0.3	5.8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	9.2	0.7	<0.2
Chromium	mg/kg		22	28	136	23	20	18	12	90	97	32	92	29	117	338	76	153	120	72	36
Chromium (hexavalent)	mg/kg		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Copper	mg/kg		11	14	38	18	16	15	5	29	66	19	51	13	10	150	61	60	43	97	70
Lead	mg/kg		20	21	1010	15	13	12	25	101	86	28	211	16	106	63	138	491	5010	420	95
Mercury	mg/kg		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.7	<1	<1	<1	<1	<1	<1
Nickel	mg/kg		26	33	33	28	21	20	10	67	64	19	48	18	43	17	17	51	34	20	19
Selenium	mg/kg		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Vanadium	mg/kg		47	53	253	30	34	32	25	163	47	49	40	44	234	924	118	320	273	126	63
Zinc	mg/kg		68	86	5030	59	51	42	113	676	976	148	5360	72	609	463	6280	4820	24000	4050	427
Total phenols (monohydric)	mg/kg		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	3	<2	<2	2.8	<2
Naphthalene	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.18	<0.1	<0.1	<0.1	<0.1	0.11	<0.1	<0.1	0.13	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.19	<0.1	<0.1	0.24	<0.1
Acenaphthene	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.29	<0.1	<0.1	0.14	<0.1	<0.1	0.19	<0.1
Fluorene	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.31	<0.1	0.22	<0.1	0.86	<0.1	<0.1	<0.1	0.12	<0.1	0.16	<0.1
Phenanthrene	mg/kg		<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	1.62	1.24	3.25	<0.1	0.55	0.82	0.1	5.22	0.72	0.43	1.95	0.5
Anthracene	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.58	0.26	1.66	<0.1	0.53	0.23	<0.1	1.01	0.11	<0.1	0.56	0.15
Fluoranthene	mg/kg		<0.1	<0.1	0.24	<0.1	<0.1	<0.1	<0.1	1.78	3.08	5.68	0.9	2.6	2.06	0.24	12.6	0.62	0.43	7.58	2.24
Pyrene	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.37	2.73	4.83	0.82	2.93	2	0.24	11.7	0.53	0.3	7.63	2.23
Benzo(a)anthracene	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.58	1.32	2.2	0.37	0.84	1.35	0.17	7.09	0.12	<0.1	5.68	1.43
Chrysene	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.57	1.43	2.44	0.35	0.74	1.27	0.23	4.81	0.17	<0.1	4.29	1.32
Benzo(b)fluoranthene	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.49	2.05	2.37	0.5	1	2.33	0.37	8.16	0.11	<0.1	9.15	2.81
Benzo(k)fluoranthene	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.15	0.63	0.72	<0.1	0.32	0.71	0.11	2.28	<0.1	<0.1	2.28	0.77
Benzo(a)pyrene	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.31	1.5	2.05	0.35	0.82	1.85	0.22	4.88	<0.1	<0.1	5.18	1.94
Indeno(1,2,3-cd)pyrene	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.19	1.35	1.16	0.24	0.45	1.3	0.2	4.77	<0.1	<0.1	5.87	1.45
Dibenz(a,h)anthracene	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.21	0.22	<0.1	<0.1	0.23	<0.1	0.53	<0.1	<0.1	0.67	0.15
Benzo(ghi)perylene	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.16	1.57	1.09	0.26	0.43	1.22	0.17	3.21	<0.1	<0.1	4.04	1.02
Total PAHs	EPA-16		<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	8.3	17.4	27.9	3.8	12.4	15.5	2	66.6	2.6	<1.6	55.5	16

firth consultants

Table 2: Soil Leachate Analytical Results

Sample Location			TP02	TP03	TP10	TP14	TP23	TP25
Depth (m)			1	1	2	2	0.7	2.5
Sample Date			13/07/2020	13/07/2020	13/07/2020	13/07/2020	13/07/2020	13/07/2020
Determinand	**Unit**							
pH	pH units		8.3	8	8	8.5	8.2	8
Total Cyanide	ug/l		<5	<5	15	<5	<5	36
Complex Cyanide	ug/l		<5	<5	15	<5	<5	36
Free Cyanide	ug/l		<5	<5	<5	<5	<5	<5
Sulphate as SO4	ug/l		6	102	26	9	84	315
Sulphide	ug/l		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nitrate as NO3	ug/l		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Arsenic	ug/l		<5	<5	<5	<5	<5	<5
Beryllium	ug/l		<3	<3	<3	<3	<3	<3
Boron	ug/l		27	14	277	8	56	392
Cadmium	ug/l		<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	ug/l		<5	<5	<5	<5	<5	<5
Chromium (hexavalent)	ug/l			<20	<20		<20	
Copper	ug/l		<5	<5	<5	<5	<5	<5
Lead	ug/l		<5	<5	<5	<5	<5	<5
Mercury	ug/l		0.64	0.28	0.18	0.07	0.06	0.06
Nickel	ug/l		<5	<5	<5	<5	<5	<5
Selenium	ug/l		<5	<5	<5	<5	<5	<5
Vanadium	ug/l		<5	<5	<5	<5	<5	<5
Zinc	ug/l		<2	<2	<2	<2	<2	5
Total phenols (monohydric)	ug/l		<10	<10	<10	<10	<10	<10
Naphthalene	ug/l		<0.01	0.02	<0.01	<0.01	<0.01	<0.01
Acenaphthylene	ug/l		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Acenaphthene	ug/l		<0.01	0.03	0.09	0.05	0.07	<0.01
Fluorene	ug/l		<0.01	0.02	0.07	<0.01	0.05	<0.01
Phenanthrene	ug/l		0.08	0.07	0.13	0.09	0.05	0.06
Anthracene	ug/l		0.03	0.03	0.04	0.03	0.02	0.02
Fluoranthene	ug/l		<0.01	0.03	0.06	<0.01	0.02	0.06
Pyrene	ug/l		<0.01	0.02	0.03	<0.01	0.02	0.04
Benzo(a)anthracene	ug/l		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chrysene	ug/l		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(b)fluoranthene	ug/l		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(k)fluoranthene	ug/l		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(a)pyrene	ug/l		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	ug/l		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dibenz(a,h)anthracene	ug/l		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(ghi)perylene	ug/l<		<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Total PAHs	EPA-16		0.11	0.22	0.42	0.17	0.23	0.18

Table 3: Groundwater Analytical Results (2020 to 2023)

			Sample Location		BH04	BH04	BH04	BH04	BH04		BH05	BH05	BH05	BH05		BH06	BH06
			Depth (m)		10.1	10.87	10.74	10.33	9.87		9.18	9.11	8.93	8.99		12.94	13.28
			Sample Date		30/07/20	12/01/22	10/02/22	10/03/22	30/03/23		12/01/22	10/02/22	10/03/22	30/03/23		30/07/20	12/01/22
			Geological Unit		MG & NSF	MG & NSF	MG & NSF	MG & NSF	MG & NSF		MG & NSF	MG & NSF	MG & NSF	MG & NSF		NSF	NSF
		DWS	EQS														
Determinand	**Unit**																
pH	pH Units	6.5 to 9.5	6 to 9		7.6	6.8	7.1	7.1	7		7	7.2	7.1	7.7		7.4	7.1
Total Cyanide	ug/l	50	1		**11**	**22**	**22**	**34**	< 5		< 5	< 5	< 5	**25**		**30**	**34**
Complex Cyanide	ug/l	50	1		**11**	**22**	**22**	**34**	< 5		< 5	< 5	< 5	**25**		**30**	**34**
Free Cyanide	ug/l				<5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		<5	< 5
Sulphate as SO4	mg/l	250	400		2560	2940	3470	5570	1160		1230	1170	1210	3800		1210	1050
Ammoniacal Nitrogen as NH4	ug/l	500	389		**4990**	**9060**	**10300**	**12000**	**450**		**480**	**509**	**529**	**9710**		**3340**	**6810**
Ammonia as NH4	ug/l	500	389		**4990**	**9060**	**10300**	**12000**	**450**		**480**	**509**	**529**	**9710**		**3340**	**6810**
Chloride	mg/l	250			56	66	75	102	8		11	10	11	57		332	135
Nitrate as NO3	mg/l	50			<0.5	0.8	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5	< 0.5		<0.5	< 0.5
Nitrite as NO2	mg/l	0.5			<0.5	< 0.5	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5	< 0.5		<0.5	< 0.5
Phosphate as PO4	mg/l				<1	< 1.0	< 1.0	1.2	< 1.0		< 1.0	< 1.0	< 1.0	< 1.0		<1	< 1.0
Fluoride	mg/l	1.5			<0.5	< 0.5	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5	< 0.5		<0.5	1.1
Total Organic Carbon (TOC)	mg/l				10.7	46.1	48.9	19	13.8		30.9	27.4	12.4	21.8		10	27.8
Chemical Oxygen Demand	mg/l				20	33	35	36	14		17	16	16	22		18	28
Biological Oxygen Demand	mg/l				32	14	< 5	< 5	11		< 5	< 5	< 5	< 5		<5	< 5
Total Suspended Solids	mg/l				3150	1450	616	41800	381		348	628	8040	225		6670	962
Carbonate (Alkalinity as CaCO3)	mg/l				<10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		<10	< 10
Antimony (dissolved)	ug/l	5				< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5			< 5
Arsenic (dissolved)	ug/l	10	50		<5	6	7	7	11		10	8	7	32		<5	46
Boron (dissolved)	ug/l	1000	-		251	799	695	788	748		843	534	730	951		952	3420
Cadmium (dissolved)	ug/l	5	0.25		<0.4	< 0.4	< 0.4	< 0.4	< 0.4		< 0.4	< 0.4	< 0.4	1		<0.4	**3.6**
Chromium (dissolved)	ug/l	50	4.7		<5	< 5	**9**	10	**< 5**		< 5	< 5	< 5	21		<5	**31**
Chromium (hexavalent)	ug/l	-	3.4		<20	< 20	< 20	< 20	< 20		< 20	< 20	< 20	< 20		<20	< 20
Chromium III	ug/l	50	4.7			< 20	< 20	< 20	< 20		< 20	< 20	< 20	< 20			**31**
Copper (dissolved)	ug/l	2000	13.53		**17**	**15**	< 5	< 5	15		6	8	< 5	24		11	**38**
Lead (dissolved)	ug/l	10	5.36		**8**	< 5	**10**	**7**	**18**		< 5	**7**	< 5	**99**		<5	**598**
Manganese (dissolved)	ug/l	50	219.55			**4740**	**4010**	**6300**	**3850**		**3980**	**2960**	**3540**	**9760**			**5130**
Mercury (dissolved)	ug/l	1	0.07		<0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.05	< 0.05	< 0.05	< 0.05		<0.05	< 0.05
Nickel (dissolved)	ug/l	20	10.05		10	**21**	**24**	**27**	**42**		**90**	**49**	**40**	**41**		**13**	**45**
Selenium (dissolved)	ug/l	10	-		<5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	23		<5	20
Zinc (dissolved)	ug/l	-	27.74		**63**	**39**	**60**	**64**	**88**		**50**	**32**	20	**318**		**75**	**5010**
Magnesium (dissolved)	mg/l					93.7	196	142	59.8		54.9	107	67.8	90.7			65.4
Chromium (total)	ug/l					31	< 5	< 5	33		< 5	< 5	6	506			21
Total Phenols (monohydric)	ug/l		7.7		<10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		<10	< 10
Naphthalene	ug/l	-	2		<0.01	< 0.01	< 0.01	< 0.01	0.18		< 0.01	< 0.01	< 0.01	0.3		<0.01	0.01
Acenaphthylene	ug/l	-	-		<0.01	< 0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01		<0.01	< 0.01
Acenaphthene	ug/l	-	-		<0.01	< 0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01		<0.01	< 0.01
Fluorene	ug/l	-	-		<0.01	< 0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01		<0.01	< 0.01
Phenanthrene	ug/l	-	-		<0.01	< 0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01		<0.01	< 0.01
Anthracene	ug/l	-	0.1		<0.01	< 0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01		<0.01	< 0.01
Fluoranthene	ug/l	-	0.0063		<0.01	< 0.01	< 0.01	**0.02**	< 0.01		**0.01**	< 0.01	< 0.01	< 0.01		**0.01**	< 0.01
Pyrene	ug/l	-	-		<0.01	< 0.01	< 0.01	0.02	< 0.01		0.02	< 0.01	0.04	< 0.01		0.01	< 0.01
Benzo(a)anthracene	ug/l	-	-		<0.01	< 0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01		<0.01	< 0.01
Chrysene	ug/l	-	-		<0.01	< 0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01		<0.01	< 0.01
Benzo(b)fluoranthene	ug/l	0.1	-		<0.01	< 0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01		<0.01	< 0.01
Benzo(k)fluoranthene	ug/l	0.1	-		<0.01	< 0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01		<0.01	< 0.01
Benzo(a)pyrene	ug/l	0.01	0.00017		<0.01	< 0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01		<0.01	< 0.01
Indeno(1,2,3-cd)pyrene	ug/l	0.1	-		<0.01	< 0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01		<0.01	< 0.01
Dibenz(a,h)anthracene	ug/l	-	-		<0.01	< 0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01		<0.01	< 0.01
Benzo(ghi)perylene	ug/l	0.1	-		<0.008	< 0.008	< 0.008	< 0.008	< 0.008		< 0.008	< 0.008	< 0.008	< 0.008		<0.008	< 0.008
Total EPA-16 PAHs	ug/l				<0.01	< 0.16	< 0.16	< 0.16	0.18		< 0.16	< 0.16	< 0.16	0.3		0.02	< 0.16
Aliphatic >C5 - C6	ug/l	15000			< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
Aliphatic >C6 - C8	ug/l	15000			< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
Aliphatic >C8 - C10	ug/l	300			< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
Aliphatic >C10 - C12	ug/l	300			< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
Aliphatic >C12 - C16	ug/l	300			< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
Aliphatic >C16 - C21	ug/l	300			< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
Aliphatic >C21 - C34	ug/l	300			< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
Aliphatic (C5 - C34)	ug/l				< 70	< 70	< 70	< 70	< 70		< 70	< 70	< 70	< 70		< 70	< 70
Aromatic >C5 - C7	ug/l	1	10		< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
Aromatic >C7 - C8	ug/l	700	74		< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
Aromatic >C8 - C10	ug/l	300			< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
Aromatic >C10 - C12	ug/l	90			< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
Aromatic >C12 - C16	ug/l	90			< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
Aromatic >C16 - C21	ug/l	90			< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
Aromatic >C21 - C35	ug/l	90			< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
Aromatic (C5 - C35)	ug/l				< 70	< 70	< 70	< 70	< 70		< 70	< 70	< 70	< 70		< 70	< 70
Total >C5 - C35	ug/l				< 140	< 140	< 140	< 140	< 140		< 140	< 140	< 140	< 140		< 140	< 140
Benzene	ug/l	1	10		< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1		< 1	< 1
Toluene	ug/l	700	74		< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Ethylbenzene	ug/l	300			< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
p & m-xylene	ug/l	500			< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
o-xylene	ug/l	500			< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
MTBE	ug/l	15			< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
Dichlorodifluoromethane	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Vinyl Chloride	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Chloromethane	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Chloroethane	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Bromomethane	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Trichlorofluoromethane	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
1,1-Dichloroethene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
MTBE	ug/l				< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
trans-1,2-Dichloroethene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
1,1-Dichloroethane	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
cis-1,2-Dichloroethene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
2,2-Dichloropropane	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Chloroform	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Bromochloromethane	ug/l				< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
1,1,1-Trichloroethane	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
1,1-Dichloropropene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Carbon Tetrachloride	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
1,2-Dichloroethane	ug/l				< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10

Table 3: Groundwater Analytical Results (2020 to 2023)

			Sample Location		BH04	BH04	BH04	BH04	BH04		BH05	BH05	BH05	BH05		BH06	BH06
			Depth (m)		10.1	10.87	10.74	10.33	9.87		9.18	9.11	8.93	8.99		12.94	13.28
			Sample Date		30/07/20	12/01/22	10/02/22	10/03/22	30/03/23		12/01/22	10/02/22	10/03/22	30/03/23		30/07/20	12/01/22
			Geological Unit		MG & NSF	MG & NSF	MG & NSF	MG & NSF	MG & NSF		MG & NSF	MG & NSF	MG & NSF	MG & NSF		NSF	NSF
		DWS	EQS														
Benzene	ug/l				< 1	< 1	< 1	< 1	< 1		< 1	< 1	< 1	< 1		< 1	< 1
1,2-Dichloropropane	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Trichloroethene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Bromodichloromethane	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Dibromomethane	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
TAME	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
cis-1,3-Dichloropropene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Toluene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
trans-1,3-Dichloropropene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
1,1,2-Trichloroethane	ug/l				< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
1,3-Dichloropropane	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Tetrachloroethene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Dibromochloromethane	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
1,2-Dibromoethane	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Chlorobenzene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
1,1,1,2-Tetrachloroethane	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Ethyl Benzene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
m,p-Xylene	ug/l				< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
o-Xylene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Styrene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Bromoform	ug/l				< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
Isopropylbenzene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
1,1,2,2-Tetrachloroethane	ug/l				< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
1,2,3-Trichloropropane	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
n-Propylbenzene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Bromobenzene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
2-Chlorotoluene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
1,3,5-Trimethylbenzene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
4-Chlorotoluene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
tert-Butylbenzene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
1,2,4-Trimethylbenzene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
sec-Butylbenzene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
p-Isopropyltoluene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
1,3-Dichlorobenzene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
1,4-Dichlorobenzene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
n-Butylbenzene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
1,2-Dichlorobenzene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
1,2-Dibromo-3-chloropropane	ug/l				< 10	< 10	< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10
Hexachlorobutadiene	ug/l				< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5
Phenol	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
1,2,4-Trichlorobenzene	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
2-Nitrophenol	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
Nitrobenzene	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
0-Cresol	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
bis(2-chloroethoxy)methane	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
bis(2-chloroethyl)ether	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
2,4-Dichlorophenol	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
2-Chlorophenol	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
1,3-Dichlorobenzene	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
1,4-Dichlorobenzene	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
1,2-Dichlorobenzene	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
2,4-Dimethylphenol	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
Isophorone	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
Hexachloroethane	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
p-Cresol	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
2,4,6-Trichlorophenol	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
2,4,5-Trichlorophenol	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
2-Nitroaniline	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
4-Chloro-3-methylphenol	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
2-Methylnaphthalene	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
Hexachlorocyclopentadiene	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
Hexachlorobutadiene	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
2,6-Dinitrotoluene	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
Dimethyl phthalate	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
2-Chloronaphthalene	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
4-Chloroanaline	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
4-Nitrophenol	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
4-Chlorophenyl phenyl ether	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
3-Nitroaniline	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
4-Nitroaniline	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
4-Bromophenyl phenyl ether	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
Hexachlorobenzene	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
2,4-Dinitrotoluene	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
Diethyl phthalate	ug/l	15000			<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
Dibenzofuran	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
Azobenzene	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
Dibutyl phthalate	ug/l	900			<0.1	< 0.1	< 0.1	0.3	< 0.1		< 0.1	< 0.1	< 0.1	7.4		<0.1	< 0.1
Carbazole	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
bis(2-ethylhexyl)phthalate	ug/l	5.6	1.3		<0.1	< 0.1	< 0.1	0.2	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
Benzyl butyl phthalate	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
Di-n-octyl phthalate	ug/l				<0.1	< 0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1	< 0.1		<0.1	< 0.1
TICs																	
Benzene, 2,4-dimethyl-1-(phenylmethyl)-	ug/l										0.4						
Benzene, 1-methyl-2-[(3-methylphenyl)methyl]-	ug/l										0.2						
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione	ug/l																
Cyclic Octaatomic sulfur	µg/l																
6-Tertradecanesulfonic acid, butyl ester	µg/l																

Notes:
MG = Made Ground
NSF = Northamton Sand Formation
Underlined denotes an exceedance of DWS
BOLD denotes an exceedance of EQS

			Sample Location		BH06	BH06	BH06	BH06	BH06	BH06	BH06		BH08		BH09	BH09	BH09
			Depth (m)		12.98	13.24	12.96	13	13.12	12.74	12.94		14.41		10.44	10.58	10.57
			Sample Date		10/02/22	10/03/22	09/09/22	14/10/22	18/11/22	14/12/22	30/03/23		30/07/20		30/07/20	12/01/22	10/02/22
			Geological Unit		NSF	NSF	NSF	NSF	NSF	NSF	NSF		MG		MG & NSF	MG & NSF	MG & NSF
		DWS	EQS														
Determinand	**Unit**																
pH	pH Units	6.5 to 9.5	6 to 9		7.3	7.2	7.1	6.8	7.2	7	7.7		6.9		7.3	6.9	7.1
Total Cyanide	ug/l	50	1		**34**	**31**	**35**	**43**	**33**	**22**	< 5		**8**		**188**	**203**	**181**
Complex Cyanide	ug/l	50	1		**34**	**31**	**35**	**43**	**33**	**22**	< 5		**8**		**188**	**203**	**181**
Free Cyanide	ug/l				< 5	< 5	< 5	< 5	< 5	< 5	< 5		<5		<5	< 5	< 5
Sulphate as SO4	mg/l	250	400		1080	1060	1010	1030	578	1020	1170		2010		1640	1410	1650
Ammoniacal Nitrogen as NH4	ug/l	500	389		**10000**	**10300**	**13600**	**13700**	**2170**	157	**253**		**190000**		**70100**	**43800**	**40500**
Ammonia as NH4	ug/l	500	389		**10000**	**10300**	**13600**	**13700**	**2170**	157	**253**		**190000**		**70100**	**43800**	**40500**
Chloride	mg/l	250			141	139	127	134	40	90	8		394		98	90	88
Nitrate as NO3	mg/l	50			1.7	1.1	3	2.9	29.4	31.1	< 0.5		<0.5		<0.5	< 0.5	< 0.5
Nitrite as NO2	mg/l	0.5			< 0.5	< 0.5	1.8	< 0.5	< 0.5	< 0.5	< 0.5		<0.5		<0.5	< 0.5	< 0.5
Phosphate as PO4	mg/l				< 1.0	< 1.0	3	< 1.0	< 1.0	< 1.0	< 1.0		<1		<1	< 1.0	< 1.0
Fluoride	mg/l	1.5			1.2	0.7	0.6	< 0.5	1.4	1.2	< 0.5		<0.5		<0.5	< 0.5	< 0.5
Total Organic Carbon (TOC)	mg/l				22.7	11.8	8.2	19.1	53.3	52.9	25.5		8.2		16.4	27	20.9
Chemical Oxygen Demand	mg/l				32	20	30	23	27	32	22		94		33	42	41
Biological Oxygen Demand	mg/l				< 5	< 5	< 5	6	< 5	< 5	< 5		<5		<5	< 5	< 5
Total Suspended Solids	mg/l				736	246	3100	224	1740	268	307		25700		3550	579	330
Carbonate (Alkalinity as CaCO3)	mg/l				< 10	< 10	< 10	< 10	< 10	< 10	< 10		<10		<10	< 10	< 10
Antimony (dissolved)	ug/l	5			< 5	< 5	< 5	< 5	< 5	< 5	< 5					< 5	< 5
Arsenic (dissolved)	ug/l	10	50		6	8	17	12	< 5	< 5	16		<5		<5	< 5	< 5
Boron (dissolved)	ug/l	1000	-		2430	3130	2960	1860	5280	8530	5280		258		1180	2330	1960
Cadmium (dissolved)	ug/l	5	0.25		**0.4**	< 0.4	**1**	**0.6**	< 0.4	< 0.4	0.9		<0.4		<0.4	< 0.4	< 0.4
Chromium (dissolved)	ug/l	50	4.7		**5**	**7**	**22**	< 5	< 5	**9**	< 5		<5		<5	< 5	< 5
Chromium (hexavalent)	ug/l	-	3.4		< 20	< 20	< 20	< 20	< 20	< 20	< 20		<20		<20	< 20	< 20
Chromium III	ug/l	50	4.7		< 20	< 20	**22**	< 20	< 20	< 20	< 20					< 20	< 20
Copper (dissolved)	ug/l	2000	13.53		6	7	**19**	**16**	6	< 5	20		11		12	8	< 5
Lead (dissolved)	ug/l	10	5.36		**57**	**80**	**305**	**120**	**6**	< 5	**116**		5		5	**6**	< 5
Manganese (dissolved)	ug/l	50	219.55		**1490**	**2650**					571					**5610**	**5320**
Mercury (dissolved)	ug/l	1	0.07		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		<0.05		<0.05	< 0.05	< 0.05
Nickel (dissolved)	ug/l	20	10.05		**15**	**18**	**26**	**11**	7	7	14		**14**		9	7	8
Selenium (dissolved)	ug/l	10	-		< 5	< 5	8	7	< 5	48	15		<5		<5	< 5	< 5
Zinc (dissolved)	ug/l	-	27.74		**455**	**529**	**3840**	**619**	**77**	**137**	**1260**		**65**		**49**	**44**	**32**
Magnesium (dissolved)	mg/l				126	68.7	52.4	47.3	87	182	134					65.2	138
Chromium (total)	ug/l				6	6	668	131	251	131	245					16	< 5
Total Phenols (monohydric)	ug/l		7.7		< 10	< 10	< 10	< 10	**23**	**10**	< 10		<10		<10	< 10	< 10
Naphthalene	ug/l	-	2		< 0.01	< 0.01	0.03	< 0.01	< 0.01	< 0.01	< 0.01		<0.01		<0.01	< 0.01	< 0.01
Acenaphthylene	ug/l	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		<0.01		<0.01	< 0.01	< 0.01
Acenaphthene	ug/l	-	-		< 0.01	< 0.01	< 0.01	< 0.01	0.03	< 0.01	< 0.01		<0.01		<0.01	< 0.01	< 0.01
Fluorene	ug/l	-	-		< 0.01	< 0.01	< 0.01	< 0.01	0.02	< 0.01	< 0.01		<0.01		<0.01	< 0.01	< 0.01
Phenanthrene	ug/l	-	-		0.01	< 0.01	< 0.01	0.07	0.03	< 0.01	< 0.01		<0.01		<0.01	< 0.01	< 0.01
Anthracene	ug/l	-	0.1		< 0.01	< 0.01	< 0.01	0.03	< 0.01	< 0.01	< 0.01		<0.01		<0.01	< 0.01	< 0.01
Fluoranthene	ug/l	-	0.0063		**0.02**	< 0.01	< 0.01	**0.04**	**0.02**	< 0.01	< 0.01		<0.01		<0.01	< 0.01	< 0.01
Pyrene	ug/l	-	-		0.02	0.01	< 0.01	0.03	0.01	< 0.01	< 0.01		<0.01		<0.01	< 0.01	< 0.01
Benzo(a)anthracene	ug/l	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		<0.01		<0.01	< 0.01	< 0.01
Chrysene	ug/l	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		<0.01		<0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	ug/l	0.1	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		<0.01		<0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	ug/l	0.1	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		<0.01		<0.01	< 0.01	< 0.01
Benzo(a)pyrene	ug/l	0.01	0.00017		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		<0.01		<0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	ug/l	0.1	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		<0.01		<0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	ug/l	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		<0.01		<0.01	< 0.01	< 0.01
Benzo(ghi)perylene	ug/l	0.1	-		< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008		<0.008		<0.008	< 0.008	< 0.008
Total EPA-16 PAHs	ug/l				< 0.16	< 0.16	< 0.16	0.17	< 0.16	< 0.16	< 0.16		<0.01		<0.01	< 0.16	< 0.16
Aliphatic >C5 - C6	ug/l	15000			< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
Aliphatic >C6 - C8	ug/l	15000			< 10	< 10	< 10	< 10	< 10	< 10	< 10		11		< 10	< 10	< 10
Aliphatic >C8 - C10	ug/l	300			< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
Aliphatic >C10 - C12	ug/l	300			< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
Aliphatic >C12 - C16	ug/l	300			< 10	< 10	< 10	< 10	15	< 10	< 10		< 10		< 10	< 10	< 10
Aliphatic >C16 - C21	ug/l	300			< 10	< 10	< 10	< 10	12	< 10	< 10		< 10		< 10	< 10	< 10
Aliphatic >C21 - C34	ug/l	300			< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
Aliphatic (C5 - C34)	ug/l				< 70	< 70	< 70	< 70	< 70	< 70	< 70		< 70		< 70	< 70	< 70
Aromatic >C5 - C7	ug/l	1	10		< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
Aromatic >C7 - C8	ug/l	700	74		< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
Aromatic >C8 - C10	ug/l	300			< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
Aromatic >C10 - C12	ug/l	90			< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
Aromatic >C12 - C16	ug/l	90			< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
Aromatic >C16 - C21	ug/l	90			< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
Aromatic >C21 - C35	ug/l	90			< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
Aromatic (C5 - C35)	ug/l				< 70	< 70	< 70	< 70	< 70	< 70	< 70		< 70		< 70	< 70	< 70
Total >C5 - C35	ug/l				< 140	< 140	< 140	< 140	< 140	< 140	< 140		< 140		< 140	< 140	< 140
Benzene	ug/l	1	10		< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1		< 1	< 1	< 1
Toluene	ug/l	700	74		< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Ethylbenzene	ug/l	300			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
p & m-xylene	ug/l	500			< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
o-xylene	ug/l	500			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
MTBE	ug/l	15			< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
Dichlorodifluoromethane	ug/l				< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Vinyl Chloride	ug/l				< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Chloromethane	ug/l				< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Chloroethane	ug/l				< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Bromomethane	ug/l				< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Trichlorofluoromethane	ug/l				< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
1,1-Dichloroethene	ug/l				< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
MTBE	ug/l				< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
trans-1,2-Dichloroethene	ug/l				< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
1,1-Dichloroethane	ug/l				< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
cis-1,2-Dichloroethene	ug/l				< 5	< 5	< 5	< 5	< 5	< 5	< 5		11		< 5	< 5	< 5
2,2-Dichloropropane	ug/l				< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Chloroform	ug/l				< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Bromochloromethane	ug/l				< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
1,1,1-Trichloroethane	ug/l				< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
1,1-Dichloropropene	ug/l				< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Carbon Tetrachloride	ug/l				< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
1,2-Dichloroethane	ug/l				< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10

Table 3: Groundwater Analytical Results (2020 to 2023)

			Sample Location	BH06	BH06	BH06	BH06	BH06	BH06	BH06		BH08		BH09	BH09	BH09
			Depth (m)	12.98	13.24	12.96	13	13.12	12.74	12.94		14.41		10.44	10.58	10.57
			Sample Date	10/02/22	10/03/22	09/09/22	14/10/22	18/11/22	14/12/22	30/03/23		30/07/20		30/07/20	12/01/22	10/02/22
			Geological Unit	NSF	NSF	NSF	NSF	NSF	NSF	NSF		MG		MG & NSF	MG & NSF	MG & NSF
		DWS	EQS													
Benzene	ug/l			< 1	< 1	< 1	< 1	< 1	< 1	< 1		< 1		< 1	< 1	< 1
1,2-Dichloropropane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Trichloroethene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Bromodichloromethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Dibromomethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
TAME	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
cis-1,3-Dichloropropene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Toluene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
trans-1,3-Dichloropropene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
1,1,2-Trichloroethane	ug/l			< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
1,3-Dichloropropane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Tetrachloroethene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Dibromochloromethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
1,2-Dibromoethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Chlorobenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
1,1,1,2-Tetrachloroethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Ethyl Benzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
m,p-Xylene	ug/l			< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
o-Xylene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Styrene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Bromoform	ug/l			< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
Isopropylbenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
1,1,2,2-Tetrachloroethane	ug/l			< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
1,2,3-Trichloropropane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
n-Propylbenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Bromobenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
2-Chlorotoluene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
1,3,5-Trimethylbenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
4-Chlorotoluene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
tert-Butylbenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
1,2,4-Trimethylbenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
sec-Butylbenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
p-Isopropyltoluene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
1,3-Dichlorobenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
1,4-Dichlorobenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
n-Butylbenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
1,2-Dichlorobenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	ug/l			< 10	< 10	< 10	< 10	< 10	< 10	< 10		< 10		< 10	< 10	< 10
Hexachlorobutadiene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5		< 5	< 5	< 5
Phenol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
2-Nitrophenol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
Nitrobenzene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
0-Cresol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
bis(2-chloroethoxy)methane	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
bis(2-chloroethyl)ether	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
2,4-Dichlorophenol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
2-Chlorophenol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
1,3-Dichlorobenzene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
1,2-Dichlorobenzene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
2,4-Dimethylphenol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
Isophorone	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
Hexachloroethane	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
p-Cresol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
2-Nitroaniline	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
2-Methylnaphthalene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
Hexachlorobutadiene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
Dimethyl phthalate	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
2-Chloronaphthalene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
4-Chloroanaline	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
4-Nitrophenol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
4-Chlorophenyl phenyl ether	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
3-Nitroaniline	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
4-Nitroaniline	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
4-Bromophenyl phenyl ether	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
Hexachlorobenzene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
Diethyl phthalate	ug/l	15000		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
Dibenzofuran	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
Azobenzene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
Dibutyl phthalate	ug/l	900		< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	20.3		<0.1		<0.1	< 0.1	< 0.1
Carbazole	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
bis(2-ethylhexyl)phthalate	ug/l	5.6	1.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
Benzyl butyl phthalate	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
Di-n-octyl phthalate	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1		<0.1		<0.1	< 0.1	< 0.1
TICs																
Benzene, 2,4-dimethyl-1-(phenylmethyl)-	ug/l															
Benzene, 1-methyl-2-[(3-methylphenyl)methyl]-	ug/l															
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione	ug/l															
Cyclic Octaatomic sulfur	ug/l							0.8								
6-Tertradecanesulfonic acid, butyl ester	ug/l							2.6								

Notes:
MG = Made Ground
NSF = Northamton Sand Formation
Underlined denotes an exceedance of DWS
BOLD denotes an exceedance of EQS

			Sample Location		BH09	BH09		LG7		LG9	LG9	LG9		LG11	LG11		LL6	LL6	LL6
			Depth (m)		10.19	9.72		8.75		10.24	10.48	9.91		10.8	10.18		12.26	11.93	11.74
			Sample Date		10/03/22	30/03/23		10/03/22		12/01/22	10/02/22	10/03/22		12/01/22	10/03/22		12/01/22	10/02/22	10/03/22
			Geological Unit		MG & NSF	MG & NSF		MG		MG	MG	MG		MG	MG		MG	MG	MG
		DWS	EQS																
Determinand	**Unit**																		
pH	pH Units	6.5 to 9.5	6 to 9		7	7.8		6.8		8.1	8.7	7.5		7.4	7.3		7.2	7.2	7.2
Total Cyanide	ug/l	50	1		**211**	**93**		**209**		**76**	**50**	**97**		**115**	**122**		< 5	< 5	**6**
Complex Cyanide	ug/l	50	1		**211**	**93**		**209**		**76**	**50**	**97**		**115**	**122**		< 5	< 5	**6**
Free Cyanide	ug/l				< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
Sulphate as SO4	mg/l	250	400		1640	1870		2180		703	538	1440		690	633		2120	2070	2090
Ammoniacal Nitrogen as NH4	ug/l	500	389		**49700**	**60100**		**639**		**7540**	**1770**	**22500**		**585**	269		**15200**	**17100**	**15500**
Ammonia as NH4	ug/l	500	389		**49700**	**60100**		**639**		**7540**	**1770**	**22500**		**585**	269		**15200**	**17100**	**15500**
Chloride	mg/l	250			87	79		220		26	19	40		240	242		13	12	12
Nitrate as NO3	mg/l	50			< 0.5	< 0.5		1.7		6	9.7	2.6		109	267		3.1	3.3	1.6
Nitrite as NO2	mg/l	0.5			< 0.5	< 0.5		< 0.5		< 0.5	**1.1**	< 0.5		**3.8**	4.5		< 0.5	< 0.5	< 0.5
Phosphate as PO4	mg/l				< 1.0	< 1.0		< 1.0		< 1.0	< 1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Fluoride	mg/l	1.5			< 0.5	< 0.5		< 0.5		5.3	6.1	1.8		< 0.5	< 0.5		< 0.5	< 0.5	< 0.5
Total Organic Carbon (TOC)	mg/l				13.7	22.7		12.7		25.9	25.1	11.2		21.2	10.7		25.7	20	8.3
Chemical Oxygen Demand	mg/l				43	48		36		12	15	25		44	41		19	25	28
Biological Oxygen Demand	mg/l				< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	11	< 5
Total Suspended Solids	mg/l				6190	615		10200		76	382	1910		98	128		598	349	4990
Carbonate (Alkalinity as CaCO3)	mg/l				< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	< 10
Antimony (dissolved)	ug/l	5			< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
Arsenic (dissolved)	ug/l	10	50		< 5	8		< 5		< 5	< 5	< 5		< 5	< 5		5	< 5	< 5
Boron (dissolved)	ug/l	1000	-		2730	1930		2010		5330	3780	4810		1140	1590		2170	1860	2520
Cadmium (dissolved)	ug/l	5	0.25		< 0.4	2.1		< 0.4		< 0.4	< 0.4	< 0.4		< 0.4	< 0.4		**0.5**	< 0.4	< 0.4
Chromium (dissolved)	ug/l	50	4.7		< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
Chromium (hexavalent)	ug/l	-	3.4		< 20	< 20		< 20		< 20	< 20	< 20		< 20	< 20		< 20	< 20	< 20
Chromium III	ug/l	50	4.7		< 20	< 20		< 20		< 20	< 20	< 20		< 20	< 20		< 20	< 20	< 20
Copper (dissolved)	ug/l	2000	13.53		< 5	13		9		**23**	< 5	**29**		**51**	**18**		**40**	**13**	**22**
Lead (dissolved)	ug/l	10	5.36		< 5	58		< 5		< 5	< 5	< 5		< 5	< 5		**22**	**15**	**16**
Manganese (dissolved)	ug/l	50	219.55		**5190**	**2030**		1240		**4700**	**3840**	**10000**		35	58		**4110**	**3980**	**4380**
Mercury (dissolved)	ug/l	1	0.07		< 0.05	< 0.05		< 0.05		< 0.05	< 0.05	< 0.05		< 0.05	< 0.05		< 0.05	< 0.05	< 0.05
Nickel (dissolved)	ug/l	20	10.05		8	8		7		< 5	5	10		< 5	< 5		**17**	**16**	**20**
Selenium (dissolved)	ug/l	10	-		< 5	10		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
Zinc (dissolved)	ug/l	-	27.74		27	**122**		**56**		**60**	**54**	**64**		**129**	**48**		**177**	**111**	**105**
Magnesium (dissolved)	mg/l				71.3	44.4		207		38.8	72.7	60.9		26.8	28		84.9	167	97.6
Chromium (total)	ug/l				< 5	149		< 5		11	9	< 5		14	8		14	< 5	< 5
Total Phenols (monohydric)	ug/l		7.7		< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	< 10
Naphthalene	ug/l	-	2		< 0.01	0.1		< 0.01		< 0.01	< 0.01	< 0.01		< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Acenaphthylene	ug/l	-	-		< 0.01	< 0.01		< 0.01		< 0.01	< 0.01	< 0.01		< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Acenaphthene	ug/l	-	-		< 0.01	< 0.01		< 0.01		< 0.01	< 0.01	< 0.01		< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Fluorene	ug/l	-	-		< 0.01	< 0.01		< 0.01		< 0.01	< 0.01	< 0.01		< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Phenanthrene	ug/l	-	-		< 0.01	< 0.01		< 0.01		< 0.01	0.01	< 0.01		< 0.01	< 0.01		< 0.01	< 0.01	0.04
Anthracene	ug/l	-	0.1		< 0.01	< 0.01		< 0.01		< 0.01	< 0.01	< 0.01		< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Fluoranthene	ug/l	-	0.0063		< 0.01	< 0.01		**0.01**		< 0.01	**0.03**	< 0.01		< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Pyrene	ug/l	-	-		< 0.01	< 0.01		0.01		< 0.01	0.02	0.01		< 0.01	< 0.01		< 0.01	< 0.01	0.02
Benzo(a)anthracene	ug/l	-	-		< 0.01	< 0.01		< 0.01		< 0.01	< 0.01	< 0.01		< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Chrysene	ug/l	-	-		< 0.01	< 0.01		< 0.01		< 0.01	< 0.01	< 0.01		< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	ug/l	0.1	-		< 0.01	< 0.01		< 0.01		< 0.01	< 0.01	< 0.01		< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	ug/l	0.1	-		< 0.01	< 0.01		< 0.01		< 0.01	< 0.01	< 0.01		< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	ug/l	0.01	0.00017		< 0.01	< 0.01		< 0.01		< 0.01	< 0.01	< 0.01		< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	ug/l	0.1	-		< 0.01	< 0.01		< 0.01		< 0.01	< 0.01	< 0.01		< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	ug/l	-	-		< 0.01	< 0.01		< 0.01		< 0.01	< 0.01	< 0.01		< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	ug/l	0.1	-		< 0.008	< 0.008		< 0.008		< 0.008	< 0.008	< 0.008		< 0.008	< 0.008		< 0.008	< 0.008	< 0.008
Total EPA-16 PAHs	ug/l				< 0.16	< 0.16		< 0.16		< 0.16	< 0.16	< 0.16		< 0.16	< 0.16		< 0.16	< 0.16	< 0.16
Aliphatic >C5 - C6	ug/l	15000			< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	< 10
Aliphatic >C6 - C8	ug/l	15000			< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	< 10
Aliphatic >C8 - C10	ug/l	300			< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	< 10
Aliphatic >C10 - C12	ug/l	300			< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	< 10
Aliphatic >C12 - C16	ug/l	300			< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	16
Aliphatic >C16 - C21	ug/l	300			< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	47
Aliphatic >C21 - C34	ug/l	300			< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	14
Aliphatic (C5 - C34)	ug/l				< 70	< 70		< 70		< 70	< 70	< 70		< 70	< 70		< 70	< 70	77
Aromatic >C5 - C7	ug/l	1	10		< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	< 10
Aromatic >C7 - C8	ug/l	700	74		< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	< 10
Aromatic >C8 - C10	ug/l	300			< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	< 10
Aromatic >C10 - C12	ug/l	90			< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	< 10
Aromatic >C12 - C16	ug/l	90			< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	18
Aromatic >C16 - C21	ug/l	90			< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	47
Aromatic >C21 - C35	ug/l	90			< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	< 10
Aromatic (C5 - C35)	ug/l				< 70	< 70		< 70		< 70	< 70	< 70		< 70	< 70		< 70	< 70	< 70
Total >C5 - C35	ug/l				< 140	< 140		< 140		< 140	< 140	< 140		< 140	< 140		< 140	< 140	143
Benzene	ug/l	1	10		< 1	< 1		< 1		< 1	< 1	< 1		< 1	< 1		< 1	< 1	< 1
Toluene	ug/l	700	74		< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
Ethylbenzene	ug/l	300			< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
p & m-xylene	ug/l	500			< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	< 10
o-xylene	ug/l	500			< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
MTBE	ug/l	15			< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	< 10
Dichlorodifluoromethane	ug/l				< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
Vinyl Chloride	ug/l				< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
Chloromethane	ug/l				< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
Chloroethane	ug/l				< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
Bromomethane	ug/l				< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
Trichlorofluoromethane	ug/l				< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
1,1-Dichloroethene	ug/l				< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
MTBE	ug/l				< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	< 10
trans-1,2-Dichloroethene	ug/l				< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
1,1-Dichloroethane	ug/l				< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
cis-1,2-Dichloroethene	ug/l				< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
2,2-Dichloropropane	ug/l				< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
Chloroform	ug/l				< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
Bromochloromethane	ug/l				< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	< 10
1,1,1-Trichloroethane	ug/l				< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
1,1-Dichloropropene	ug/l				< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
Carbon Tetrachloride	ug/l				< 5	< 5		< 5		< 5	< 5	< 5		< 5	< 5		< 5	< 5	< 5
1,2-Dichloroethane	ug/l				< 10	< 10		< 10		< 10	< 10	< 10		< 10	< 10		< 10	< 10	< 10

Table 3: Groundwater Analytical Results (2020 to 2023)

			Sample Location	BH09	BH09	LG7	LG9	LG9	LG9	LG11	LG11	LL6	LL6	LL6
			Depth (m)	10.19	9.72	8.75	10.24	10.48	9.91	10.8	10.18	12.26	11.93	11.74
			Sample Date	10/03/22	30/03/23	10/03/22	12/01/22	10/02/22	10/03/22	12/01/22	10/03/22	12/01/22	10/02/22	10/03/22
			Geological Unit	MG & NSF	MG & NSF	MG	MG	MG	MG	MG	MG	MG	MG	MG
		DWS	EQS											
Benzene	ug/l			< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Trichloroethene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromodichloromethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Dibromomethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
TAME	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Toluene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,1,2-Trichloroethane	ug/l			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,3-Dichloropropane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Tetrachloroethene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Dibromochloromethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromoethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorobenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,1,1,2-Tetrachloroethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Ethyl Benzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
m,p-Xylene	ug/l			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
o-Xylene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Styrene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	ug/l			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Isopropylbenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,1,2,2-Tetrachloroethane	ug/l			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,2,3-Trichloropropane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
n-Propylbenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromobenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
2-Chlorotoluene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,3,5-Trimethylbenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
4-Chlorotoluene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
tert-Butylbenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2,4-Trimethylbenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
sec-Butylbenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
p-Isopropyltoluene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,3-Dichlorobenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,4-Dichlorobenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
n-Butylbenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dichlorobenzene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	ug/l			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hexachlorobutadiene	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Phenol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitrophenol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nitrobenzene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
0-Cresol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-chloroethoxy)methane	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-chloroethyl)ether	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dichlorobenzene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dichlorobenzene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Isophorone	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachloroethane	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
p-Cresol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dimethyl phthalate	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloroanaline	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenyl phenyl ether	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenyl phenyl ether	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobenzene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diethyl phthalate	ug/l	15000		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibutyl phthalate	ug/l	900		0.3	7.5	0.3	< 0.1	< 0.1	0.3	0.2	< 0.1	< 0.1	< 0.1	0.2
Carbazole	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-ethylhexyl)phthalate	ug/l	5.6	1.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl butyl phthalate	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octyl phthalate	ug/l			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TICs														
Benzene, 2,4-dimethyl-1-(phenylmethyl)-	ug/l													
Benzene, 1-methyl-2-[(3-methylphenyl)methyl]-	ug/l													
7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione	ug/l									0.5				
Cyclic Octaatomic sulfur	ug/l													
6-Tertradecanesulfonic acid, butyl ester	ug/l													

Notes:
MG = Made Ground
NSF = Northamton Sand Formation
Underlined denotes an exceedance of DWS
BOLD denotes an exceedance of EQS

Table 4: Surface Water Analytical Results

		Sample Location		SW1	SW1	SW1		SP02	SW2	SW2	SW2		SW3	SW3	SW3
		Sample Date		12/01/22	10/02/22	10/03/22		30/07/20	12/01/22	10/02/22	10/03/22		12/01/22	10/02/22	10/03/22
		EQS													
Determinand	**Unit**														
pH	pH Units	6 to 9		8	8.2	8		8.3	8.2	8.3	8.2		8.2	8.3	8.1
Total Cyanide	ug/l	1		< 5	< 5	**7**		**14**	**21**	**8**	**7**		**12**	**8**	**9**
Complex Cyanide	ug/l	1		< 5	< 5	**7**		**14**	**21**	**8**	**7**		**12**	**8**	**9**
Free Cyanide	ug/l			< 5	< 5	< 5		<5	< 5	< 5	< 5		< 5	< 5	< 5
Sulphate as SO4	mg/l	400		69	102	102		60	91	105	102		76	107	104
Ammoniacal Nitrogen as NH4	ug/l	389		307	288	263		324	220	178	210		224	199	231
Ammonia as NH4	ug/l	389		307	288	263		324	220	178	210		224	199	231
Chloride	mg/l			66	72	75		55	74	89	77		62	78	80
Nitrate as NO3	mg/l			18.6	19.4	2.9		4.9	16.2	17.3	5		16	17.9	5.1
Nitrite as NO2	mg/l			< 0.5	< 0.5	0.9		<0.5	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5
Phosphate as PO4	mg/l			< 1.0	< 1.0	< 1.0		<1	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Fluoride	mg/l			< 0.5	< 0.5	< 0.5		<0.5	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5
Total Organic Carbon (TOC)	mg/l			16.5	16.9	9.1		13.3	15.5	15.8	9		15.3	16	9.1
Chemical Oxygen Demand	mg/l			40	17	24		6	17	14	22		16	15	24
Biological Oxygen Demand	mg/l			< 5	13	< 5		<5	< 5	< 5	< 5		< 5	70	< 5
Total Suspended Solids	mg/l			201	< 5	8		25	9	6	6		13	< 5	8
Carbonate (Alkalinity as CaCO3)	mg/l			< 10	< 10	< 10		<10	< 10	< 10	< 10		< 10	< 10	< 10
Antimony (dissolved)	ug/l			< 5	< 5	< 5			< 5	< 5	< 5		< 5	< 5	< 5
Arsenic (dissolved)	ug/l	50		< 5	< 5	< 5		<5	< 5	< 5	< 5		< 5	< 5	< 5
Boron (dissolved)	ug/l	-		487	788	443		68	660	781	729		549	726	371
Cadmium (dissolved)	ug/l	0.25		< 0.4	< 0.4	< 0.4		<0.4	< 0.4	< 0.4	< 0.4		< 0.4	< 0.4	< 0.4
Chromium (dissolved)	ug/l	4.7		< 5	< 5	< 5		<5	< 5	< 5	< 5		< 5	< 5	< 5
Chromium (hexavalent)	ug/l	3.4		< 20	< 20	< 20		<20	< 20	< 20	< 20		< 20	< 20	< 20
Chromium III	ug/l	4.7		< 20	< 20	< 20			< 20	< 20	< 20		< 20	< 20	< 20
Copper (dissolved)	ug/l	13.53		6	< 5	< 5		11	9	6	5		**22**	**18**	8
Lead (dissolved)	ug/l	5.36		< 5	< 5	< 5		<5	< 5	< 5	< 5		< 5	**7**	< 5
Manganese (dissolved)	ug/l	219.55		28	59	**305**			10	9	38		13	24	81
Mercury (dissolved)	ug/l	0.07		< 0.05	< 0.05	< 0.05		<0.05	< 0.05	**0.15**	< 0.05		< 0.05	< 0.05	< 0.05
Nickel (dissolved)	ug/l	10.05		< 5	< 5	< 5		<5	< 5	< 5	< 5		< 5	< 5	< 5
Selenium (dissolved)	ug/l	-		< 5	< 5	< 5		<5	< 5	< 5	< 5		< 5	< 5	< 5
Zinc (dissolved)	ug/l	27.74		22	**62**	**44**		**60**	**28**	**100**	**107**		**30**	**120**	**109**
Magnesium (dissolved)	mg/l			8.8	21	11.7			9.1	20.6	10.5		8.3	20.5	11
Chromium (total)	ug/l			33	< 5	< 5			10	9	< 5		10	8	< 5
Total Phenols (monohydric)	ug/l	7.7		< 10	< 10	< 10		<10	< 10	< 10	< 10		< 10	< 10	< 10
Naphthalene	ug/l	2		< 0.01	< 0.01	< 0.01		<0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Acenaphthylene	ug/l	-		< 0.01	< 0.01	< 0.01		<0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Acenaphthene	ug/l	-		< 0.01	0.28	< 0.01		<0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Fluorene	ug/l	-		< 0.01	0.56	< 0.01		<0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Phenanthrene	ug/l	-		< 0.01	0.89	< 0.01		<0.01	< 0.01	< 0.01	< 0.01		< 0.01	0.01	< 0.01
Anthracene	ug/l	0.1		< 0.01	**0.28**	< 0.01		<0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Fluoranthene	ug/l	0.0063		< 0.01	**0.47**	< 0.01		<0.01	< 0.01	< 0.01	< 0.01		< 0.01	**0.01**	< 0.01
Pyrene	ug/l	-		< 0.01	0.3	< 0.01		<0.01	< 0.01	< 0.01	0.01		< 0.01	0.01	< 0.01
Benzo(a)anthracene	ug/l	-		< 0.01	0.04	< 0.01		<0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Chrysene	ug/l	-		< 0.01	0.03	< 0.01		<0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	ug/l	-		< 0.01	< 0.01	< 0.01		<0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	ug/l	-		< 0.01	< 0.01	< 0.01		<0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	ug/l	0.00017		< 0.01	< 0.01	< 0.01		<0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	ug/l	-		< 0.01	< 0.01	< 0.01		<0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	ug/l	-		< 0.01	< 0.01	< 0.01		<0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	ug/l	-		< 0.008	< 0.008	< 0.008		<0.008	< 0.008	< 0.008	< 0.008		< 0.008	< 0.008	< 0.008
Total EPA-16 PAHs	ug/l			< 0.16	2.85	< 0.16		<0.01	< 0.16	< 0.16	< 0.16		< 0.16	< 0.16	< 0.16
Aliphatic >C5 - C6	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
Aliphatic >C6 - C8	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
Aliphatic >C8 - C10	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
Aliphatic >C10 - C12	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
Aliphatic >C12 - C16	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
Aliphatic >C16 - C21	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
Aliphatic >C21 - C34	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
Aliphatic (C5 - C34)	ug/l			< 70	< 70	< 70		< 70	< 70	< 70	< 70		< 70	< 70	< 70
Aromatic >C5 - C7	ug/l	10		< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
Aromatic >C7 - C8	ug/l	74		< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
Aromatic >C8 - C10	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
Aromatic >C10 - C12	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
Aromatic >C12 - C16	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
Aromatic >C16 - C21	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
Aromatic >C21 - C35	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
Aromatic (C5 - C35)	ug/l			< 70	< 70	< 70		< 70	< 70	< 70	< 70		< 70	< 70	< 70
Total >C5 - C35	ug/l			< 140	< 140	< 140		< 140	< 140	< 140	< 140		< 140	< 140	< 140
Benzene	ug/l	10		< 1	< 1	< 1		< 1	< 1	< 1	< 1		< 1	< 1	< 1
Toluene	ug/l	74		< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Ethylbenzene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
p & m-xylene	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
o-xylene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
MTBE	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
Dichlorodifluoromethane	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Vinyl Chloride	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Chloromethane	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Chloroethane	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Bromomethane	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Trichlorofluoromethane	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
1,1-Dichloroethene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
MTBE	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
trans-1,2-Dichloroethene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
1,1-Dichloroethane	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
cis-1,2-Dichloroethene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
2,2-Dichloropropane	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Chloroform	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Bromochloromethane	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
1,1,1-Trichloroethane	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
1,1-Dichloropropene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Carbon Tetrachloride	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
1,2-Dichloroethane	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
Benzene	ug/l			< 1	< 1	< 1		< 1	< 1	< 1	< 1		< 1	< 1	< 1

Table 4: Surface Water Analytical Results

		Sample Location		SW1	SW1	SW1		SP02	SW2	SW2	SW2		SW3	SW3	SW3
		Sample Date		12/01/22	10/02/22	10/03/22		30/07/20	12/01/22	10/02/22	10/03/22		12/01/22	10/02/22	10/03/22
		EQS													
Determinand	**Unit**														
1,2-Dichloropropane	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Trichloroethene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Bromodichloromethane	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Dibromomethane	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
TAME	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
cis-1,3-Dichloropropene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Toluene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
trans-1,3-Dichloropropene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
1,1,2-Trichloroethane	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
1,3-Dichloropropane	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Tetrachloroethene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Dibromochloromethane	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
1,2-Dibromoethane	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Chlorobenzene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
1,1,1,2-Tetrachloroethane	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Ethyl Benzene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
m,p-Xylene	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
o-Xylene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Styrene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Bromoform	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
Isopropylbenzene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
1,1,2,2-Tetrachloroethane	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
1,2,3-Trichloropropane	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
n-Propylbenzene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Bromobenzene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
2-Chlorotoluene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
1,3,5-Trimethylbenzene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
4-Chlorotoluene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
tert-Butylbenzene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
1,2,4-Trimethylbenzene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
sec-Butylbenzene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
p-Isopropyltoluene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
1,3-Dichlorobenzene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
1,4-Dichlorobenzene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
n-Butylbenzene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
1,2-Dichlorobenzene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	ug/l			< 10	< 10	< 10		< 10	< 10	< 10	< 10		< 10	< 10	< 10
Hexachlorobutadiene	ug/l			< 5	< 5	< 5		< 5	< 5	< 5	< 5		< 5	< 5	< 5
Phenol	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
2-Nitrophenol	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
Nitrobenzene	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
0-Cresol	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
bis(2-chloroethoxy)methane	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
bis(2-chloroethyl)ether	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
2-Chlorophenol	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
1,3-Dichlorobenzene	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
1,2-Dichlorobenzene	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
Isophorone	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
Hexachloroethane	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
p-Cresol	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
2-Nitroaniline	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
Dimethyl phthalate	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
4-Chloroanaline	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
4-Nitrophenol	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
4-Chlorophenyl phenyl ether	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
3-Nitroaniline	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
4-Nitroaniline	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
4-Bromophenyl phenyl ether	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
Hexachlorobenzene	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
Diethyl phthalate	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
Dibenzofuran	ug/l			< 0.1	0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
Azobenzene	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
Dibutyl phthalate	ug/l			< 0.1	< 0.1	0.3		<0.1	< 0.1	< 0.1	0.3		< 0.1	< 0.1	0.2
Carbazole	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
bis(2-ethylhexyl)phthalate	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	0.1
Benzyl butyl phthalate	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
Di-n-octyl phthalate	ug/l			< 0.1	< 0.1	< 0.1		<0.1	< 0.1	< 0.1	< 0.1		< 0.1	< 0.1	< 0.1
TICs															
2-Propanol, 1-chloro-, phosphate (3:1)	ug/l			0.1					<0.1				0.2		
Propanoic acid, 2-methyl-, 3-hydroxy-	ug/l												<0.1		
Naphthalene, 2,3,6-trimethyl-	ug/l				0.8										
Dibenzothiophene, 3-methyl-	ug/l				0.4										

Notes:

BOLD denotes an exceedance of EQS

APPENDIX 1
BGS Logs

British Geological Survey

BGS ID: 359671 : BGS Reference: SP89SE143
EPSG: 27700 : 489860,290500

GEOLOGICAL SURVEY OF GREAT BRITAIN

RECORD OF SHAFT OR BORE FOR MINERALS

(For Survey use only)

6-inch Map Registered No. SP 89/SE-/143 19

Northants II SE

Name of Shaft or Bore given by Geological Survey: ~~SSG~~ 143

Name and Number given by owner: Brookfields East LK1 24PP/4319

Nat. Grid Reference 8986 9250

For whom made

Town or Village ..... County .....

Exact site ..... Attach a tracing from a map, or a sketch-map, if possible.

1"N.S. Map No.	1"O.S. Map No.	Confidential or not
171		

Purpose for which made

Ground Level at shaft bore relative to O.D. 377.66 If not ground level give O.D. of beginning of shaft bore

Made by ..... Date of sinking 1949

Information from S+C Date received 1950

Examined by

SPECIMEN NUMBERS AND ADDITIONAL NOTES

Water at 28'
RLW 24'
2nd Water at 84'
RLW 24'

(For Survey use only) Geological Classification	DESCRIPTION OF STRATA		Thickness Ft	Thickness in.	Depth Ft	Depth in.
	soil	(0.30)	1			
	Blue clay	(3.66)	12		13	(3.96)
	Sst.	(1.83)	6		19	(5.79)
	Brown sand	(0.61)	2		21	(6.40)
	Brown Sandy clay	(2.13)	7		28	(8.53)
	Grey clay	(1.22)	4		32	(9.75)
	Ironstone (sampled)	(3.66)	12	3 (5.18)		
	unsampled	(1.52)	5	7	49	(14.94)
	Lias clay	(0.61)	2		51	(15.54)

No.	Fe	Si	Al	Ca	Mn	S
1	40.2	10.4	7.02	3.6	180	.123
2	33.8	23.6	8.94	3.9	143	.302
3	34.2	18.6	6.36	4.1	152	.261
4	35.4	14.8	6.36	5.0	18.0	.275
5	29.5	25.0	4.52	5.9	16.9	.288
6	32.4	35.2	4.94	6.9	15.6	.233
7	28.0	29.6	6.44	5.9	13.9	.137
8	21.6	40.8	6.19	4.6	11.0	.124
9	21.6	33.0	7.02	8.0	15.6	.178
10	12.6	37.8	5.52	12.0	16.4	.137
11	15.2	40.6	4.43	13.1	16.5	.275
12	15.0	36.0	3.85	15.8	10.4	.343

C.B.H. 27185 - Wt. 53825 - Dd. 0609-2000 - 2/56

Contact BGS: ngdc@bgs.ac.uk

British Geological Survey

BGS ID: 359750 : BGS Reference: SP89SE222
EPSG: 27700 : 489790,290580

(*11932) Wt.30370/0370 10,000 9/39 A.& E.W.Ltd. Gp.685

222

RECORD OF SHAFT OR BORE FOR MINERALS

County Northants.
6" Quarter Sheet 11SE(W)
1" N.S. Geol. Map 171
1" O.S. Geol. Map 64.
Whether Confidential
Yes.

Name and Number of Shaft or Bore given by Geological Survey: SP89/52 ~~26~~ 222

Name and Number given by owner (if different from above): L111 21 E.E.

Town or Village Easton area. Date of sinking March 1935

Exact site q.v. 8979 9058

DECLASSIFIED

A sketch-map or tracing from a large-scale map is desirable.

Purpose for which made Ironstone.

Level at which bore commenced relative to O.D. 381' If not down bore, state if horizontal or up

Made by Messrs Stewarts & Lloyds for Messrs. S. & L.

Information from Date received Oct '40

Specimens Dip of strata

Geological Classification	Description	Thickness (ft.)	Depth (ft.)
B.Cl.	Soil.	(0.30) 1	(0.30) 1
	Boulder clay.	(3.05) 10	(3.35) 11
?Gloc. Sand Lincs Lst.	Brown sand.	(0.30) 1	(3.66) 12
	Limestone.	(1.22) 4	(4.88) 16
Lr. Est	Brown sand.	(1.22) 4	(6.10) 20
	Black ..	(1.83) 6	(7.92) 26
	Gray .. sandy clay.	(0.61) 2	(8.53) 28
		(2.44) 8	(10.97) 36
Fronst.	Top bed.	(0.91) 3	(11.89) 39
	Ironstone.	(3.66) 12	(15.54) 51

Analysis of dried Ironstone.

	Fe.	SiO_2.	Al_2O_3	CaO	Loss on Calcing	S.
Top 2 ft. Top bed.	30.8	14.7	5.35	4.8	24.9	.897
2nd ft. bed.	30.8	8.9	7.5	7.8	25.7	.54
6' Workable 1st 2 ft.	32.9	7	6.65	7.8	24.9	.302
2nd	28.5	6.2	5.65	14.3	26.9	.254
3rd	22.2	9.2	7.77	19.8	26.8	.185
4th	21.6	12.6	7.85	17.8	26.5	.342
5	15.6	14.7	7.77	24	27.7	.417
		10.6				.410

Geological Survey and Museum, South Kensington, London, S.W.7.

G.S.M. Office File No.	Site marked on 6" Map by	Site marked on 1" Map by

Contact BGS: ngdc@bgs.ac.uk

British Geological Survey

BGS ID: 359755 : BGS Reference: SP89SE227
EPSG: 27700 : 489760,291220

(*11932) Wt.30370/0370 10,000 9/39 A.& E.W.Ltd. Gp.685

RECORD OF SHAFT OR BORE FOR MINERALS

SP 89/3E

Name and Number of Shaft or Bore given by Geological Survey: 271 227

Name and Number given by owner (if different from above): Deene Pit No III 2022.

Town or Village ____ Date of sinking 1940.

Exact site g.r. 8976 9122

DECLASSIFIED

A sketch-map or tracing from a large-scale map is desirable.

County Northants

6" Quarter Sheet 11SE(W)

1" N.S. Geol. Map 171

1" O.S. Geol. Map 64SW

Whether Confidential

Yes.

Purpose for which made Ironstone.

Level at which bore commenced relative to O.D. ____ If not down bore, state if horizontal or up ____

Made by Messrs Stewarts & Lloyds for Messrs Do.

Information from Do. Date received 1941.

Specimens ____ Dip of strata ____

Geological Classification	Description	Thickness			Depth		
Alc.	Soil	(0.30)	1	-	(0.30)	1	-
Lincs Lst.	Sandy clay	(0.83)	6	-	(2.13)	7	-
	Limestone layers & sand	(1.52)	5	-	(3.66)	12	-
Lr. Est.	Yellow sand	(2.13)	7	-	(5.79)	19	-
	Black clay	(1.52)	5	-	(7.32)	24	-
	Dark shaly clay	(1.22)	4	-	(8.53)	28	-
	Light grey sandy	(1.52)	5	-	(10.06)	33	-
Ironst.	Ironstone	(3.66)	12	-	(13.72)	45	-

Analyses of dried ironstone.

	Iron	Silica	Alumina	Lime	Loss on calcining	Sulphur
1st ft.	32.8	12.6	5.27	4.8	22.0	1.443
2nd "	33.2	10.4	4.18	6.0	22.1	1.306
3rd-4th "	35.0	12.8	4.94	5.6	22.6	.356
5th-6th "	28.2	24.6	5.60	5.0	19.3	.288
7th-8th "	26.2	25.8	4.35	6.8	18.9	.302
9th-10th "	21.8	18.8	5.11	14.2	22.7	.713
11th-12th "	19.0	19.2	4.85	17.4	24.6	.425
		18.8				.576

2' workable.

Geological Survey and Museum, South Kensington, London, S.W.7.

G.S.M. Office File No.	Site marked on 6" Map by	Site marked on 1" Map by

Contact BGS: ngdc@bgs.ac.uk

British Geological Survey

BGS ID: 359756 : BGS Reference: SP89SE228
EPSG: 27700 : 489999,291300

(*11932) Wt.30370/0370 10,000 9/39 A.& E.W.Ltd. Gp.685

RECORD OF SHAFT OR BORE FOR MINERALS

Name and Number of Shaft or Bore given by Geological Survey: SP 89/SE. 872 / 228

Name and Number given by owner (if different from above): Deene Pit AX1 28 B 50

Town or Village ____ Date of sinking Jan 1940.

Exact site G.R. 9000 9130

Purpose for which made Ironstone.

Level at which bore commenced relative to O.D. 354' If not down bore, state if horizontal or up ____

Made by Stewarts & Lloyds for Messrs. do.

Information from do. Date received Nov 1941.

Specimens ____ Dip of strata ____

County Northants.

6" Quarter Sheet 118E(W)

1" N.S. Geol. Map 171.

1" O.S. Geol. Map 64SW

Whether Confidential DECLASSIFIED

A sketch-map or tracing from a large-scale map is desirable.

Geological Classification	Description	Thickness			Depth		
PC1	Soil	(0·30)	1	-	(0·30)	1	-
	Boulder Clay	(2·90)	9	6	(3·20)	10	6
	Yellow Sand	(3·20)	10	6	(6·40)	21	-
L.F.	Dark grey sand	(0·61)	2	-	(7·01)	23	-
	Light grey silty clay	(2·59)	8	6	(9·60)	31	6
	Light grey sand	(0·46)	1	6	(10·06)	33	-
NS	Ironstone	(3·66)	12	-	(13·72)	45	-
	Water standing at 30'.						

Analyses of dried ironstone.

	Iron.	Silica	Alumina	Lime	Loss on calcining	Sulphur.
1st ft.	30·6	16·8	3·35	5·2	23·3	·973
2nd "	34·4	10·2	6·02	6·8	21·0	2·520
3rd-4th "	34·4	13·6	5·60	5·6	19·7	·822
5th-6th "	31·4	19·6	5·02	6·8	19·5	·275
7th-8th "	32·4	17·0	5·60	6·0	19·5	·399
9th-10th "	31·2	12·6	6·35	7·6	22·0	·506
11th-12th "	22·2	14·8	5·02	15·2	24·0	·564
		15·2				·719

Geological Survey and Museum, South Kensington, London, S.W.7.

G.S.M. Office File No.	Site marked on 6" Map by	Site marked on 1" Map by

Contact BGS: ngdc@bgs.ac.uk

British Geological Survey

BGS ID: 359812 : BGS Reference: SP89SE284
EPSG: 27700 : 489375,291194

DRILLHOLE RECORD

SP89SE284

Project DENE QUARRY RECLAIMATION
Client CORBY DISTRICT COUNCIL
Drillhole 11
Location CORBY
Contractor
Sheet 1 of 2
Project No. 86-5455

Drilling Depth Cored	Drilling Depth Cased	Samples	Core Recovery %	Core RQD %	Core Fracture Index	Core Fracture Spacing	Core Tests	Strata Description	Piezo	Legend	Depth	Level
								Hardcore, bricks and cobbles. MADE GROUND.			0.50	111.27
								Firm dark green grey sandy clayey SILT and some fine gravel of limestone. GLACIAL TILL.			1.30	110.77
								Firm dark brown grey silty CLAY with some fine to medium gravel. GLACIAL TILL.			1.80	109.97
OH								Stiff light brown mottled yellow brown silty clay/clayey silt with some limestone gravel. GLACIAL TILL.			2.40	109.47
								Stiff light purple grey laminated silty CLAY. (L.E.S).			3.80	108.87
								Light purple grey and dark grey black variably slightly clayey silty fine SAND. (L.E.S).			4.7	107.47
6.0	6.0							Light grey green fine to medium grained thin to medium bedded slightly weathered becoming fresh silty SANDSTONE, moderately strong. Bedding horizontal, occasional discontinuous vertical joints. To 6.80m much iron staining with thick lamiantions of ironstone present. From 6.80m becoming darker in colour. From 8.50m medium spaced joints present dip 45°. (N.S.I).				106.57
	6.0		94(90)	82	5	100-300mm	-					
8.0	6.0											
	6.0		88(88)	88	45	110-200mm	-					
10.00	6.0										10.0	

Ground Water

Depth Struck	Depth of Casing	Depth after 20 mins	Depth Sealed	Date am pm	Depth of Hole	Depth to Water
9.0	6.0	-	NS	22.10.86	Piezo	7.45
				23.10.86	Piezo	7.50

Remarks

Flushing medium : Air. Water added from 6.0m to assist coring. Casagrande type standpipe piezometer inserted to 10.0m in sand cell from 10.50-9.30m, volume 0.010m³, Cement Bentonite plug placed from 11.3 to 10.50m, 9.30 to 7.80, 1.50 to 1.0m.

Boring

Plant HANDS ENGLAND
Crew JS/PS

Type and Diameter	Depth
100mm rock roller	6.0m
HWF 76mm ID 99mm OD	11.30m

Start Date 17.10.86
Finish Date 17.10.86

Symbols and abbreviations are explained on the accompanying key.
All values are in metres.

geotechnics

Contact BGS: ngdc@bgs.ac.uk

British Geological Survey

BGS ID: 359812 : BGS Reference: SP89SE284
EPSG: 27700 : 489375,291194

DRILLHOLE RECORD

SP 89 SE 284

Project DENE QUARRY RECLAIMATION **Client** CORBY DISTRICT COUNCIL **Drillhole** 11

Location CORBY **Contractor** **Sheet** 2 of 2 **Project No.** 86-5455

Drilling			Core					Strata				
Depth Cored	Depth Cased	Samples	Recovery %	RQD %	Fracture Index	Fracture Spacing	Tests	Description	Piezo	Legend	Depth	Level
10.0	6.0							SANDSTONE. (for description see sheet 1 of 2)			10.25	101.02
			81(81)	N/A	N/A	N/A	-	Hard dark grey thickly laminated to very thinly bedded slightly micaceous silty CLAY. Fine silt partings present. (UPPER LIAS).				
11.3	6.0										11.30	99.97
								End of Drillhole				

Remarks:

Access to piezometer via stopcock cover set in concrete.
Borehole backfilled with imported gravelly sand.

geotechnics

Contact BGS: ngdc@bgs.ac.uk

British Geological Survey

BGS ID: 359814 : BGS Reference: SP89SE286
EPSG: 27700 : 489788,290993

DRILLHOLE RECORD

SP 89 SE 286

Project DEME QUARRY RECLAIMATION **Client** CORBY DISTRICT COUNCIL **Drillhole** 13

Location CORBY **Contractor** **Sheet** 1 of 2 **Project No.** 86-5455

Drilling | **Core** | **Strata**

Depth Cored	Depth Cased	Samples	Recovery %	RQD %	Fracture Index	Fracture Spacing	Tests	Description	Piezo	Legend	Depth	Level
0.H								Dark brown sandy silty clay and gravel cobbles and boulders of sandstone and concrete. MADE GROUND.			0.6	115.21 / 114.61
								Dark brown fine to coarse sand. MADE GROUND.			1.20	114.01
								Light yellow brown gravelly sandy silty clay with occasional cobbles MADE GROUND.			3.60	111.61
0.H								Firm dark grey brown silty clay/ clayey silt with some gravel, cobble and boulder sized fragments of predominantly sandstone. Occasional lenses of yellow silty sand. MADE GROUND.				
0.H												
0.H	9.0										10.0	

Ground Water

Depth Struck	Depth of Casing	Depth after 20 mins	Depth Sealed	Date am pm	Depth of Hole	Depth to Water
19.20	9.0	-	NS	13.10.86	Piezo	16.20
				14.10.86	Piezo	16.20
				15.10.86	Piezo	16.30
				16.10.86	Piezo	16.40
				17.10.86	Piezo	16.30
				22.10.86	Piezo	16.10
				23.10.86	Piezo	16.20

Remarks

From 9.0m water added to assist air flush. Piezometer installed at 21.0m in sand cell from 21.5m to 20.40m volume 0.007m. Cement bentonite plug inserted from 20.50-19.50m, and 16.50 to 15.40m. Access to piezometer by stopcock cover set in concrete.

Boring

Plant HANDS ENGLAND
Crew JS/PS

Type and Diameter	Depth
100mm rock roller	19.20m
76mm ID HWF 99mm OD	21.40m

Start Date 10.10.86
Finish Date 10.10.86

Symbols and abbreviations are explained on the accompanying key.
All linear dimensions are in metres.

geotechnics

Contact BGS: ngdc@bgs.ac.uk

British Geological Survey

BGS ID: 359814 : BGS Reference: SP89SE286
EPSG: 27700 : 489788,290993

DRILLHOLE RECORD

SP 89 SE 286.

Project DENE QUARRY RECLAIMATION | Client CORBY DISTRICT COUNCIL | Drillhole 13

Location CORBY | Contractor | Sheet 2 of 2 | Project No. 86-5455

Drilling			Core					Strata				
Depth Cored	Depth Cased	Samples	Recovery %	RQD %	Fracture Index	Fracture Spacing	Tests	Description	Piezo	Legend	Depth	Level
0.H								MADE GROUND. (for description see sheet 1 of 2)			10.0	
0.H								Light orange brown and grey silty sand with occasional chalk, grey silty clay laminations. MADE GROUND.			13.9	101.31
											14.3	100.91
0.H								Firm dark blue grey silty clay. MADE GROUND.			14.8	100.41
								Firm dark grey brown sandy silty clay/clayey silt with occasional sandstone gravel. MADE GROUND.				
19.20	9.0										18.8	96.41
	9.0		76(76	76	1.4	200mm -1200mm		Dark blue grey fine to medium grained medium to thickly bedded fresh silty SANDSTONE, moderately strong. (N.S.I) Some iron mineralization along bedding plane at 19.50m. Becoming very clayey and micaceous from 20.90m.				
21.40	9.0										21.4	93.81
								End of Borehole				

Remarks:

Borehole backfilled with imported gravelly sand.

geotechnics

Contact BGS: ngdc@bgs.ac.uk

British Geological Survey

BGS ID: 17861627 : BGS Reference: SP99SW1347
EPSG: 27700 : 490134,290579

Contest Melbourne Weeks Ltd

Borehole log

Bh no. E6
Sheet 2 of 2

Location : Willowbrook Slurry Ponds, Corby
Job No : DS121

Method : Cable Percussion Boring
Hole Dimensions : 150mm
Casing Dimensions : 150mm to 15.50m

Ground Level 109.21 m O.D. | Co-ordinates E - 490134 N - 290579 | Date 30/10/92-2/11/92

Date	Casing Depth (m)	Water Depth (m)	Samples / Insitu Tests: Depth (m)	Type No.	Test Result	Change of Strata: Legend	Depth & (thickness) (m)	Reduced Level	Description	Piezo / S'pipe
2/11/92			10.00		S N=10					
			11.50						8.50m to 14.00m - Soft and firm, orange brown mottled dark grey and light blue grey, silty, very sandy CLAY, with some gravel size fragments of sandstone. Roots. ....with pockets of dark grey sandy silt to 10.75m. (Fill)	
			11.50-11.95		U=80		(5.50)			
			12.00							
			13.00		S N=22					
		▽	14.00	W	S N=47		14.00 (0.20) 14.20	95.21 95.01	Orange brown and blue light grey, friable in places, medium grained SANDSTONE, very weak. (Northampton Sand Ironstone)	
							(2.80)		Very stiff, faintly laminated, silty, sandy CLAY. (Upper Lias Clay)	
			16.00		S N=60					
	15.50	13.00	17.00				17.00	92.21	End of Borehole	

Remarks: 4. A standpipe was installed as follows - 50mm diameter HDPE geotextile wrapped slotted casing 16.50m to 14.50m; 50mm diameter HDPE plain casing 14.50m to 0.40m above G.L.; sand filter 16.70m to 14.20m; bentonite seal from 14.20m to 0.50m. A lockable cover was concreted over the standpipe installation.

Scale 1:50

Fig A3

Logged	JH		Checked	MW		Approved		

For explanation of symbols and abbreviations see Key Sheet

Contact BGS: ngdc@bgs.ac.uk

Contest Melbourne Weeks Ltd

Borehole log

Bh no. J5
Sheet 1 of 2

Location : Willowbrook Slurry Ponds, Corby
Job No : DS121

Method : Cable Percussion Boring
Hole Dimensions : 150mm
Casing Dimensions : 150mm to 13.50m

Ground Level 109.26 m O.D. | Co-ordinates E - 490284 N - 290674 | Date 3-4/11/92

Date	Casing Depth (m)	Water Depth (m)	Samples / Insitu Tests: Depth (m)	Type No.	Test Result	Change of Strata: Legend	Depth & (thickness) (m)	Reduced Level	Description	Piezo / S'pipe
3/11/92							(1.25)		Dark red brown, very sandy SILT, with many fragments of very weak siltstone. Roots. ....occasional blue grey pockets. (Fill)	
			1.00							
			1.00-1.45		U=12		1.25	108.01		
			1.50				(0.55)		Dark red brown, very silty, fine to medium SAND, with abundant gravel size fragments of very weak siltstone. (Fill)	
			2.00		S N=5		1.80	107.46		
			3.00							
			3.00-3.45		U=10					
			4.00		S N=4				Very loose to loose, dark red brown, sandy SILT with occasional blue grey pockets. ....moist. ....with some fragments of siltstone. ....dry between 2.50m and 3.50m, and between 4.50m and 5.25m. ....abundant fragments of siltstone and light grey sandstone between 5.25m and 6.00m. (Fill)	
			5.00							
			5.00-5.45		U=10		(6.95)			
			5.50							
			6.50		S N=4					
			8.00							
			8.00-8.45		U=30					
			8.50				8.50	100.51		
							(0.75)		Orange brown and light grey mottled, silty, very clayey, medium SAND, with few gravel size fragments of sandstone. (Fill)	
			9.50		S N=10		9.25	99.76		
							(3.20)		9.25m to 12.45m - see next sheet. (Fill) continued.....	

Remarks

1. Groundwater was encountered at 11.00m, rising to 9.50m in 20 minutes.
2. The borehole was backfilled up to 14.00m with bentonite granules.

continued.....

Scale 1:50

Fig A7

Logged	JH		Checked	MW		Approved		

For explanation of symbols and abbreviations see Key Sheet

Contest Melbourne Weeks Ltd

Borehole log

Bh no. J5
Sheet 2 of 2

Location : Willowbrook Slurry Ponds, Corby
Job No : DS121

Method : Cable Percussion Boring
Hole Dimensions : 150mm
Casing Dimensions : 150mm to 13.50m

Ground Level 109.26 m O.D. | Co-ordinates E - 490284 N - 290674 | Date 3-4/11/92

Date	Casing Depth (m)	Water Depth (m)	Samples / Insitu Tests: Depth (m)	Type No.	Test Result	Change of Strata: Legend	Depth & (thickness) (m)	Reduced Level	Description	Piezo / S'pipe
3/11/92									9.25m to 12.45m - Soft, orange brown and light grey mottled, silty, very sandy CLAY, with frequent gravel size fragments of sandstone. ....becoming soft to firm, purple light grey mottled orange brown, sandy clay between 9.75m and 10.50m. (Fill)	
	10.50	▽ 9.00	11.00	W	S N=12		(3.20)			
4/11/92		7.00					12.45	96.56		
			12.50	C	N=20		(0.05) 12.50	96.51	Orange brown and blue grey, partly friable, medium grained SANDSTONE, weak to very weak. (Northampton Sand Ironstone)	
			13.00		S N=22					
							(3.50)			
			14.50		S N=39				Stiff to very stiff, dark grey, faintly laminated, fissured, slightly sandy, silty CLAY. (Upper Lias Clay)	
	13.50	12.50	16.00				16.00	93.01		
									End of Borehole	

Remarks: 3. A standpipe was installed as follows - 50mm diameter HDPE geotextile wrapped slotted casing 14.00m to 12.00m; 50mm diameter HDPE plain casing 12.00m to 0.40m above G.L.; sand filter 14.00m to 11.80m; bentonite seal 11.80m to 0.50m. A lockable cover was concreted over the standpipe installation.

Scale 1:50

Fig A7

Logged	JH		Checked	MW		Approved		

For explanation of symbols and abbreviations see Key Sheet

Contest Melbourne Weeks Ltd

Borehole log

Bh no. K1
Sheet 1 of 2

Location : Willowbrook Slurry Ponds, Corby
Job No : DS121

Method : Cable Percussion Boring
Hole Dimensions : 150mm
Casing Dimensions : 150mm to 10.50m

Ground Level 106.61 m O.D. | Co-ordinates E - 490399 N - 290454 | Date 14/10/92

Date	Casing Depth (m)	Water Depth (m)	Samples / Insitu Tests: Depth (m)	Type No.	Test Result	Change of Strata: Legend	Depth & (thickness) (m)	Reduced Level	Description	Piezo / S'pipe
14/10/92			G.L.-1.00						TOPSOIL, over dark grey brown, silty, very sandy CLAY, with occasional sub-angular gravel size fragments of ironstone. ....with occasional laminations of light grey clay ....(driller recorded fragments of brick and concrete to 1.80m) Dampness below 1.80m. (Fill)	
			1.00	S	N=12		(2.70)			
			1.45-2.00							
			2.00	S	N=4					
			2.45-3.00				2.70	103.91		
			3.00	S	N=6					
			3.45-4.00							
			4.20	S	N=2					
			4.20-5.10							
			5.10	S	N=5				Soft, blue dark grey, orange brown and blue light grey mottled, silty, sandy CLAY, with occasional gravel size fragments of sandstone, ironstone, chalk and brick.	
			5.55-6.00							
			6.00	S	N=8		(10.00)			
			6.45-7.00							
			7.00	S	N=8				Soft to firm, between 6.00m and 8.50m.	
			7.70	●						
			8.00	S	N=7					
			8.70	●						
			9.00	S	N=11				....becoming soft to firm at 9.50m.	
			9.45-10.00						continued.....	

Remarks
1. Groundwater was encountered at 12.70m, rising to 12.00m in 20 minutes.
2. On completion, the borehole was backfilled with bentonite granules.

Scale 1:50

Fig A8

Logged	JH		Checked	MW		Approved		

For explanation of symbols and abbreviations see Key Sheet

British Geological Survey

BGS ID: 17862309 : BGS Reference: SP99SW1352
EPSG: 27700 : 490399,290454

Contest Melbourne Weeks Ltd

Borehole log

Bh no. K1
Sheet 2 of 2

Location : Willowbrook Slurry Ponds, Corby
Job No : DS121

Method : Cable Percussion Boring
Hole Dimensions : 150mm
Casing Dimensions : 150mm to 10.50m

Ground Level 106.61 m O.D. | Co-ordinates E - 490399 N - 290454 | Date 14/10/92

Date	Casing Depth (m)	Water Depth (m)	Samples / Insitu Tests: Depth (m)	Type No.	Test Result	Change of Strata: Legend	Depth & (thickness) (m)	Reduced Level	Description	Piezo / S'pipe
14/10/92			10.00		S N=8					
			10.45-11.10							
			11.10		S N=11		(10.00)		2.70m to 12.70m - see previous sheet (Fill)	
			11.55-12.00							
			12.00		S N=17					
			12.00-12.70							
		▽	12.70		S N=(52) 150		12.70 (0.15) 12.85 (0.15) 13.00	93.91 93.76 93.61	Orange brown IRONSTONE - drillers description (Northampton Sand Ironstone)	
	10.50	DRY							Very dense, orange brown and grey SAND/ SANDSTONE, very weak - drillers description. (Northampton Sand Ironstone)	
									End of Borehole	

Remarks

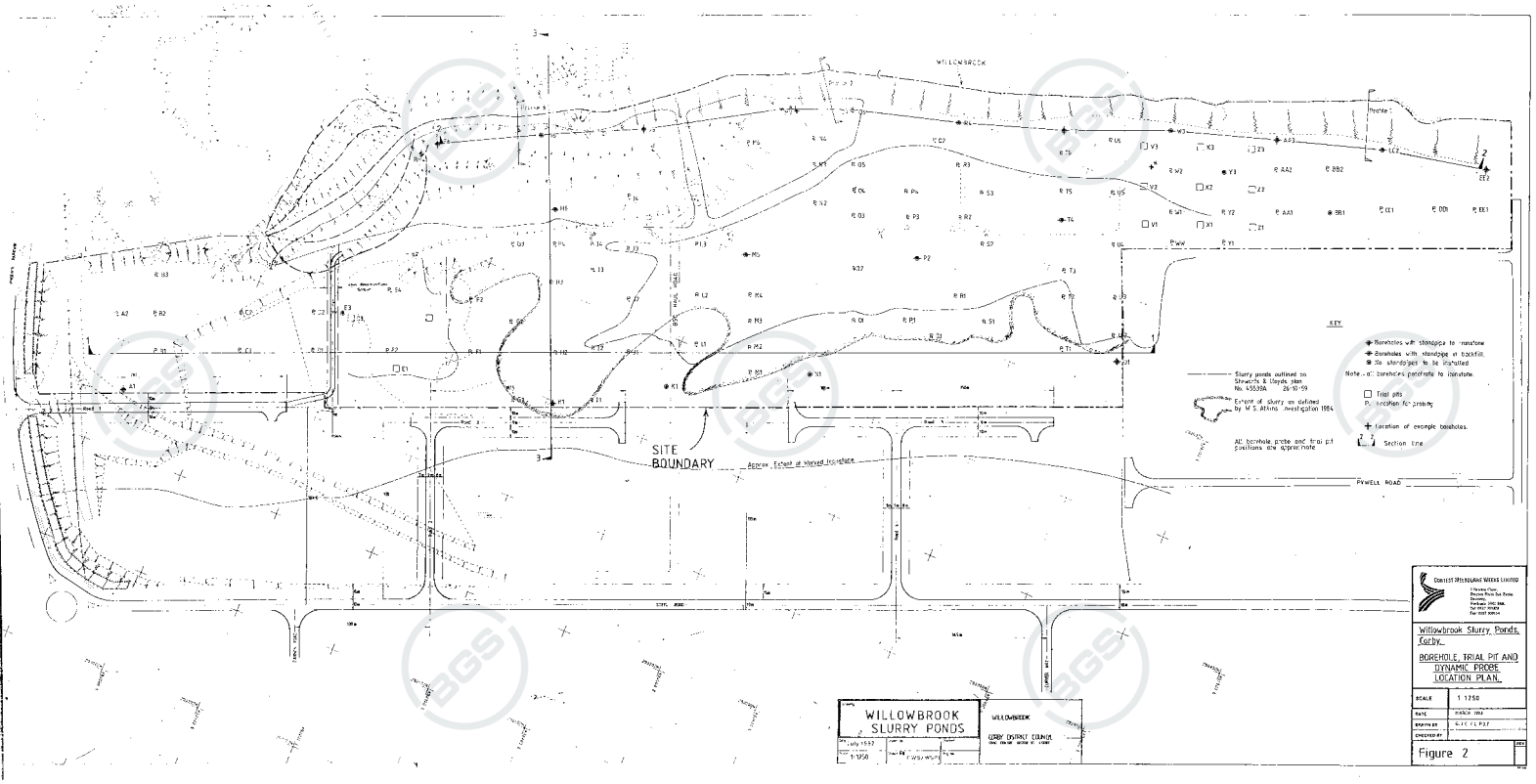
Scale 1:50

Fig A8

Logged	JH		Checked	MW		Approved		

For explanation of symbols and abbreviations see Key Sheet

Contact BGS: ngdc@bgs.ac.uk


WILLOWBROOK
SITE BOUNDARY
FIVEWELL ROAD
KEY
Willowbrook Slurry Ponds, Corby.
BOREHOLE, TRIAL PIT AND DYNAMIC PROBE LOCATION PLAN.
Figure 2
WILLOWBROOK SLURRY PONDS
CORBY DISTRICT COUNCIL

British Geological Survey

BGS ID: 367704 : BGS Reference: SP99SW912
EPSG: 27700 : 490505,291189

DRILLHOLE RECORD

SP 99 SW 912

Project DENE QUARRY RECLAIMATION | Client CORBY DISTRICT COUNCIL | Drillhole 19

Location CORBY | Contractor | Sheet 1 of 2 | Project No. 86-5455

Drilling			Core					Strata				
Depth Cored	Depth Cased	Samples	Recovery %	RQD %	Fracture Index	Fracture Spacing	Tests	Description	Piezo	Legend	Depth	Level
OH								Gravel, cobbles and boulder sized fragments of sandstone, concrete, wood with some dark grey silty clay. MADE GROUND.				110.26
											2.4	107.86
								'Loose' MADE GROUND.**			2.9	107.36
OH								Gravel, cobbles and boulders of concrete and sandstone. MADE GROUND.			4.7	105.56
OH								Variably soft to firm dark grey and brown grey silty clay/clayey silt, sandy in parts with some gravel and occasional cobbles and boulders of sandstone and limestone. MADE GROUND. Occasional lenses of light grey and orange brown silty sand.				
OH											10.0	

Ground Water

Depth Struck	Depth of Casing	Depth after 20 mins	Depth Sealed	Date am pm	Depth of Hole	Depth to Water
*4.60	NIL	-	4.70	16.10.86	Piezo	15.75
				17.10.86	Piezo	15.65
18.60	18.0	-	NS	22.10.86	Piezo	15.60
				23.10.86	Piezo	15.65

Remarks

* Water strike 4.6m slightly contaminated.

**No returns 2.40-2.90. Casagrande standpipe type piezometer installed at 20.5m in a sand cell from 21.5m to 19.8m, volume 0.015m³. Cement/Bentonite plug inserted from 19.8-18.80m, 16.20-15.0m, 1.4-0.8.

Boring

Plant HANDS ENGLAND
Crew JS/PS

Type and Diameter	Depth
100mm rock roller	19.0m
76mm ID HWF 99mm OD	21.5m

Start Date 15.10.86
Finish Date 15.10.86

Symbols and abbreviations are as used on the accompanying key.
All dimensions are in metres.

geotechnics

Contact BGS: ngdc@bgs.ac.uk

British Geological Survey

BGS ID: 367704 : BGS Reference: SP99SW912
EPSG: 27700 : 490505,291189

DRILLHOLE RECORD

SP 99 SW 912

Project DENE QUARRY RECLAIMATION | Client CORBY DISTRICT COUNCIL | Drillhole 19

Location CORBY | Contractor | Sheet 2 of 2 | Project No. 86-5455

Drilling			Core					Strata				
Depth Cored	Depth Cased	Samples	Recovery %	RQD %	Fracture Index	Fracture Spacing	Tests	Description	Piezo	Legend	Depth	Level
											10.00	
OH								Silty clay with some gravel. MADE GROUND. (for description see sheet 1 of 2)				
OH												
OH												
19.0	18.0							Light and dark bluish grey fine to medium grained medium occasionally thinly bedded fresh silty SANDSTONE, moderately strong to strong. (N.S.I). 19.35 to 19.45m, 20.85 to 20.95m, highly fractured and ironstained, highly fossiliferous in parts. Becoming very fine grained from 20.0m.			18.60	91.66
			96(92)	78	4	200-500mm						
	18.0										21.20	89.06
21.5								Dark grey thickly laminated to thinly bedded MUDSTONE, very weak slightly micaceous. (UPPER LIAS).			21.50	88.76
								End of Borehole.				

Remarks:

Access to piezometer by stopcock cover set in concrete.
Borehole backfilled with imported gravelly sand.

geotechnics

Contact BGS: ngdc@bgs.ac.uk

British Geological Survey

BGS ID: 367787 : BGS Reference: SP99SW995
EPSG: 27700 : 490060,290120

Norwest Holst Soil Engineering Ltd.

Borehole No. **2-2**

BOREHOLE LOG

Contract No. F5283
Location Corby Steelworks
Client Corby District Council
Method of Boring Percussion
Diameter of Borehole 150mm

SP99SW 995

Sheet 1 of 2
Chainage
Ground Level 111.680 m.A.O.D.
Date 28-29/7/82

Description of Strata	Legend	Depth Below G.L.(m)	O.D. Level (m)	Casing Depth at Sampling	Sampling and Coring	"N"/ R.Q.D.%	Daily Progress
MADE GROUND: Ash, cinders.		0.50	111.2		0.50		28/7
MADE GROUND: Soft orange-brown/blue-grey mottled sandy silty clay with scattered pale gravel.		1.00	110.7		1.50		
Stiff grey-orange brown sandy silty CLAY with scattered fine to medium pale sub-rounded gravel and pockets of silty sand.		3.50	108.2		2.50		
Stiff grey sandy silty CLAY with scattered fine to medium pale sub-rounded gravel, and pockets of silty sand, (BOULDER CLAY).		7.20	104.5		3.50 4.50 6.00		28/7 29/7
Very dense grey, fine to medium slightly clayey SAND with layers of very stiff silty clay.					7.50 8.50 9.10	74 88	

Type of Sample

- Is S.P.T. ■ Undisturbed
- Ic. C.P.T. × Vane
- O Jar △ Water
- ● Bulk ▮ Piezometer

Remarks (Observations of Ground Water etc.)

28/7/82 Groundwater not encountered during boring.
29/7/82 Slight seepage of groundwater at 7.50m.
Chiselling from 11.00m to 13.50m (3hrs).
+Possible made ground.

Contact BGS: ngdc@bgs.ac.uk

British Geological Survey

BGS ID: 367787 : BGS Reference: SP99SW995
EPSG: 27700 : 490060,290120

Norwest Holst Soil Engineering Ltd.

Borehole No. **2-2**

BOREHOLE LOG

Contract No. E5283
Location. Corby Steelworks
Client. Corby District Council
Method of Boring. Percussion
Diameter of Borehole. 150mm

SP 99 SW /99T

Sheet 2 of 2
Chainage.
Ground Level. 111.680 m.A.O.D.
Date. 28-29/7/82

Description of Strata	Legend	Depth Below G.L.(m)	O.D. Level (m)	Casing Depth at Sampling	Sampling and Coring	"N"/ R.Q.D.%	Daily Progress
Very dense grey fine to medium slightly clayey SAND.		10.50	101.2		10.00	69	
Stiff grey fissured silty CLAY.		11.00	100.7		11.00		
Dense grey silty SAND.		11.50	100.2			44	
Stiff grey fissured silty CLAY.		12.20	99.5		12.20		
Dense to very dense orange-brown SAND,						28	
...becoming blue-grey/orange-brown and weakly cemented to 13.60m.		13.80	97.9	150mm to 13.80m	13.00	82 /150*	
Friable grey MUDSTONE, with fragments of red-brown ironstone.		14.00	97.7		13.80	67 /150*	29/7

Type of Sample

Is S.P.T. ■ Undisturbed
Ic. C.P.T. × Vane
O Jar Δ Water
● Bulk ◉ Piezometer

Remarks (Observations of Ground Water etc.)

* Seating drive only.

Contact BGS: ngdc@bgs.ac.uk

APPENDIX 2
Logs for Recent On-site Boreholes

soiltechnics
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INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	OPEN HOLE.																		

DRAFT

CONTINUED ON NEXT SHEET

Notes	**Title** Borehole record		**Date(s)** 11/05/2022
	Method Rotary core	**Logged by** NI	**Sheet number** Sheet 1 of 2
Groundwater observations No groundwater encountered.	**Level (m OD)** 109.00	**Compiled by** SA	**Revision** 0
	Co-ordinates 490019mE, 291070mN	**Checked by** AW	**BH01B**

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INSTALL	STRATA DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	CORING DEPTH (m)	CORING TCR (%)	CORING SCR (%)	CORING RQD (%)	CORING FI	SPT TESTING TYPE / DEPTH (m)	SPT TESTING RESULT	SPT TESTING CASING DEPTH (m)	SPT TESTING WATER LEVEL (m)	OTHER IN SITU TESTING TYPE / DEPTH (m)	OTHER IN SITU TESTING RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Soft slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to subangular brick and concrete. (MADE GROUND)	10.00	99.00																
	[Loose] yellowish orange fine SAND. (NORTHAMPTON SAND FORMATION)	10.50	98.50			10.00 - 11.50	100	0	0										
	Stiff grey CLAY. (SUSPECTED WEATHERED WHITBY MUDSTONE)	12.80	96.20			11.50 - 13.81	92	0	0										
	BOREHOLE TERMINATED AT 12.81m	12.81	96.19																

DRAFT

Notes	**Title** Borehole record		**Date(s)** 11/05/2022
	Method Rotary core	**Logged by** NI	**Sheet number** Sheet 2 of 2
Groundwater observations No groundwater encountered.	**Level (m OD)** 109.00	**Compiled by** SA	**Revision** 0
	Co-ordinates 490019mE, 291070mN	**Checked by** AW	**BH01B**

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INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	OPEN HOLE.																		

DRAFT

CONTINUED ON NEXT SHEET

Notes	**Title** Borehole record		**Date(s)** 11/05/2022
	Method Rotary core	**Logged by** NI	**Sheet number** Sheet 1 of 2
Groundwater observations No groundwater encountered.	**Level (m OD)** 106.98	**Compiled by** SA	**Revision** 0
	Co-ordinates 490181mE, 290993mN	**Checked by** AW	**BH02B**

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INSTALL	STRATA DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES
	Soft slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to subangular brick and concrete. (MADE GROUND)	10.00	96.98		
	[Loose] yellowish orange fine SAND. (NORTHAMPTON SAND FORMATION)	11.40	95.58		
	Stiff grey CLAY. (SUSPECTED WEATHERED WHITBY MUDSTONE)	13.50	93.48		
	BOREHOLE TERMINATED AT 13.51m	13.51	93.47		

CORING DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI
10.00 - 11.50	67	0	0	
11.50 - 13.00	73	0	0	
13.00 - 13.50	100	0	0	

SPT TESTING TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)

OTHER IN SITU TESTING TYPE / DEPTH (m)	RESULT

SAMPLING FROM (m)	TO (m)	TYPE

DRAFT

Notes

Groundwater observations
No groundwater encountered.

Title
Borehole record

Date(s)
11/05/2022

Method
Rotary core

Logged by
NI

Sheet number
Sheet 2 of 2

Level (m OD)
106.98

Compiled by
SA

Revision
0

Co-ordinates
490181mE, 290993mN

Checked by
AW

BH02B

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INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	OPEN HOLE.																		

DRAFT

CONTINUED ON NEXT SHEET

Notes	**Title** Borehole record		**Date(s)** 11/05/2022
	Method Rotary core	**Logged by** NI	**Sheet number** Sheet 1 of 2
Groundwater observations No groundwater encountered.	**Level (m OD)** 108.90	**Compiled by** SA	**Revision** 0
	Co-ordinates 489966mE, 290877mN	**Checked by** AW	**BH08B**

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INSTALL	STRATA: DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES
	Soft slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to subangular brick and concrete. (MADE GROUND)	10.00	98.90		
	[Loose] yellowish orange fine SAND. (NORTHAMPTON SAND FORMATION)	11.40	97.50		
	Stiff grey CLAY. (WEATHERED WHITBY MUDSTONE)	12.90	96.00		
	BOREHOLE TERMINATED AT 14.00m	14.00	94.90		

CORING: DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI
10.00 - 11.50	67	0	0	
11.50 - 13.00	67	0	0	
13.00 - 14.00	50	0	0	

SPT TESTING: TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)

OTHER IN SITU TESTING: TYPE / DEPTH (m)	RESULT

SAMPLING: FROM (m)	TO (m)	TYPE

DRAFT

Notes

Groundwater observations
No groundwater encountered.

Title
Borehole record

Date(s)
11/05/2022

Method
Rotary core

Logged by
NI

Sheet number
Sheet 2 of 2

Level (m OD)
108.90

Compiled by
SA

Revision
0

Co-ordinates
489966mE, 290877mN

Checked by
AW

BH08B

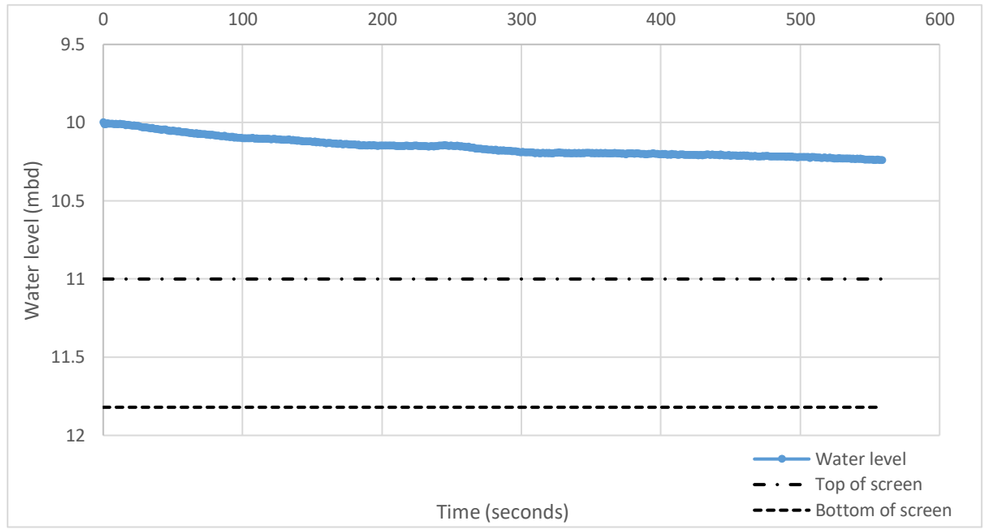
APPENDIX 3
Hydraulic Conductivity Analysis

Hydraulic Conductivity Analysis - Bouwer-Rice Method

firth consultants

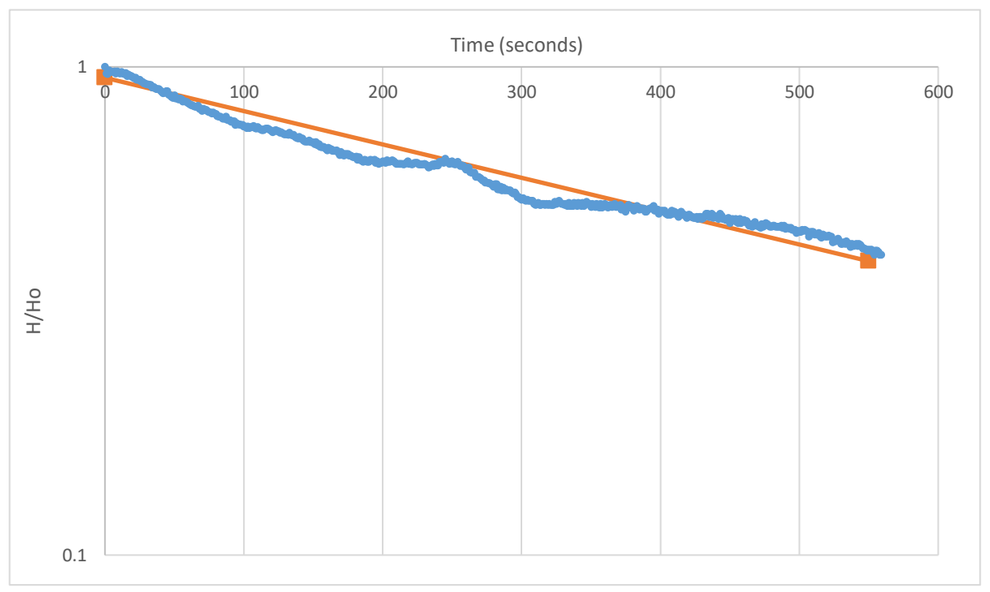
Site name:	Corby	
Well name:	BH04	
Test date:	15/06/2022	
Test number:	test 1 slug in	
Analyst:	LK	
Datum point:	Ground level	
Rest water level:	10.41	m below datum (mbd)
Top of screen:	11	m below datum (mbd)
Bottom of screen:	11.82	m below datum (mbd)

User to change cells in blue

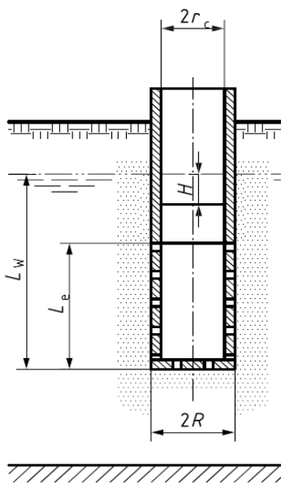


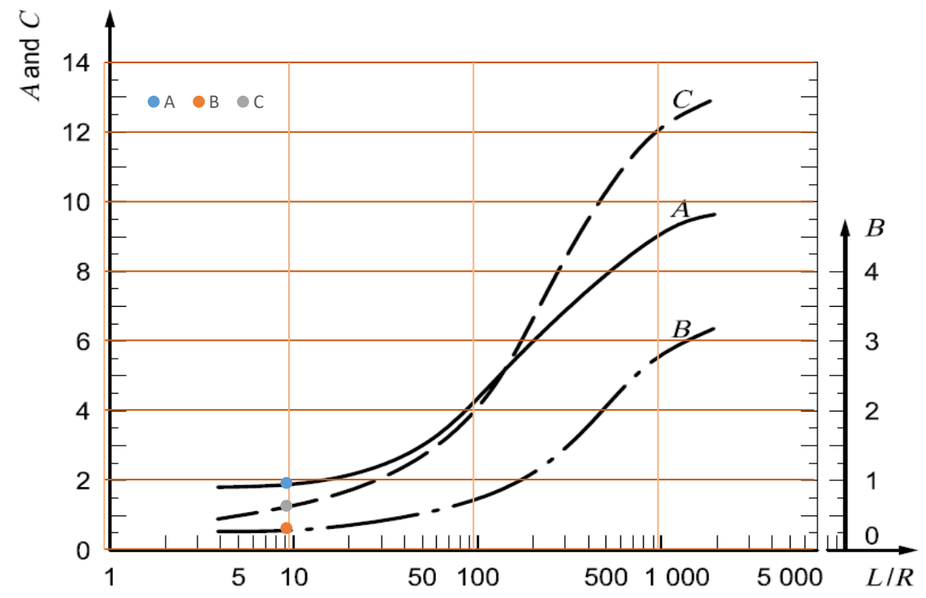
Time (seconds)	Water level (mbd)	H (m)	H/Ho
0	9.998	0.412	1
1	10.011	0.399	0.968447
2	10.012	0.398	0.966019
3	10.005	0.405	0.98301
4	10.007	0.403	0.978155
5	10.008	0.402	0.975728
6	10.008	0.402	0.975728
7	10.007	0.403	0.978155
8	10.011	0.399	0.968447
9	10.007	0.403	0.978155
10	10.01	0.4	0.970874
11	10.011	0.399	0.968447
12	10.008	0.402	0.975728
13	10.011	0.399	0.968447
14	10.012	0.398	0.966019
15	10.01	0.4	0.970874
16	10.016	0.394	0.956311
17	10.013	0.397	0.963592
18	10.015	0.395	0.958738
19	10.016	0.394	0.956311
20	10.017	0.393	0.953883
21	10.019	0.391	0.949029
22	10.018	0.392	0.951456
23	10.022	0.388	0.941748
24	10.022	0.388	0.941748
25	10.022	0.388	0.941748
26	10.025	0.385	0.934466
27	10.026	0.384	0.932039
28	10.029	0.381	0.924757
29	10.029	0.381	0.924757
30	10.031	0.379	0.919903
31	10.031	0.379	0.919903
32	10.032	0.378	0.917476
33	10.032	0.378	0.917476
34	10.036	0.374	0.907767
35	10.035	0.375	0.910194
36	10.037	0.373	0.90534
37	10.039	0.371	0.900485
38	10.039	0.371	0.900485
39	10.039	0.371	0.900485
40	10.042	0.368	0.893204
41	10.044	0.366	0.88835
42	10.046	0.364	0.883495
43	10.045	0.365	0.885922
44	10.043	0.367	0.890777
45	10.043	0.367	0.890777
46	10.049	0.361	0.876214
47	10.05	0.36	0.873786
48	10.052	0.358	0.868932
49	10.054	0.356	0.864078
50	10.05	0.36	0.873786
51	10.055	0.355	0.86165
52	10.055	0.355	0.86165
53	10.057	0.353	0.856796
54	10.055	0.355	0.86165
55	10.056	0.354	0.859223
56	10.06	0.35	0.849515
57	10.059	0.351	0.851942
58	10.06	0.35	0.849515
59	10.061	0.349	0.847087
60	10.063	0.347	0.842233
61	10.064	0.346	0.839806
62	10.066	0.344	0.834951
63	10.066	0.344	0.834951
64	10.068	0.342	0.830097
65	10.069	0.341	0.82767
66	10.069	0.341	0.82767
67	10.067	0.343	0.832524
68	10.072	0.338	0.820388
69	10.071	0.339	0.822816
70	10.075	0.335	0.813107
71	10.072	0.338	0.820388
72	10.074	0.336	0.815534
73	10.074	0.336	0.815534
74	10.076	0.334	0.81068
75	10.077	0.333	0.808252
76	10.078	0.332	0.805825
77	10.079	0.331	0.803398
78	10.078	0.332	0.805825
79	10.079	0.331	0.803398
80	10.08	0.33	0.800971
81	10.083	0.327	0.793689
82	10.084	0.326	0.791262
83	10.084	0.326	0.791262
84	10.086	0.324	0.786408
85	10.087	0.323	0.783981
86	10.087	0.323	0.783981
87	10.084	0.326	0.791262
88	10.089	0.321	0.779126
89	10.09	0.32	0.776699
90	10.09	0.32	0.776699
91	10.092	0.318	0.771845

Bouwer-Rice Analysis



Input parameters	**Symbol**	**Units**	**Value**
Radius of well pipe	r_c	m	0.025
Borehole radius in screened section	R	m	0.085
Length of saturated screen (Le on diagram)	L	m	0.82
Length of saturated screen + solid casing	L_w	m	1.41
Saturated thickness of aquifer	h	m	7.59
Use effective radius of well pipe? (when water level in screened section)			No
Porosity of gravel pack	n		0.25
Line fitting parameters (adjust to best fit line)			
x-axis time 1	t1	s	0
x-axis time 2	t2	s	550
y-axis H/Ho 1	H1/Ho		0.95
y-axis H/Ho 2	H2/Ho		0.4





A	A		1.9
B	B		0.3
C	C		1.25
2B	2B		0.6
Calculated parameters			
H1 (from line fitting)	H1	m	0.3914
H2 (from line fitting)	H2	m	0.1648
Effective radius of well pipe	r_e	m	0.025
L/R	L/R		9.647059
Effective radial distance over which induced head dissipated	Re	m	0.339646
Re fully penetrating			
Assume fully penetrating?			No
ln (Re/R) (partially penetrating)	ln (Re/R)		1.385253
ln (Re/R) (fully penetrating)	ln (Re/R)		1.918597
ln (Re/R) (used)	ln (Re/R)		1.385253
Hydraulic conductivity	K	m/s	8.30E-07
		m/d	7.17E-02

Equations used

$$K = \frac{r_e^2 . ln\left({}^{Re}/_{R}\right)}{2.L} . \frac{1}{(t_2 - t_1)} . ln\left(\frac{H_1}{H_2}\right) \qquad r_e = \sqrt{(1-n)r_c^2 + nR^2}$$

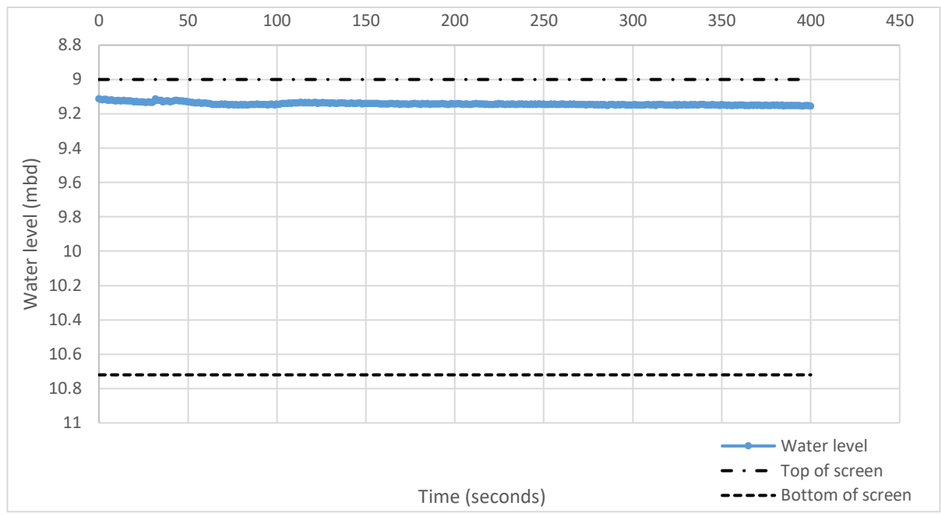
If L_w is less than h, the saturated thickness of the aquifer, then

Hydraulic Conductivity Analysis - Bouwer-Rice Method

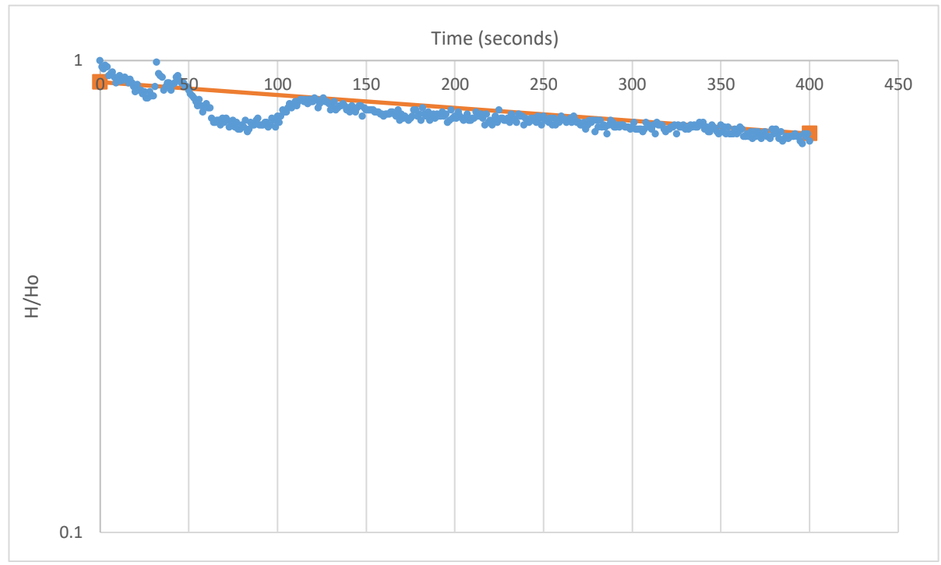
firth consultants

Well name:	BH05	
Test date:	20/06/2022	
Test number:	test 1 slug in	
Analyst:	LK	
Datum point:	Ground level	
Rest water level:	9.24	m below datum (mbd)
Top of screen:	9	m below datum (mbd)
Bottom of screen:	10.72	m below datum (mbd)

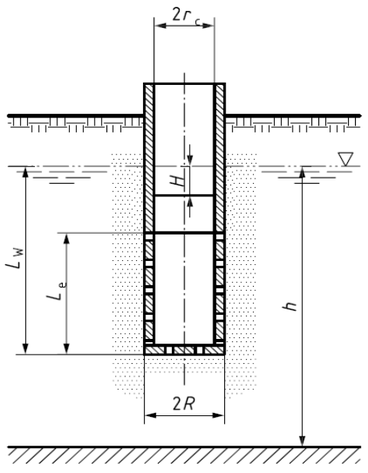
Time (seconds)	Water level (mbd)	H (m)	H/Ho
0	9.114	0.126	1
1	9.118	0.122	0.968254
2	9.119	0.121	0.960317
3	9.117	0.123	0.97619
4	9.118	0.122	0.968254
5	9.123	0.117	0.928571
6	9.122	0.118	0.936508
7	9.121	0.119	0.944444
8	9.124	0.116	0.920635
9	9.127	0.113	0.896825
10	9.126	0.114	0.904762
11	9.123	0.117	0.928571
12	9.126	0.114	0.904762
13	9.125	0.115	0.912698
14	9.124	0.116	0.920635
15	9.125	0.115	0.912698
16	9.127	0.113	0.896825
17	9.125	0.115	0.912698
18	9.127	0.113	0.896825
19	9.129	0.111	0.880952
20	9.132	0.108	0.857143
21	9.128	0.112	0.888889
22	9.131	0.109	0.865079
23	9.131	0.109	0.865079
24	9.133	0.107	0.849206
25	9.132	0.108	0.857143
26	9.135	0.105	0.833333
27	9.135	0.105	0.833333
28	9.132	0.108	0.857143
29	9.134	0.106	0.84127
30	9.134	0.106	0.84127
31	9.129	0.111	0.880952
32	9.115	0.125	0.992063
33	9.122	0.118	0.936508
34	9.123	0.117	0.928571
35	9.124	0.116	0.920635
36	9.131	0.109	0.865079
37	9.129	0.111	0.880952
38	9.127	0.113	0.896825
39	9.127	0.113	0.896825
40	9.131	0.109	0.865079
41	9.128	0.112	0.888889
42	9.127	0.113	0.896825
43	9.124	0.116	0.920635
44	9.123	0.117	0.928571
45	9.126	0.114	0.904762
46	9.127	0.113	0.896825
47	9.127	0.113	0.896825
48	9.129	0.111	0.880952
49	9.129	0.111	0.880952
50	9.131	0.109	0.865079
51	9.133	0.107	0.849206
52	9.134	0.106	0.84127
53	9.135	0.105	0.833333
54	9.137	0.103	0.81746
55	9.139	0.101	0.801587
56	9.136	0.104	0.825397
57	9.139	0.101	0.801587
58	9.142	0.098	0.777778
59	9.139	0.101	0.801587
60	9.138	0.102	0.809524
61	9.14	0.1	0.793651
62	9.14	0.1	0.793651
63	9.145	0.095	0.753968
64	9.147	0.093	0.738095
65	9.147	0.093	0.738095
66	9.146	0.094	0.746032
67	9.146	0.094	0.746032
68	9.148	0.092	0.730159
69	9.145	0.095	0.753968
70	9.147	0.093	0.738095
71	9.145	0.095	0.753968
72	9.146	0.094	0.746032
73	9.149	0.091	0.722222
74	9.147	0.093	0.738095
75	9.146	0.094	0.746032
76	9.149	0.091	0.722222
77	9.147	0.093	0.738095
78	9.15	0.09	0.714286
79	9.15	0.09	0.714286
80	9.148	0.092	0.730159
81	9.149	0.091	0.722222
82	9.146	0.094	0.746032
83	9.151	0.089	0.706349
84	9.15	0.09	0.714286
85	9.147	0.093	0.738095
86	9.148	0.092	0.730159
87	9.148	0.092	0.730159
88	9.146	0.094	0.746032
89	9.145	0.095	0.753968
90	9.148	0.092	0.730159
91	9.148	0.092	0.730159
92	9.148	0.092	0.730159

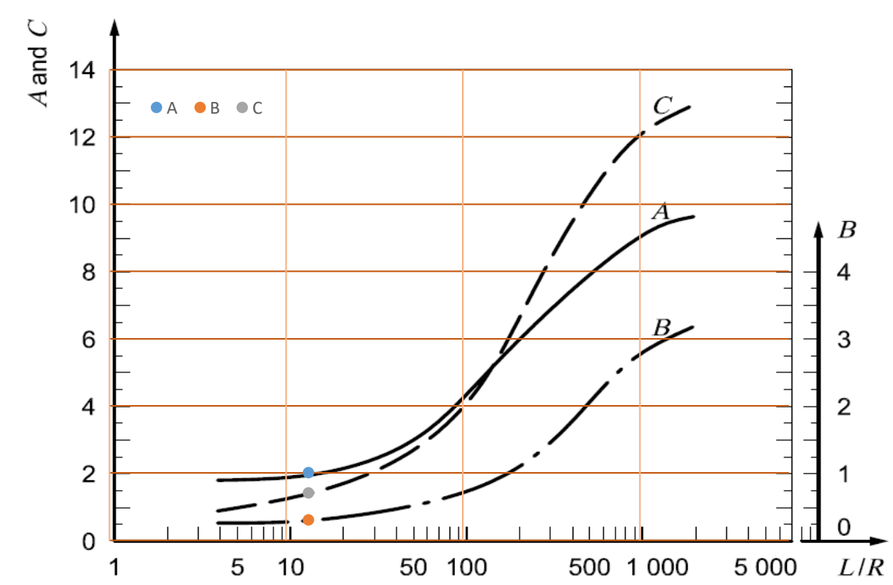


Bouwer-Rice Analysis



Input parameters	**Symbol**	**Units**	**Value**
Radius of well pipe	r_c	m	0.025
Borehole radius in screened section	R	m	0.11
Length of saturated screen (Le on diagram)	L	m	1.48
Length of saturated screen + solid casing	L_w	m	1.48
Saturated thickness of aquifer	h	m	6.36
Use effective radius of well pipe? (when water level in screened section)			Yes
Porosity of gravel pack	n		0.25
Line fitting parameters (adjust to best fit line)			
x-axis time 1	t1	s	0
x-axis time 2	t2	s	400
y-axis H/Ho 1	H1/Ho		0.9
y-axis H/Ho 2	H2/Ho		0.7





A	A		2
B	B		0.3
C	C		1.4
2B	2B		0.6
Calculated parameters			
H1 (from line fitting)	H1	m	0.1134
H2 (from line fitting)	H2	m	0.0882
Effective radius of well pipe	r_e	m	0.059108
L/R	L/R		13.45455
Effective radial distance over which induced head dissipated	Re	m	0.504692
Re fully penetrating			
Assume fully penetrating?			No
ln (Re/R) (partially penetrating)	ln (Re/R)		1.523467
ln (Re/R) (fully penetrating)	ln (Re/R)		1.896662
ln (Re/R) (used)	ln (Re/R)		1.523467
Hydraulic conductivity	K	m/s	1.13E-06
		m/d	9.76E-02

Equations used

$$K = \frac{r_e^2 . ln\left({Re}/{R}\right)}{2.L} . \frac{1}{(t_2 - t_1)} . ln\left(\frac{H_1}{H_2}\right) \qquad r_e = \sqrt{(1-n)r_c^2 + nR^2}$$

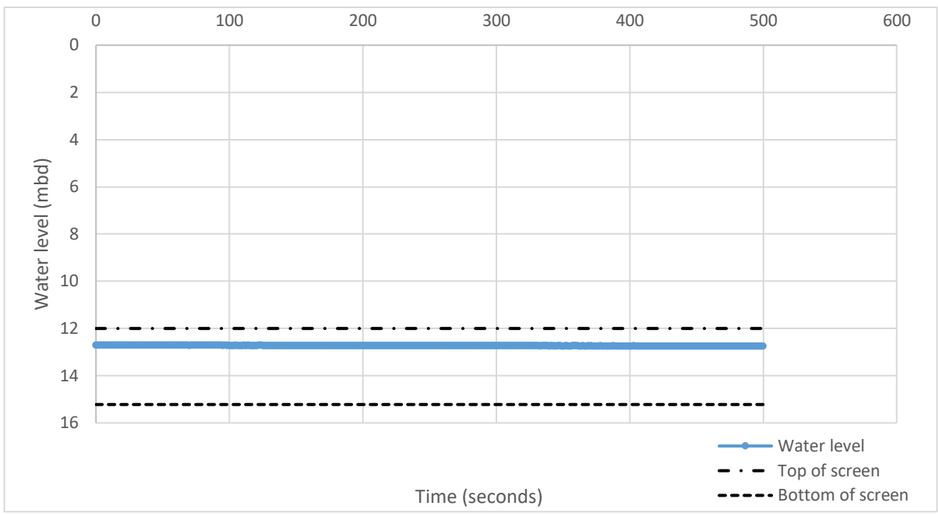
If L_w is less than h, the saturated thickness of the aquifer, then

Hydraulic Conductivity Analysis - Bouwer-Rice Method

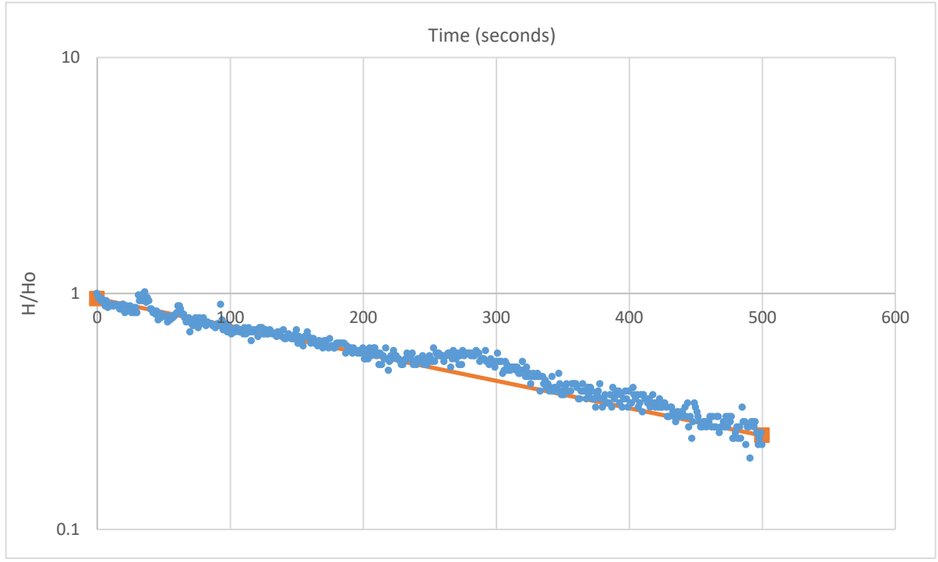
firth consultants

Well name:	BH06	
Test date:	15/06/2022	
Test number:	test 1 slug in	
Analyst:	LK	
Datum point:	Ground level	
Rest water level:	12.77	m below datum (mbd)
Top of screen:	12	m below datum (mbd)
Bottom of screen:	15.22	m below datum (mbd)

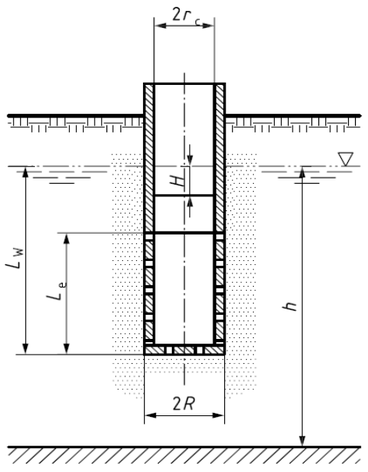
Time (seconds)	Water level (mbd)	H (m)	H/Ho
0	12.7	0.07	1
1	12.703	0.067	0.957143
2	12.703	0.067	0.957143
3	12.705	0.065	0.928571
4	12.704	0.066	0.942857
5	12.706	0.064	0.914286
6	12.708	0.062	0.885714
7	12.705	0.065	0.928571
8	12.709	0.061	0.871429
9	12.708	0.062	0.885714
10	12.708	0.062	0.885714
11	12.707	0.063	0.9
12	12.708	0.062	0.885714
13	12.708	0.062	0.885714
14	12.707	0.063	0.9
15	12.708	0.062	0.885714
16	12.708	0.062	0.885714
17	12.71	0.06	0.857143
18	12.71	0.06	0.857143
19	12.707	0.063	0.9
20	12.707	0.063	0.9
21	12.712	0.058	0.828571
22	12.708	0.062	0.885714
23	12.711	0.059	0.842857
24	12.711	0.059	0.842857
25	12.708	0.062	0.885714
26	12.712	0.058	0.828571
27	12.711	0.059	0.842857
28	12.712	0.058	0.828571
29	12.709	0.061	0.871429
30	12.712	0.058	0.828571
31	12.701	0.069	0.985714
32	12.705	0.065	0.928571
33	12.704	0.066	0.942857
34	12.705	0.065	0.928571
35	12.7	0.07	1
36	12.699	0.071	1.014286
37	12.706	0.064	0.914286
38	12.703	0.067	0.957143
39	12.705	0.065	0.928571
40	12.71	0.06	0.857143
41	12.71	0.06	0.857143
42	12.712	0.058	0.828571
43	12.711	0.059	0.842857
44	12.713	0.057	0.814286
45	12.711	0.059	0.842857
46	12.716	0.054	0.771429
47	12.713	0.057	0.814286
48	12.715	0.055	0.785714
49	12.713	0.057	0.814286
50	12.714	0.056	0.8
51	12.714	0.056	0.8
52	12.714	0.056	0.8
53	12.717	0.053	0.757143
54	12.714	0.056	0.8
55	12.716	0.054	0.771429
56	12.714	0.056	0.8
57	12.715	0.055	0.785714
58	12.714	0.056	0.8
59	12.713	0.057	0.814286
60	12.712	0.058	0.828571
61	12.708	0.062	0.885714
62	12.708	0.062	0.885714
63	12.71	0.06	0.857143
64	12.713	0.057	0.814286
65	12.713	0.057	0.814286
66	12.715	0.055	0.785714
67	12.717	0.053	0.757143
68	12.716	0.054	0.771429
69	12.715	0.055	0.785714
70	12.722	0.048	0.685714
71	12.718	0.052	0.742857
72	12.719	0.051	0.728571
73	12.717	0.053	0.757143
74	12.715	0.055	0.785714
75	12.718	0.052	0.742857
76	12.72	0.05	0.714286
77	12.715	0.055	0.785714
78	12.717	0.053	0.757143
79	12.718	0.052	0.742857
80	12.715	0.055	0.785714
81	12.718	0.052	0.742857
82	12.719	0.051	0.728571
83	12.717	0.053	0.757143
84	12.718	0.052	0.742857
85	12.718	0.052	0.742857
86	12.718	0.052	0.742857
87	12.719	0.051	0.728571
88	12.719	0.051	0.728571
89	12.72	0.05	0.714286
90	12.719	0.051	0.728571
91	12.718	0.052	0.742857
92	12.719	0.051	0.728571

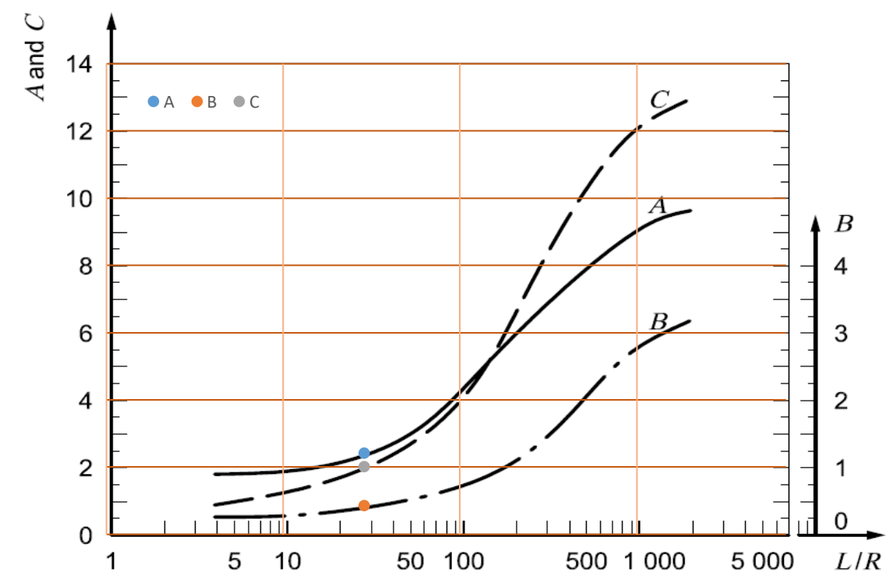


Bouwer-Rice Analysis



Input parameters	**Symbol**	**Units**	**Value**
Radius of well pipe	r_c	m	0.025
Borehole radius in screened section	R	m	0.085
Length of saturated screen (Le on diagram)	L	m	2.45
Length of saturated screen + solid casing	L_w	m	2.45
Saturated thickness of aquifer	h	m	2.33
Use effective radius of well pipe? (when water level in screened section)			Yes
Porosity of gravel pack	n		0.25
Line fitting parameters (adjust to best fit line)			
x-axis time 1	t1	s	0
x-axis time 2	t2	s	500
y-axis H/Ho 1	H1/Ho		0.95
y-axis H/Ho 2	H2/Ho		0.25





A	A		2.4
B	B		0.42
C	C		2
2B	2B		0.84
Calculated parameters			
H1 (from line fitting)	H1	m	0.0665
H2 (from line fitting)	H2	m	0.0175
Effective radius of well pipe	r_e	m	0.047697
L/R	L/R		28.82353
Effective radial distance over which induced head dissipated	Re	m	1.057591
Re fully penetrating			
Assume fully penetrating?			Yes
ln (Re/R) (partially penetrating)	ln (Re/R)		#NUM!
ln (Re/R) (fully penetrating)	ln (Re/R)		2.521098
ln (Re/R) (used)	ln (Re/R)		2.521098
Hydraulic conductivity	K	m/s	3.13E-06
		m/d	2.70E-01

Equations used

$$K = \frac{r_e^2 . ln\left({}^{Re}/_{R}\right)}{2.L} . \frac{1}{(t_2 - t_1)} . ln\left(\frac{H_1}{H_2}\right) \qquad r_e = \sqrt{(1-n)r_c^2 + nR^2}$$

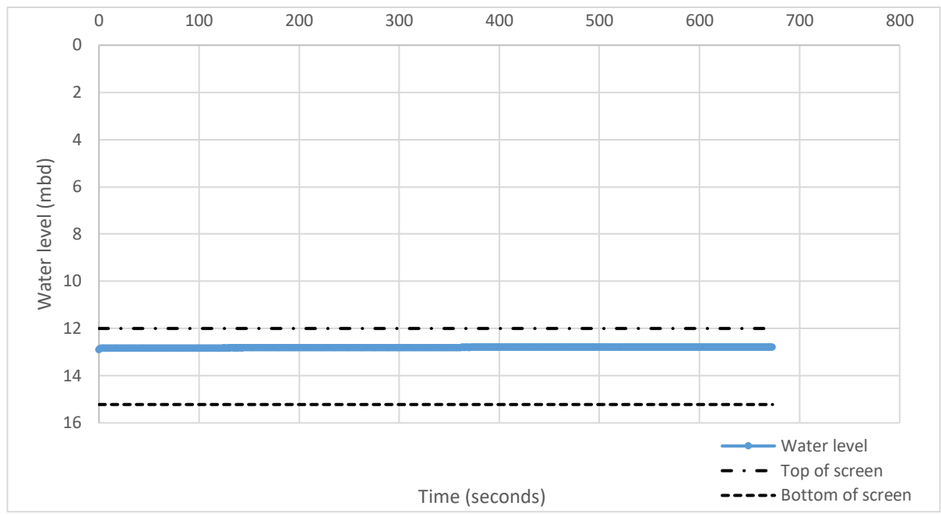
If L_w is less than h, the saturated thickness of the aquifer, then

Hydraulic Conductivity Analysis - Bouwer-Rice Method

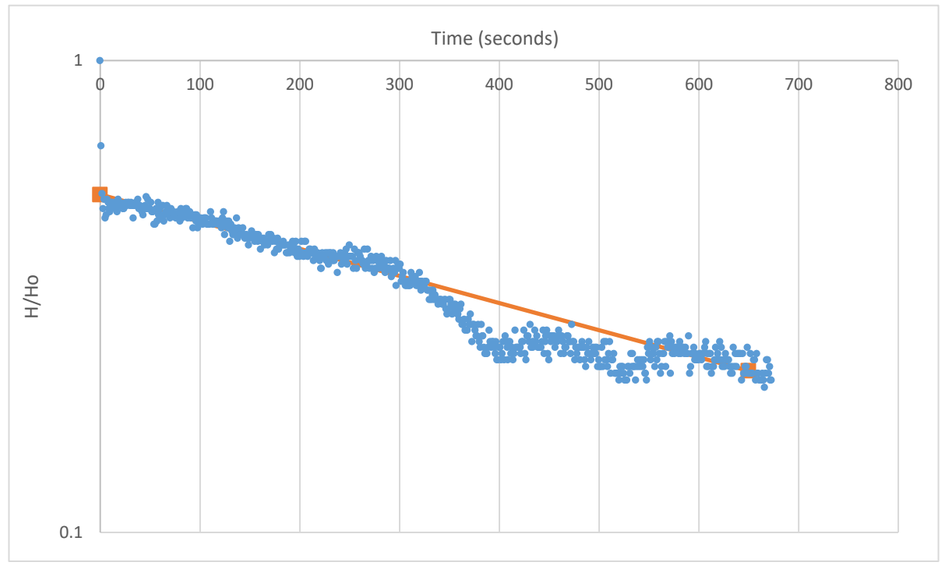
firth consultants

Well name:	BH06	
Test date:	15/06/2022	
Test number:	test 2 slug in	
Analyst:	LK	
Datum point:	Ground level	
Rest water level:	12.77	m below datum (mbd)
Top of screen:	12	m below datum (mbd)
Bottom of screen:	15.22	m below datum (mbd)

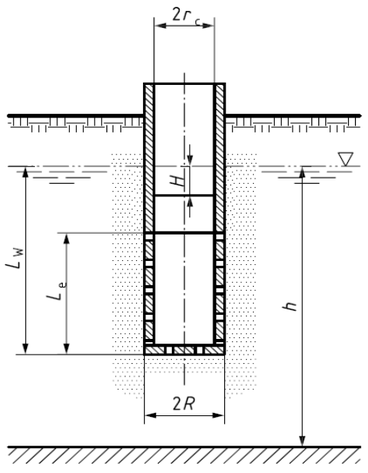
Time (seconds)	Water level (mbd)	H (m)	H/Ho
0	12.908	-0.138	1
1	12.861	-0.091	0.65942
2	12.842	-0.072	0.521739
3	12.837	-0.067	0.485507
4	12.84	-0.07	0.507246
5	12.834	-0.064	0.463768
6	12.835	-0.065	0.471014
7	12.84	-0.07	0.507246
8	12.839	-0.069	0.5
9	12.837	-0.067	0.485507
10	12.836	-0.066	0.478261
11	12.838	-0.068	0.492754
12	12.839	-0.069	0.5
13	12.839	-0.069	0.5
14	12.838	-0.068	0.492754
15	12.837	-0.067	0.485507
16	12.839	-0.069	0.5
17	12.836	-0.066	0.478261
18	12.84	-0.07	0.507246
19	12.838	-0.068	0.492754
20	12.839	-0.069	0.5
21	12.838	-0.068	0.492754
22	12.838	-0.068	0.492754
23	12.837	-0.067	0.485507
24	12.837	-0.067	0.485507
25	12.838	-0.068	0.492754
26	12.839	-0.069	0.5
27	12.838	-0.068	0.492754
28	12.839	-0.069	0.5
29	12.839	-0.069	0.5
30	12.838	-0.068	0.492754
31	12.839	-0.069	0.5
32	12.838	-0.068	0.492754
33	12.834	-0.064	0.463768
34	12.838	-0.068	0.492754
35	12.838	-0.068	0.492754
36	12.839	-0.069	0.5
37	12.839	-0.069	0.5
38	12.84	-0.07	0.507246
39	12.837	-0.067	0.485507
40	12.838	-0.068	0.492754
41	12.837	-0.067	0.485507
42	12.836	-0.066	0.478261
43	12.835	-0.065	0.471014
44	12.837	-0.067	0.485507
45	12.838	-0.068	0.492754
46	12.841	-0.071	0.514493
47	12.837	-0.067	0.485507
48	12.84	-0.07	0.507246
49	12.837	-0.067	0.485507
50	12.837	-0.067	0.485507
51	12.839	-0.069	0.5
52	12.836	-0.066	0.478261
53	12.836	-0.066	0.478261
54	12.832	-0.062	0.449275
55	12.832	-0.062	0.449275
56	12.837	-0.067	0.485507
57	12.833	-0.063	0.456522
58	12.839	-0.069	0.5
59	12.835	-0.065	0.471014
60	12.837	-0.067	0.485507
61	12.834	-0.064	0.463768
62	12.835	-0.065	0.471014
63	12.838	-0.068	0.492754
64	12.833	-0.063	0.456522
65	12.835	-0.065	0.471014
66	12.836	-0.066	0.478261
67	12.838	-0.068	0.492754
68	12.835	-0.065	0.471014
69	12.836	-0.066	0.478261
70	12.834	-0.064	0.463768
71	12.837	-0.067	0.485507
72	12.836	-0.066	0.478261
73	12.836	-0.066	0.478261
74	12.836	-0.066	0.478261
75	12.835	-0.065	0.471014
76	12.834	-0.064	0.463768
77	12.834	-0.064	0.463768
78	12.836	-0.066	0.478261
79	12.834	-0.064	0.463768
80	12.833	-0.063	0.456522
81	12.837	-0.067	0.485507
82	12.834	-0.064	0.463768
83	12.835	-0.065	0.471014
84	12.835	-0.065	0.471014
85	12.836	-0.066	0.478261
86	12.837	-0.067	0.485507
87	12.837	-0.067	0.485507
88	12.834	-0.064	0.463768
89	12.835	-0.065	0.471014
90	12.836	-0.066	0.478261
91	12.834	-0.064	0.463768
92	12.835	-0.065	0.471014

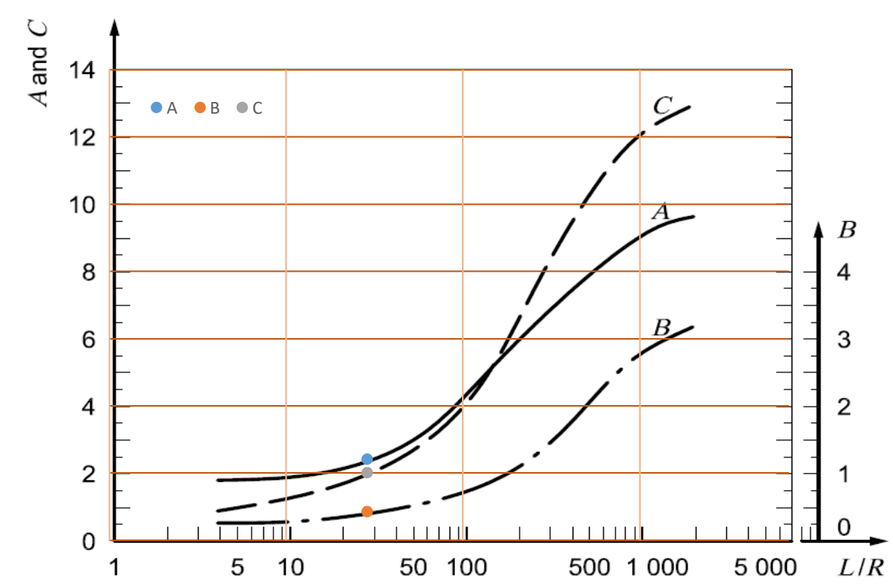


Bouwer-Rice Analysis



Input parameters	**Symbol**	**Units**	**Value**
Radius of well pipe	r_c	m	0.025
Borehole radius in screened section	R	m	0.085
Length of saturated screen (Le on diagram)	L	m	2.45
Length of saturated screen + solid casing	L_w	m	2.45
Saturated thickness of aquifer	h	m	2.33
Use effective radius of well pipe? (when water level in screened section)			Yes
Porosity of gravel pack	n		0.25
Line fitting parameters (adjust to best fit line)			
x-axis time 1	t1	s	0
x-axis time 2	t2	s	650
y-axis H/Ho 1	H1/Ho		0.52
y-axis H/Ho 2	H2/Ho		0.22





A	A		2.4
B	B		0.42
C	C		2
2B	2B		0.84
Calculated parameters			
H1 (from line fitting)	H1	m	-0.07176
H2 (from line fitting)	H2	m	-0.03036
Effective radius of well pipe	r_e	m	0.047697
L/R	L/R		28.82353
Effective radial distance over which induced head dissipated	Re	m	1.057591
Re fully penetrating			
Assume fully penetrating?			Yes
ln (Re/R) (partially penetrating)	ln (Re/R)		#NUM!
ln (Re/R) (fully penetrating)	ln (Re/R)		2.521098
ln (Re/R) (used)	ln (Re/R)		2.521098
Hydraulic conductivity	K	m/s	1.55E-06
		m/d	1.34E-01

Equations used

$$K = \frac{r_e^2 . ln\left({Re}/{R}\right)}{2.L} . \frac{1}{(t_2 - t_1)} . ln\left(\frac{H_1}{H_2}\right) \qquad r_e = \sqrt{(1-n)r_c^2 + nR^2}$$

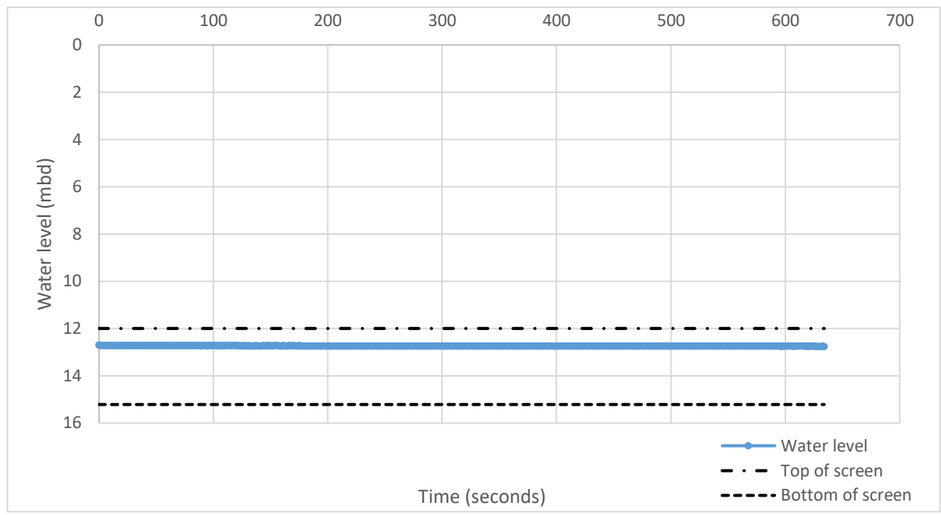
If L_w is less than h, the saturated thickness of the aquifer, then

Hydraulic Conductivity Analysis - Bouwer-Rice Method

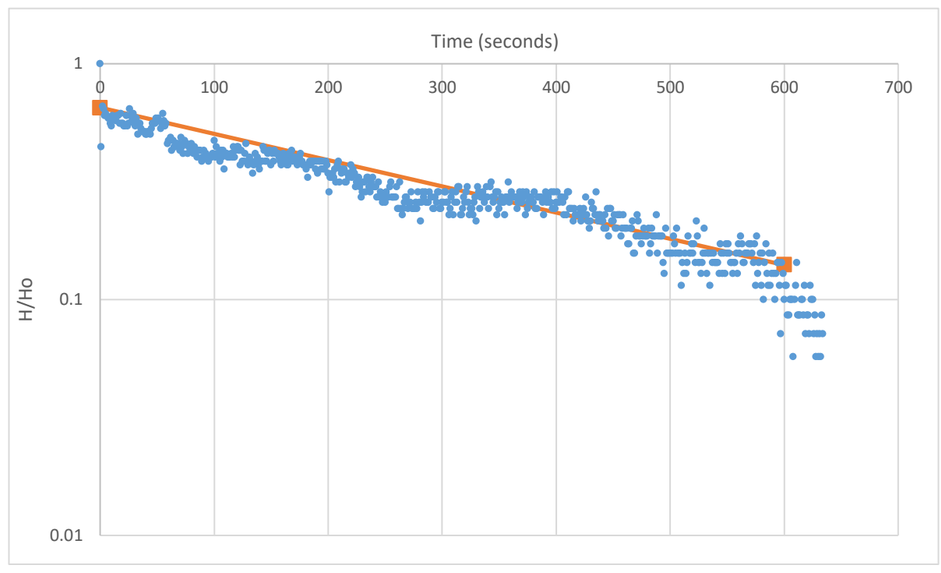
firth consultants

Well name:	BH06	
Test date:	15/06/2022	
Test number:	test 2 slug in	
Analyst:	LK	
Datum point:	Ground level	
Rest water level:	12.77	m below datum (mbd)
Top of screen:	12	m below datum (mbd)
Bottom of screen:	15.22	m below datum (mbd)

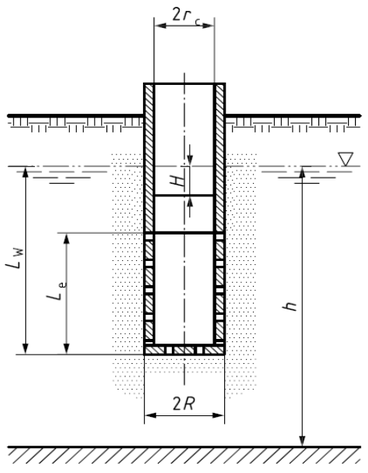
Time (seconds)	Water level (mbd)	H (m)	H/Ho
0	12.7	0.07	1
1	12.739	0.031	0.442857
2	12.724	0.046	0.657143
3	12.725	0.045	0.642857
4	12.728	0.042	0.6
5	12.727	0.043	0.614286
6	12.728	0.042	0.6
7	12.729	0.041	0.585714
8	12.729	0.041	0.585714
9	12.731	0.039	0.557143
10	12.732	0.038	0.542857
11	12.728	0.042	0.6
12	12.729	0.041	0.585714
13	12.729	0.041	0.585714
14	12.73	0.04	0.571429
15	12.728	0.042	0.6
16	12.728	0.042	0.6
17	12.731	0.039	0.557143
18	12.727	0.043	0.614286
19	12.731	0.039	0.557143
20	12.731	0.039	0.557143
21	12.732	0.038	0.542857
22	12.732	0.038	0.542857
23	12.728	0.042	0.6
24	12.732	0.038	0.542857
25	12.731	0.039	0.557143
26	12.725	0.045	0.642857
27	12.728	0.042	0.6
28	12.73	0.04	0.571429
29	12.727	0.043	0.614286
30	12.731	0.039	0.557143
31	12.732	0.038	0.542857
32	12.729	0.041	0.585714
33	12.735	0.035	0.5
34	12.731	0.039	0.557143
35	12.731	0.039	0.557143
36	12.733	0.037	0.528571
37	12.734	0.036	0.514286
38	12.734	0.036	0.514286
39	12.734	0.036	0.514286
40	12.735	0.035	0.5
41	12.735	0.035	0.5
42	12.734	0.036	0.514286
43	12.734	0.036	0.514286
44	12.735	0.035	0.5
45	12.733	0.037	0.528571
46	12.731	0.039	0.557143
47	12.731	0.039	0.557143
48	12.731	0.039	0.557143
49	12.729	0.041	0.585714
50	12.73	0.04	0.571429
51	12.729	0.041	0.585714
52	12.73	0.04	0.571429
53	12.733	0.037	0.528571
54	12.731	0.039	0.557143
55	12.727	0.043	0.614286
56	12.73	0.04	0.571429
57	12.732	0.038	0.542857
58	12.731	0.039	0.557143
59	12.738	0.032	0.457143
60	12.737	0.033	0.471429
61	12.737	0.033	0.471429
62	12.736	0.034	0.485714
63	12.74	0.03	0.428571
64	12.737	0.033	0.471429
65	12.739	0.031	0.442857
66	12.739	0.031	0.442857
67	12.738	0.032	0.457143
68	12.738	0.032	0.457143
69	12.738	0.032	0.457143
70	12.74	0.03	0.428571
71	12.736	0.034	0.485714
72	12.739	0.031	0.442857
73	12.741	0.029	0.414286
74	12.737	0.033	0.471429
75	12.738	0.032	0.457143
76	12.738	0.032	0.457143
77	12.741	0.029	0.414286
78	12.739	0.031	0.442857
79	12.739	0.031	0.442857
80	12.738	0.032	0.457143
81	12.74	0.03	0.428571
82	12.741	0.029	0.414286
83	12.739	0.031	0.442857
84	12.74	0.03	0.428571
85	12.742	0.028	0.4
86	12.74	0.03	0.428571
87	12.74	0.03	0.428571
88	12.74	0.03	0.428571
89	12.743	0.027	0.385714
90	12.742	0.028	0.4
91	12.74	0.03	0.428571
92	12.742	0.028	0.4

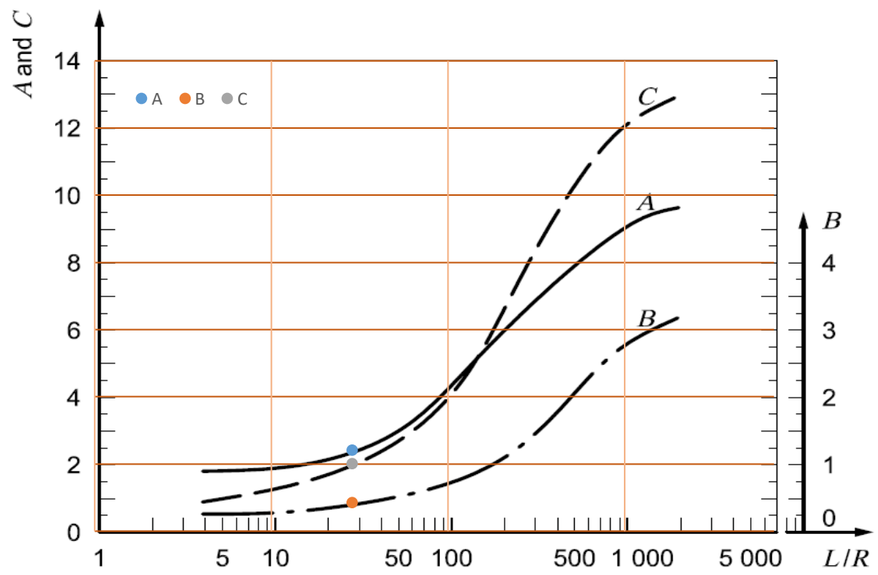


Bouwer-Rice Analysis



Input parameters	**Symbol**	**Units**	**Value**
Radius of well pipe	r_c	m	0.025
Borehole radius in screened section	R	m	0.085
Length of saturated screen (Le on diagram)	L	m	2.45
Length of saturated screen + solid casing	L_w	m	2.45
Saturated thickness of aquifer	h	m	2.33
Use effective radius of well pipe? (when water level in screened section)			Yes
Porosity of gravel pack	n		0.25
Line fitting parameters (adjust to best fit line)			
x-axis time 1	t1	s	0
x-axis time 2	t2	s	600
y-axis H/Ho 1	H1/Ho		0.65
y-axis H/Ho 2	H2/Ho		0.14





A	A		2.4
B	B		0.42
C	C		2
2B	2B		0.84
Calculated parameters			
H1 (from line fitting)	H1	m	0.0455
H2 (from line fitting)	H2	m	0.0098
Effective radius of well pipe	r_e	m	0.047697
L/R	L/R		28.82353
Effective radial distance over which induced head dissipated	Re	m	1.057591
Re fully penetrating			
Assume fully penetrating?			Yes
ln (Re/R) (partially penetrating)	ln (Re/R)		#NUM!
ln (Re/R) (fully penetrating)	ln (Re/R)		2.521098
ln (Re/R) (used)	ln (Re/R)		2.521098
Hydraulic conductivity	K	m/s	3.00E-06
		m/d	2.59E-01

Equations used

$$K = \frac{r_e^2 . ln\left({Re}/{R}\right)}{2.L} . \frac{1}{(t_2 - t_1)} . ln\left(\frac{H_1}{H_2}\right) \qquad r_e = \sqrt{(1-n)r_c^2 + nR^2}$$

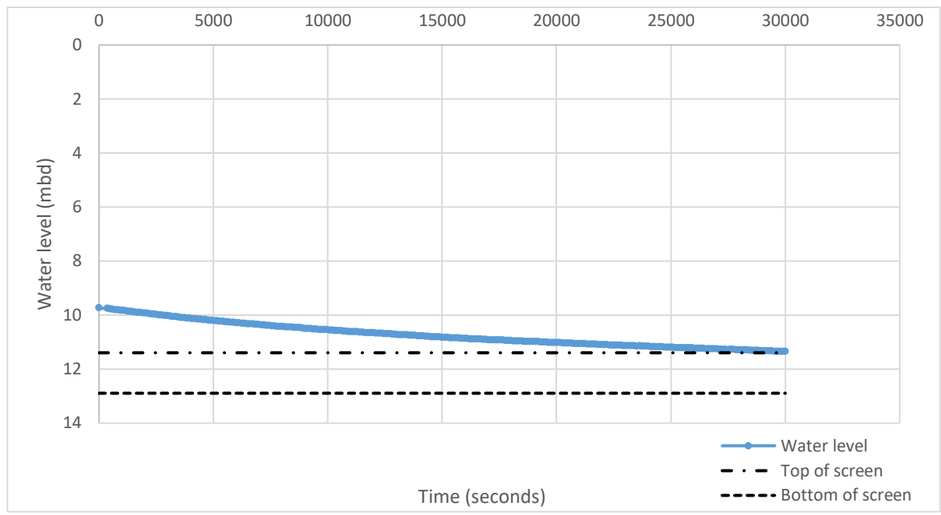
If L_w is less than h, the saturated thickness of the aquifer, then

Hydraulic Conductivity Analysis - Bouwer-Rice Method

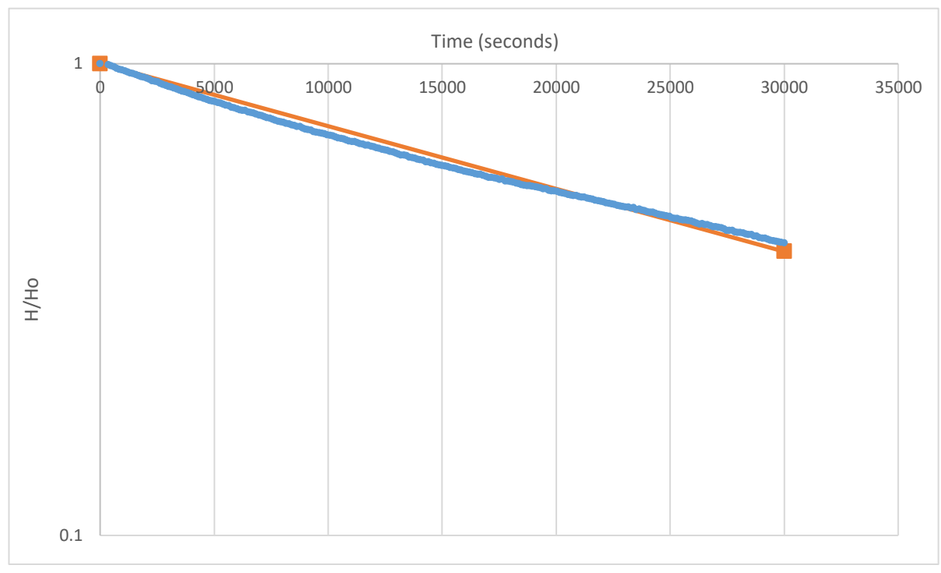
firth consultants

Well name:	BH08	
Test date:	20/06/2022	
Test number:	test 1 slug in	
Analyst:	LK	
Datum point:	Ground level	
Rest water level:	12.51	m below datum (mbd)
Top of screen:	11.4	m below datum (mbd)
Bottom of screen:	12.9	m below datum (mbd)

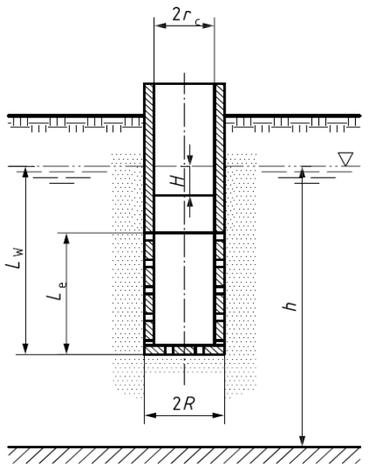
Time (seconds)	Water level (mbd)	H (m)	H/Ho
0	9.74	2.77	1
360	9.757	2.753	0.993863
480	9.769	2.741	0.989531
600	9.786	2.724	0.983394
720	9.803	2.707	0.977256
840	9.817	2.693	0.972202
960	9.826	2.684	0.968953
1080	9.84	2.67	0.963899
1200	9.85	2.66	0.960289
1320	9.866	2.644	0.954513
1440	9.876	2.634	0.950903
1560	9.884	2.626	0.948014
1680	9.899	2.611	0.942599
1800	9.913	2.597	0.937545
1920	9.921	2.589	0.934657
2040	9.935	2.575	0.929603
2160	9.945	2.565	0.925993
2280	9.963	2.547	0.919495
2400	9.971	2.539	0.916606
2520	9.981	2.529	0.912996
2640	9.996	2.514	0.907581
2760	10.008	2.502	0.903249
2880	10.022	2.488	0.898195
3000	10.032	2.478	0.894585
3120	10.042	2.468	0.890975
3240	10.056	2.454	0.885921
3360	10.066	2.444	0.88231
3480	10.077	2.433	0.878339
3600	10.092	2.418	0.872924
3720	10.099	2.411	0.870397
3840	10.111	2.399	0.866065
3960	10.122	2.388	0.862094
4080	10.133	2.377	0.858123
4200	10.145	2.365	0.853791
4320	10.156	2.354	0.849819
4440	10.162	2.348	0.847653
4560	10.176	2.334	0.842599
4680	10.185	2.325	0.83935
4800	10.199	2.311	0.834296
4920	10.206	2.304	0.831769
5040	10.212	2.298	0.829603
5160	10.22	2.29	0.826715
5280	10.23	2.28	0.823105
5400	10.242	2.268	0.818773
5520	10.253	2.257	0.814801
5640	10.258	2.252	0.812996
5760	10.272	2.238	0.807942
5880	10.279	2.231	0.805415
6000	10.29	2.22	0.801444
6120	10.301	2.209	0.797473
6240	10.307	2.203	0.795307
6360	10.31	2.2	0.794224
6480	10.326	2.184	0.788448
6600	10.332	2.178	0.786282
6720	10.337	2.173	0.784477
6840	10.345	2.165	0.781588
6960	10.356	2.154	0.777617
7080	10.362	2.148	0.775451
7200	10.372	2.138	0.771841
7320	10.383	2.127	0.76787
7440	10.392	2.118	0.764621
7560	10.401	2.109	0.761372
7680	10.41	2.1	0.758123
7800	10.419	2.091	0.754874
7920	10.425	2.085	0.752708
8040	10.434	2.076	0.749458
8160	10.442	2.068	0.74657
8280	10.45	2.06	0.743682
8400	10.456	2.054	0.741516
8520	10.461	2.049	0.739711
8640	10.474	2.036	0.735018
8760	10.473	2.037	0.735379
8880	10.489	2.021	0.729603
9000	10.497	2.013	0.726715
9120	10.502	2.008	0.72491
9240	10.511	1.999	0.721661
9360	10.523	1.987	0.717329
9480	10.529	1.981	0.715162
9600	10.535	1.975	0.712996
9720	10.539	1.971	0.711552
9840	10.545	1.965	0.709386
9960	10.553	1.957	0.706498
10080	10.559	1.951	0.704332
10200	10.566	1.944	0.701805
10320	10.576	1.934	0.698195
10440	10.585	1.925	0.694946
10560	10.591	1.919	0.69278
10680	10.595	1.915	0.691336
10800	10.602	1.908	0.688809
10920	10.613	1.897	0.684838
11040	10.616	1.894	0.683755
11160	10.618	1.892	0.683032
11280	10.63	1.88	0.6787

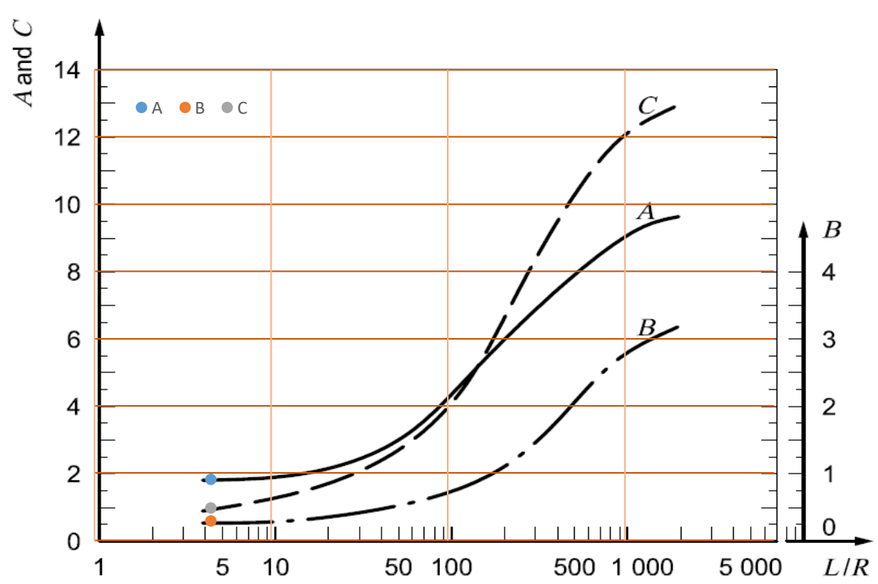


Bouwer-Rice Analysis



Input parameters	**Symbol**	**Units**	**Value**
Radius of well pipe	r_c	m	0.025
Borehole radius in screened section	R	m	0.085
Length of saturated screen (Le on diagram)	L	m	0.39
Length of saturated screen + solid casing	L_w	m	0.39
Saturated thickness of aquifer	h	m	0.39
Use effective radius of well pipe? (when water level in screened section)			No
Porosity of gravel pack	n		0.25
Line fitting parameters (adjust to best fit line)			
x-axis time 1	t1	s	0
x-axis time 2	t2	s	30000
y-axis H/Ho 1	H1/Ho		1
y-axis H/Ho 2	H2/Ho		0.4





A	A		1.8
B	B		0.28
C	C		0.95
2B	2B		0.56
Calculated parameters			
H1 (from line fitting)	H1	m	2.77
H2 (from line fitting)	H2	m	1.108
Effective radius of well pipe	r_e	m	0.025
L/R	L/R		4.588235
Effective radial distance over which induced head dissipated	Re	m	0.249383
Re fully penetrating			
Assume fully penetrating?			Yes
ln (Re/R) (partially penetrating)	ln (Re/R)		#NUM!
ln (Re/R) (fully penetrating)	ln (Re/R)		1.076339
ln (Re/R) (used)	ln (Re/R)		1.076339
Hydraulic conductivity	K	m/s	2.63E-08
		m/d	2.28E-03

Equations used

$$K = \frac{r_e^2 . ln\left({Re}/{R}\right)}{2.L} . \frac{1}{(t_2 - t_1)} . ln\left(\frac{H_1}{H_2}\right) \qquad r_e = \sqrt{(1-n)r_c^2 + nR^2}$$

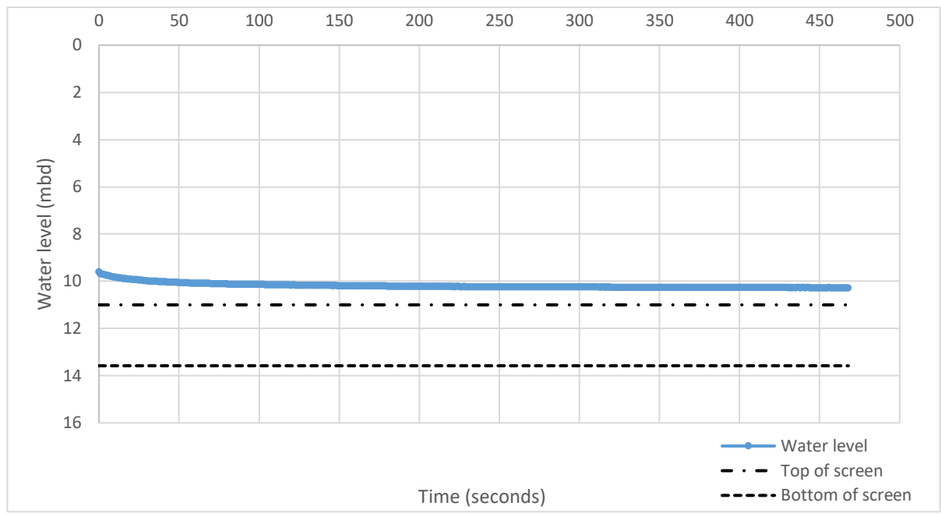
If L_w is less than h, the saturated thickness of the aquifer, then

Hydraulic Conductivity Analysis - Bouwer-Rice Method

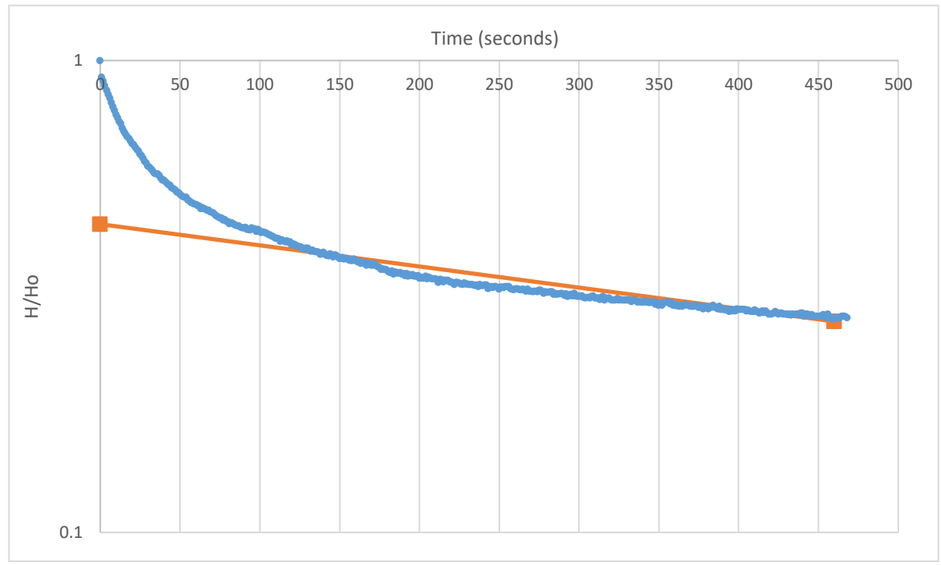
firth consultants

Well name:	BH09	
Test date:	20/06/2022	
Test number:	test 1 slug in	
Analyst:	LK	
Datum point:	Ground level	
Rest water level:	10.55	m below datum (mbd)
Top of screen:	11	m below datum (mbd)
Bottom of screen:	13.58	m below datum (mbd)

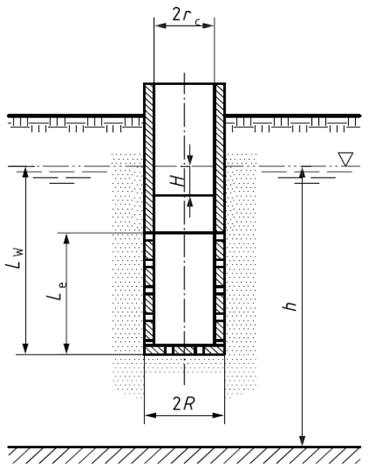
Time (seconds)	Water level (mbd)	H (m)	H/Ho
0	9.613	0.937	1
1	9.687	0.863	0.921025
2	9.702	0.848	0.905016
3	9.721	0.829	0.884739
4	9.74	0.81	0.864461
5	9.757	0.793	0.846318
6	9.771	0.779	0.831377
7	9.788	0.762	0.813234
8	9.803	0.747	0.797225
9	9.817	0.733	0.782284
10	9.83	0.72	0.76841
11	9.841	0.709	0.75667
12	9.854	0.696	0.742796
13	9.862	0.688	0.734258
14	9.876	0.674	0.719317
15	9.887	0.663	0.707577
16	9.895	0.655	0.699039
17	9.903	0.647	0.690502
18	9.91	0.64	0.683031
19	9.918	0.632	0.674493
20	9.926	0.624	0.665955
21	9.929	0.621	0.662753
22	9.937	0.613	0.654216
23	9.943	0.607	0.647812
24	9.948	0.602	0.642476
25	9.957	0.593	0.632871
26	9.962	0.588	0.627535
27	9.969	0.581	0.620064
28	9.978	0.572	0.610459
29	9.982	0.568	0.60619
30	9.99	0.56	0.597652
31	9.994	0.556	0.593383
32	9.999	0.551	0.588047
33	10.004	0.546	0.582711
34	10.01	0.54	0.576307
35	10.011	0.539	0.57524
36	10.012	0.538	0.574173
37	10.016	0.534	0.569904
38	10.022	0.528	0.563501
39	10.027	0.523	0.558164
40	10.028	0.522	0.557097
41	10.031	0.519	0.553895
42	10.035	0.515	0.549626
43	10.039	0.511	0.545358
44	10.041	0.509	0.543223
45	10.047	0.503	0.53682
46	10.05	0.5	0.533618
47	10.052	0.498	0.531483
48	10.057	0.493	0.526147
49	10.058	0.492	0.52508
50	10.062	0.488	0.520811
51	10.066	0.484	0.516542
52	10.068	0.482	0.514408
53	10.07	0.48	0.512273
54	10.07	0.48	0.512273
55	10.075	0.475	0.506937
56	10.078	0.472	0.503735
57	10.081	0.469	0.500534
58	10.083	0.467	0.498399
59	10.085	0.465	0.496265
60	10.086	0.464	0.495197
61	10.089	0.461	0.491996
62	10.09	0.46	0.490928
63	10.095	0.455	0.485592
64	10.093	0.457	0.487727
65	10.096	0.454	0.484525
66	10.097	0.453	0.483458
67	10.099	0.451	0.481323
68	10.099	0.451	0.481323
69	10.102	0.448	0.478122
70	10.104	0.446	0.475987
71	10.105	0.445	0.47492
72	10.108	0.442	0.471718
73	10.111	0.439	0.468517
74	10.114	0.436	0.465315
75	10.116	0.434	0.46318
76	10.116	0.434	0.46318
77	10.12	0.43	0.458911
78	10.119	0.431	0.459979
79	10.122	0.428	0.456777
80	10.123	0.427	0.45571
81	10.128	0.422	0.450374
82	10.126	0.424	0.452508
83	10.127	0.423	0.451441
84	10.129	0.421	0.449306
85	10.131	0.419	0.447172
86	10.132	0.418	0.446105
87	10.132	0.418	0.446105
88	10.135	0.415	0.442903
89	10.136	0.414	0.441836
90	10.136	0.414	0.441836
91	10.135	0.415	0.442903
92	10.139	0.411	0.438634

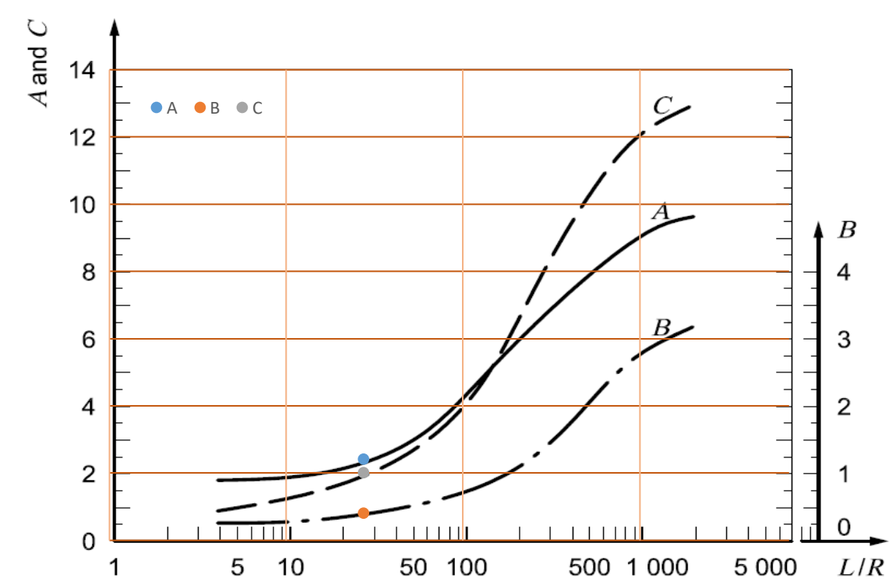


Bouwer-Rice Analysis



Input parameters	**Symbol**	**Units**	**Value**
Radius of well pipe	r_c	m	0.025
Borehole radius in screened section	R	m	0.11
Length of saturated screen (Le on diagram)	L	m	3.03
Length of saturated screen + solid casing	L_w	m	3.03
Saturated thickness of aquifer	h	m	3.55
Use effective radius of well pipe? (when water level in screened section)			No
Porosity of gravel pack	n		0.25
Line fitting parameters (adjust to best fit line)			
x-axis time 1	t1	s	0
x-axis time 2	t2	s	460
y-axis H/Ho 1	H1/Ho		0.45
y-axis H/Ho 2	H2/Ho		0.28





A	A		2.4
B	B		0.4
C	C		2
2B	2B		0.8
Calculated parameters			
H1 (from line fitting)	H1	m	0.42165
H2 (from line fitting)	H2	m	0.26236
Effective radius of well pipe	r_e	m	0.025
L/R	L/R		27.54545
Effective radial distance over which induced head dissipated	Re	m	1.059828
Re fully penetrating			
Assume fully penetrating?			No
ln (Re/R) (partially penetrating)	ln (Re/R)		2.265381
ln (Re/R) (fully penetrating)	ln (Re/R)		2.473114
ln (Re/R) (used)	ln (Re/R)		2.265381
Hydraulic conductivity	K	m/s	2.41E-07
		m/d	2.08E-02

Equations used

$$K = \frac{r_e^2 . ln\left(Re/R\right)}{2.L} . \frac{1}{(t_2 - t_1)} . ln\left(\frac{H_1}{H_2}\right) \qquad r_e = \sqrt{(1-n)r_c^2 + nR^2}$$

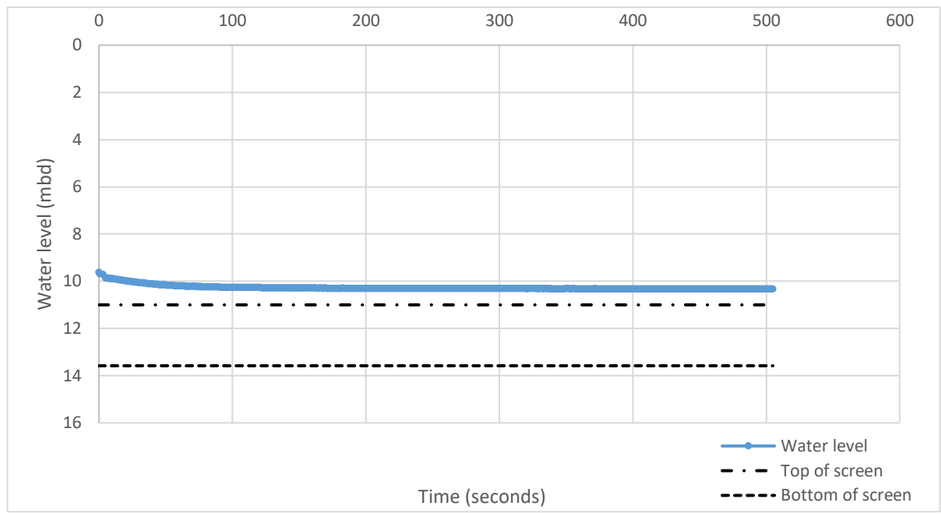
If L_w is less than h, the saturated thickness of the aquifer, then

Hydraulic Conductivity Analysis - Bouwer-Rice Method

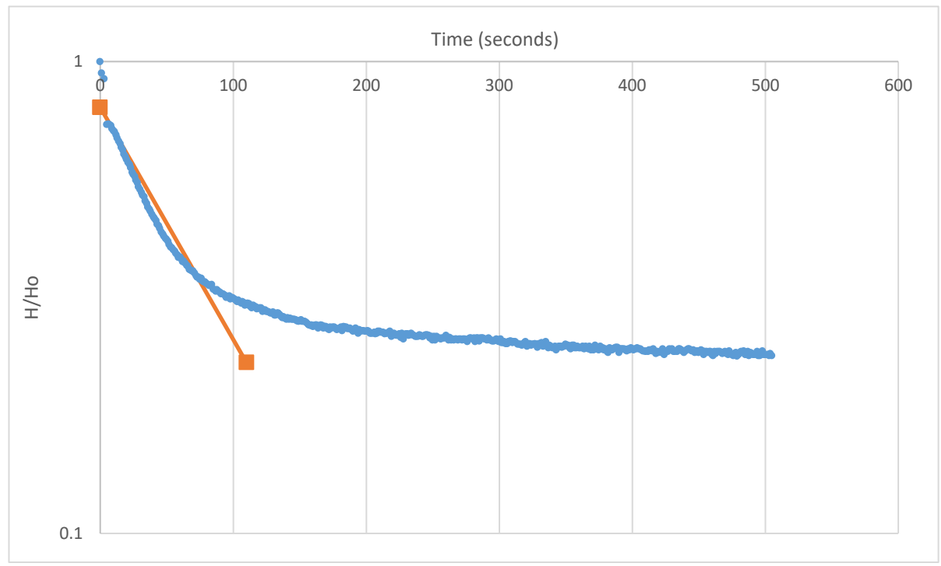
firth consultants

Well name:	BH09	
Test date:	20/06/2022	
Test number:	test 2 slug in	
Analyst:	LK	
Datum point:	Ground level	
Rest water level:	10.55	m below datum (mbd)
Top of screen:	11	m below datum (mbd)
Bottom of screen:	13.58	m below datum (mbd)

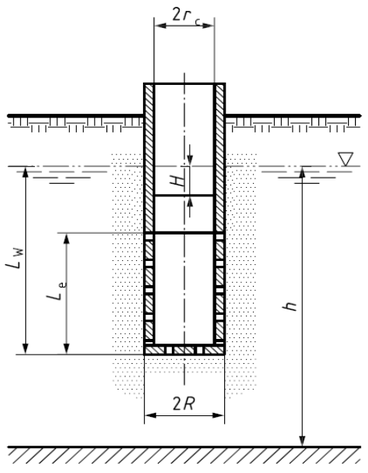
Time (seconds)	Water level (mbd)	H (m)	H/Ho
0	9.639	0.911	1
1	9.689	0.861	0.945115
3	9.714	0.836	0.917673
5	9.88	0.67	0.735456
6	9.878	0.672	0.737651
7	9.881	0.669	0.734358
8	9.884	0.666	0.731065
9	9.893	0.657	0.721186
10	9.9	0.65	0.713502
11	9.904	0.646	0.709111
12	9.914	0.636	0.698134
13	9.923	0.627	0.688255
14	9.932	0.618	0.678375
15	9.941	0.609	0.668496
16	9.951	0.599	0.657519
17	9.958	0.592	0.649835
18	9.97	0.58	0.636663
19	9.977	0.573	0.628979
20	9.985	0.565	0.620198
21	9.993	0.557	0.611416
22	9.999	0.551	0.60483
23	10.008	0.542	0.594951
24	10.019	0.531	0.582876
25	10.025	0.525	0.57629
26	10.03	0.52	0.570801
27	10.039	0.511	0.560922
28	10.046	0.504	0.553238
29	10.056	0.494	0.542261
30	10.062	0.488	0.535675
31	10.07	0.48	0.526894
32	10.076	0.474	0.520307
33	10.079	0.471	0.517014
34	10.089	0.461	0.506037
35	10.094	0.456	0.500549
36	10.102	0.448	0.491767
37	10.107	0.443	0.486279
38	10.111	0.439	0.481888
39	10.118	0.432	0.474204
40	10.124	0.426	0.467618
41	10.127	0.423	0.464325
42	10.131	0.419	0.459934
43	10.138	0.412	0.45225
44	10.142	0.408	0.447859
45	10.147	0.403	0.442371
46	10.154	0.396	0.434687
47	10.158	0.392	0.430296
48	10.162	0.388	0.425906
49	10.166	0.384	0.421515
50	10.168	0.382	0.419319
51	10.171	0.379	0.416026
52	10.177	0.373	0.40944
53	10.182	0.368	0.403952
54	10.183	0.367	0.402854
55	10.186	0.364	0.399561
56	10.189	0.361	0.396268
57	10.193	0.357	0.391877
58	10.196	0.354	0.388584
59	10.2	0.35	0.384193
60	10.199	0.351	0.385291
61	10.202	0.348	0.381998
62	10.207	0.343	0.376509
63	10.206	0.344	0.377607
64	10.21	0.34	0.373216
65	10.213	0.337	0.369923
66	10.215	0.335	0.367728
67	10.22	0.33	0.362239
68	10.221	0.329	0.361142
69	10.222	0.328	0.360044
70	10.222	0.328	0.360044
71	10.226	0.324	0.355653
72	10.23	0.32	0.351262
73	10.232	0.318	0.349067
74	10.232	0.318	0.349067
75	10.235	0.315	0.345774
76	10.234	0.316	0.346872
77	10.238	0.312	0.342481
78	10.239	0.311	0.341383
79	10.239	0.311	0.341383
80	10.242	0.308	0.33809
81	10.243	0.307	0.336992
82	10.245	0.305	0.334797
83	10.245	0.305	0.334797
84	10.243	0.307	0.336992
85	10.25	0.3	0.329308
86	10.251	0.299	0.328211
87	10.253	0.297	0.326015
88	10.251	0.299	0.328211
89	10.253	0.297	0.326015
90	10.255	0.295	0.32382
91	10.257	0.293	0.321625
92	10.257	0.293	0.321625
93	10.258	0.292	0.320527
94	10.259	0.291	0.319429

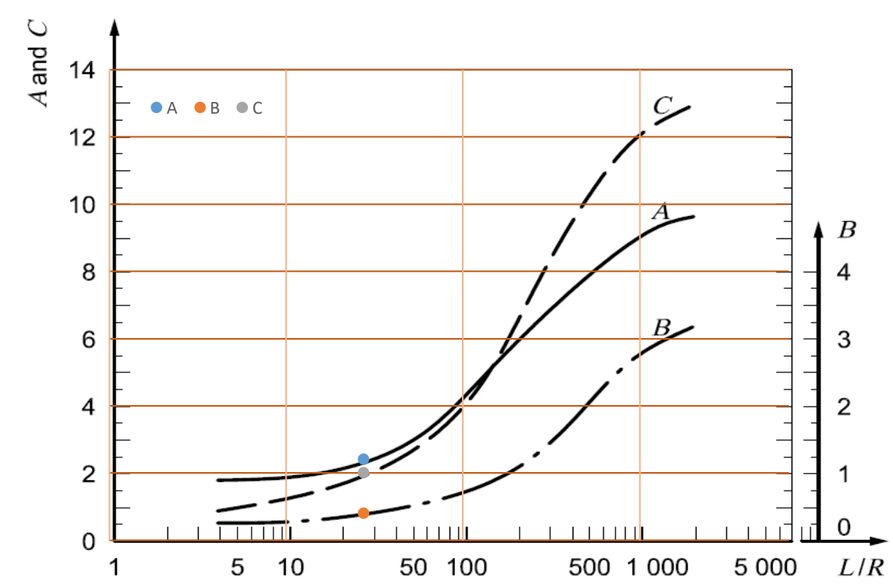


Bouwer-Rice Analysis



Input parameters	**Symbol**	**Units**	**Value**
Radius of well pipe	r_c	m	0.025
Borehole radius in screened section	R	m	0.11
Length of saturated screen (Le on diagram)	L	m	3.03
Length of saturated screen + solid casing	L_w	m	3.03
Saturated thickness of aquifer	h	m	3.55
Use effective radius of well pipe? (when water level in screened section)			No
Porosity of gravel pack	n		0.25
Line fitting parameters (adjust to best fit line)			
x-axis time 1	t1	s	0
x-axis time 2	t2	s	110
y-axis H/Ho 1	H1/Ho		0.8
y-axis H/Ho 2	H2/Ho		0.23





A		A	2.4
B		B	0.4
C		C	2
2B		2B	0.8
Calculated parameters			
H1 (from line fitting)	H1	m	0.7288
H2 (from line fitting)	H2	m	0.20953
Effective radius of well pipe	r_e	m	0.025
L/R	L/R		27.54545
Effective radial distance over which induced head dissipated	Re	m	1.059828
Re fully penetrating			
Assume fully penetrating?			No
ln (Re/R) (partially penetrating)	ln (Re/R)		2.265381
ln (Re/R) (fully penetrating)	ln (Re/R)		2.473114
ln (Re/R) (used)	ln (Re/R)		2.265381
Hydraulic conductivity	K	m/s	2.65E-06
		m/d	2.29E-01

Equations used

$$K = \frac{r_e^2 . ln\left(Re/R\right)}{2.L} . \frac{1}{(t_2 - t_1)} . ln\left(\frac{H_1}{H_2}\right) \qquad r_e = \sqrt{(1-n)r_c^2 + nR^2}$$

If L_w is less than h, the saturated thickness of the aquifer, then

APPENDIX 4
Laboratory Certificates

Lauren Wenham
Soiltechnics Ltd
White Lodge
Cedar Barn
Walgrave
NN6 9PY

Derwentside Environmental Testing Services Ltd
Unit 1
Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Kent
ME17 2JN
t: 01622 850410

DETS Report No: 22-00385

Site Reference:	Rockingham Enterprise Area, Corby
Project / Job Ref:	STP3966D
Order No:	POR011711
Sample Receipt Date:	17/01/2022
Sample Scheduled Date:	17/01/2022
Report Issue Number:	1
Reporting Date:	24/01/2022

Authorised by:

Dave Ashworth
Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

DETS Ltd
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Maidstone
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UKAS TESTING 4480

Water Analysis Certificate						
DETS Report No: 22-00385	Date Sampled	12/01/22	12/01/22	12/01/22	12/01/22	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.871	BH059.182	BH0613.285	BH0910.583	LG1110.806
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	LG11
Order No: POR011711	Depth (m)	10.87	9.18	13.28	10.58	10.80
Reporting Date: 24/01/2022	DETS Sample No	582156	582157	582158	582159	582160

Determinand	Unit	RL	Accreditation					
pH	pH Units	N/a	ISO17025	6.8	7.0	7.1	6.9	7.4
Total Cyanide	ug/l	< 5	ISO17025	22	< 5	34	203	115
Complex Cyanide	ug/l	< 5	NONE	22	< 5	34	203	115
Free Cyanide	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Sulphate as SO_4	mg/l	< 1	ISO17025	2940	1230	1050	1410	690
Ammoniacal Nitrogen as NH_4	ug/l	< 50	ISO17025	9060	480	6810	43800	585
Ammonia as NH_4	ug/l	< 50	ISO17025	9060	480	6810	43800	585
Chloride	mg/l	< 1	ISO17025	66	11	135	90	240
Nitrate as NO_3	mg/l	< 0.5	ISO17025	0.8	< 0.5	< 0.5	< 0.5	109
Nitrite as NO_2	mg/l	< 0.5	NONE	< 0.5	< 0.5	< 0.5	< 0.5	3.8
Phosphate as PO_4	mg/l	< 1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Fluoride	mg/l	< 0.5	ISO17025	< 0.5	< 0.5	1.1	< 0.5	< 0.5
Total Organic Carbon (TOC)	mg/l	< 0.1	NONE	46.1	30.9	27.8	27	21.2
Chemical Oxygen Demand	mg/l	< 5	NONE	33	17	28	42	44
Biological Oxygen Demand	mg/l	< 5	NONE	14	< 5	< 5	< 5	< 5
Total Suspended Solids	mg/l	5	NONE	1450	348	962	579	98
Carbonate (Alkalinity as $CaCO_3$)	mg/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Antimony (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Arsenic (dissolved)	ug/l	< 5	ISO17025	6	10	46	< 5	< 5
Boron (dissolved)	ug/l	< 5	ISO17025	799	843	3420	2330	1140
Cadmium (dissolved)	ug/l	< 0.4	ISO17025	< 0.4	< 0.4	3.6	< 0.4	< 0.4
Chromium (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	31	< 5	< 5
Chromium (hexavalent)	ug/l	< 20	NONE	< 20	< 20	< 20	< 20	< 20
Chromium III	ug/l	< 20	NONE	< 20	< 20	31	< 20	< 20
Copper (dissolved)	ug/l	< 5	ISO17025	15	6	38	8	51
Lead (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	598	6	< 5
Manganese (dissolved)	ug/l	< 5	ISO17025	4740	3980	5130	5610	35
Mercury (dissolved)	ug/l	< 0.05	ISO17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	ug/l	< 5	ISO17025	21	90	45	7	< 5
Selenium (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	20	< 5	< 5
Zinc (dissolved)	ug/l	< 2	ISO17025	39	50	5010	44	129
Magnesium (dissolved)	mg/l	< 0.1	ISO17025	93.7	54.9	65.4	65.2	26.8
Chromium (total)	ug/l	< 5	NONE	31	< 5	21	16	14
Total Phenols (monohydric)	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10

Subcontracted analysis (S)
Insufficient sample I/S
Unsuitable Sample U/S

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

UKAS TESTING 4480

Water Analysis Certificate						
DETS Report No: 22-00385	Date Sampled	12/01/22	12/01/22	12/01/22	12/01/22	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LG910.247	LL612.264	SW10.008	SW20.009	SW30.0010
Project / Job Ref: STP3966D	Additional Refs	LG9	LL6	SW1	SW2	SW3
Order No: POR011711	Depth (m)	10.24	12.26	0.00	0.00	0.00
Reporting Date: 24/01/2022	DETS Sample No	582161	582162	582163	582164	582165

Determinand	Unit	RL	Accreditation					
pH	pH Units	N/a	ISO17025	8.1	7.2	8.0	8.2	8.2
Total Cyanide	ug/l	< 5	ISO17025	76	< 5	< 5	21	12
Complex Cyanide	ug/l	< 5	NONE	76	< 5	< 5	21	12
Free Cyanide	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Sulphate as SO_4	mg/l	< 1	ISO17025	703	2120	69	91	76
Ammoniacal Nitrogen as NH_4	ug/l	< 50	ISO17025	7540	15200	307	220	224
Ammonia as NH_4	ug/l	< 50	ISO17025	7540	15200	307	220	224
Chloride	mg/l	< 1	ISO17025	26	13	66	74	62
Nitrate as NO_3	mg/l	< 0.5	ISO17025	6	3.1	18.6	16.2	16
Nitrite as NO_2	mg/l	< 0.5	NONE	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Phosphate as PO_4	mg/l	< 1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Fluoride	mg/l	< 0.5	ISO17025	5.3	< 0.5	< 0.5	< 0.5	< 0.5
Total Organic Carbon (TOC)	mg/l	< 0.1	NONE	25.9	25.7	16.5	15.5	15.3
Chemical Oxygen Demand	mg/l	< 5	NONE	12	19	40	17	16
Biological Oxygen Demand	mg/l	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Total Suspended Solids	mg/l	5	NONE	76	598	201	9	13
Carbonate (Alkalinity as $CaCO_3$)	mg/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Antimony (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Arsenic (dissolved)	ug/l	< 5	ISO17025	< 5	5	< 5	< 5	< 5
Boron (dissolved)	ug/l	< 5	ISO17025	5330	2170	487	660	549
Cadmium (dissolved)	ug/l	< 0.4	ISO17025	< 0.4	0.5	< 0.4	< 0.4	< 0.4
Chromium (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chromium (hexavalent)	ug/l	< 20	NONE	< 20	< 20	< 20	< 20	< 20
Chromium III	ug/l	< 20	NONE	< 20	< 20	< 20	< 20	< 20
Copper (dissolved)	ug/l	< 5	ISO17025	23	40	6	9	22
Lead (dissolved)	ug/l	< 5	ISO17025	< 5	22	< 5	< 5	< 5
Manganese (dissolved)	ug/l	< 5	ISO17025	4700	4110	28	10	13
Mercury (dissolved)	ug/l	< 0.05	ISO17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	ug/l	< 5	ISO17025	< 5	17	< 5	< 5	< 5
Selenium (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Zinc (dissolved)	ug/l	< 2	ISO17025	60	177	22	28	30
Magnesium (dissolved)	mg/l	< 0.1	ISO17025	38.8	84.9	8.8	9.1	8.3
Chromium (total)	ug/l	< 5	NONE	11	14	33	10	10
Total Phenols (monohydric)	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10

Subcontracted analysis (S)
Insufficient sample I/S
Unsuitable Sample U/S

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Water Analysis Certificate - Speciated PAH							
DETS Report No: 22-00385	Date Sampled	12/01/22	12/01/22	12/01/22	12/01/22	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.871	BH059.182	BH0613.285	BH0910.583	LG1110.806
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	LG11
Order No: POR011711	Depth (m)	10.87	9.18	13.28	10.58	10.80
Reporting Date: 24/01/2022	DETS Sample No	582156	582157	582158	582159	582160

Determinand	Unit	RL	Accreditation					
Naphthalene	ug/l	< 0.01	NONE	< 0.01	< 0.01	0.01	< 0.01	< 0.01
Acenaphthylene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	ug/l	< 0.01	NONE	< 0.01	0.01	< 0.01	< 0.01	< 0.01
Pyrene	ug/l	< 0.01	NONE	< 0.01	0.02	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	ug/l	< 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
Total EPA-16 PAHs	ug/l	< 0.16	NONE	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
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Maidstone
Kent ME17 2JN
Tel : 01622 850410

Water Analysis Certificate - Speciated PAH						
DETS Report No: 22-00385	Date Sampled	12/01/22	12/01/22	12/01/22	12/01/22	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LG910.247	LL612.264	SW10.008	SW20.009	SW30.0010
Project / Job Ref: STP3966D	Additional Refs	LG9	LL6	SW1	SW2	SW3
Order No: POR011711	Depth (m)	10.24	12.26	0.00	0.00	0.00
Reporting Date: 24/01/2022	DETS Sample No	582161	582162	582163	582164	582165

Determinand	Unit	RL	Accreditation					
Naphthalene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	ug/l	< 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
Total EPA-16 PAHs	ug/l	< 0.16	NONE	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16

DETS Ltd
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Rose Lane
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Maidstone
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Tel : 01622 850410

Water Analysis Certificate - TPH CWG Banded							
DETS Report No: 22-00385	Date Sampled	12/01/22	12/01/22	12/01/22	12/01/22	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.871	BH059.182	BH0613.285	BH0910.583	LG1110.806
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	LG11
Order No: POR011711	Depth (m)	10.87	9.18	13.28	10.58	10.80
Reporting Date: 24/01/2022	DETS Sample No	582156	582157	582158	582159	582160

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C6 - C8	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C8 - C10	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C10 - C12	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C12 - C16	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C16 - C21	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C21 - C34	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34)	ug/l	< 70	NONE	< 70	< 70	< 70	< 70	< 70
Aromatic >C5 - C7	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C7 - C8	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C8 - C10	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C10 - C12	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C12 - C16	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C16 - C21	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C21 - C35	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35)	ug/l	< 70	NONE	< 70	< 70	< 70	< 70	< 70
Total >C5 - C35	ug/l	< 140	NONE	< 140	< 140	< 140	< 140	< 140

DETS Ltd
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Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Water Analysis Certificate - TPH CWG Banded							
DETS Report No: 22-00385	Date Sampled	12/01/22	12/01/22	12/01/22	12/01/22	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LG910.247	LL612.264	SW10.008	SW20.009	SW30.0010
Project / Job Ref: STP3966D	Additional Refs	LG9	LL6	SW1	SW2	SW3
Order No: POR011711	Depth (m)	10.24	12.26	0.00	0.00	0.00
Reporting Date: 24/01/2022	DETS Sample No	582161	582162	582163	582164	582165

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C6 - C8	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C8 - C10	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C10 - C12	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C12 - C16	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C16 - C21	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C21 - C34	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34)	ug/l	< 70	NONE	< 70	< 70	< 70	< 70	< 70
Aromatic >C5 - C7	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C7 - C8	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C8 - C10	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C10 - C12	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C12 - C16	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C16 - C21	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C21 - C35	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35)	ug/l	< 70	NONE	< 70	< 70	< 70	< 70	< 70
Total >C5 - C35	ug/l	< 140	NONE	< 140	< 140	< 140	< 140	< 140

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UKAS TESTING 4480

Water Analysis Certificate - BTEX / MTBE						
DETS Report No: 22-00385	Date Sampled	12/01/22	12/01/22	12/01/22	12/01/22	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.871	BH059.182	BH0613.285	BH0910.583	LG1110.806
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	LG11
Order No: POR011711	Depth (m)	10.87	9.18	13.28	10.58	10.80
Reporting Date: 24/01/2022	DETS Sample No	582156	582157	582158	582159	582160

Determinand	Unit	RL	Accreditation					
Benzene	ug/l	< 1	ISO17025	< 1	< 1	< 1	< 1	< 1
Toluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
p & m-xylene	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
o-xylene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
MTBE	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10

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Water Analysis Certificate - BTEX / MTBE							
DETS Report No: 22-00385	Date Sampled	12/01/22	12/01/22	12/01/22	12/01/22	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LG910.247	LL612.264	SW10.008	SW20.009	SW30.0010
Project / Job Ref: STP3966D	Additional Refs	LG9	LL6	SW1	SW2	SW3
Order No: POR011711	Depth (m)	10.24	12.26	0.00	0.00	0.00
Reporting Date: 24/01/2022	DETS Sample No	582161	582162	582163	582164	582165

Determinand	Unit	RL	Accreditation					
Benzene	ug/l	< 1	ISO17025	< 1	< 1	< 1	< 1	< 1
Toluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
p & m-xylene	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
o-xylene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
MTBE	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10

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Water Analysis Certificate - Volatile Organic Compounds (VOC)						
DETS Report No: 22-00385	Date Sampled	12/01/22	12/01/22	12/01/22	12/01/22	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.871	BH059.182	BH0613.285	BH0910.583	LG1110.806
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	LG11
Order No: POR011711	Depth (m)	10.87	9.18	13.28	10.58	10.80
Reporting Date: 24/01/2022	DETS Sample No	582156	582157	582158	582159	582160

Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Vinyl Chloride	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromomethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Trichlorofluoromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
MTBE	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
trans-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
cis-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
2,2-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chloroform	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
1,1,1-Trichloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Carbon Tetrachloride	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
Benzene	ug/l	< 1	ISO17025	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Trichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromodichloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Dibromomethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
TAME	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Toluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1,2-Trichloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
1,3-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Tetrachloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Dibromochloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2-Dibromoethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1,1,2-Tetrachloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Ethyl Benzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
m,p-Xylene	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
o-Xylene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Styrene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromoform	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
Isopropylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1,2,2-Tetrachloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
1,2,3-Trichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
n-Propylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
2-Chlorotoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,3,5-Trimethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
4-Chlorotoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
tert-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2,4-Trimethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
sec-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
p-Isopropyltoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,3-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,4-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
n-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
,2-Dibromo-3-chloropropane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
Hexachlorobutadiene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5

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UKAS TESTING 4480

Water Analysis Certificate - Volatile Organic Compounds (VOC)						
DETS Report No: 22-00385	Date Sampled	12/01/22	12/01/22	12/01/22	12/01/22	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LG910.247	LL612.264	SW10.008	SW20.009	SW30.0010
Project / Job Ref: STP3966D	Additional Refs	LG9	LL6	SW1	SW2	SW3
Order No: POR011711	Depth (m)	10.24	12.26	0.00	0.00	0.00
Reporting Date: 24/01/2022	DETS Sample No	582161	582162	582163	582164	582165

Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Vinyl Chloride	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromomethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Trichlorofluoromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
MTBE	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
trans-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
cis-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
2,2-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chloroform	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
1,1,1-Trichloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Carbon Tetrachloride	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
Benzene	ug/l	< 1	ISO17025	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Trichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromodichloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Dibromomethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
TAME	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Toluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1,2-Trichloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
1,3-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Tetrachloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Dibromochloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2-Dibromoethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1,1,2-Tetrachloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Ethyl Benzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
m,p-Xylene	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
o-Xylene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Styrene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromoform	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
Isopropylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1,2,2-Tetrachloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
1,2,3-Trichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
n-Propylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
2-Chlorotoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,3,5-Trimethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
4-Chlorotoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
tert-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2,4-Trimethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
sec-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
p-Isopropyltoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,3-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,4-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
n-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
,2-Dibromo-3-chloropropane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
Hexachlorobutadiene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.871
Project / Job Ref: STP3966D	Additional Refs	BH04
Order No: POR011711	Depth (m)	10.87
Reporting Date: 24/01/2022	DETS Sample No	582156

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH059.182
Project / Job Ref: STP3966D	Additional Refs	BH05
Order No: POR011711	Depth (m)	9.18
Reporting Date: 24/01/2022	DETS Sample No	582157

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0613.285
Project / Job Ref: STP3966D	Additional Refs	BH06
Order No: POR011711	Depth (m)	13.28
Reporting Date: 24/01/2022	DETS Sample No	582158

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0910.583
Project / Job Ref: STP3966D	Additional Refs	BH09
Order No: POR011711	Depth (m)	10.58
Reporting Date: 24/01/2022	DETS Sample No	582159

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LG1110.806
Project / Job Ref: STP3966D	Additional Refs	LG11
Order No: POR011711	Depth (m)	10.80
Reporting Date: 24/01/2022	DETS Sample No	582160

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LG910.247
Project / Job Ref: STP3966D	Additional Refs	LG9
Order No: POR011711	Depth (m)	10.24
Reporting Date: 24/01/2022	DETS Sample No	582161

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

DETS Ltd
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Rose Lane
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Tel : 01622 850410

Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LL612.264
Project / Job Ref: STP3966D	Additional Refs	LL6
Order No: POR011711	Depth (m)	12.26
Reporting Date: 24/01/2022	DETS Sample No	582162

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Tel : 01622 850410

Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	SW10.008
Project / Job Ref: STP3966D	Additional Refs	SW1
Order No: POR011711	Depth (m)	0.00
Reporting Date: 24/01/2022	DETS Sample No	582163

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Tel : 01622 850410

Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	SW20.009
Project / Job Ref: STP3966D	Additional Refs	SW2
Order No: POR011711	Depth (m)	0.00
Reporting Date: 24/01/2022	DETS Sample No	582164

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Tel : 01622 850410

Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	SW30.0010
Project / Job Ref: STP3966D	Additional Refs	SW3
Order No: POR011711	Depth (m)	0.00
Reporting Date: 24/01/2022	DETS Sample No	582165

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds (SVOC)						
DETS Report No: 22-00385	Date Sampled	12/01/22	12/01/22	12/01/22	12/01/22	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.871	BH059.182	BH0613.285	BH0910.583	LG1110.806
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	LG11
Order No: POR011711	Depth (m)	10.87	9.18	13.28	10.58	10.80
Reporting Date: 24/01/2022	DETS Sample No	582156	582157	582158	582159	582160

Determinand	Unit	RL	Accreditation					
Phenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitrophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nitrobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
0-Cresol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-chloroethoxy)methane	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-chloroethyl)ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Isophorone	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachloroethane	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
p-Cresol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dimethyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloroanaline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diethyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibutyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-ethylhexyl)phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl butyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

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Water Analysis Certificate - Semi Volatile Organic Compounds (SVOC)						
DETS Report No: 22-00385	Date Sampled	12/01/22	12/01/22	12/01/22	12/01/22	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LG910.247	LL612.264	SW10.008	SW20.009	SW30.0010
Project / Job Ref: STP3966D	Additional Refs	LG9	LL6	SW1	SW2	SW3
Order No: POR011711	Depth (m)	10.24	12.26	0.00	0.00	0.00
Reporting Date: 24/01/2022	DETS Sample No	582161	582162	582163	582164	582165

Determinand	Unit	RL	Accreditation					
Phenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitrophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nitrobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
0-Cresol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-chloroethoxy)methane	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-chloroethyl)ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Isophorone	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachloroethane	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
p-Cresol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dimethyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloroanaline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diethyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibutyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-ethylhexyl)phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl butyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.871
Project / Job Ref: STP3966D	Additional Refs	BH04
Order No: POR011711	Depth (m)	10.87
Reporting Date: 24/01/2022	DETS Sample No	582156

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH059.182
Project / Job Ref: STP3966D	Additional Refs	BH05
Order No: POR011711	Depth (m)	9.18
Reporting Date: 24/01/2022	DETS Sample No	582157

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	Benzene, 2,4-dimethyl-1-(phenylmethyl)-	93	µg/l	< 0.1	0.4
2	Benzene, 1-methyl-2-[(3-methylphenyl)methyl]-	95	µg/l	< 0.1	0.2
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0613.285
Project / Job Ref: STP3966D	Additional Refs	BH06
Order No: POR011711	Depth (m)	13.28
Reporting Date: 24/01/2022	DETS Sample No	582158

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0910.583
Project / Job Ref: STP3966D	Additional Refs	BH09
Order No: POR011711	Depth (m)	10.58
Reporting Date: 24/01/2022	DETS Sample No	582159

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LG1110.806
Project / Job Ref: STP3966D	Additional Refs	LG11
Order No: POR011711	Depth (m)	10.80
Reporting Date: 24/01/2022	DETS Sample No	582160

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione	97	µg/l	< 0.1	0.5
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Tel : 01622 850410

Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LG910.247
Project / Job Ref: STP3966D	Additional Refs	LG9
Order No: POR011711	Depth (m)	10.24
Reporting Date: 24/01/2022	DETS Sample No	582161

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LL612.264
Project / Job Ref: STP3966D	Additional Refs	LL6
Order No: POR011711	Depth (m)	12.26
Reporting Date: 24/01/2022	DETS Sample No	582162

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

DETS Ltd
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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	SW10.008
Project / Job Ref: STP3966D	Additional Refs	SW1
Order No: POR011711	Depth (m)	0.00
Reporting Date: 24/01/2022	DETS Sample No	582163

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	2-Propanol, 1-chloro-, phosphate (3:1)	90	µg/l	< 0.1	0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	SW20.009
Project / Job Ref: STP3966D	Additional Refs	SW2
Order No: POR011711	Depth (m)	0.00
Reporting Date: 24/01/2022	DETS Sample No	582164

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	2-Propanol, 1-chloro-, phosphate (3:1)	91	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-00385	Date Sampled	12/01/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	SW30.0010
Project / Job Ref: STP3966D	Additional Refs	SW3
Order No: POR011711	Depth (m)	0.00
Reporting Date: 24/01/2022	DETS Sample No	582165

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	Propanoic acid, 2-methyl-, 3-hydroxy-2,2,4-trimethylpentyl ester	90	µg/l	< 0.1	< 0.1
2	2-Propanol, 1-chloro-, phosphate (3:1)	91	µg/l	< 0.1	0.2
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 22-00385
Soiltechnics Ltd
Site Reference: Rockingham Enterprise Area, Corby
Project / Job Ref: STP3966D
Order No: POR011711
Reporting Date: 24/01/2022

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Water	UF	Alkalinity	Determination of alkalinity by titration against hydrochloric acid using bromocresol green as the end point	E103
Water	F	Ammoniacal Nitrogen	Determination of ammoniacal nitrogen by discrete analyser.	E126
Water	UF	BTEX	Determination of BTEX by headspace GC-MS	E101
Water	F	Cations	Determination of cations by filtration followed by ICP-MS	E102
Water	UF	Chemical Oxygen Demand (COD)	Determination using a COD reactor followed by colorimetry	E112
Water	F	Chloride	Determination of chloride by filtration & analysed by ion chromatography	E109
Water	F	Chromium - Hexavalent	Determination of hexavalent chromium by acidification, addition of 1,5 diphenylcarbazide followed by	E116
Water	UF	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E115
Water	UF	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through liquid:liquid extraction with cyclohexane	E111
Water	F	Diesel Range Organics (C10 - C24)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	Dissolved Organic Content (DOC)	Determination of DOC by filtration followed by low heat with persulphate addition followed by IR dete	E110
Water	UF	Electrical Conductivity	Determination of electrical conductivity by electrometric measurement	E123
Water	F	EPH (C10 – C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E104
Water	F	Fluoride	Determination of Fluoride by filtration & analysed by ion chromatography	E109
Water	F	Hardness	Determination of Ca and Mg by ICP-MS followed by calculation	E102
Leachate	F	Leachate Preparation - NRA	Based on National Rivers Authority leaching test 1994	E301
Leachate	F	Leachate Preparation - WAC	Based on BS EN 12457 Pt1, 2, 3	E302
Water	F	Metals	Determination of metals by filtration followed by ICP-MS	E102
Water	F	Mineral Oil (C10 - C40)	Determination of liquid:liquid extraction with hexane followed by GI-FID	E104
Water	F	Nitrate	Determination of nitrate by filtration & analysed by ion chromatography	E109
Water	UF	Monohydric Phenol	Determination of phenols by distillation followed by colorimetry	E121
Water	F	PAH - Speciated (EPA 16)	Determination of PAH compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E105
Water	F	PCB - 7 Congeners	Determination of PCB compounds by concentration through SPE cartridge, collection in dichlorometha	E108
Water	UF	Petroleum Ether Extract (PEE)	Gravimetrically determined through liquid:liquid extraction with petroleum ether	E111
Water	UF	pH	Determination of pH by electrometric measurement	E107
Water	F	Phosphate	Determination of phosphate by filtration & analysed by ion chromatography	E109
Water	UF	Redox Potential	Determination of redox potential by electrometric measurement	E113
Water	F	Sulphate (as SO4)	Determination of sulphate by filtration & analysed by ion chromatography	E109
Water	UF	Sulphide	Determination of sulphide by distillation followed by colorimetry	E118
Water	F	SVOC	Determination of semi-volatile organic compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E106
Water	UF	Toluene Extractable Matter (TEM)	Gravimetrically determined through liquid:liquid extraction with toluene	E111
Water	UF	Total Organic Carbon (TOC)	Low heat with persulphate addition followed by IR detection	E110
Water	F	TPH CWG (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C35. C5 to C8 by headspace GC-MS	E104
Water	F	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C44. C5 to C8 by headspace GC-MS	E104
Water	UF	VOCs	Determination of volatile organic compounds by headspace GC-MS	E101
Water	UF	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E101

Key

F Filtered
UF Unfiltered

Lauren Wenham
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Walgrave
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Derwentside Environmental Testing Services Ltd
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t: 01622 850410

DETS Report No: 22-01432

Site Reference:	Rockingham Enterprise Area, Corby
Project / Job Ref:	STP3966D
Order No:	POR011918
Sample Receipt Date:	14/02/2022
Sample Scheduled Date:	14/02/2022
Report Issue Number:	1
Reporting Date:	21/02/2022

Authorised by:

Dave Ashworth
Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

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Water Analysis Certificate						
DETS Report No: 22-01432	Date Sampled	10/02/22	10/02/22	10/02/22	10/02/22	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.744	BH059.112	BH0612.986	BH0910.575	LG910.481
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	LG9
Order No: POR011918	Depth (m)	10.74	9.11	12.98	10.57	10.48
Reporting Date: 21/02/2022	DETS Sample No	586288	586289	586290	586291	586292

Determinand	Unit	RL	Accreditation					
pH	pH Units	N/a	ISO17025	7.1	7.2	7.3	7.1	8.7
Total Cyanide	ug/l	< 5	ISO17025	22	< 5	34	181	50
Complex Cyanide	ug/l	< 5	NONE	22	< 5	34	181	50
Free Cyanide	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Sulphate as SO_4	mg/l	< 1	ISO17025	3470	1170	1080	1650	538
Ammoniacal Nitrogen as NH_4	ug/l	< 50	ISO17025	10300	509	10000	40500	1770
Ammonia as NH_4	ug/l	< 50	ISO17025	10300	509	10000	40500	1770
Chloride	mg/l	< 1	ISO17025	75	10	141	88	19
Nitrate as NO_3	mg/l	< 0.5	ISO17025	< 0.5	< 0.5	1.7	< 0.5	9.7
Nitrite as NO_2	mg/l	< 0.5	NONE	< 0.5	< 0.5	< 0.5	< 0.5	1.1
Phosphate as PO_4	mg/l	< 1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Fluoride	mg/l	< 0.5	ISO17025	< 0.5	< 0.5	1.2	< 0.5	6.1
Total Organic Carbon (TOC)	mg/l	< 0.1	NONE	48.9	27.4	22.7	20.9	25.1
Chemical Oxygen Demand	mg/l	< 5	NONE	35	16	32	41	15
Biological Oxygen Demand	mg/l	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Total Suspended Solids	mg/l	5	NONE	616	628	736	330	382
Carbonate (Alkalinity as $CaCO_3$)	mg/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Antimony (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Arsenic (dissolved)	ug/l	< 5	ISO17025	7	8	6	< 5	< 5
Boron (dissolved)	ug/l	< 5	ISO17025	695	534	2430	1960	3780
Cadmium (dissolved)	ug/l	< 0.4	ISO17025	< 0.4	< 0.4	0.4	< 0.4	< 0.4
Chromium (dissolved)	ug/l	< 5	ISO17025	9	< 5	5	< 5	< 5
Chromium (hexavalent)	ug/l	< 20	NONE	< 20	< 20	< 20	< 20	< 20
Chromium III	ug/l	< 20	NONE	< 20	< 20	< 20	< 20	< 20
Copper (dissolved)	ug/l	< 5	ISO17025	< 5	8	6	< 5	< 5
Lead (dissolved)	ug/l	< 5	ISO17025	10	7	57	< 5	< 5
Manganese (dissolved)	ug/l	< 5	ISO17025	4010	2960	1490	5320	3840
Mercury (dissolved)	ug/l	< 0.05	ISO17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	ug/l	< 5	ISO17025	24	49	15	8	5
Selenium (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Zinc (dissolved)	ug/l	< 2	ISO17025	60	32	455	32	54
Magnesium (dissolved)	mg/l	< 0.1	ISO17025	196	107	126	138	72.7
Chromium (total)	ug/l	< 5	NONE	< 5	< 5	6	< 5	9
Total Phenols (monohydric)	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10

Subcontracted analysis (S)
Insufficient sample I/S
Unsuitable Sample U/S

DETS Ltd
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UKAS TESTING 4480

Water Analysis Certificate						
DETS Report No: 22-01432	Date Sampled	10/02/22	10/02/22	10/02/22	10/02/22	
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LL611.933	SW10.007	SW20.008	SW30.009	
Project / Job Ref: STP3966D	Additional Refs	LL6	SW1	SW2	SW3	
Order No: POR011918	Depth (m)	11.93	0.00	0.00	0.00	
Reporting Date: 21/02/2022	DETS Sample No	586293	586294	586295	586296	

Determinand	Unit	RL	Accreditation					
pH	pH Units	N/a	ISO17025	7.2	8.2	8.3	8.3	
Total Cyanide	ug/l	< 5	ISO17025	< 5	< 5	8	8	
Complex Cyanide	ug/l	< 5	NONE	< 5	< 5	8	8	
Free Cyanide	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Sulphate as SO_4	mg/l	< 1	ISO17025	2070	102	105	107	
Ammoniacal Nitrogen as NH_4	ug/l	< 50	ISO17025	17100	288	178	199	
Ammonia as NH_4	ug/l	< 50	ISO17025	17100	288	178	199	
Chloride	mg/l	< 1	ISO17025	12	72	89	78	
Nitrate as NO_3	mg/l	< 0.5	ISO17025	3.3	19.4	17.3	17.9	
Nitrite as NO_2	mg/l	< 0.5	NONE	< 0.5	< 0.5	< 0.5	< 0.5	
Phosphate as PO_4	mg/l	< 1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	
Fluoride	mg/l	< 0.5	ISO17025	< 0.5	< 0.5	< 0.5	< 0.5	
Total Organic Carbon (TOC)	mg/l	< 0.1	NONE	20	16.9	15.8	16	
Chemical Oxygen Demand	mg/l	< 5	NONE	25	17	14	15	
Biological Oxygen Demand	mg/l	< 5	NONE	11	13	< 5	70	
Total Suspended Solids	mg/l	5	NONE	349	< 5	6	< 5	
Carbonate (Alkalinity as $CaCO_3$)	mg/l	< 10	NONE	< 10	< 10	< 10	< 10	
Antimony (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Arsenic (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Boron (dissolved)	ug/l	< 5	ISO17025	1860	788	781	726	
Cadmium (dissolved)	ug/l	< 0.4	ISO17025	< 0.4	< 0.4	< 0.4	< 0.4	
Chromium (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Chromium (hexavalent)	ug/l	< 20	NONE	< 20	< 20	< 20	< 20	
Chromium III	ug/l	< 20	NONE	< 20	< 20	< 20	< 20	
Copper (dissolved)	ug/l	< 5	ISO17025	13	< 5	6	18	
Lead (dissolved)	ug/l	< 5	ISO17025	15	< 5	< 5	7	
Manganese (dissolved)	ug/l	< 5	ISO17025	3980	59	9	24	
Mercury (dissolved)	ug/l	< 0.05	ISO17025	< 0.05	< 0.05	0.15	< 0.05	
Nickel (dissolved)	ug/l	< 5	ISO17025	16	< 5	< 5	< 5	
Selenium (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Zinc (dissolved)	ug/l	< 2	ISO17025	111	62	100	120	
Magnesium (dissolved)	mg/l	< 0.1	ISO17025	167	21	20.6	20.5	
Chromium (total)	ug/l	< 5	NONE	< 5	< 5	9	8	
Total Phenols (monohydric)	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	

Subcontracted analysis (S)
Insufficient sample I/S
Unsuitable Sample U/S

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Water Analysis Certificate - Speciated PAH						
DETS Report No: 22-01432	Date Sampled	10/02/22	10/02/22	10/02/22	10/02/22	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.744	BH059.112	BH0612.986	BH0910.575	LG910.481
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	LG9
Order No: POR011918	Depth (m)	10.74	9.11	12.98	10.57	10.48
Reporting Date: 21/02/2022	DETS Sample No	586288	586289	586290	586291	586292

Determinand	Unit	RL	Accreditation					
Naphthalene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	0.01	< 0.01	0.01
Anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	0.02	< 0.01	0.03
Pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	0.02	< 0.01	0.02
Benzo(a)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	ug/l	< 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
Total EPA-16 PAHs	ug/l	< 0.16	NONE	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16

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Water Analysis Certificate - Speciated PAH						
DETS Report No: 22-01432	Date Sampled	10/02/22	10/02/22	10/02/22	10/02/22	
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LL611.933	SW10.007	SW20.008	SW30.009	
Project / Job Ref: STP3966D	Additional Refs	LL6	SW1	SW2	SW3	
Order No: POR011918	Depth (m)	11.93	0.00	0.00	0.00	
Reporting Date: 21/02/2022	DETS Sample No	586293	586294	586295	586296	

Determinand	Unit	RL	Accreditation					
Naphthalene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Acenaphthylene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Acenaphthene	ug/l	< 0.01	NONE	< 0.01	0.28	< 0.01	< 0.01	
Fluorene	ug/l	< 0.01	NONE	< 0.01	0.56	< 0.01	< 0.01	
Phenanthrene	ug/l	< 0.01	NONE	< 0.01	0.89	< 0.01	0.01	
Anthracene	ug/l	< 0.01	NONE	< 0.01	0.28	< 0.01	< 0.01	
Fluoranthene	ug/l	< 0.01	NONE	< 0.01	0.47	< 0.01	0.01	
Pyrene	ug/l	< 0.01	NONE	< 0.01	0.30	< 0.01	0.01	
Benzo(a)anthracene	ug/l	< 0.01	NONE	< 0.01	0.04	< 0.01	< 0.01	
Chrysene	ug/l	< 0.01	NONE	< 0.01	0.03	< 0.01	< 0.01	
Benzo(b)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Benzo(k)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Benzo(a)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Indeno(1,2,3-cd)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Dibenz(a,h)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Benzo(ghi)perylene	ug/l	< 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	
Total EPA-16 PAHs	ug/l	< 0.16	NONE	< 0.16	2.85	< 0.16	< 0.16	

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Water Analysis Certificate - TPH CWG Banded						
DETS Report No: 22-01432	Date Sampled	10/02/22	10/02/22	10/02/22	10/02/22	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.744	BH059.112	BH0612.986	BH0910.575	LG910.481
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	LG9
Order No: POR011918	Depth (m)	10.74	9.11	12.98	10.57	10.48
Reporting Date: 21/02/2022	DETS Sample No	586288	586289	586290	586291	586292

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C6 - C8	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C8 - C10	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C10 - C12	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C12 - C16	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C16 - C21	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C21 - C34	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34)	ug/l	< 70	NONE	< 70	< 70	< 70	< 70	< 70
Aromatic >C5 - C7	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C7 - C8	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C8 - C10	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C10 - C12	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C12 - C16	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C16 - C21	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C21 - C35	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35)	ug/l	< 70	NONE	< 70	< 70	< 70	< 70	< 70
Total >C5 - C35	ug/l	< 140	NONE	< 140	< 140	< 140	< 140	< 140

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Water Analysis Certificate - TPH CWG Banded						
DETS Report No: 22-01432	Date Sampled	10/02/22	10/02/22	10/02/22	10/02/22	
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LL611.933	SW10.007	SW20.008	SW30.009	
Project / Job Ref: STP3966D	Additional Refs	LL6	SW1	SW2	SW3	
Order No: POR011918	Depth (m)	11.93	0.00	0.00	0.00	
Reporting Date: 21/02/2022	DETS Sample No	586293	586294	586295	586296	

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aliphatic >C6 - C8	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aliphatic >C8 - C10	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aliphatic >C10 - C12	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aliphatic >C12 - C16	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aliphatic >C16 - C21	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aliphatic >C21 - C34	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aliphatic (C5 - C34)	ug/l	< 70	NONE	< 70	< 70	< 70	< 70	
Aromatic >C5 - C7	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aromatic >C7 - C8	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aromatic >C8 - C10	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aromatic >C10 - C12	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aromatic >C12 - C16	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aromatic >C16 - C21	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aromatic >C21 - C35	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aromatic (C5 - C35)	ug/l	< 70	NONE	< 70	< 70	< 70	< 70	
Total >C5 - C35	ug/l	< 140	NONE	< 140	< 140	< 140	< 140	

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Water Analysis Certificate - BTEX / MTBE							
DETS Report No: 22-01432	Date Sampled	10/02/22	10/02/22	10/02/22	10/02/22	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.744	BH059.112	BH0612.986	BH0910.575	LG910.481
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	LG9
Order No: POR011918	Depth (m)	10.74	9.11	12.98	10.57	10.48
Reporting Date: 21/02/2022	DETS Sample No	586288	586289	586290	586291	586292

Determinand	Unit	RL	Accreditation					
Benzene	ug/l	< 1	ISO17025	< 1	< 1	< 1	< 1	< 1
Toluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
p & m-xylene	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
o-xylene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
MTBE	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10

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Water Analysis Certificate - BTEX / MTBE						
DETS Report No: 22-01432	Date Sampled	10/02/22	10/02/22	10/02/22	10/02/22	
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LL611.933	SW10.007	SW20.008	SW30.009	
Project / Job Ref: STP3966D	Additional Refs	LL6	SW1	SW2	SW3	
Order No: POR011918	Depth (m)	11.93	0.00	0.00	0.00	
Reporting Date: 21/02/2022	DETS Sample No	586293	586294	586295	586296	

Determinand	Unit	RL	Accreditation					
Benzene	ug/l	< 1	ISO17025	< 1	< 1	< 1	< 1	
Toluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Ethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
p & m-xylene	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	
o-xylene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
MTBE	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	

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Water Analysis Certificate - Volatile Organic Compounds (VOC)						
DETS Report No: 22-01432	Date Sampled	10/02/22	10/02/22	10/02/22	10/02/22	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.744	BH059.112	BH0612.986	BH0910.575	LG910.481
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	LG9
Order No: POR011918	Depth (m)	10.74	9.11	12.98	10.57	10.48
Reporting Date: 21/02/2022	DETS Sample No	586288	586289	586290	586291	586292

Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Vinyl Chloride	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromomethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Trichlorofluoromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
MTBE	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
trans-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
cis-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
2,2-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chloroform	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
1,1,1-Trichloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Carbon Tetrachloride	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
Benzene	ug/l	< 1	ISO17025	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Trichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromodichloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Dibromomethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
TAME	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Toluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1,2-Trichloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
1,3-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Tetrachloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Dibromochloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2-Dibromoethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1,1,2-Tetrachloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Ethyl Benzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
m,p-Xylene	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
o-Xylene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Styrene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromoform	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
Isopropylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1,2,2-Tetrachloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
1,2,3-Trichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
n-Propylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
2-Chlorotoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,3,5-Trimethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
4-Chlorotoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
tert-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2,4-Trimethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
sec-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
p-Isopropyltoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,3-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,4-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
n-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
,2-Dibromo-3-chloropropane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
Hexachlorobutadiene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5

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Water Analysis Certificate - Volatile Organic Compounds (VOC)						
DETS Report No: 22-01432	Date Sampled	10/02/22	10/02/22	10/02/22	10/02/22	
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LL611.933	SW10.007	SW20.008	SW30.009	
Project / Job Ref: STP3966D	Additional Refs	LL6	SW1	SW2	SW3	
Order No: POR011918	Depth (m)	11.93	0.00	0.00	0.00	
Reporting Date: 21/02/2022	DETS Sample No	586293	586294	586295	586296	

Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Vinyl Chloride	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Chloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Chloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Bromomethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Trichlorofluoromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,1-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
MTBE	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	
trans-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,1-Dichloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
cis-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
2,2-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Chloroform	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Bromochloromethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	
1,1,1-Trichloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,1-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Carbon Tetrachloride	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,2-Dichloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	
Benzene	ug/l	< 1	ISO17025	< 1	< 1	< 1	< 1	
1,2-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Trichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Bromodichloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Dibromomethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
TAME	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
cis-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Toluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
trans-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,1,2-Trichloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	
1,3-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Tetrachloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Dibromochloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,2-Dibromoethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Chlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,1,1,2-Tetrachloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Ethyl Benzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
m,p-Xylene	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	
o-Xylene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Styrene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Bromoform	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	
Isopropylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,1,2,2-Tetrachloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	
1,2,3-Trichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
n-Propylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Bromobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
2-Chlorotoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,3,5-Trimethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
4-Chlorotoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
tert-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,2,4-Trimethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
sec-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
p-Isopropyltoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,3-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,4-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
n-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,2-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
,2-Dibromo-3-chloropropane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	
Hexachlorobutadiene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-01432	Date Sampled	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.744
Project / Job Ref: STP3966D	Additional Refs	BH04
Order No: POR011918	Depth (m)	10.74
Reporting Date: 21/02/2022	DETS Sample No	586288

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-01432	Date Sampled	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH059.112
Project / Job Ref: STP3966D	Additional Refs	BH05
Order No: POR011918	Depth (m)	9.11
Reporting Date: 21/02/2022	DETS Sample No	586289

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-01432	Date Sampled	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.986
Project / Job Ref: STP3966D	Additional Refs	BH06
Order No: POR011918	Depth (m)	12.98
Reporting Date: 21/02/2022	DETS Sample No	586290

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-01432	Date Sampled	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0910.575
Project / Job Ref: STP3966D	Additional Refs	BH09
Order No: POR011918	Depth (m)	10.57
Reporting Date: 21/02/2022	DETS Sample No	586291

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

DETS Ltd
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Tel : 01622 850410

Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-01432	Date Sampled	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LG910.481
Project / Job Ref: STP3966D	Additional Refs	LG9
Order No: POR011918	Depth (m)	10.48
Reporting Date: 21/02/2022	DETS Sample No	586292

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Kent ME17 2JN
Tel : 01622 850410

Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-01432	Date Sampled	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LL611.933
Project / Job Ref: STP3966D	Additional Refs	LL6
Order No: POR011918	Depth (m)	11.93
Reporting Date: 21/02/2022	DETS Sample No	586293

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Maidstone
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Tel : 01622 850410

Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-01432	Date Sampled	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	SW10.007
Project / Job Ref: STP3966D	Additional Refs	SW1
Order No: POR011918	Depth (m)	0.00
Reporting Date: 21/02/2022	DETS Sample No	586294

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-01432	Date Sampled	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	SW20.008
Project / Job Ref: STP3966D	Additional Refs	SW2
Order No: POR011918	Depth (m)	0.00
Reporting Date: 21/02/2022	DETS Sample No	586295

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Tel : 01622 850410

Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-01432	Date Sampled	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	SW30.009
Project / Job Ref: STP3966D	Additional Refs	SW3
Order No: POR011918	Depth (m)	0.00
Reporting Date: 21/02/2022	DETS Sample No	586296

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds (SVOC)						
DETS Report No: 22-01432	Date Sampled	10/02/22	10/02/22	10/02/22	10/02/22	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.744	BH059.112	BH0612.986	BH0910.575	LG910.481
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	LG9
Order No: POR011918	Depth (m)	10.74	9.11	12.98	10.57	10.48
Reporting Date: 21/02/2022	DETS Sample No	586288	586289	586290	586291	586292

Determinand	Unit	RL	Accreditation					
Phenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitrophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nitrobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
0-Cresol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-chloroethoxy)methane	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-chloroethyl)ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Isophorone	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachloroethane	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
p-Cresol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dimethyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloroanaline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diethyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibutyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-ethylhexyl)phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl butyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

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Maidstone
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Water Analysis Certificate - Semi Volatile Organic Compounds (SVOC)						
DETS Report No: 22-01432	Date Sampled	10/02/22	10/02/22	10/02/22	10/02/22	
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LL611.933	SW10.007	SW20.008	SW30.009	
Project / Job Ref: STP3966D	Additional Refs	LL6	SW1	SW2	SW3	
Order No: POR011918	Depth (m)	11.93	0.00	0.00	0.00	
Reporting Date: 21/02/2022	DETS Sample No	586293	586294	586295	586296	

Determinand	Unit	RL	Accreditation					
Phenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
1,2,4-Trichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2-Nitrophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Nitrobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
0-Cresol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
bis(2-chloroethoxy)methane	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
bis(2-chloroethyl)ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2,4-Dichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2-Chlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
1,3-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
1,4-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
1,2-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2,4-Dimethylphenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Isophorone	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Hexachloroethane	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
p-Cresol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2,4,6-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2,4,5-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
4-Chloro-3-methylphenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2-Methylnaphthalene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Hexachlorocyclopentadiene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Hexachlorobutadiene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2,6-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Dimethyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2-Chloronaphthalene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
4-Chloroanaline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
4-Nitrophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
4-Chlorophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
3-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
4-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
4-Bromophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Hexachlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2,4-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Diethyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Dibenzofuran	ug/l	< 0.1	NONE	< 0.1	0.1	< 0.1	< 0.1	
Azobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Dibutyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Carbazole	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
bis(2-ethylhexyl)phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Benzyl butyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Di-n-octyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	

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Tel : 01622 850410

Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-01432	Date Sampled	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0410.744
Project / Job Ref: STP3966D	Additional Refs	BH04
Order No: POR011918	Depth (m)	10.74
Reporting Date: 21/02/2022	DETS Sample No	586288

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-01432	Date Sampled	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH059.112
Project / Job Ref: STP3966D	Additional Refs	BH05
Order No: POR011918	Depth (m)	9.11
Reporting Date: 21/02/2022	DETS Sample No	586289

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-01432	Date Sampled	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.986
Project / Job Ref: STP3966D	Additional Refs	BH06
Order No: POR011918	Depth (m)	12.98
Reporting Date: 21/02/2022	DETS Sample No	586290

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-01432	Date Sampled	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0910.575
Project / Job Ref: STP3966D	Additional Refs	BH09
Order No: POR011918	Depth (m)	10.57
Reporting Date: 21/02/2022	DETS Sample No	586291

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Kent ME17 2JN
Tel : 01622 850410

Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-01432	Date Sampled	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LG910.481
Project / Job Ref: STP3966D	Additional Refs	LG9
Order No: POR011918	Depth (m)	10.48
Reporting Date: 21/02/2022	DETS Sample No	586292

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-01432	Date Sampled	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	LL611.933
Project / Job Ref: STP3966D	Additional Refs	LL6
Order No: POR011918	Depth (m)	11.93
Reporting Date: 21/02/2022	DETS Sample No	586293

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-01432	Date Sampled	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	SW10.007
Project / Job Ref: STP3966D	Additional Refs	SW1
Order No: POR011918	Depth (m)	0.00
Reporting Date: 21/02/2022	DETS Sample No	586294

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	Naphthalene, 2,3,6-trimethyl-	98	µg/l	< 0.1	0.8
2	Dibenzothiophene, 3-methyl-	94	µg/l	< 0.1	0.4
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

DETS Ltd
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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-01432	Date Sampled	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	SW20.008
Project / Job Ref: STP3966D	Additional Refs	SW2
Order No: POR011918	Depth (m)	0.00
Reporting Date: 21/02/2022	DETS Sample No	586295

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-01432	Date Sampled	10/02/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	SW30.009
Project / Job Ref: STP3966D	Additional Refs	SW3
Order No: POR011918	Depth (m)	0.00
Reporting Date: 21/02/2022	DETS Sample No	586296

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 22-01432
Soiltechnics Ltd
Site Reference: Rockingham Enterprise Area, Corby
Project / Job Ref: STP3966D
Order No: POR011918
Reporting Date: 21/02/2022

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Water	UF	Alkalinity	Determination of alkalinity by titration against hydrochloric acid using bromocresol green as the end point	E103
Water	F	Ammoniacal Nitrogen	Determination of ammoniacal nitrogen by discrete analyser.	E126
Water	UF	BTEX	Determination of BTEX by headspace GC-MS	E101
Water	F	Cations	Determination of cations by filtration followed by ICP-MS	E102
Water	UF	Chemical Oxygen Demand (COD)	Determination using a COD reactor followed by colorimetry	E112
Water	F	Chloride	Determination of chloride by filtration & analysed by ion chromatography	E109
Water	F	Chromium - Hexavalent	Determination of hexavalent chromium by acidification, addition of 1,5 diphenylcarbazide followed by	E116
Water	UF	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E115
Water	UF	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through liquid:liquid extraction with cyclohexane	E111
Water	F	Diesel Range Organics (C10 - C24)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	Dissolved Organic Content (DOC)	Determination of DOC by filtration followed by low heat with persulphate addition followed by IR dete	E110
Water	UF	Electrical Conductivity	Determination of electrical conductivity by electrometric measurement	E123
Water	F	EPH (C10 – C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E104
Water	F	Fluoride	Determination of Fluoride by filtration & analysed by ion chromatography	E109
Water	F	Hardness	Determination of Ca and Mg by ICP-MS followed by calculation	E102
Leachate	F	Leachate Preparation - NRA	Based on National Rivers Authority leaching test 1994	E301
Leachate	F	Leachate Preparation - WAC	Based on BS EN 12457 Pt1, 2, 3	E302
Water	F	Metals	Determination of metals by filtration followed by ICP-MS	E102
Water	F	Mineral Oil (C10 - C40)	Determination of liquid:liquid extraction with hexane followed by GI-FID	E104
Water	F	Nitrate	Determination of nitrate by filtration & analysed by ion chromatography	E109
Water	UF	Monohydric Phenol	Determination of phenols by distillation followed by colorimetry	E121
Water	F	PAH - Speciated (EPA 16)	Determination of PAH compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E105
Water	F	PCB - 7 Congeners	Determination of PCB compounds by concentration through SPE cartridge, collection in dichlorometha	E108
Water	UF	Petroleum Ether Extract (PEE)	Gravimetrically determined through liquid:liquid extraction with petroleum ether	E111
Water	UF	pH	Determination of pH by electrometric measurement	E107
Water	F	Phosphate	Determination of phosphate by filtration & analysed by ion chromatography	E109
Water	UF	Redox Potential	Determination of redox potential by electrometric measurement	E113
Water	F	Sulphate (as SO4)	Determination of sulphate by filtration & analysed by ion chromatography	E109
Water	UF	Sulphide	Determination of sulphide by distillation followed by colorimetry	E118
Water	F	SVOC	Determination of semi-volatile organic compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E106
Water	UF	Toluene Extractable Matter (TEM)	Gravimetrically determined through liquid:liquid extraction with toluene	E111
Water	UF	Total Organic Carbon (TOC)	Low heat with persulphate addition followed by IR detection	E110
Water	F	TPH CWG (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C35. C5 to C8 by headspace GC-MS	E104
Water	F	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C44. C5 to C8 by headspace GC-MS	E104
Water	UF	VOCs	Determination of volatile organic compounds by headspace GC-MS	E101
Water	UF	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E101

Key

F Filtered
UF Unfiltered

Alexa Band
Soiltechnics Ltd
White Lodge
Cedar Barn
Walgrave
NN6 9PY

Derwentside Environmental Testing Services Ltd
Unit 1
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t: 01622 850410

DETS Report No: 22-02424

Site Reference:	Rockingham Enterprise Are, Corby
Project / Job Ref:	STP3966D
Order No:	POR012105
Sample Receipt Date:	14/03/2022
Sample Scheduled Date:	14/03/2022
Report Issue Number:	1
Reporting Date:	21/03/2022

Authorised by:

Dave Ashworth
Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

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Water Analysis Certificate						
DETS Report No: 22-02424	Date Sampled	10/03/22	10/03/22	10/03/22	10/03/22	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	BH0410.339	BH058.937	BH0613.248	BH0910.195	LG1110.181
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	LG11
Order No: POR012105	Depth (m)	10.33	8.93	13.24	10.19	10.18
Reporting Date: 21/03/2022	DETS Sample No	590218	590219	590220	590221	590222

Determinand	Unit	RL	Accreditation					
pH	pH Units	N/a	ISO17025	7.1	7.1	7.2	7.0	7.3
Total Cyanide	ug/l	< 5	ISO17025	34	< 5	31	211	122
Complex Cyanide	ug/l	< 5	NONE	34	< 5	31	211	122
Free Cyanide	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Sulphate as SO_4	mg/l	< 1	ISO17025	5570	1210	1060	1640	633
Ammoniacal Nitrogen as NH_4	ug/l	< 50	ISO17025	12000	529	10300	49700	269
Ammonia as NH_4	ug/l	< 50	ISO17025	12000	529	10300	49700	269
Chloride	mg/l	< 1	ISO17025	102	11	139	87	242
Nitrate as NO_3	mg/l	< 0.5	ISO17025	< 0.5	< 0.5	1.1	< 0.5	267
Nitrite as NO_2	mg/l	< 0.5	NONE	< 0.5	< 0.5	< 0.5	< 0.5	4.5
Phosphate as PO_4	mg/l	< 1	NONE	1.2	< 1.0	< 1.0	< 1.0	< 1.0
Fluoride	mg/l	< 0.5	ISO17025	< 0.5	< 0.5	0.7	< 0.5	< 0.5
Total Organic Carbon (TOC)	mg/l	< 0.1	NONE	19	12.4	11.8	13.7	10.7
Chemical Oxygen Demand	mg/l	< 5	NONE	36	16	20	43	41
Biological Oxygen Demand	mg/l	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Total Suspended Solids	mg/l	5	NONE	41800	8040	246	6190	128
Carbonate (Alkalinity as $CaCO_3$)	mg/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Antimony (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Arsenic (dissolved)	ug/l	< 5	ISO17025	7	7	8	< 5	< 5
Boron (dissolved)	ug/l	< 5	ISO17025	788	730	3130	2730	1590
Cadmium (dissolved)	ug/l	< 0.4	ISO17025	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Chromium (dissolved)	ug/l	< 5	ISO17025	10	< 5	7	< 5	< 5
Chromium (hexavalent)	ug/l	< 20	NONE	< 20	< 20	< 20	< 20	< 20
Chromium III	ug/l	< 20	NONE	< 20	< 20	< 20	< 20	< 20
Copper (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	7	< 5	18
Lead (dissolved)	ug/l	< 5	ISO17025	7	< 5	80	< 5	< 5
Manganese (dissolved)	ug/l	< 5	ISO17025	6300	3540	2650	5190	58
Mercury (dissolved)	ug/l	< 0.05	ISO17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	ug/l	< 5	ISO17025	27	40	18	8	< 5
Selenium (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Zinc (dissolved)	ug/l	< 2	ISO17025	64	20	529	27	48
Magnesium (dissolved)	mg/l	< 0.1	ISO17025	142	67.8	68.7	71.3	28
Chromium (total)	ug/l	< 5	NONE	< 5	6	6	< 5	8
Total Phenols (monohydric)	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10

Subcontracted analysis (S)
Insufficient sample I/S
Unsuitable Sample U/S

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UKAS TESTING 4480

Water Analysis Certificate						
DETS Report No: 22-02424	Date Sampled	10/03/22	10/03/22	10/03/22	10/03/22	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	LG78.754	LG99.912	LL611.746	SW10.0010	SW20.0011
Project / Job Ref: STP3966D	Additional Refs	LG7	LG9	LL6	SW1	SW2
Order No: POR012105	Depth (m)	8.75	9.91	11.74	0.00	0.00
Reporting Date: 21/03/2022	DETS Sample No	590223	590224	590225	590226	590227

Determinand	Unit	RL	Accreditation					
pH	pH Units	N/a	ISO17025	6.8	7.5	7.2	8.0	8.2
Total Cyanide	ug/l	< 5	ISO17025	209	97	6	7	7
Complex Cyanide	ug/l	< 5	NONE	209	97	6	7	7
Free Cyanide	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Sulphate as SO_4	mg/l	< 1	ISO17025	2180	1440	2090	102	102
Ammoniacal Nitrogen as NH_4	ug/l	< 50	ISO17025	639	22500	15500	263	210
Ammonia as NH_4	ug/l	< 50	ISO17025	639	22500	15500	263	210
Chloride	mg/l	< 1	ISO17025	220	40	12	75	77
Nitrate as NO_3	mg/l	< 0.5	ISO17025	1.7	2.6	1.6	2.9	5
Nitrite as NO_2	mg/l	< 0.5	NONE	< 0.5	< 0.5	< 0.5	0.9	< 0.5
Phosphate as PO_4	mg/l	< 1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Fluoride	mg/l	< 0.5	ISO17025	< 0.5	1.8	< 0.5	< 0.5	< 0.5
Total Organic Carbon (TOC)	mg/l	< 0.1	NONE	12.7	11.2	8.3	9.1	9
Chemical Oxygen Demand	mg/l	< 5	NONE	36	25	28	24	22
Biological Oxygen Demand	mg/l	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Total Suspended Solids	mg/l	5	NONE	10200	1910	4990	8	6
Carbonate (Alkalinity as $CaCO_3$)	mg/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Antimony (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Arsenic (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Boron (dissolved)	ug/l	< 5	ISO17025	2010	4810	2520	443	729
Cadmium (dissolved)	ug/l	< 0.4	ISO17025	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Chromium (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chromium (hexavalent)	ug/l	< 20	NONE	< 20	< 20	< 20	< 20	< 20
Chromium III	ug/l	< 20	NONE	< 20	< 20	< 20	< 20	< 20
Copper (dissolved)	ug/l	< 5	ISO17025	9	29	22	< 5	5
Lead (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	16	< 5	< 5
Manganese (dissolved)	ug/l	< 5	ISO17025	1240	10000	4380	305	38
Mercury (dissolved)	ug/l	< 0.05	ISO17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	ug/l	< 5	ISO17025	7	10	20	< 5	< 5
Selenium (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Zinc (dissolved)	ug/l	< 2	ISO17025	56	64	105	44	107
Magnesium (dissolved)	mg/l	< 0.1	ISO17025	207	60.9	97.6	11.7	10.5
Chromium (total)	ug/l	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Total Phenols (monohydric)	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10

Subcontracted analysis (S)
Insufficient sample I/S
Unsuitable Sample U/S

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Water Analysis Certificate						
DETS Report No: 22-02424	Date Sampled	10/03/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	SW30.003				
Project / Job Ref: STP3966D	Additional Refs	SW3				
Order No: POR012105	Depth (m)	0.00				
Reporting Date: 21/03/2022	DETS Sample No	590228				

Determinand	Unit	RL	Accreditation					
pH	pH Units	N/a	ISO17025	8.1				
Total Cyanide	ug/l	< 5	ISO17025	9				
Complex Cyanide	ug/l	< 5	NONE	9				
Free Cyanide	ug/l	< 5	ISO17025	< 5				
Sulphate as SO_4	mg/l	< 1	ISO17025	104				
Ammoniacal Nitrogen as NH_4	ug/l	< 50	ISO17025	231				
Ammonia as NH_4	ug/l	< 50	ISO17025	231				
Chloride	mg/l	< 1	ISO17025	80				
Nitrate as NO_3	mg/l	< 0.5	ISO17025	5.1				
Nitrite as NO_2	mg/l	< 0.5	NONE	< 0.5				
Phosphate as PO_4	mg/l	< 1	NONE	< 1.0				
Fluoride	mg/l	< 0.5	ISO17025	< 0.5				
Total Organic Carbon (TOC)	mg/l	< 0.1	NONE	9.1				
Chemical Oxygen Demand	mg/l	< 5	NONE	24				
Biological Oxygen Demand	mg/l	< 5	NONE	< 5				
Total Suspended Solids	mg/l	5	NONE	8				
Carbonate (Alkalinity as $CaCO_3$)	mg/l	< 10	NONE	< 10				
Antimony (dissolved)	ug/l	< 5	ISO17025	< 5				
Arsenic (dissolved)	ug/l	< 5	ISO17025	< 5				
Boron (dissolved)	ug/l	< 5	ISO17025	371				
Cadmium (dissolved)	ug/l	< 0.4	ISO17025	< 0.4				
Chromium (dissolved)	ug/l	< 5	ISO17025	< 5				
Chromium (hexavalent)	ug/l	< 20	NONE	< 20				
Chromium III	ug/l	< 20	NONE	< 20				
Copper (dissolved)	ug/l	< 5	ISO17025	8				
Lead (dissolved)	ug/l	< 5	ISO17025	< 5				
Manganese (dissolved)	ug/l	< 5	ISO17025	81				
Mercury (dissolved)	ug/l	< 0.05	ISO17025	< 0.05				
Nickel (dissolved)	ug/l	< 5	ISO17025	< 5				
Selenium (dissolved)	ug/l	< 5	ISO17025	< 5				
Zinc (dissolved)	ug/l	< 2	ISO17025	109				
Magnesium (dissolved)	mg/l	< 0.1	ISO17025	11				
Chromium (total)	ug/l	< 5	NONE	< 5				
Total Phenols (monohydric)	ug/l	< 10	ISO17025	< 10				

Subcontracted analysis (S)
Insufficient sample I/S
Unsuitable Sample U/S

DETS Ltd
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Water Analysis Certificate - Speciated PAH						
DETS Report No: 22-02424	Date Sampled	10/03/22	10/03/22	10/03/22	10/03/22	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	BH0410.339	BH058.937	BH0613.248	BH0910.195	LG1110.181
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	LG11
Order No: POR012105	Depth (m)	10.33	8.93	13.24	10.19	10.18
Reporting Date: 21/03/2022	DETS Sample No	590218	590219	590220	590221	590222

Determinand	Unit	RL	Accreditation					
Naphthalene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	ug/l	< 0.01	NONE	0.02	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	ug/l	< 0.01	NONE	0.02	0.04	0.01	< 0.01	< 0.01
Benzo(a)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	ug/l	< 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
Total EPA-16 PAHs	ug/l	< 0.16	NONE	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16

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Water Analysis Certificate - Speciated PAH						
DETS Report No: 22-02424	Date Sampled	10/03/22	10/03/22	10/03/22	10/03/22	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	LG78.754	LG99.912	LL611.746	SW10.0010	SW20.0011
Project / Job Ref: STP3966D	Additional Refs	LG7	LG9	LL6	SW1	SW2
Order No: POR012105	Depth (m)	8.75	9.91	11.74	0.00	0.00
Reporting Date: 21/03/2022	DETS Sample No	590223	590224	590225	590226	590227

Determinand	Unit	RL	Accreditation					
Naphthalene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	0.04	< 0.01	< 0.01
Anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	ug/l	< 0.01	NONE	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	ug/l	< 0.01	NONE	0.01	0.01	0.02	< 0.01	0.01
Benzo(a)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	ug/l	< 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
Total EPA-16 PAHs	ug/l	< 0.16	NONE	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16

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Water Analysis Certificate - Speciated PAH						
DETS Report No: 22-02424	Date Sampled	10/03/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	SW30.003				
Project / Job Ref: STP3966D	Additional Refs	SW3				
Order No: POR012105	Depth (m)	0.00				
Reporting Date: 21/03/2022	DETS Sample No	590228				

Determinand	Unit	RL	Accreditation				
Naphthalene	ug/l	< 0.01	NONE	< 0.01			
Acenaphthylene	ug/l	< 0.01	NONE	< 0.01			
Acenaphthene	ug/l	< 0.01	NONE	< 0.01			
Fluorene	ug/l	< 0.01	NONE	< 0.01			
Phenanthrene	ug/l	< 0.01	NONE	< 0.01			
Anthracene	ug/l	< 0.01	NONE	< 0.01			
Fluoranthene	ug/l	< 0.01	NONE	< 0.01			
Pyrene	ug/l	< 0.01	NONE	< 0.01			
Benzo(a)anthracene	ug/l	< 0.01	NONE	< 0.01			
Chrysene	ug/l	< 0.01	NONE	< 0.01			
Benzo(b)fluoranthene	ug/l	< 0.01	NONE	< 0.01			
Benzo(k)fluoranthene	ug/l	< 0.01	NONE	< 0.01			
Benzo(a)pyrene	ug/l	< 0.01	NONE	< 0.01			
Indeno(1,2,3-cd)pyrene	ug/l	< 0.01	NONE	< 0.01			
Dibenz(a,h)anthracene	ug/l	< 0.01	NONE	< 0.01			
Benzo(ghi)perylene	ug/l	< 0.008	NONE	< 0.008			
Total EPA-16 PAHs	ug/l	< 0.16	NONE	< 0.16			

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Water Analysis Certificate - TPH CWG Banded							
DETS Report No: 22-02424	Date Sampled	10/03/22	10/03/22	10/03/22	10/03/22	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	BH0410.339	BH058.937	BH0613.248	BH0910.195	LG1110.181
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	LG11
Order No: POR012105	Depth (m)	10.33	8.93	13.24	10.19	10.18
Reporting Date: 21/03/2022	DETS Sample No	590218	590219	590220	590221	590222

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C6 - C8	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C8 - C10	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C10 - C12	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C12 - C16	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C16 - C21	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C21 - C34	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34)	ug/l	< 70	NONE	< 70	< 70	< 70	< 70	< 70
Aromatic >C5 - C7	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C7 - C8	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C8 - C10	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C10 - C12	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C12 - C16	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C16 - C21	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C21 - C35	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35)	ug/l	< 70	NONE	< 70	< 70	< 70	< 70	< 70
Total >C5 - C35	ug/l	< 140	NONE	< 140	< 140	< 140	< 140	< 140

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Water Analysis Certificate - TPH CWG Banded						
DETS Report No: 22-02424	Date Sampled	10/03/22	10/03/22	10/03/22	10/03/22	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	LG78.754	LG99.912	LL611.746	SW10.0010	SW20.0011
Project / Job Ref: STP3966D	Additional Refs	LG7	LG9	LL6	SW1	SW2
Order No: POR012105	Depth (m)	8.75	9.91	11.74	0.00	0.00
Reporting Date: 21/03/2022	DETS Sample No	590223	590224	590225	590226	590227

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C6 - C8	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C8 - C10	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C10 - C12	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aliphatic >C12 - C16	ug/l	< 10	NONE	< 10	< 10	16	< 10	< 10
Aliphatic >C16 - C21	ug/l	< 10	NONE	< 10	< 10	47	< 10	< 10
Aliphatic >C21 - C34	ug/l	< 10	NONE	< 10	< 10	14	< 10	< 10
Aliphatic (C5 - C34)	ug/l	< 70	NONE	< 70	< 70	77	< 70	< 70
Aromatic >C5 - C7	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C7 - C8	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C8 - C10	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C10 - C12	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic >C12 - C16	ug/l	< 10	NONE	< 10	< 10	18	< 10	< 10
Aromatic >C16 - C21	ug/l	< 10	NONE	< 10	< 10	47	< 10	< 10
Aromatic >C21 - C35	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35)	ug/l	< 70	NONE	< 70	< 70	< 70	< 70	< 70
Total >C5 - C35	ug/l	< 140	NONE	< 140	< 140	143	< 140	< 140

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Water Analysis Certificate - TPH CWG Banded						
DETS Report No: 22-02424	Date Sampled	10/03/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	SW30.003				
Project / Job Ref: STP3966D	Additional Refs	SW3				
Order No: POR012105	Depth (m)	0.00				
Reporting Date: 21/03/2022	DETS Sample No	590228				

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	ug/l	< 10	NONE	< 10				
Aliphatic >C6 - C8	ug/l	< 10	NONE	< 10				
Aliphatic >C8 - C10	ug/l	< 10	NONE	< 10				
Aliphatic >C10 - C12	ug/l	< 10	NONE	< 10				
Aliphatic >C12 - C16	ug/l	< 10	NONE	< 10				
Aliphatic >C16 - C21	ug/l	< 10	NONE	< 10				
Aliphatic >C21 - C34	ug/l	< 10	NONE	< 10				
Aliphatic (C5 - C34)	ug/l	< 70	NONE	< 70				
Aromatic >C5 - C7	ug/l	< 10	NONE	< 10				
Aromatic >C7 - C8	ug/l	< 10	NONE	< 10				
Aromatic >C8 - C10	ug/l	< 10	NONE	< 10				
Aromatic >C10 - C12	ug/l	< 10	NONE	< 10				
Aromatic >C12 - C16	ug/l	< 10	NONE	< 10				
Aromatic >C16 - C21	ug/l	< 10	NONE	< 10				
Aromatic >C21 - C35	ug/l	< 10	NONE	< 10				
Aromatic (C5 - C35)	ug/l	< 70	NONE	< 70				
Total >C5 - C35	ug/l	< 140	NONE	< 140				

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Water Analysis Certificate - BTEX / MTBE						
DETS Report No: 22-02424	Date Sampled	10/03/22	10/03/22	10/03/22	10/03/22	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	BH0410.339	BH058.937	BH0613.248	BH0910.195	LG1110.181
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	LG11
Order No: POR012105	Depth (m)	10.33	8.93	13.24	10.19	10.18
Reporting Date: 21/03/2022	DETS Sample No	590218	590219	590220	590221	590222

Determinand	Unit	RL	Accreditation					
Benzene	ug/l	< 1	ISO17025	< 1	< 1	< 1	< 1	< 1
Toluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
p & m-xylene	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
o-xylene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
MTBE	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10

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Water Analysis Certificate - BTEX / MTBE						
DETS Report No: 22-02424	Date Sampled	10/03/22	10/03/22	10/03/22	10/03/22	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	LG78.754	LG99.912	LL611.746	SW10.0010	SW20.0011
Project / Job Ref: STP3966D	Additional Refs	LG7	LG9	LL6	SW1	SW2
Order No: POR012105	Depth (m)	8.75	9.91	11.74	0.00	0.00
Reporting Date: 21/03/2022	DETS Sample No	590223	590224	590225	590226	590227

Determinand	Unit	RL	Accreditation					
Benzene	ug/l	< 1	ISO17025	< 1	< 1	< 1	< 1	< 1
Toluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
p & m-xylene	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
o-xylene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
MTBE	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10

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Water Analysis Certificate - BTEX / MTBE						
DETS Report No: 22-02424	Date Sampled	10/03/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	SW30.003				
Project / Job Ref: STP3966D	Additional Refs	SW3				
Order No: POR012105	Depth (m)	0.00				
Reporting Date: 21/03/2022	DETS Sample No	590228				

Determinand	Unit	RL	Accreditation					
Benzene	ug/l	< 1	ISO17025	< 1				
Toluene	ug/l	< 5	ISO17025	< 5				
Ethylbenzene	ug/l	< 5	ISO17025	< 5				
p & m-xylene	ug/l	< 10	ISO17025	< 10				
o-xylene	ug/l	< 5	ISO17025	< 5				
MTBE	ug/l	< 10	ISO17025	< 10				

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Water Analysis Certificate - Volatile Organic Compounds (VOC)						
DETS Report No: 22-02424	Date Sampled	10/03/22	10/03/22	10/03/22	10/03/22	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	BH0410.339	BH058.937	BH0613.248	BH0910.195	LG1110.181
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	LG11
Order No: POR012105	Depth (m)	10.33	8.93	13.24	10.19	10.18
Reporting Date: 21/03/2022	DETS Sample No	590218	590219	590220	590221	590222

Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Vinyl Chloride	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromomethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Trichlorofluoromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
MTBE	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
trans-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
cis-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
2,2-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chloroform	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
1,1,1-Trichloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Carbon Tetrachloride	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
Benzene	ug/l	< 1	ISO17025	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Trichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromodichloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Dibromomethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
TAME	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Toluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1,2-Trichloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
1,3-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Tetrachloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Dibromochloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2-Dibromoethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1,1,2-Tetrachloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Ethyl Benzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
m,p-Xylene	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
o-Xylene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Styrene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromoform	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
Isopropylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1,2,2-Tetrachloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
1,2,3-Trichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
n-Propylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
2-Chlorotoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,3,5-Trimethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
4-Chlorotoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
tert-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2,4-Trimethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
sec-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
p-Isopropyltoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,3-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,4-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
n-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
,2-Dibromo-3-chloropropane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
Hexachlorobutadiene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5

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Water Analysis Certificate - Volatile Organic Compounds (VOC)						
DETS Report No: 22-02424	Date Sampled	10/03/22	10/03/22	10/03/22	10/03/22	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	LG78.754	LG99.912	LL611.746	SW10.0010	SW20.0011
Project / Job Ref: STP3966D	Additional Refs	LG7	LG9	LL6	SW1	SW2
Order No: POR012105	Depth (m)	8.75	9.91	11.74	0.00	0.00
Reporting Date: 21/03/2022	DETS Sample No	590223	590224	590225	590226	590227

Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Vinyl Chloride	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromomethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Trichlorofluoromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
MTBE	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
trans-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
cis-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
2,2-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chloroform	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
1,1,1-Trichloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Carbon Tetrachloride	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
Benzene	ug/l	< 1	ISO17025	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Trichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromodichloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Dibromomethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
TAME	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Toluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
trans-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1,2-Trichloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
1,3-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Tetrachloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Dibromochloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2-Dibromoethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Chlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1,1,2-Tetrachloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Ethyl Benzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
m,p-Xylene	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
o-Xylene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Styrene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromoform	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
Isopropylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,1,2,2-Tetrachloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
1,2,3-Trichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
n-Propylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
Bromobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
2-Chlorotoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,3,5-Trimethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
4-Chlorotoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
tert-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2,4-Trimethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
sec-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
p-Isopropyltoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,3-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,4-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
n-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
1,2-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5
,2-Dibromo-3-chloropropane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	< 10
Hexachlorobutadiene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	< 5

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UKAS TESTING 4480

Water Analysis Certificate - Volatile Organic Compounds (VOC)						
DETS Report No: 22-02424	Date Sampled	10/03/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	SW30.003				
Project / Job Ref: STP3966D	Additional Refs	SW3				
Order No: POR012105	Depth (m)	0.00				
Reporting Date: 21/03/2022	DETS Sample No	590228				

Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/l	< 5	ISO17025	< 5				
Vinyl Chloride	ug/l	< 5	ISO17025	< 5				
Chloromethane	ug/l	< 5	ISO17025	< 5				
Chloroethane	ug/l	< 5	ISO17025	< 5				
Bromomethane	ug/l	< 5	ISO17025	< 5				
Trichlorofluoromethane	ug/l	< 5	ISO17025	< 5				
1,1-Dichloroethene	ug/l	< 5	ISO17025	< 5				
MTBE	ug/l	< 10	ISO17025	< 10				
trans-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5				
1,1-Dichloroethane	ug/l	< 5	ISO17025	< 5				
cis-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5				
2,2-Dichloropropane	ug/l	< 5	ISO17025	< 5				
Chloroform	ug/l	< 5	ISO17025	< 5				
Bromochloromethane	ug/l	< 10	ISO17025	< 10				
1,1,1-Trichloroethane	ug/l	< 5	ISO17025	< 5				
1,1-Dichloropropene	ug/l	< 5	ISO17025	< 5				
Carbon Tetrachloride	ug/l	< 5	ISO17025	< 5				
1,2-Dichloroethane	ug/l	< 10	ISO17025	< 10				
Benzene	ug/l	< 1	ISO17025	< 1				
1,2-Dichloropropane	ug/l	< 5	ISO17025	< 5				
Trichloroethene	ug/l	< 5	ISO17025	< 5				
Bromodichloromethane	ug/l	< 5	ISO17025	< 5				
Dibromomethane	ug/l	< 5	ISO17025	< 5				
TAME	ug/l	< 5	ISO17025	< 5				
cis-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5				
Toluene	ug/l	< 5	ISO17025	< 5				
trans-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5				
1,1,2-Trichloroethane	ug/l	< 10	ISO17025	< 10				
1,3-Dichloropropane	ug/l	< 5	ISO17025	< 5				
Tetrachloroethene	ug/l	< 5	ISO17025	< 5				
Dibromochloromethane	ug/l	< 5	ISO17025	< 5				
1,2-Dibromoethane	ug/l	< 5	ISO17025	< 5				
Chlorobenzene	ug/l	< 5	ISO17025	< 5				
1,1,1,2-Tetrachloroethane	ug/l	< 5	ISO17025	< 5				
Ethyl Benzene	ug/l	< 5	ISO17025	< 5				
m,p-Xylene	ug/l	< 10	ISO17025	< 10				
o-Xylene	ug/l	< 5	ISO17025	< 5				
Styrene	ug/l	< 5	ISO17025	< 5				
Bromoform	ug/l	< 10	ISO17025	< 10				
Isopropylbenzene	ug/l	< 5	ISO17025	< 5				
1,1,2,2-Tetrachloroethane	ug/l	< 10	ISO17025	< 10				
1,2,3-Trichloropropane	ug/l	< 5	ISO17025	< 5				
n-Propylbenzene	ug/l	< 5	ISO17025	< 5				
Bromobenzene	ug/l	< 5	ISO17025	< 5				
2-Chlorotoluene	ug/l	< 5	ISO17025	< 5				
1,3,5-Trimethylbenzene	ug/l	< 5	ISO17025	< 5				
4-Chlorotoluene	ug/l	< 5	ISO17025	< 5				
tert-Butylbenzene	ug/l	< 5	ISO17025	< 5				
1,2,4-Trimethylbenzene	ug/l	< 5	ISO17025	< 5				
sec-Butylbenzene	ug/l	< 5	ISO17025	< 5				
p-Isopropyltoluene	ug/l	< 5	ISO17025	< 5				
1,3-Dichlorobenzene	ug/l	< 5	ISO17025	< 5				
1,4-Dichlorobenzene	ug/l	< 5	ISO17025	< 5				
n-Butylbenzene	ug/l	< 5	ISO17025	< 5				
1,2-Dichlorobenzene	ug/l	< 5	ISO17025	< 5				
,2-Dibromo-3-chloropropane	ug/l	< 10	ISO17025	< 10				
Hexachlorobutadiene	ug/l	< 5	ISO17025	< 5				

DETS Ltd
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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	BH0410.339
Project / Job Ref: STP3966D	Additional Refs	BH04
Order No: POR012105	Depth (m)	10.33
Reporting Date: 21/03/2022	DETS Sample No	590218

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	BH058.937
Project / Job Ref: STP3966D	Additional Refs	BH05
Order No: POR012105	Depth (m)	8.93
Reporting Date: 21/03/2022	DETS Sample No	590219

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	BH0613.248
Project / Job Ref: STP3966D	Additional Refs	BH06
Order No: POR012105	Depth (m)	13.24
Reporting Date: 21/03/2022	DETS Sample No	590220

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	BH0910.195
Project / Job Ref: STP3966D	Additional Refs	BH09
Order No: POR012105	Depth (m)	10.19
Reporting Date: 21/03/2022	DETS Sample No	590221

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	LG1110.181
Project / Job Ref: STP3966D	Additional Refs	LG11
Order No: POR012105	Depth (m)	10.18
Reporting Date: 21/03/2022	DETS Sample No	590222

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	LG78.754
Project / Job Ref: STP3966D	Additional Refs	LG7
Order No: POR012105	Depth (m)	8.75
Reporting Date: 21/03/2022	DETS Sample No	590223

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	LG99.912
Project / Job Ref: STP3966D	Additional Refs	LG9
Order No: POR012105	Depth (m)	9.91
Reporting Date: 21/03/2022	DETS Sample No	590224

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	LL611.746
Project / Job Ref: STP3966D	Additional Refs	LL6
Order No: POR012105	Depth (m)	11.74
Reporting Date: 21/03/2022	DETS Sample No	590225

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	SW10.0010
Project / Job Ref: STP3966D	Additional Refs	SW1
Order No: POR012105	Depth (m)	0.00
Reporting Date: 21/03/2022	DETS Sample No	590226

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	SW20.0011
Project / Job Ref: STP3966D	Additional Refs	SW2
Order No: POR012105	Depth (m)	0.00
Reporting Date: 21/03/2022	DETS Sample No	590227

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	SW30.003
Project / Job Ref: STP3966D	Additional Refs	SW3
Order No: POR012105	Depth (m)	0.00
Reporting Date: 21/03/2022	DETS Sample No	590228

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds (SVOC)						
DETS Report No: 22-02424	Date Sampled	10/03/22	10/03/22	10/03/22	10/03/22	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	BH0410.339	BH058.937	BH0613.248	BH0910.195	LG1110.181
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	LG11
Order No: POR012105	Depth (m)	10.33	8.93	13.24	10.19	10.18
Reporting Date: 21/03/2022	DETS Sample No	590218	590219	590220	590221	590222

Determinand	Unit	RL	Accreditation					
Phenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitrophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nitrobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
0-Cresol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-chloroethoxy)methane	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-chloroethyl)ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Isophorone	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachloroethane	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
p-Cresol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dimethyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloroanaline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diethyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	0.1
Dibenzofuran	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibutyl phthalate	ug/l	< 0.1	NONE	0.3	< 0.1	0.1	0.3	0.2
Carbazole	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-ethylhexyl)phthalate	ug/l	< 0.1	NONE	0.2	< 0.1	< 0.1	< 0.1	0.1
Benzyl butyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

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Water Analysis Certificate - Semi Volatile Organic Compounds (SVOC)						
DETS Report No: 22-02424	Date Sampled	10/03/22	10/03/22	10/03/22	10/03/22	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	LG78.754	LG99.912	LL611.746	SW10.0010	SW20.0011
Project / Job Ref: STP3966D	Additional Refs	LG7	LG9	LL6	SW1	SW2
Order No: POR012105	Depth (m)	8.75	9.91	11.74	0.00	0.00
Reporting Date: 21/03/2022	DETS Sample No	590223	590224	590225	590226	590227

Determinand	Unit	RL	Accreditation					
Phenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitrophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nitrobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
0-Cresol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-chloroethoxy)methane	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-chloroethyl)ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Isophorone	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachloroethane	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
p-Cresol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dimethyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloroanaline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diethyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibutyl phthalate	ug/l	< 0.1	NONE	0.3	0.3	0.2	0.3	0.3
Carbazole	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
bis(2-ethylhexyl)phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl butyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

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Water Analysis Certificate - Semi Volatile Organic Compounds (SVOC)						
DETS Report No: 22-02424	Date Sampled	10/03/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	SW30.003				
Project / Job Ref: STP3966D	Additional Refs	SW3				
Order No: POR012105	Depth (m)	0.00				
Reporting Date: 21/03/2022	DETS Sample No	590228				

Determinand	Unit	RL	Accreditation					
Phenol	ug/l	< 0.1	NONE	< 0.1				
1,2,4-Trichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
2-Nitrophenol	ug/l	< 0.1	NONE	< 0.1				
Nitrobenzene	ug/l	< 0.1	NONE	< 0.1				
0-Cresol	ug/l	< 0.1	NONE	< 0.1				
bis(2-chloroethoxy)methane	ug/l	< 0.1	NONE	< 0.1				
bis(2-chloroethyl)ether	ug/l	< 0.1	NONE	< 0.1				
2,4-Dichlorophenol	ug/l	< 0.1	NONE	< 0.1				
2-Chlorophenol	ug/l	< 0.1	NONE	< 0.1				
1,3-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
1,4-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
1,2-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
2,4-Dimethylphenol	ug/l	< 0.1	NONE	< 0.1				
Isophorone	ug/l	< 0.1	NONE	< 0.1				
Hexachloroethane	ug/l	< 0.1	NONE	< 0.1				
p-Cresol	ug/l	< 0.1	NONE	< 0.1				
2,4,6-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1				
2,4,5-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1				
2-Nitroaniline	ug/l	< 0.1	NONE	< 0.1				
4-Chloro-3-methylphenol	ug/l	< 0.1	NONE	< 0.1				
2-Methylnaphthalene	ug/l	< 0.1	NONE	< 0.1				
Hexachlorocyclopentadiene	ug/l	< 0.1	NONE	< 0.1				
Hexachlorobutadiene	ug/l	< 0.1	NONE	< 0.1				
2,6-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1				
Dimethyl phthalate	ug/l	< 0.1	NONE	< 0.1				
2-Chloronaphthalene	ug/l	< 0.1	NONE	< 0.1				
4-Chloroanaline	ug/l	< 0.1	NONE	< 0.1				
4-Nitrophenol	ug/l	< 0.1	NONE	< 0.1				
4-Chlorophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1				
3-Nitroaniline	ug/l	< 0.1	NONE	< 0.1				
4-Nitroaniline	ug/l	< 0.1	NONE	< 0.1				
4-Bromophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1				
Hexachlorobenzene	ug/l	< 0.1	NONE	< 0.1				
2,4-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1				
Diethyl phthalate	ug/l	< 0.1	NONE	< 0.1				
Dibenzofuran	ug/l	< 0.1	NONE	< 0.1				
Azobenzene	ug/l	< 0.1	NONE	< 0.1				
Dibutyl phthalate	ug/l	< 0.1	NONE	0.2				
Carbazole	ug/l	< 0.1	NONE	< 0.1				
bis(2-ethylhexyl)phthalate	ug/l	< 0.1	NONE	0.1				
Benzyl butyl phthalate	ug/l	< 0.1	NONE	< 0.1				
Di-n-octyl phthalate	ug/l	< 0.1	NONE	< 0.1				

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	BH0410.339
Project / Job Ref: STP3966D	Additional Refs	BH04
Order No: POR012105	Depth (m)	10.33
Reporting Date: 21/03/2022	DETS Sample No	590218

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	BH058.937
Project / Job Ref: STP3966D	Additional Refs	BH05
Order No: POR012105	Depth (m)	8.93
Reporting Date: 21/03/2022	DETS Sample No	590219

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	BH0613.248
Project / Job Ref: STP3966D	Additional Refs	BH06
Order No: POR012105	Depth (m)	13.24
Reporting Date: 21/03/2022	DETS Sample No	590220

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	BH0910.195
Project / Job Ref: STP3966D	Additional Refs	BH09
Order No: POR012105	Depth (m)	10.19
Reporting Date: 21/03/2022	DETS Sample No	590221

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	LG1110.181
Project / Job Ref: STP3966D	Additional Refs	LG11
Order No: POR012105	Depth (m)	10.18
Reporting Date: 21/03/2022	DETS Sample No	590222

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	LG78.754
Project / Job Ref: STP3966D	Additional Refs	LG7
Order No: POR012105	Depth (m)	8.75
Reporting Date: 21/03/2022	DETS Sample No	590223

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	LG99.912
Project / Job Ref: STP3966D	Additional Refs	LG9
Order No: POR012105	Depth (m)	9.91
Reporting Date: 21/03/2022	DETS Sample No	590224

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	LL611.746
Project / Job Ref: STP3966D	Additional Refs	LL6
Order No: POR012105	Depth (m)	11.74
Reporting Date: 21/03/2022	DETS Sample No	590225

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	SW10.0010
Project / Job Ref: STP3966D	Additional Refs	SW1
Order No: POR012105	Depth (m)	0.00
Reporting Date: 21/03/2022	DETS Sample No	590226

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	Cyclic octaatomic sulfur	96	µg/l	< 0.1	1.7
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	SW20.0011
Project / Job Ref: STP3966D	Additional Refs	SW2
Order No: POR012105	Depth (m)	0.00
Reporting Date: 21/03/2022	DETS Sample No	590227

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-02424	Date Sampled	10/03/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Are, Corby	TP / BH No	SW30.003
Project / Job Ref: STP3966D	Additional Refs	SW3
Order No: POR012105	Depth (m)	0.00
Reporting Date: 21/03/2022	DETS Sample No	590228

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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UKAS TESTING 4480

Water Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 22-02424
Soiltechnics Ltd
Site Reference: Rockingham Enterprise Are, Corby
Project / Job Ref: STP3966D
Order No: POR012105
Reporting Date: 21/03/2022

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Water	UF	Alkalinity	Determination of alkalinity by titration against hydrochloric acid using bromocresol green as the end point	E103
Water	F	Ammoniacal Nitrogen	Determination of ammoniacal nitrogen by discrete analyser.	E126
Water	UF	BTEX	Determination of BTEX by headspace GC-MS	E101
Water	F	Cations	Determination of cations by filtration followed by ICP-MS	E102
Water	UF	Chemical Oxygen Demand (COD)	Determination using a COD reactor followed by colorimetry	E112
Water	F	Chloride	Determination of chloride by filtration & analysed by ion chromatography	E109
Water	F	Chromium - Hexavalent	Determination of hexavalent chromium by acidification, addition of 1,5 diphenylcarbazide followed by	E116
Water	UF	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E115
Water	UF	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through liquid:liquid extraction with cyclohexane	E111
Water	F	Diesel Range Organics (C10 - C24)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	Dissolved Organic Content (DOC)	Determination of DOC by filtration followed by low heat with persulphate addition followed by IR dete	E110
Water	UF	Electrical Conductivity	Determination of electrical conductivity by electrometric measurement	E123
Water	F	EPH (C10 – C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E104
Water	F	Fluoride	Determination of Fluoride by filtration & analysed by ion chromatography	E109
Water	F	Hardness	Determination of Ca and Mg by ICP-MS followed by calculation	E102
Leachate	F	Leachate Preparation - NRA	Based on National Rivers Authority leaching test 1994	E301
Leachate	F	Leachate Preparation - WAC	Based on BS EN 12457 Pt1, 2, 3	E302
Water	F	Metals	Determination of metals by filtration followed by ICP-MS	E102
Water	F	Mineral Oil (C10 - C40)	Determination of liquid:liquid extraction with hexane followed by GI-FID	E104
Water	F	Nitrate	Determination of nitrate by filtration & analysed by ion chromatography	E109
Water	UF	Monohydric Phenol	Determination of phenols by distillation followed by colorimetry	E121
Water	F	PAH - Speciated (EPA 16)	Determination of PAH compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E105
Water	F	PCB - 7 Congeners	Determination of PCB compounds by concentration through SPE cartridge, collection in dichlorometha	E108
Water	UF	Petroleum Ether Extract (PEE)	Gravimetrically determined through liquid:liquid extraction with petroleum ether	E111
Water	UF	pH	Determination of pH by electrometric measurement	E107
Water	F	Phosphate	Determination of phosphate by filtration & analysed by ion chromatography	E109
Water	UF	Redox Potential	Determination of redox potential by electrometric measurement	E113
Water	F	Sulphate (as SO4)	Determination of sulphate by filtration & analysed by ion chromatography	E109
Water	UF	Sulphide	Determination of sulphide by distillation followed by colorimetry	E118
Water	F	SVOC	Determination of semi-volatile organic compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E106
Water	UF	Toluene Extractable Matter (TEM)	Gravimetrically determined through liquid:liquid extraction with toluene	E111
Water	UF	Total Organic Carbon (TOC)	Low heat with persulphate addition followed by IR detection	E110
Water	F	TPH CWG (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C35. C5 to C8 by headspace GC-MS	E104
Water	F	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C44. C5 to C8 by headspace GC-MS	E104
Water	UF	VOCs	Determination of volatile organic compounds by headspace GC-MS	E101
Water	UF	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E101

Key

F Filtered
UF Unfiltered

Lauren Wenham
Soiltechnics Ltd
White Lodge
Cedar Barn
Walgrave
NN6 9PY

Derwentside Environmental Testing Services Ltd
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Lenham Heath
Kent
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t: 01622 850410

DETS Report No: 22-07642

Site Reference:	Rockingham Enterprise Area, Corby
Project / Job Ref:	STP3966D
Order No:	POR013557
Sample Receipt Date:	12/09/2022
Sample Scheduled Date:	12/09/2022
Report Issue Number:	1
Reporting Date:	20/09/2022

Authorised by:

Dave Ashworth
Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

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Maidstone
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Water Analysis Certificate							
DETS Report No: 22-07642	Date Sampled	09/09/22					
Soiltechnics Ltd	Time Sampled	BH06					
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.961					
Project / Job Ref: STP3966D	Additional Refs	BH06					
Order No: POR013557	Depth (m)	12.96					
Reporting Date: 20/09/2022	DETS Sample No	612307					

Determinand	Unit	RL	Accreditation					
pH	pH Units	N/a	ISO17025	7.1				
Total Cyanide	ug/l	< 5	ISO17025	35				
Complex Cyanide	ug/l	< 5	NONE	35				
Free Cyanide	ug/l	< 5	ISO17025	< 5				
Sulphate as SO_4	mg/l	< 1	ISO17025	1010				
Ammoniacal Nitrogen as NH_4	ug/l	< 50	ISO17025	13600				
Ammonia as NH_4	ug/l	< 50	ISO17025	13600				
Chloride	mg/l	< 1	ISO17025	127				
Nitrate as NO_3	mg/l	< 0.5	ISO17025	3				
Nitrite as NO_2	mg/l	< 0.5	NONE	1.8				
Phosphate as PO_4	mg/l	< 1	NONE	3				
Fluoride	mg/l	< 0.5	ISO17025	0.6				
Total Organic Carbon (TOC)	mg/l	< 0.1	NONE	8.2				
Chemical Oxygen Demand	mg/l	<10	ISO17025	30				
Biological Oxygen Demand	mg/l	< 5	NONE	< 5				
Total Suspended Solids	mg/l	5	NONE	3100				
Carbonate (Alkalinity as $CaCO_3$)	mg/l	< 10	NONE	< 10				
Antimony (dissolved)	ug/l	< 5	ISO17025	< 5				
Arsenic (dissolved)	ug/l	< 5	ISO17025	17				
Boron (dissolved)	ug/l	< 5	ISO17025	2960				
Cadmium (dissolved)	ug/l	< 0.4	ISO17025	1				
Chromium (dissolved)	ug/l	< 5	ISO17025	22				
Chromium (hexavalent)	ug/l	< 20	NONE	< 20				
Chromium III	ug/l	< 20	NONE	22				
Copper (dissolved)	ug/l	< 5	ISO17025	19				
Lead (dissolved)	ug/l	< 5	ISO17025	305				
Mercury (dissolved)	ug/l	< 0.05	ISO17025	< 0.05				
Nickel (dissolved)	ug/l	< 5	ISO17025	26				
Selenium (dissolved)	ug/l	< 5	ISO17025	8				
Zinc (dissolved)	ug/l	< 2	ISO17025	3840				
Magnesium (dissolved)	mg/l	< 0.1	ISO17025	52.4				
Chromium (total)	ug/l	< 5	NONE	668				
Total Phenols (monohydric)	ug/l	< 10	ISO17025	< 10				

Subcontracted analysis (S)
Insufficient sample I/S
Unsuitable Sample U/S

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Water Analysis Certificate - Speciated PAH						
DETS Report No: 22-07642	Date Sampled	09/09/22				
Soiltechnics Ltd	Time Sampled	BH06				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.961				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR013557	Depth (m)	12.96				
Reporting Date: 20/09/2022	DETS Sample No	612307				

Determinand	Unit	RL	Accreditation					
Naphthalene	ug/l	< 0.01	NONE	0.03				
Acenaphthylene	ug/l	< 0.01	NONE	< 0.01				
Acenaphthene	ug/l	< 0.01	NONE	< 0.01				
Fluorene	ug/l	< 0.01	NONE	< 0.01				
Phenanthrene	ug/l	< 0.01	NONE	< 0.01				
Anthracene	ug/l	< 0.01	NONE	< 0.01				
Fluoranthene	ug/l	< 0.01	NONE	< 0.01				
Pyrene	ug/l	< 0.01	NONE	< 0.01				
Benzo(a)anthracene	ug/l	< 0.01	NONE	< 0.01				
Chrysene	ug/l	< 0.01	NONE	< 0.01				
Benzo(b)fluoranthene	ug/l	< 0.01	NONE	< 0.01				
Benzo(k)fluoranthene	ug/l	< 0.01	NONE	< 0.01				
Benzo(a)pyrene	ug/l	< 0.01	NONE	< 0.01				
Indeno(1,2,3-cd)pyrene	ug/l	< 0.01	NONE	< 0.01				
Dibenz(a,h)anthracene	ug/l	< 0.01	NONE	< 0.01				
Benzo(ghi)perylene	ug/l	< 0.008	NONE	< 0.008				
Total EPA-16 PAHs	ug/l	< 0.16	NONE	< 0.16				

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Water Analysis Certificate - TPH CWG Banded						
DETS Report No: 22-07642	Date Sampled	09/09/22				
Soiltechnics Ltd	Time Sampled	BH06				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.961				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR013557	Depth (m)	12.96				
Reporting Date: 20/09/2022	DETS Sample No	612307				

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	ug/l	< 10	NONE	< 10				
Aliphatic >C6 - C8	ug/l	< 10	NONE	< 10				
Aliphatic >C8 - C10	ug/l	< 10	NONE	< 10				
Aliphatic >C10 - C12	ug/l	< 10	NONE	< 10				
Aliphatic >C12 - C16	ug/l	< 10	NONE	< 10				
Aliphatic >C16 - C21	ug/l	< 10	NONE	< 10				
Aliphatic >C21 - C34	ug/l	< 10	NONE	< 10				
Aliphatic (C5 - C34)	ug/l	< 70	NONE	< 70				
Aromatic >C5 - C7	ug/l	< 10	NONE	< 10				
Aromatic >C7 - C8	ug/l	< 10	NONE	< 10				
Aromatic >C8 - C10	ug/l	< 10	NONE	< 10				
Aromatic >C10 - C12	ug/l	< 10	NONE	< 10				
Aromatic >C12 - C16	ug/l	< 10	NONE	< 10				
Aromatic >C16 - C21	ug/l	< 10	NONE	< 10				
Aromatic >C21 - C35	ug/l	< 10	NONE	< 10				
Aromatic (C5 - C35)	ug/l	< 70	NONE	< 70				
Total >C5 - C35	ug/l	< 140	NONE	< 140				

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Water Analysis Certificate - BTEX / MTBE						
DETS Report No: 22-07642	Date Sampled	09/09/22				
Soiltechnics Ltd	Time Sampled	BH06				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.961				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR013557	Depth (m)	12.96				
Reporting Date: 20/09/2022	DETS Sample No	612307				

Determinand	Unit	RL	Accreditation					
Benzene	ug/l	< 1	ISO17025	< 1				
Toluene	ug/l	< 5	ISO17025	< 5				
Ethylbenzene	ug/l	< 5	ISO17025	< 5				
p & m-xylene	ug/l	< 10	ISO17025	< 10				
o-xylene	ug/l	< 5	ISO17025	< 5				
MTBE	ug/l	< 10	ISO17025	< 10				

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Water Analysis Certificate - Volatile Organic Compounds (VOC)						
DETS Report No: 22-07642	Date Sampled	09/09/22				
Soiltechnics Ltd	Time Sampled	BH06				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.961				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR013557	Depth (m)	12.96				
Reporting Date: 20/09/2022	DETS Sample No	612307				

Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/l	< 5	ISO17025	< 5				
Vinyl Chloride	ug/l	< 5	ISO17025	< 5				
Chloromethane	ug/l	< 5	ISO17025	< 5				
Chloroethane	ug/l	< 5	ISO17025	< 5				
Bromomethane	ug/l	< 5	ISO17025	< 5				
Trichlorofluoromethane	ug/l	< 5	ISO17025	< 5				
1,1-Dichloroethene	ug/l	< 5	ISO17025	< 5				
MTBE	ug/l	< 10	ISO17025	< 10				
trans-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5				
1,1-Dichloroethane	ug/l	< 5	ISO17025	< 5				
cis-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5				
2,2-Dichloropropane	ug/l	< 5	ISO17025	< 5				
Chloroform	ug/l	< 5	ISO17025	< 5				
Bromochloromethane	ug/l	< 10	ISO17025	< 10				
1,1,1-Trichloroethane	ug/l	< 5	ISO17025	< 5				
1,1-Dichloropropene	ug/l	< 5	ISO17025	< 5				
Carbon Tetrachloride	ug/l	< 5	ISO17025	< 5				
1,2-Dichloroethane	ug/l	< 10	ISO17025	< 10				
Benzene	ug/l	< 1	ISO17025	< 1				
1,2-Dichloropropane	ug/l	< 5	ISO17025	< 5				
Trichloroethene	ug/l	< 5	ISO17025	< 5				
Bromodichloromethane	ug/l	< 5	ISO17025	< 5				
Dibromomethane	ug/l	< 5	ISO17025	< 5				
TAME	ug/l	< 5	ISO17025	< 5				
cis-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5				
Toluene	ug/l	< 5	ISO17025	< 5				
trans-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5				
1,1,2-Trichloroethane	ug/l	< 10	ISO17025	< 10				
1,3-Dichloropropane	ug/l	< 5	ISO17025	< 5				
Tetrachloroethene	ug/l	< 5	ISO17025	< 5				
Dibromochloromethane	ug/l	< 5	ISO17025	< 5				
1,2-Dibromoethane	ug/l	< 5	ISO17025	< 5				
Chlorobenzene	ug/l	< 5	ISO17025	< 5				
1,1,1,2-Tetrachloroethane	ug/l	< 5	ISO17025	< 5				
Ethyl Benzene	ug/l	< 5	ISO17025	< 5				
m,p-Xylene	ug/l	< 10	ISO17025	< 10				
o-Xylene	ug/l	< 5	ISO17025	< 5				
Styrene	ug/l	< 5	ISO17025	< 5				
Bromoform	ug/l	< 10	ISO17025	< 10				
Isopropylbenzene	ug/l	< 5	ISO17025	< 5				
1,1,2,2-Tetrachloroethane	ug/l	< 10	ISO17025	< 10				
1,2,3-Trichloropropane	ug/l	< 5	ISO17025	< 5				
n-Propylbenzene	ug/l	< 5	ISO17025	< 5				
Bromobenzene	ug/l	< 5	ISO17025	< 5				
2-Chlorotoluene	ug/l	< 5	ISO17025	< 5				
1,3,5-Trimethylbenzene	ug/l	< 5	ISO17025	< 5				
4-Chlorotoluene	ug/l	< 5	ISO17025	< 5				
tert-Butylbenzene	ug/l	< 5	ISO17025	< 5				
1,2,4-Trimethylbenzene	ug/l	< 5	ISO17025	< 5				
sec-Butylbenzene	ug/l	< 5	ISO17025	< 5				
p-Isopropyltoluene	ug/l	< 5	ISO17025	< 5				
1,3-Dichlorobenzene	ug/l	< 5	ISO17025	< 5				
1,4-Dichlorobenzene	ug/l	< 5	ISO17025	< 5				
n-Butylbenzene	ug/l	< 5	ISO17025	< 5				
1,2-Dichlorobenzene	ug/l	< 5	ISO17025	< 5				
,2-Dibromo-3-chloropropane	ug/l	< 10	ISO17025	< 10				
Hexachlorobutadiene	ug/l	< 5	ISO17025	< 5				

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-07642	Date Sampled	09/09/22
Soiltechnics Ltd	Time Sampled	BH06
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.961
Project / Job Ref: STP3966D	Additional Refs	BH06
Order No: POR013557	Depth (m)	12.96
Reporting Date: 20/09/2022	DETS Sample No	612307

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds (SVOC)						
DETS Report No: 22-07642	Date Sampled	09/09/22				
Soiltechnics Ltd	Time Sampled	BH06				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.961				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR013557	Depth (m)	12.96				
Reporting Date: 20/09/2022	DETS Sample No	612307				

Determinand	Unit	RL	Accreditation					
Phenol	ug/l	< 0.1	NONE	< 0.1				
1,2,4-Trichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
2-Nitrophenol	ug/l	< 0.1	NONE	< 0.1				
Nitrobenzene	ug/l	< 0.1	NONE	< 0.1				
0-Cresol	ug/l	< 0.1	NONE	< 0.1				
bis(2-chloroethoxy)methane	ug/l	< 0.1	NONE	< 0.1				
bis(2-chloroethyl)ether	ug/l	< 0.1	NONE	< 0.1				
2,4-Dichlorophenol	ug/l	< 0.1	NONE	< 0.1				
2-Chlorophenol	ug/l	< 0.1	NONE	< 0.1				
1,3-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
1,4-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
1,2-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
2,4-Dimethylphenol	ug/l	< 0.1	NONE	< 0.1				
Isophorone	ug/l	< 0.1	NONE	< 0.1				
Hexachloroethane	ug/l	< 0.1	NONE	< 0.1				
p-Cresol	ug/l	< 0.1	NONE	< 0.1				
2,4,6-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1				
2,4,5-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1				
2-Nitroaniline	ug/l	< 0.1	NONE	< 0.1				
4-Chloro-3-methylphenol	ug/l	< 0.1	NONE	< 0.1				
2-Methylnaphthalene	ug/l	< 0.1	NONE	< 0.1				
Hexachlorocyclopentadiene	ug/l	< 0.1	NONE	< 0.1				
Hexachlorobutadiene	ug/l	< 0.1	NONE	< 0.1				
2,6-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1				
Dimethyl phthalate	ug/l	< 0.1	NONE	< 0.1				
2-Chloronaphthalene	ug/l	< 0.1	NONE	< 0.1				
4-Chloroanaline	ug/l	< 0.1	NONE	< 0.1				
4-Nitrophenol	ug/l	< 0.1	NONE	< 0.1				
4-Chlorophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1				
3-Nitroaniline	ug/l	< 0.1	NONE	< 0.1				
4-Nitroaniline	ug/l	< 0.1	NONE	< 0.1				
4-Bromophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1				
Hexachlorobenzene	ug/l	< 0.1	NONE	< 0.1				
2,4-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1				
Diethyl phthalate	ug/l	< 0.1	NONE	< 0.1				
Dibenzofuran	ug/l	< 0.1	NONE	< 0.1				
Azobenzene	ug/l	< 0.1	NONE	< 0.1				
Dibutyl phthalate	ug/l	< 0.1	NONE	< 0.1				
Carbazole	ug/l	< 0.1	NONE	< 0.1				
bis(2-ethylhexyl)phthalate	ug/l	< 0.1	NONE	< 0.1				
Benzyl butyl phthalate	ug/l	< 0.1	NONE	< 0.1				
Di-n-octyl phthalate	ug/l	< 0.1	NONE	< 0.1				

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-07642	Date Sampled	09/09/22
Soiltechnics Ltd	Time Sampled	BH06
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.961
Project / Job Ref: STP3966D	Additional Refs	BH06
Order No: POR013557	Depth (m)	12.96
Reporting Date: 20/09/2022	DETS Sample No	612307

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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UKAS TESTING 4480

Water Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 22-07642
Soiltechnics Ltd
Site Reference: Rockingham Enterprise Area, Corby
Project / Job Ref: STP3966D
Order No: POR013557
Reporting Date: 20/09/2022

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Water	UF	Alkalinity	Determination of alkalinity by titration against hydrochloric acid using bromocresol green as the end point	E103
Water	F	Ammoniacal Nitrogen	Determination of ammoniacal nitrogen by discrete analyser.	E126
Water	UF	BTEX	Determination of BTEX by headspace GC-MS	E101
Water	F	Cations	Determination of cations by filtration followed by ICP-MS	E102
Water	UF	Chemical Oxygen Demand (COD)	Determination using a COD reactor followed by colorimetry	E112
Water	F	Chloride	Determination of chloride by filtration & analysed by ion chromatography	E109
Water	F	Chromium - Hexavalent	Determination of hexavalent chromium by acidification, addition of 1,5 diphenylcarbazide followed by	E116
Water	UF	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E115
Water	UF	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through liquid:liquid extraction with cyclohexane	E111
Water	F	Diesel Range Organics (C10 - C24)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	Dissolved Organic Content (DOC)	Determination of DOC by filtration followed by low heat with persulphate addition followed by IR dete	E110
Water	UF	Electrical Conductivity	Determination of electrical conductivity by electrometric measurement	E123
Water	F	EPH (C10 – C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E104
Water	F	Fluoride	Determination of Fluoride by filtration & analysed by ion chromatography	E109
Water	F	Hardness	Determination of Ca and Mg by ICP-MS followed by calculation	E102
Leachate	F	Leachate Preparation - NRA	Based on National Rivers Authority leaching test 1994	E301
Leachate	F	Leachate Preparation - WAC	Based on BS EN 12457 Pt1, 2, 3	E302
Water	F	Metals	Determination of metals by filtration followed by ICP-MS	E102
Water	F	Mineral Oil (C10 - C40)	Determination of liquid:liquid extraction with hexane followed by GI-FID	E104
Water	F	Nitrate	Determination of nitrate by filtration & analysed by ion chromatography	E109
Water	UF	Monohydric Phenol	Determination of phenols by distillation followed by colorimetry	E121
Water	F	PAH - Speciated (EPA 16)	Determination of PAH compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E105
Water	F	PCB - 7 Congeners	Determination of PCB compounds by concentration through SPE cartridge, collection in dichlorometha	E108
Water	UF	Petroleum Ether Extract (PEE)	Gravimetrically determined through liquid:liquid extraction with petroleum ether	E111
Water	UF	pH	Determination of pH by electrometric measurement	E107
Water	F	Phosphate	Determination of phosphate by filtration & analysed by ion chromatography	E109
Water	UF	Redox Potential	Determination of redox potential by electrometric measurement	E113
Water	F	Sulphate (as SO4)	Determination of sulphate by filtration & analysed by ion chromatography	E109
Water	UF	Sulphide	Determination of sulphide by distillation followed by colorimetry	E118
Water	F	SVOC	Determination of semi-volatile organic compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E106
Water	UF	Toluene Extractable Matter (TEM)	Gravimetrically determined through liquid:liquid extraction with toluene	E111
Water	UF	Total Organic Carbon (TOC)	Low heat with persulphate addition followed by IR detection	E110
Water	F	TPH CWG (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C35. C5 to C8 by headspace GC-MS	E104
Water	F	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C44. C5 to C8 by headspace GC-MS	E104
Water	UF	VOCs	Determination of volatile organic compounds by headspace GC-MS	E101
Water	UF	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E101

Key

F Filtered
UF Unfiltered

Lauren Wenham
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Lenham Heath
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DETS Report No: 22-08711

Site Reference:	Rockingham Enterprise Area, Corby
Project / Job Ref:	STP3966D
Order No:	POR013825
Sample Receipt Date:	19/10/2022
Sample Scheduled Date:	19/10/2022
Report Issue Number:	1
Reporting Date:	25/10/2022

Authorised by:

Dave Ashworth
Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

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Maidstone
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Water Analysis Certificate						
DETS Report No: 22-08711	Date Sampled	14/10/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0613.001				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR013825	Depth (m)	13.00				
Reporting Date: 25/10/2022	DETS Sample No	617083				

Determinand	Unit	RL	Accreditation					
pH	pH Units	N/a	ISO17025	6.8				
Total Cyanide	ug/l	< 5	ISO17025	43				
Complex Cyanide	ug/l	< 5	NONE	43				
Free Cyanide	ug/l	< 5	ISO17025	< 5				
Sulphate as SO_4	mg/l	< 1	ISO17025	1030				
Ammoniacal Nitrogen as NH_4	ug/l	< 50	ISO17025	13700				
Ammonia as NH_4	ug/l	< 50	ISO17025	13700				
Chloride	mg/l	< 1	ISO17025	134				
Nitrate as NO_3	mg/l	< 0.5	ISO17025	2.9				
Nitrite as NO_2	mg/l	< 0.5	NONE	< 0.5				
Phosphate as PO_4	mg/l	< 1	NONE	< 1.0				
Fluoride	mg/l	< 0.5	ISO17025	< 0.5				
Total Organic Carbon (TOC)	mg/l	< 0.1	NONE	19.1				
Chemical Oxygen Demand	mg/l	<10	ISO17025	23				
Biological Oxygen Demand	mg/l	< 5	NONE	6				
Total Suspended Solids	mg/l	5	NONE	224				
Carbonate (Alkalinity as $CaCO_3$)	mg/l	< 10	NONE	< 10				
Antimony (dissolved)	ug/l	< 5	ISO17025	< 5				
Arsenic (dissolved)	ug/l	< 5	ISO17025	12				
Boron (dissolved)	ug/l	< 5	ISO17025	1860				
Cadmium (dissolved)	ug/l	< 0.4	ISO17025	0.6				
Chromium (dissolved)	ug/l	< 5	ISO17025	< 5				
Chromium (hexavalent)	ug/l	< 20	NONE	< 20				
Chromium III	ug/l	< 20	NONE	< 20				
Copper (dissolved)	ug/l	< 5	ISO17025	16				
Lead (dissolved)	ug/l	< 5	ISO17025	120				
Mercury (dissolved)	ug/l	< 0.05	ISO17025	< 0.05				
Nickel (dissolved)	ug/l	< 5	ISO17025	11				
Selenium (dissolved)	ug/l	< 5	ISO17025	7				
Zinc (dissolved)	ug/l	< 2	ISO17025	619				
Magnesium (dissolved)	mg/l	< 0.1	ISO17025	47.3				
Chromium (total)	ug/l	< 5	NONE	131				
Total Phenols (monohydric)	ug/l	< 10	ISO17025	< 10				

Subcontracted analysis (S)
Insufficient sample I/S
Unsuitable Sample U/S

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Water Analysis Certificate - Speciated PAH						
DETS Report No: 22-08711	Date Sampled	14/10/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0613.001				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR013825	Depth (m)	13.00				
Reporting Date: 25/10/2022	DETS Sample No	617083				

Determinand	Unit	RL	Accreditation				
Naphthalene	ug/l	< 0.01	NONE	< 0.01			
Acenaphthylene	ug/l	< 0.01	NONE	< 0.01			
Acenaphthene	ug/l	< 0.01	NONE	< 0.01			
Fluorene	ug/l	< 0.01	NONE	< 0.01			
Phenanthrene	ug/l	< 0.01	NONE	0.07			
Anthracene	ug/l	< 0.01	NONE	0.03			
Fluoranthene	ug/l	< 0.01	NONE	0.04			
Pyrene	ug/l	< 0.01	NONE	0.03			
Benzo(a)anthracene	ug/l	< 0.01	NONE	< 0.01			
Chrysene	ug/l	< 0.01	NONE	< 0.01			
Benzo(b)fluoranthene	ug/l	< 0.01	NONE	< 0.01			
Benzo(k)fluoranthene	ug/l	< 0.01	NONE	< 0.01			
Benzo(a)pyrene	ug/l	< 0.01	NONE	< 0.01			
Indeno(1,2,3-cd)pyrene	ug/l	< 0.01	NONE	< 0.01			
Dibenz(a,h)anthracene	ug/l	< 0.01	NONE	< 0.01			
Benzo(ghi)perylene	ug/l	< 0.008	NONE	< 0.008			
Total EPA-16 PAHs	ug/l	< 0.16	NONE	0.17			

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Water Analysis Certificate - TPH CWG Banded						
DETS Report No: 22-08711	Date Sampled	14/10/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0613.001				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR013825	Depth (m)	13.00				
Reporting Date: 25/10/2022	DETS Sample No	617083				

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6 : HS_1D_MS_AL	ug/l	< 10	NONE	< 10				
Aliphatic >C6 - C8 : HS_1D_MS_AL	ug/l	< 10	NONE	< 10				
Aliphatic >C8 - C10 : EH_CU_1D_AL	ug/l	< 10	NONE	< 10				
Aliphatic >C10 - C12 : EH_CU_1D_AL	ug/l	< 10	NONE	< 10				
Aliphatic >C12 - C16 : EH_CU_1D_AL	ug/l	< 10	NONE	< 10				
Aliphatic >C16 - C21 : EH_CU_1D_AL	ug/l	< 10	NONE	< 10				
Aliphatic >C21 - C34 : EH_CU_1D_AL	ug/l	< 10	NONE	< 10				
Aliphatic (C5 - C34) : HS_1D_MS+EH_CU_1D_AL	ug/l	< 70	NONE	< 70				
Aromatic >C5 - C7 : HS_1D_MS_AR	ug/l	< 10	NONE	< 10				
Aromatic >C7 - C8 : HS_1D_MS_AR	ug/l	< 10	NONE	< 10				
Aromatic >C8 - C10 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10				
Aromatic >C10 - C12 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10				
Aromatic >C12 - C16 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10				
Aromatic >C16 - C21 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10				
Aromatic >C21 - C35 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10				
Aromatic (C5 - C35) : HS_1D_MS+EH_CU_1D_AR	ug/l	< 70	NONE	< 70				
Total >C5 - C35 : HS_1D_MS+EH_CU_1D_Total	ug/l	< 140	NONE	< 140				

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Water Analysis Certificate - BTEX / MTBE						
DETS Report No: 22-08711	Date Sampled	14/10/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0613.001				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR013825	Depth (m)	13.00				
Reporting Date: 25/10/2022	DETS Sample No	617083				

Determinand	Unit	RL	Accreditation					
Benzene : HS_1D_MS	ug/l	< 1	ISO17025	< 1				
Toluene : HS_1D_MS	ug/l	< 5	ISO17025	< 5				
Ethylbenzene : HS_1D_MS	ug/l	< 5	ISO17025	< 5				
p & m-xylene : HS_1D_MS	ug/l	< 10	ISO17025	< 10				
o-xylene : HS_1D_MS	ug/l	< 5	ISO17025	< 5				
MTBE : HS_1D_MS	ug/l	< 10	ISO17025	< 10				

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Water Analysis Certificate - Volatile Organic Compounds (VOC)						
DETS Report No: 22-08711	Date Sampled	14/10/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0613.001				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR013825	Depth (m)	13.00				
Reporting Date: 25/10/2022	DETS Sample No	617083				

Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/l	< 5	ISO17025	< 5				
Vinyl Chloride	ug/l	< 5	ISO17025	< 5				
Chloromethane	ug/l	< 5	ISO17025	< 5				
Chloroethane	ug/l	< 5	ISO17025	< 5				
Bromomethane	ug/l	< 5	ISO17025	< 5				
Trichlorofluoromethane	ug/l	< 5	ISO17025	< 5				
1,1-Dichloroethene	ug/l	< 5	ISO17025	< 5				
MTBE	ug/l	< 10	ISO17025	< 10				
trans-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5				
1,1-Dichloroethane	ug/l	< 5	ISO17025	< 5				
cis-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5				
2,2-Dichloropropane	ug/l	< 5	ISO17025	< 5				
Chloroform	ug/l	< 5	ISO17025	< 5				
Bromochloromethane	ug/l	< 10	ISO17025	< 10				
1,1,1-Trichloroethane	ug/l	< 5	ISO17025	< 5				
1,1-Dichloropropene	ug/l	< 5	ISO17025	< 5				
Carbon Tetrachloride	ug/l	< 5	ISO17025	< 5				
1,2-Dichloroethane	ug/l	< 10	ISO17025	< 10				
Benzene	ug/l	< 1	ISO17025	< 1				
1,2-Dichloropropane	ug/l	< 5	ISO17025	< 5				
Trichloroethene	ug/l	< 5	ISO17025	< 5				
Bromodichloromethane	ug/l	< 5	ISO17025	< 5				
Dibromomethane	ug/l	< 5	ISO17025	< 5				
TAME	ug/l	< 5	ISO17025	< 5				
cis-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5				
Toluene	ug/l	< 5	ISO17025	< 5				
trans-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5				
1,1,2-Trichloroethane	ug/l	< 10	ISO17025	< 10				
1,3-Dichloropropane	ug/l	< 5	ISO17025	< 5				
Tetrachloroethene	ug/l	< 5	ISO17025	< 5				
Dibromochloromethane	ug/l	< 5	ISO17025	< 5				
1,2-Dibromoethane	ug/l	< 5	ISO17025	< 5				
Chlorobenzene	ug/l	< 5	ISO17025	< 5				
1,1,1,2-Tetrachloroethane	ug/l	< 5	ISO17025	< 5				
Ethyl Benzene	ug/l	< 5	ISO17025	< 5				
m,p-Xylene	ug/l	< 10	ISO17025	< 10				
o-Xylene	ug/l	< 5	ISO17025	< 5				
Styrene	ug/l	< 5	ISO17025	< 5				
Bromoform	ug/l	< 10	ISO17025	< 10				
Isopropylbenzene	ug/l	< 5	ISO17025	< 5				
1,1,2,2-Tetrachloroethane	ug/l	< 10	ISO17025	< 10				
1,2,3-Trichloropropane	ug/l	< 5	ISO17025	< 5				
n-Propylbenzene	ug/l	< 5	ISO17025	< 5				
Bromobenzene	ug/l	< 5	ISO17025	< 5				
2-Chlorotoluene	ug/l	< 5	ISO17025	< 5				
1,3,5-Trimethylbenzene	ug/l	< 5	ISO17025	< 5				
4-Chlorotoluene	ug/l	< 5	ISO17025	< 5				
tert-Butylbenzene	ug/l	< 5	ISO17025	< 5				
1,2,4-Trimethylbenzene	ug/l	< 5	ISO17025	< 5				
sec-Butylbenzene	ug/l	< 5	ISO17025	< 5				
p-Isopropyltoluene	ug/l	< 5	ISO17025	< 5				
1,3-Dichlorobenzene	ug/l	< 5	ISO17025	< 5				
1,4-Dichlorobenzene	ug/l	< 5	ISO17025	< 5				
n-Butylbenzene	ug/l	< 5	ISO17025	< 5				
1,2-Dichlorobenzene	ug/l	< 5	ISO17025	< 5				
,2-Dibromo-3-chloropropane	ug/l	< 10	ISO17025	< 10				
Hexachlorobutadiene	ug/l	< 5	ISO17025	< 5				

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-08711	Date Sampled	14/10/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0613.001
Project / Job Ref: STP3966D	Additional Refs	BH06
Order No: POR013825	Depth (m)	13.00
Reporting Date: 25/10/2022	DETS Sample No	617083

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds (SVOC)						
DETS Report No: 22-08711	Date Sampled	14/10/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0613.001				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR013825	Depth (m)	13.00				
Reporting Date: 25/10/2022	DETS Sample No	617083				

Determinand	Unit	RL	Accreditation					
Phenol	ug/l	< 0.1	NONE	< 0.1				
1,2,4-Trichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
2-Nitrophenol	ug/l	< 0.1	NONE	< 0.1				
Nitrobenzene	ug/l	< 0.1	NONE	< 0.1				
0-Cresol	ug/l	< 0.1	NONE	< 0.1				
bis(2-chloroethoxy)methane	ug/l	< 0.1	NONE	< 0.1				
bis(2-chloroethyl)ether	ug/l	< 0.1	NONE	< 0.1				
2,4-Dichlorophenol	ug/l	< 0.1	NONE	< 0.1				
2-Chlorophenol	ug/l	< 0.1	NONE	< 0.1				
1,3-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
1,4-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
1,2-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
2,4-Dimethylphenol	ug/l	< 0.1	NONE	< 0.1				
Isophorone	ug/l	< 0.1	NONE	< 0.1				
Hexachloroethane	ug/l	< 0.1	NONE	< 0.1				
p-Cresol	ug/l	< 0.1	NONE	< 0.1				
2,4,6-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1				
2,4,5-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1				
2-Nitroaniline	ug/l	< 0.1	NONE	< 0.1				
4-Chloro-3-methylphenol	ug/l	< 0.1	NONE	< 0.1				
2-Methylnaphthalene	ug/l	< 0.1	NONE	< 0.1				
Hexachlorocyclopentadiene	ug/l	< 0.1	NONE	< 0.1				
Hexachlorobutadiene	ug/l	< 0.1	NONE	< 0.1				
2,6-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1				
Dimethyl phthalate	ug/l	< 0.1	NONE	< 0.1				
2-Chloronaphthalene	ug/l	< 0.1	NONE	< 0.1				
4-Chloroanaline	ug/l	< 0.1	NONE	< 0.1				
4-Nitrophenol	ug/l	< 0.1	NONE	< 0.1				
4-Chlorophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1				
3-Nitroaniline	ug/l	< 0.1	NONE	< 0.1				
4-Nitroaniline	ug/l	< 0.1	NONE	< 0.1				
4-Bromophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1				
Hexachlorobenzene	ug/l	< 0.1	NONE	< 0.1				
2,4-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1				
Diethyl phthalate	ug/l	< 0.1	NONE	< 0.1				
Dibenzofuran	ug/l	< 0.1	NONE	< 0.1				
Azobenzene	ug/l	< 0.1	NONE	< 0.1				
Dibutyl phthalate	ug/l	< 0.1	NONE	< 0.1				
Carbazole	ug/l	< 0.1	NONE	< 0.1				
bis(2-ethylhexyl)phthalate	ug/l	< 0.1	NONE	< 0.1				
Benzyl butyl phthalate	ug/l	< 0.1	NONE	< 0.1				
Di-n-octyl phthalate	ug/l	< 0.1	NONE	< 0.1				

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-08711	Date Sampled	14/10/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0613.001
Project / Job Ref: STP3966D	Additional Refs	BH06
Order No: POR013825	Depth (m)	13.00
Reporting Date: 25/10/2022	DETS Sample No	617083

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 22-08711
Soiltechnics Ltd
Site Reference: Rockingham Enterprise Area, Corby
Project / Job Ref: STP3966D
Order No: POR013825
Reporting Date: 25/10/2022

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Water	UF	Alkalinity	Determination of alkalinity by titration against hydrochloric acid using bromocresol green as the end point	E103
Water	F	Ammoniacal Nitrogen	Determination of ammoniacal nitrogen by discrete analyser.	E126
Water	UF	BTEX	Determination of BTEX by headspace GC-MS	E101
Water	F	Cations	Determination of cations by filtration followed by ICP-MS	E102
Water	UF	Chemical Oxygen Demand (COD)	Determination using a COD reactor followed by colorimetry	E112
Water	F	Chloride	Determination of chloride by filtration & analysed by ion chromatography	E109
Water	F	Chromium - Hexavalent	Determination of hexavalent chromium by acidification, addition of 1,5 diphenylcarbazide followed by	E116
Water	UF	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E115
Water	UF	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through liquid:liquid extraction with cyclohexane	E111
Water	F	Diesel Range Organics (C10 - C24)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	Dissolved Organic Content (DOC)	Determination of DOC by filtration followed by low heat with persulphate addition followed by IR dete	E110
Water	UF	Electrical Conductivity	Determination of electrical conductivity by electrometric measurement	E123
Water	F	EPH (C10 – C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E104
Water	F	Fluoride	Determination of Fluoride by filtration & analysed by ion chromatography	E109
Water	F	Hardness	Determination of Ca and Mg by ICP-MS followed by calculation	E102
Leachate	F	Leachate Preparation - NRA	Based on National Rivers Authority leaching test 1994	E301
Leachate	F	Leachate Preparation - WAC	Based on BS EN 12457 Pt1, 2, 3	E302
Water	F	Metals	Determination of metals by filtration followed by ICP-MS	E102
Water	F	Mineral Oil (C10 - C40)	Determination of liquid:liquid extraction with hexane followed by GI-FID	E104
Water	F	Nitrate	Determination of nitrate by filtration & analysed by ion chromatography	E109
Water	UF	Monohydric Phenol	Determination of phenols by distillation followed by colorimetry	E121
Water	F	PAH - Speciated (EPA 16)	Determination of PAH compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E105
Water	F	PCB - 7 Congeners	Determination of PCB compounds by concentration through SPE cartridge, collection in dichlorometha	E108
Water	UF	Petroleum Ether Extract (PEE)	Gravimetrically determined through liquid:liquid extraction with petroleum ether	E111
Water	UF	pH	Determination of pH by electrometric measurement	E107
Water	F	Phosphate	Determination of phosphate by filtration & analysed by ion chromatography	E109
Water	UF	Redox Potential	Determination of redox potential by electrometric measurement	E113
Water	F	Sulphate (as SO4)	Determination of sulphate by filtration & analysed by ion chromatography	E109
Water	UF	Sulphide	Determination of sulphide by distillation followed by colorimetry	E118
Water	F	SVOC	Determination of semi-volatile organic compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E106
Water	UF	Toluene Extractable Matter (TEM)	Gravimetrically determined through liquid:liquid extraction with toluene	E111
Water	UF	Total Organic Carbon (TOC)	Low heat with persulphate addition followed by IR detection	E110
Water	F	TPH CWG (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C35. C5 to C8 by headspace GC-MS	E104
Water	F	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C44. C5 to C8 by headspace GC-MS	E104
Water	UF	VOCs	Determination of volatile organic compounds by headspace GC-MS	E101
Water	UF	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E101

Key

F Filtered
UF Unfiltered

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List of HWOL Acronyms and Operators

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total

Det - Acronym
Benzene - HS_1D_MS
Ethylbenzene - HS_1D_MS
MTBE - HS_1D_MS
TPH CWG - Aliphatic >C10 - C12 - EH_CU_1D_AL
TPH CWG - Aliphatic >C12 - C16 - EH_CU_1D_AL
TPH CWG - Aliphatic >C16 - C21 - EH_CU_1D_AL
TPH CWG - Aliphatic >C21 - C34 - EH_CU_1D_AL
TPH CWG - Aliphatic >C5 - C34 - HS_1D_MS+EH_CU_1D_AL
TPH CWG - Aliphatic >C5 - C6 - HS_1D_MS_AL
TPH CWG - Aliphatic >C6 - C8 - HS_1D_MS_AL
TPH CWG - Aliphatic >C8 - C10 - EH_CU_1D_AL
TPH CWG - Aromatic >C10 - C12 - EH_CU_1D_AR
TPH CWG - Aromatic >C12 - C16 - EH_CU_1D_AR
TPH CWG - Aromatic >C16 - C21 - EH_CU_1D_AR
TPH CWG - Aromatic >C21 - C35 - EH_CU_1D_AR
TPH CWG - Aromatic >C5 - C7 - HS_1D_MS_AR
TPH CWG - Aromatic >C7 - C8 - HS_1D_MS_AR
TPH CWG - Aromatic >C8 - C10 - EH_CU_1D_AR
TPH CWG - Aromatic C5 - C35 - HS_1D_MS+EH_CU_1D_AR
TPH CWG - Total >C5 - C35 - HS_1D_MS+EH_CU_1D_Total
Toluene - HS_1D_MS
m & p-xylene - HS_1D_MS
o-Xylene - HS_1D_MS

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DETS Report No: 22-09764

Site Reference:	Rockingham Enterprise Area, Corby
Project / Job Ref:	STP3966D
Order No:	POR014060
Sample Receipt Date:	23/11/2022
Sample Scheduled Date:	23/11/2022
Report Issue Number:	1
Reporting Date:	01/12/2022

Authorised by:

Dave Ashworth
Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

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Water Analysis Certificate						
DETS Report No: 22-09764	Date Sampled	18/11/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0613.121				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR014060	Depth (m)	13.12				
Reporting Date: 01/12/2022	DETS Sample No	621196				

Determinand	Unit	RL	Accreditation					
pH	pH Units	N/a	ISO17025	7.2				
Total Cyanide	ug/l	< 5	NONE	33				
Complex Cyanide	ug/l	< 5	NONE	33				
Free Cyanide	ug/l	< 5	NONE	< 5				
Sulphate as SO_4	mg/l	< 1	ISO17025	578				
Ammoniacal Nitrogen as NH_4	ug/l	< 50	ISO17025	2170				
Ammonia as NH_4	ug/l	< 50	ISO17025	2170				
Chloride	mg/l	< 1	ISO17025	40				
Nitrate as NO_3	mg/l	< 0.5	ISO17025	29.4				
Nitrite as NO_2	mg/l	< 0.5	NONE	< 0.5				
Phosphate as PO_4	mg/l	< 1	NONE	< 1.0				
Fluoride	mg/l	< 0.5	ISO17025	1.4				
Total Organic Carbon (TOC)	mg/l	< 0.1	NONE	53.3				
Chemical Oxygen Demand	mg/l	<10	ISO17025	27				
Biological Oxygen Demand	mg/l	< 5	NONE	< 5				
Total Suspended Solids	mg/l	5	NONE	1740				
Carbonate (Alkalinity as $CaCO_3$)	mg/l	< 10	NONE	< 10				
Antimony (dissolved)	ug/l	< 5	ISO17025	< 5				
Arsenic (dissolved)	ug/l	< 5	ISO17025	< 5				
Boron (dissolved)	ug/l	< 5	ISO17025	5280				
Cadmium (dissolved)	ug/l	< 0.4	ISO17025	< 0.4				
Chromium (dissolved)	ug/l	< 5	ISO17025	< 5				
Chromium (hexavalent)	ug/l	< 20	NONE	< 20				
Chromium III	ug/l	< 20	NONE	< 20				
Copper (dissolved)	ug/l	< 5	ISO17025	6				
Lead (dissolved)	ug/l	< 5	ISO17025	6				
Mercury (dissolved)	ug/l	< 0.05	ISO17025	< 0.05				
Nickel (dissolved)	ug/l	< 5	ISO17025	7				
Selenium (dissolved)	ug/l	< 5	ISO17025	< 5				
Zinc (dissolved)	ug/l	< 2	ISO17025	77				
Magnesium (dissolved)	mg/l	< 0.1	ISO17025	87				
Chromium (total)	ug/l	< 5	NONE	251				
Total Phenols (monohydric)	ug/l	< 10	NONE	23				

Subcontracted analysis (S)
Insufficient sample I/S
Unsuitable Sample U/S

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Water Analysis Certificate - Speciated PAH						
DETS Report No: 22-09764	Date Sampled	18/11/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0613.121				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR014060	Depth (m)	13.12				
Reporting Date: 01/12/2022	DETS Sample No	621196				

Determinand	Unit	RL	Accreditation				
Naphthalene	ug/l	< 0.01	NONE	< 0.01			
Acenaphthylene	ug/l	< 0.01	NONE	< 0.01			
Acenaphthene	ug/l	< 0.01	NONE	0.03			
Fluorene	ug/l	< 0.01	NONE	0.02			
Phenanthrene	ug/l	< 0.01	NONE	0.03			
Anthracene	ug/l	< 0.01	NONE	< 0.01			
Fluoranthene	ug/l	< 0.01	NONE	0.02			
Pyrene	ug/l	< 0.01	NONE	0.01			
Benzo(a)anthracene	ug/l	< 0.01	NONE	< 0.01			
Chrysene	ug/l	< 0.01	NONE	< 0.01			
Benzo(b)fluoranthene	ug/l	< 0.01	NONE	< 0.01			
Benzo(k)fluoranthene	ug/l	< 0.01	NONE	< 0.01			
Benzo(a)pyrene	ug/l	< 0.01	NONE	< 0.01			
Indeno(1,2,3-cd)pyrene	ug/l	< 0.01	NONE	< 0.01			
Dibenz(a,h)anthracene	ug/l	< 0.01	NONE	< 0.01			
Benzo(ghi)perylene	ug/l	< 0.008	NONE	< 0.008			
Total EPA-16 PAHs	ug/l	< 0.16	NONE	< 0.16			

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Water Analysis Certificate - TPH CWG Banded						
DETS Report No: 22-09764	Date Sampled	18/11/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0613.121				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR014060	Depth (m)	13.12				
Reporting Date: 01/12/2022	DETS Sample No	621196				

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6 : HS_1D_MS_AL	ug/l	< 10	NONE	< 10				
Aliphatic >C6 - C8 : HS_1D_MS_AL	ug/l	< 10	NONE	< 10				
Aliphatic >C8 - C10 : EH_CU_1D_AL	ug/l	< 10	NONE	< 10				
Aliphatic >C10 - C12 : EH_CU_1D_AL	ug/l	< 10	NONE	< 10				
Aliphatic >C12 - C16 : EH_CU_1D_AL	ug/l	< 10	NONE	15				
Aliphatic >C16 - C21 : EH_CU_1D_AL	ug/l	< 10	NONE	12				
Aliphatic >C21 - C34 : EH_CU_1D_AL	ug/l	< 10	NONE	< 10				
Aliphatic (C5 - C34) : HS_1D_MS+EH_CU_1D_AL	ug/l	< 70	NONE	< 70				
Aromatic >C5 - C7 : HS_1D_MS_AR	ug/l	< 10	NONE	< 10				
Aromatic >C7 - C8 : HS_1D_MS_AR	ug/l	< 10	NONE	< 10				
Aromatic >C8 - C10 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10				
Aromatic >C10 - C12 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10				
Aromatic >C12 - C16 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10				
Aromatic >C16 - C21 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10				
Aromatic >C21 - C35 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10				
Aromatic (C5 - C35) : HS_1D_MS+EH_CU_1D_AR	ug/l	< 70	NONE	< 70				
Total >C5 - C35 : HS_1D_MS+EH_CU_1D_Total	ug/l	< 140	NONE	< 140				

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Water Analysis Certificate - BTEX / MTBE						
DETS Report No: 22-09764	Date Sampled	18/11/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0613.121				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR014060	Depth (m)	13.12				
Reporting Date: 01/12/2022	DETS Sample No	621196				

Determinand	Unit	RL	Accreditation					
Benzene : HS_1D_MS	ug/l	< 1	ISO17025	< 1				
Toluene : HS_1D_MS	ug/l	< 5	ISO17025	< 5				
Ethylbenzene : HS_1D_MS	ug/l	< 5	ISO17025	< 5				
p & m-xylene : HS_1D_MS	ug/l	< 10	ISO17025	< 10				
o-xylene : HS_1D_MS	ug/l	< 5	ISO17025	< 5				
MTBE : HS_1D_MS	ug/l	< 10	ISO17025	< 10				

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Water Analysis Certificate - Volatile Organic Compounds (VOC)						
DETS Report No: 22-09764	Date Sampled	18/11/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0613.121				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR014060	Depth (m)	13.12				
Reporting Date: 01/12/2022	DETS Sample No	621196				

Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/l	< 5	ISO17025	< 5				
Vinyl Chloride	ug/l	< 5	ISO17025	< 5				
Chloromethane	ug/l	< 5	ISO17025	< 5				
Chloroethane	ug/l	< 5	ISO17025	< 5				
Bromomethane	ug/l	< 5	ISO17025	< 5				
Trichlorofluoromethane	ug/l	< 5	ISO17025	< 5				
1,1-Dichloroethene	ug/l	< 5	ISO17025	< 5				
MTBE	ug/l	< 10	ISO17025	< 10				
trans-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5				
1,1-Dichloroethane	ug/l	< 5	ISO17025	< 5				
cis-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5				
2,2-Dichloropropane	ug/l	< 5	ISO17025	< 5				
Chloroform	ug/l	< 5	ISO17025	< 5				
Bromochloromethane	ug/l	< 10	ISO17025	< 10				
1,1,1-Trichloroethane	ug/l	< 5	ISO17025	< 5				
1,1-Dichloropropene	ug/l	< 5	ISO17025	< 5				
Carbon Tetrachloride	ug/l	< 5	ISO17025	< 5				
1,2-Dichloroethane	ug/l	< 10	ISO17025	< 10				
Benzene	ug/l	< 1	ISO17025	< 1				
1,2-Dichloropropane	ug/l	< 5	ISO17025	< 5				
Trichloroethene	ug/l	< 5	ISO17025	< 5				
Bromodichloromethane	ug/l	< 5	ISO17025	< 5				
Dibromomethane	ug/l	< 5	ISO17025	< 5				
TAME	ug/l	< 5	ISO17025	< 5				
cis-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5				
Toluene	ug/l	< 5	ISO17025	< 5				
trans-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5				
1,1,2-Trichloroethane	ug/l	< 10	ISO17025	< 10				
1,3-Dichloropropane	ug/l	< 5	ISO17025	< 5				
Tetrachloroethene	ug/l	< 5	ISO17025	< 5				
Dibromochloromethane	ug/l	< 5	ISO17025	< 5				
1,2-Dibromoethane	ug/l	< 5	ISO17025	< 5				
Chlorobenzene	ug/l	< 5	ISO17025	< 5				
1,1,1,2-Tetrachloroethane	ug/l	< 5	ISO17025	< 5				
Ethyl Benzene	ug/l	< 5	ISO17025	< 5				
m,p-Xylene	ug/l	< 10	ISO17025	< 10				
o-Xylene	ug/l	< 5	ISO17025	< 5				
Styrene	ug/l	< 5	ISO17025	< 5				
Bromoform	ug/l	< 10	ISO17025	< 10				
Isopropylbenzene	ug/l	< 5	ISO17025	< 5				
1,1,2,2-Tetrachloroethane	ug/l	< 10	ISO17025	< 10				
1,2,3-Trichloropropane	ug/l	< 5	ISO17025	< 5				
n-Propylbenzene	ug/l	< 5	ISO17025	< 5				
Bromobenzene	ug/l	< 5	ISO17025	< 5				
2-Chlorotoluene	ug/l	< 5	ISO17025	< 5				
1,3,5-Trimethylbenzene	ug/l	< 5	ISO17025	< 5				
4-Chlorotoluene	ug/l	< 5	ISO17025	< 5				
tert-Butylbenzene	ug/l	< 5	ISO17025	< 5				
1,2,4-Trimethylbenzene	ug/l	< 5	ISO17025	< 5				
sec-Butylbenzene	ug/l	< 5	ISO17025	< 5				
p-Isopropyltoluene	ug/l	< 5	ISO17025	< 5				
1,3-Dichlorobenzene	ug/l	< 5	ISO17025	< 5				
1,4-Dichlorobenzene	ug/l	< 5	ISO17025	< 5				
n-Butylbenzene	ug/l	< 5	ISO17025	< 5				
1,2-Dichlorobenzene	ug/l	< 5	ISO17025	< 5				
,2-Dibromo-3-chloropropane	ug/l	< 10	ISO17025	< 10				
Hexachlorobutadiene	ug/l	< 5	ISO17025	< 5				

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-09764	Date Sampled	18/11/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0613.121
Project / Job Ref: STP3966D	Additional Refs	BH06
Order No: POR014060	Depth (m)	13.12
Reporting Date: 01/12/2022	DETS Sample No	621196

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds (SVOC)						
DETS Report No: 22-09764	Date Sampled	18/11/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0613.121				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR014060	Depth (m)	13.12				
Reporting Date: 01/12/2022	DETS Sample No	621196				

Determinand	Unit	RL	Accreditation					
Phenol	ug/l	< 0.1	NONE	< 0.1				
1,2,4-Trichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
2-Nitrophenol	ug/l	< 0.1	NONE	< 0.1				
Nitrobenzene	ug/l	< 0.1	NONE	< 0.1				
0-Cresol	ug/l	< 0.1	NONE	< 0.1				
bis(2-chloroethoxy)methane	ug/l	< 0.1	NONE	< 0.1				
bis(2-chloroethyl)ether	ug/l	< 0.1	NONE	< 0.1				
2,4-Dichlorophenol	ug/l	< 0.1	NONE	< 0.1				
2-Chlorophenol	ug/l	< 0.1	NONE	< 0.1				
1,3-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
1,4-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
1,2-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
2,4-Dimethylphenol	ug/l	< 0.1	NONE	< 0.1				
Isophorone	ug/l	< 0.1	NONE	< 0.1				
Hexachloroethane	ug/l	< 0.1	NONE	< 0.1				
p-Cresol	ug/l	< 0.1	NONE	< 0.1				
2,4,6-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1				
2,4,5-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1				
2-Nitroaniline	ug/l	< 0.1	NONE	< 0.1				
4-Chloro-3-methylphenol	ug/l	< 0.1	NONE	< 0.1				
2-Methylnaphthalene	ug/l	< 0.1	NONE	< 0.1				
Hexachlorocyclopentadiene	ug/l	< 0.1	NONE	< 0.1				
Hexachlorobutadiene	ug/l	< 0.1	NONE	< 0.1				
2,6-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1				
Dimethyl phthalate	ug/l	< 0.1	NONE	< 0.1				
2-Chloronaphthalene	ug/l	< 0.1	NONE	< 0.1				
4-Chloroanaline	ug/l	< 0.1	NONE	< 0.1				
4-Nitrophenol	ug/l	< 0.1	NONE	< 0.1				
4-Chlorophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1				
3-Nitroaniline	ug/l	< 0.1	NONE	< 0.1				
4-Nitroaniline	ug/l	< 0.1	NONE	< 0.1				
4-Bromophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1				
Hexachlorobenzene	ug/l	< 0.1	NONE	< 0.1				
2,4-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1				
Diethyl phthalate	ug/l	< 0.1	NONE	< 0.1				
Dibenzofuran	ug/l	< 0.1	NONE	< 0.1				
Azobenzene	ug/l	< 0.1	NONE	< 0.1				
Dibutyl phthalate	ug/l	< 0.1	NONE	< 0.1				
Carbazole	ug/l	< 0.1	NONE	< 0.1				
bis(2-ethylhexyl)phthalate	ug/l	< 0.1	NONE	< 0.1				
Benzyl butyl phthalate	ug/l	< 0.1	NONE	< 0.1				
Di-n-octyl phthalate	ug/l	< 0.1	NONE	< 0.1				

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-09764	Date Sampled	18/11/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0613.121
Project / Job Ref: STP3966D	Additional Refs	BH06
Order No: POR014060	Depth (m)	13.12
Reporting Date: 01/12/2022	DETS Sample No	621196

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	Cyclic Octaatomic sulfur	95	µg/l	< 0.1	0.8
2	6-Tertradecanesulfonic acid, butyl ester	91	µg/l	< 0.1	2.6
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 22-09764
Soiltechnics Ltd
Site Reference: Rockingham Enterprise Area, Corby
Project / Job Ref: STP3966D
Order No: POR014060
Reporting Date: 01/12/2022

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Water	UF	Alkalinity	Determination of alkalinity by titration against hydrochloric acid using bromocresol green as the end point	E103
Water	F	Ammoniacal Nitrogen	Determination of ammoniacal nitrogen by discrete analyser.	E126
Water	UF	BTEX	Determination of BTEX by headspace GC-MS	E101
Water	F	Cations	Determination of cations by filtration followed by ICP-MS	E102
Water	UF	Chemical Oxygen Demand (COD)	Determination using a COD reactor followed by colorimetry	E112
Water	F	Chloride	Determination of chloride by filtration & analysed by ion chromatography	E109
Water	F	Chromium - Hexavalent	Determination of hexavalent chromium by acidification, addition of 1,5 diphenylcarbazide followed by	E116
Water	UF	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E115
Water	UF	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through liquid:liquid extraction with cyclohexane	E111
Water	F	Diesel Range Organics (C10 - C24)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	Dissolved Organic Content (DOC)	Determination of DOC by filtration followed by low heat with persulphate addition followed by IR dete	E110
Water	UF	Electrical Conductivity	Determination of electrical conductivity by electrometric measurement	E123
Water	F	EPH (C10 – C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E104
Water	F	Fluoride	Determination of Fluoride by filtration & analysed by ion chromatography	E109
Water	F	Hardness	Determination of Ca and Mg by ICP-MS followed by calculation	E102
Leachate	F	Leachate Preparation - NRA	Based on National Rivers Authority leaching test 1994	E301
Leachate	F	Leachate Preparation - WAC	Based on BS EN 12457 Pt1, 2, 3	E302
Water	F	Metals	Determination of metals by filtration followed by ICP-MS	E102
Water	F	Mineral Oil (C10 - C40)	Determination of liquid:liquid extraction with hexane followed by GI-FID	E104
Water	F	Nitrate	Determination of nitrate by filtration & analysed by ion chromatography	E109
Water	UF	Monohydric Phenol	Determination of phenols by distillation followed by colorimetry	E121
Water	F	PAH - Speciated (EPA 16)	Determination of PAH compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E105
Water	F	PCB - 7 Congeners	Determination of PCB compounds by concentration through SPE cartridge, collection in dichlorometha	E108
Water	UF	Petroleum Ether Extract (PEE)	Gravimetrically determined through liquid:liquid extraction with petroleum ether	E111
Water	UF	pH	Determination of pH by electrometric measurement	E107
Water	F	Phosphate	Determination of phosphate by filtration & analysed by ion chromatography	E109
Water	UF	Redox Potential	Determination of redox potential by electrometric measurement	E113
Water	F	Sulphate (as SO4)	Determination of sulphate by filtration & analysed by ion chromatography	E109
Water	UF	Sulphide	Determination of sulphide by distillation followed by colorimetry	E118
Water	F	SVOC	Determination of semi-volatile organic compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E106
Water	UF	Toluene Extractable Matter (TEM)	Gravimetrically determined through liquid:liquid extraction with toluene	E111
Water	UF	Total Organic Carbon (TOC)	Low heat with persulphate addition followed by IR detection	E110
Water	F	TPH CWG (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C35. C5 to C8 by headspace GC-MS	E104
Water	F	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C44. C5 to C8 by headspace GC-MS	E104
Water	UF	VOCs	Determination of volatile organic compounds by headspace GC-MS	E101
Water	UF	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E101

Key

F Filtered
UF Unfiltered

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List of HWOL Acronyms and Operators

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total

Det - Acronym
Benzene - HS_1D_MS
Ethylbenzene - HS_1D_MS
MTBE - HS_1D_MS
TPH CWG - Aliphatic >C10 - C12 - EH_CU_1D_AL
TPH CWG - Aliphatic >C12 - C16 - EH_CU_1D_AL
TPH CWG - Aliphatic >C16 - C21 - EH_CU_1D_AL
TPH CWG - Aliphatic >C21 - C34 - EH_CU_1D_AL
TPH CWG - Aliphatic >C5 - C34 - HS_1D_MS+EH_CU_1D_AL
TPH CWG - Aliphatic >C5 - C6 - HS_1D_MS_AL
TPH CWG - Aliphatic >C6 - C8 - HS_1D_MS_AL
TPH CWG - Aliphatic >C8 - C10 - EH_CU_1D_AL
TPH CWG - Aromatic >C10 - C12 - EH_CU_1D_AR
TPH CWG - Aromatic >C12 - C16 - EH_CU_1D_AR
TPH CWG - Aromatic >C16 - C21 - EH_CU_1D_AR
TPH CWG - Aromatic >C21 - C35 - EH_CU_1D_AR
TPH CWG - Aromatic >C5 - C7 - HS_1D_MS_AR
TPH CWG - Aromatic >C7 - C8 - HS_1D_MS_AR
TPH CWG - Aromatic >C8 - C10 - EH_CU_1D_AR
TPH CWG - Aromatic C5 - C35 - HS_1D_MS+EH_CU_1D_AR
TPH CWG - Total >C5 - C35 - HS_1D_MS+EH_CU_1D_Total
Toluene - HS_1D_MS
m & p-xylene - HS_1D_MS
o-Xylene - HS_1D_MS

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DETS Report No: 22-10821

Site Reference:	Rockingham Enterprise Area, Corby
Project / Job Ref:	STP3966D
Order No:	POR014312
Sample Receipt Date:	20/12/2022
Sample Scheduled Date:	20/12/2022
Report Issue Number:	1
Reporting Date:	05/01/2023

Authorised by:

Dave Ashworth
Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

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Water Analysis Certificate						
DETS Report No: 22-10821	Date Sampled	14/12/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.741				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR014312	Depth (m)	12.74				
Reporting Date: 05/01/2023	DETS Sample No	625535				

Determinand	Unit	RL	Accreditation	(hs)				
pH	pH Units	N/a	ISO17025	7.0				
Total Cyanide	ug/l	< 5	NONE	22				
Complex Cyanide	ug/l	< 5	NONE	22				
Free Cyanide	ug/l	< 5	NONE	< 5				
Sulphate as SO_4	mg/l	< 1	ISO17025	1020				
Ammoniacal Nitrogen as NH_4	ug/l	< 50	ISO17025	157				
Ammonia as NH_4	ug/l	< 50	ISO17025	157				
Chloride	mg/l	< 1	ISO17025	90				
Nitrate as NO_3	mg/l	< 0.5	ISO17025	31.1				
Nitrite as NO_2	mg/l	< 0.5	NONE	< 0.5				
Phosphate as PO_4	mg/l	< 1	NONE	< 1.0				
Fluoride	mg/l	< 0.5	ISO17025	1.2				
Total Organic Carbon (TOC)	mg/l	< 0.1	NONE	52.9				
Chemical Oxygen Demand	mg/l	<10	ISO17025	32				
Biological Oxygen Demand	mg/l	< 5	NONE	< 5				
Total Suspended Solids	mg/l	5	NONE	268				
Carbonate (Alkalinity as $CaCO_3$)	mg/l	< 10	NONE	< 10				
Antimony (dissolved)	ug/l	< 5	ISO17025	< 5				
Arsenic (dissolved)	ug/l	< 5	ISO17025	< 5				
Boron (dissolved)	ug/l	< 5	ISO17025	8530				
Cadmium (dissolved)	ug/l	< 0.4	ISO17025	< 0.4				
Chromium (dissolved)	ug/l	< 5	ISO17025	9				
Chromium (hexavalent)	ug/l	< 20	NONE	< 20				
Chromium III	ug/l	< 20	NONE	< 20				
Copper (dissolved)	ug/l	< 5	ISO17025	< 5				
Lead (dissolved)	ug/l	< 5	ISO17025	< 5				
Mercury (dissolved)	ug/l	< 0.05	ISO17025	< 0.05				
Nickel (dissolved)	ug/l	< 5	ISO17025	7				
Selenium (dissolved)	ug/l	< 5	ISO17025	48				
Zinc (dissolved)	ug/l	< 2	ISO17025	137				
Magnesium (dissolved)	mg/l	< 0.1	ISO17025	182				
Chromium (total)	ug/l	< 5	NONE	131				
Total Phenols (monohydric)	ug/l	< 10	NONE	10				

Subcontracted analysis (S)
Insufficient sample I/S
Unsuitable Sample U/S
(hs) Please note deviating sample due to head space in container

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Water Analysis Certificate - Speciated PAH						
DETS Report No: 22-10821	Date Sampled	14/12/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.741				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR014312	Depth (m)	12.74				
Reporting Date: 05/01/2023	DETS Sample No	625535				

Determinand	Unit	RL	Accreditation	(hs)			
Naphthalene	ug/l	< 0.01	NONE	< 0.01			
Acenaphthylene	ug/l	< 0.01	NONE	< 0.01			
Acenaphthene	ug/l	< 0.01	NONE	< 0.01			
Fluorene	ug/l	< 0.01	NONE	< 0.01			
Phenanthrene	ug/l	< 0.01	NONE	< 0.01			
Anthracene	ug/l	< 0.01	NONE	< 0.01			
Fluoranthene	ug/l	< 0.01	NONE	< 0.01			
Pyrene	ug/l	< 0.01	NONE	< 0.01			
Benzo(a)anthracene	ug/l	< 0.01	NONE	< 0.01			
Chrysene	ug/l	< 0.01	NONE	< 0.01			
Benzo(b)fluoranthene	ug/l	< 0.01	NONE	< 0.01			
Benzo(k)fluoranthene	ug/l	< 0.01	NONE	< 0.01			
Benzo(a)pyrene	ug/l	< 0.01	NONE	< 0.01			
Indeno(1,2,3-cd)pyrene	ug/l	< 0.01	NONE	< 0.01			
Dibenz(a,h)anthracene	ug/l	< 0.01	NONE	< 0.01			
Benzo(ghi)perylene	ug/l	< 0.008	NONE	< 0.008			
Total EPA-16 PAHs	ug/l	< 0.16	NONE	< 0.16			

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Water Analysis Certificate - TPH CWG Banded						
DETS Report No: 22-10821	Date Sampled	14/12/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.741				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR014312	Depth (m)	12.74				
Reporting Date: 05/01/2023	DETS Sample No	625535				

Determinand	Unit	RL	Accreditation	(hs)				
Aliphatic >C5 - C6 : HS_1D_MS_AL	ug/l	< 10	NONE	< 10				
Aliphatic >C6 - C8 : HS_1D_MS_AL	ug/l	< 10	NONE	< 10				
Aliphatic >C8 - C10 : EH_CU_1D_AL	ug/l	< 10	NONE	< 10				
Aliphatic >C10 - C12 : EH_CU_1D_AL	ug/l	< 10	NONE	< 10				
Aliphatic >C12 - C16 : EH_CU_1D_AL	ug/l	< 10	NONE	< 10				
Aliphatic >C16 - C21 : EH_CU_1D_AL	ug/l	< 10	NONE	< 10				
Aliphatic >C21 - C34 : EH_CU_1D_AL	ug/l	< 10	NONE	< 10				
Aliphatic (C5 - C34) : HS_1D_MS+EH_CU_1D_AL	ug/l	< 70	NONE	< 70				
Aromatic >C5 - C7 : HS_1D_MS_AR	ug/l	< 10	NONE	< 10				
Aromatic >C7 - C8 : HS_1D_MS_AR	ug/l	< 10	NONE	< 10				
Aromatic >C8 - C10 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10				
Aromatic >C10 - C12 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10				
Aromatic >C12 - C16 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10				
Aromatic >C16 - C21 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10				
Aromatic >C21 - C35 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10				
Aromatic (C5 - C35) : HS_1D_MS+EH_CU_1D_AR	ug/l	< 70	NONE	< 70				
Total >C5 - C35 : HS_1D_MS+EH_CU_1D_Total	ug/l	< 140	NONE	< 140				

(hs) Please note deviating sample due to head space in container

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Water Analysis Certificate - BTEX / MTBE						
DETS Report No: 22-10821	Date Sampled	14/12/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.741				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR014312	Depth (m)	12.74				
Reporting Date: 05/01/2023	DETS Sample No	625535				

Determinand	Unit	RL	Accreditation	(hs)			
Benzene : HS_1D_MS	ug/l	< 1	ISO17025	< 1			
Toluene : HS_1D_MS	ug/l	< 5	ISO17025	< 5			
Ethylbenzene : HS_1D_MS	ug/l	< 5	ISO17025	< 5			
p & m-xylene : HS_1D_MS	ug/l	< 10	ISO17025	< 10			
o-xylene : HS_1D_MS	ug/l	< 5	ISO17025	< 5			
MTBE : HS_1D_MS	ug/l	< 10	ISO17025	< 10			

(hs) Please note deviating sample due to head space in container

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Water Analysis Certificate - Volatile Organic Compounds (VOC)						
DETS Report No: 22-10821	Date Sampled	14/12/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.741				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR014312	Depth (m)	12.74				
Reporting Date: 05/01/2023	DETS Sample No	625535				

Determinand	Unit	RL	Accreditation	(hs)				
Dichlorodifluoromethane	ug/l	< 5	ISO17025	< 5				
Vinyl Chloride	ug/l	< 5	ISO17025	< 5				
Chloromethane	ug/l	< 5	ISO17025	< 5				
Chloroethane	ug/l	< 5	ISO17025	< 5				
Bromomethane	ug/l	< 5	ISO17025	< 5				
Trichlorofluoromethane	ug/l	< 5	ISO17025	< 5				
1,1-Dichloroethene	ug/l	< 5	ISO17025	< 5				
MTBE	ug/l	< 10	ISO17025	< 10				
trans-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5				
1,1-Dichloroethane	ug/l	< 5	ISO17025	< 5				
cis-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5				
2,2-Dichloropropane	ug/l	< 5	ISO17025	< 5				
Chloroform	ug/l	< 5	ISO17025	< 5				
Bromochloromethane	ug/l	< 10	ISO17025	< 10				
1,1,1-Trichloroethane	ug/l	< 5	ISO17025	< 5				
1,1-Dichloropropene	ug/l	< 5	ISO17025	< 5				
Carbon Tetrachloride	ug/l	< 5	ISO17025	< 5				
1,2-Dichloroethane	ug/l	< 10	ISO17025	< 10				
Benzene	ug/l	< 1	ISO17025	< 1				
1,2-Dichloropropane	ug/l	< 5	ISO17025	< 5				
Trichloroethene	ug/l	< 5	ISO17025	< 5				
Bromodichloromethane	ug/l	< 5	ISO17025	< 5				
Dibromomethane	ug/l	< 5	ISO17025	< 5				
TAME	ug/l	< 5	ISO17025	< 5				
cis-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5				
Toluene	ug/l	< 5	ISO17025	< 5				
trans-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5				
1,1,2-Trichloroethane	ug/l	< 10	ISO17025	< 10				
1,3-Dichloropropane	ug/l	< 5	ISO17025	< 5				
Tetrachloroethene	ug/l	< 5	ISO17025	< 5				
Dibromochloromethane	ug/l	< 5	ISO17025	< 5				
1,2-Dibromoethane	ug/l	< 5	ISO17025	< 5				
Chlorobenzene	ug/l	< 5	ISO17025	< 5				
1,1,1,2-Tetrachloroethane	ug/l	< 5	ISO17025	< 5				
Ethyl Benzene	ug/l	< 5	ISO17025	< 5				
m,p-Xylene	ug/l	< 10	ISO17025	< 10				
o-Xylene	ug/l	< 5	ISO17025	< 5				
Styrene	ug/l	< 5	ISO17025	< 5				
Bromoform	ug/l	< 10	ISO17025	< 10				
Isopropylbenzene	ug/l	< 5	ISO17025	< 5				
1,1,2,2-Tetrachloroethane	ug/l	< 10	ISO17025	< 10				
1,2,3-Trichloropropane	ug/l	< 5	ISO17025	< 5				
n-Propylbenzene	ug/l	< 5	ISO17025	< 5				
Bromobenzene	ug/l	< 5	ISO17025	< 5				
2-Chlorotoluene	ug/l	< 5	ISO17025	< 5				
1,3,5-Trimethylbenzene	ug/l	< 5	ISO17025	< 5				
4-Chlorotoluene	ug/l	< 5	ISO17025	< 5				
tert-Butylbenzene	ug/l	< 5	ISO17025	< 5				
1,2,4-Trimethylbenzene	ug/l	< 5	ISO17025	< 5				
sec-Butylbenzene	ug/l	< 5	ISO17025	< 5				
p-Isopropyltoluene	ug/l	< 5	ISO17025	< 5				
1,3-Dichlorobenzene	ug/l	< 5	ISO17025	< 5				
1,4-Dichlorobenzene	ug/l	< 5	ISO17025	< 5				
n-Butylbenzene	ug/l	< 5	ISO17025	< 5				
1,2-Dichlorobenzene	ug/l	< 5	ISO17025	< 5				
,2-Dibromo-3-chloropropane	ug/l	< 10	ISO17025	< 10				
Hexachlorobutadiene	ug/l	< 5	ISO17025	< 5				

(hs) Please note deviating sample due to head space in container

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 22-10821	Date Sampled	14/12/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.741
Project / Job Ref: STP3966D	Additional Refs	BH06
Order No: POR014312	Depth (m)	12.74
Reporting Date: 05/01/2023	DETS Sample No	625535

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Tel : 01622 850410

Water Analysis Certificate - Semi Volatile Organic Compounds (SVOC)						
DETS Report No: 22-10821	Date Sampled	14/12/22				
Soiltechnics Ltd	Time Sampled	None Supplied				
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.741				
Project / Job Ref: STP3966D	Additional Refs	BH06				
Order No: POR014312	Depth (m)	12.74				
Reporting Date: 05/01/2023	DETS Sample No	625535				

Determinand	Unit	RL	Accreditation	(hs)				
Phenol	ug/l	< 0.1	NONE	< 0.1				
1,2,4-Trichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
2-Nitrophenol	ug/l	< 0.1	NONE	< 0.1				
Nitrobenzene	ug/l	< 0.1	NONE	< 0.1				
0-Cresol	ug/l	< 0.1	NONE	< 0.1				
bis(2-chloroethoxy)methane	ug/l	< 0.1	NONE	< 0.1				
bis(2-chloroethyl)ether	ug/l	< 0.1	NONE	< 0.1				
2,4-Dichlorophenol	ug/l	< 0.1	NONE	< 0.1				
2-Chlorophenol	ug/l	< 0.1	NONE	< 0.1				
1,3-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
1,4-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
1,2-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1				
2,4-Dimethylphenol	ug/l	< 0.1	NONE	< 0.1				
Isophorone	ug/l	< 0.1	NONE	< 0.1				
Hexachloroethane	ug/l	< 0.1	NONE	< 0.1				
p-Cresol	ug/l	< 0.1	NONE	< 0.1				
2,4,6-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1				
2,4,5-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1				
2-Nitroaniline	ug/l	< 0.1	NONE	< 0.1				
4-Chloro-3-methylphenol	ug/l	< 0.1	NONE	< 0.1				
2-Methylnaphthalene	ug/l	< 0.1	NONE	< 0.1				
Hexachlorocyclopentadiene	ug/l	< 0.1	NONE	< 0.1				
Hexachlorobutadiene	ug/l	< 0.1	NONE	< 0.1				
2,6-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1				
Dimethyl phthalate	ug/l	< 0.1	NONE	< 0.1				
2-Chloronaphthalene	ug/l	< 0.1	NONE	< 0.1				
4-Chloroanaline	ug/l	< 0.1	NONE	< 0.1				
4-Nitrophenol	ug/l	< 0.1	NONE	< 0.1				
4-Chlorophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1				
3-Nitroaniline	ug/l	< 0.1	NONE	< 0.1				
4-Nitroaniline	ug/l	< 0.1	NONE	< 0.1				
4-Bromophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1				
Hexachlorobenzene	ug/l	< 0.1	NONE	< 0.1				
2,4-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1				
Diethyl phthalate	ug/l	< 0.1	NONE	< 0.1				
Dibenzofuran	ug/l	< 0.1	NONE	< 0.1				
Azobenzene	ug/l	< 0.1	NONE	< 0.1				
Dibutyl phthalate	ug/l	< 0.1	NONE	< 0.1				
Carbazole	ug/l	< 0.1	NONE	< 0.1				
bis(2-ethylhexyl)phthalate	ug/l	< 0.1	NONE	< 0.1				
Benzyl butyl phthalate	ug/l	< 0.1	NONE	< 0.1				
Di-n-octyl phthalate	ug/l	< 0.1	NONE	< 0.1				

(hs) Please note deviating sample due to head space in container

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 22-10821	Date Sampled	14/12/22
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.741
Project / Job Ref: STP3966D	Additional Refs	BH06
Order No: POR014312	Depth (m)	12.74
Reporting Date: 05/01/2023	DETS Sample No	625535

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 22-10821
Soiltechnics Ltd
Site Reference: Rockingham Enterprise Area, Corby
Project / Job Ref: STP3966D
Order No: POR014312
Reporting Date: 05/01/2023

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Water	UF	Alkalinity	Determination of alkalinity by titration against hydrochloric acid using bromocresol green as the end point	E103
Water	F	Ammoniacal Nitrogen	Determination of ammoniacal nitrogen by discrete analyser.	E126
Water	UF	BTEX	Determination of BTEX by headspace GC-MS	E101
Water	F	Cations	Determination of cations by filtration followed by ICP-MS	E102
Water	UF	Chemical Oxygen Demand (COD)	Determination using a COD reactor followed by colorimetry	E112
Water	F	Chloride	Determination of chloride by filtration & analysed by ion chromatography	E109
Water	F	Chromium - Hexavalent	Determination of hexavalent chromium by acidification, addition of 1,5 diphenylcarbazide followed by	E116
Water	UF	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E115
Water	UF	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through liquid:liquid extraction with cyclohexane	E111
Water	F	Diesel Range Organics (C10 - C24)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	Dissolved Organic Content (DOC)	Determination of DOC by filtration followed by low heat with persulphate addition followed by IR dete	E110
Water	UF	Electrical Conductivity	Determination of electrical conductivity by electrometric measurement	E123
Water	F	EPH (C10 – C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E104
Water	F	Fluoride	Determination of Fluoride by filtration & analysed by ion chromatography	E109
Water	F	Hardness	Determination of Ca and Mg by ICP-MS followed by calculation	E102
Leachate	F	Leachate Preparation - NRA	Based on National Rivers Authority leaching test 1994	E301
Leachate	F	Leachate Preparation - WAC	Based on BS EN 12457 Pt1, 2, 3	E302
Water	F	Metals	Determination of metals by filtration followed by ICP-MS	E102
Water	F	Mineral Oil (C10 - C40)	Determination of liquid:liquid extraction with hexane followed by GI-FID	E104
Water	F	Nitrate	Determination of nitrate by filtration & analysed by ion chromatography	E109
Water	UF	Monohydric Phenol	Determination of phenols by distillation followed by colorimetry	E121
Water	F	PAH - Speciated (EPA 16)	Determination of PAH compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E105
Water	F	PCB - 7 Congeners	Determination of PCB compounds by concentration through SPE cartridge, collection in dichlorometha	E108
Water	UF	Petroleum Ether Extract (PEE)	Gravimetrically determined through liquid:liquid extraction with petroleum ether	E111
Water	UF	pH	Determination of pH by electrometric measurement	E107
Water	F	Phosphate	Determination of phosphate by filtration & analysed by ion chromatography	E109
Water	UF	Redox Potential	Determination of redox potential by electrometric measurement	E113
Water	F	Sulphate (as SO4)	Determination of sulphate by filtration & analysed by ion chromatography	E109
Water	UF	Sulphide	Determination of sulphide by distillation followed by colorimetry	E118
Water	F	SVOC	Determination of semi-volatile organic compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E106
Water	UF	Toluene Extractable Matter (TEM)	Gravimetrically determined through liquid:liquid extraction with toluene	E111
Water	UF	Total Organic Carbon (TOC)	Low heat with persulphate addition followed by IR detection	E110
Water	F	TPH CWG (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C35. C5 to C8 by headspace GC-MS	E104
Water	F	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C44. C5 to C8 by headspace GC-MS	E104
Water	UF	VOCs	Determination of volatile organic compounds by headspace GC-MS	E101
Water	UF	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E101

Key

F Filtered
UF Unfiltered

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List of HWOL Acronyms and Operators

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total

Det - Acronym
Benzene - HS_1D_MS
Ethylbenzene - HS_1D_MS
MTBE - HS_1D_MS
TPH CWG - Aliphatic >C10 - C12 - EH_CU_1D_AL
TPH CWG - Aliphatic >C12 - C16 - EH_CU_1D_AL
TPH CWG - Aliphatic >C16 - C21 - EH_CU_1D_AL
TPH CWG - Aliphatic >C21 - C34 - EH_CU_1D_AL
TPH CWG - Aliphatic >C5 - C34 - HS_1D_MS+EH_CU_1D_AL
TPH CWG - Aliphatic >C5 - C6 - HS_1D_MS_AL
TPH CWG - Aliphatic >C6 - C8 - HS_1D_MS_AL
TPH CWG - Aliphatic >C8 - C10 - EH_CU_1D_AL
TPH CWG - Aromatic >C10 - C12 - EH_CU_1D_AR
TPH CWG - Aromatic >C12 - C16 - EH_CU_1D_AR
TPH CWG - Aromatic >C16 - C21 - EH_CU_1D_AR
TPH CWG - Aromatic >C21 - C35 - EH_CU_1D_AR
TPH CWG - Aromatic >C5 - C7 - HS_1D_MS_AR
TPH CWG - Aromatic >C7 - C8 - HS_1D_MS_AR
TPH CWG - Aromatic >C8 - C10 - EH_CU_1D_AR
TPH CWG - Aromatic C5 - C35 - HS_1D_MS+EH_CU_1D_AR
TPH CWG - Total >C5 - C35 - HS_1D_MS+EH_CU_1D_Total
Toluene - HS_1D_MS
m & p-xylene - HS_1D_MS
o-Xylene - HS_1D_MS

Alexa Band
Soiltechnics Ltd
White Lodge
Cedar Barn
Walgrave
NN6 9PY

Derwentside Environmental Testing Services Ltd
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DETS Report No: 23-04624

Site Reference:	Rockingham Enterprise Area, Corby
Project / Job Ref:	STP3966D
Order No:	POR015074
Sample Receipt Date:	03/04/2023
Sample Scheduled Date:	03/04/2023
Report Issue Number:	1
Reporting Date:	13/04/2023

Authorised by:

Kevin Old
Operations Director

Dates of laboratory activities for each tested analyte are available upon request.

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Water Analysis Certificate						
DETS Report No: 23-04624	Date Sampled	30/03/23	30/03/23	30/03/23	30/03/23	
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH049.871	BH058.993	BH0612.942	BH099.724	
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	
Order No: POR015074	Depth (m)	9.87	8.99	12.94	9.72	
Reporting Date: 13/04/2023	DETS Sample No	645201	645202	645203	645204	

Determinand	Unit	RL	Accreditation					
pH	pH Units	N/a	ISO17025	7.0	7.7	7.7	7.8	
Total Cyanide	ug/l	< 5	ISO17025	< 5	25	< 5	93	
Complex Cyanide	ug/l	< 5	ISO17025	< 5	25	< 5	93	
Free Cyanide	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Sulphate as SO_4	mg/l	< 1	ISO17025	1160	3800	1170	1870	
Ammoniacal Nitrogen as NH_4	ug/l	< 50	ISO17025	450	9710	253	60100	
Ammonia as NH_4	ug/l	< 50	ISO17025	450	9710	253	60100	
Chloride	mg/l	< 1	ISO17025	8	57	8	79	
Nitrate as NO_3	mg/l	< 0.5	ISO17025	< 0.5	< 0.5	< 0.5	< 0.5	
Nitrite as NO_2	mg/l	< 0.5	NONE	< 0.5	< 0.5	< 0.5	< 0.5	
Phosphate as PO_4	mg/l	< 1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	
Fluoride	mg/l	< 0.5	ISO17025	< 0.5	< 0.5	< 0.5	< 0.5	
Total Organic Carbon (TOC)	mg/l	< 0.1	NONE	13.8	21.8	25.5	22.7	
Chemical Oxygen Demand	mg/l	<10	ISO17025	14	22	22	48	
Biological Oxygen Demand	mg/l	< 5	NONE	11	< 5	< 5	< 5	
Total Suspended Solids	mg/l	< 5	NONE	381	225	307	615	
Carbonate (Alkalinity as $CaCO_3$)	mg/l	< 10	NONE	< 10	< 10	< 10	< 10	
Antimony (dissolved)	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Arsenic (dissolved)	ug/l	< 5	ISO17025	11	32	16	8	
Boron (dissolved)	ug/l	< 5	ISO17025	748	951	5280	1930	
Cadmium (dissolved)	ug/l	< 0.4	ISO17025	< 0.4	1	0.9	2.1	
Chromium (dissolved)	ug/l	< 5	ISO17025	< 5	21	< 5	< 5	
Chromium (hexavalent)	ug/l	< 20	NONE	< 20	< 20	< 20	< 20	
Chromium III	ug/l	< 20	NONE	< 20	< 20	< 20	< 20	
Copper (dissolved)	ug/l	< 5	ISO17025	15	24	20	13	
Lead (dissolved)	ug/l	< 5	ISO17025	18	99	116	58	
Manganese (dissolved)	ug/l	< 5	ISO17025	3850	9760	571	2030	
Mercury (dissolved)	ug/l	< 0.05	ISO17025	< 0.05	< 0.05	< 0.05	< 0.05	
Nickel (dissolved)	ug/l	< 5	ISO17025	42	41	14	8	
Selenium (dissolved)	ug/l	< 5	ISO17025	< 5	23	15	10	
Zinc (dissolved)	ug/l	< 2	ISO17025	88	318	1260	122	
Magnesium (dissolved)	mg/l	< 0.1	ISO17025	59.8	90.7	134	44.4	
Chromium (total)	ug/l	< 5	NONE	33	506	245	149	
Total Phenols (monohydric)	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	

Subcontracted analysis (S)
Insufficient sample I/S
Unsuitable Sample U/S

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Water Analysis Certificate - Speciated PAH						
DETS Report No: 23-04624	Date Sampled	30/03/23	30/03/23	30/03/23	30/03/23	
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH049.871	BH058.993	BH0612.942	BH099.724	
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	
Order No: POR015074	Depth (m)	9.87	8.99	12.94	9.72	
Reporting Date: 13/04/2023	DETS Sample No	645201	645202	645203	645204	

Determinand	Unit	RL	Accreditation					
Naphthalene	ug/l	< 0.01	NONE	0.18	0.30	< 0.01	0.10	
Acenaphthylene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Acenaphthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Fluorene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Phenanthrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Benzo(a)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Chrysene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Benzo(b)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Benzo(k)fluoranthene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Benzo(a)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Indeno(1,2,3-cd)pyrene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Dibenz(a,h)anthracene	ug/l	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	
Benzo(ghi)perylene	ug/l	< 0.008	NONE	< 0.008	< 0.008	< 0.008	< 0.008	
Total EPA-16 PAHs	ug/l	< 0.16	NONE	0.18	0.30	< 0.16	< 0.16	

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Water Analysis Certificate - TPH CWG Banded						
DETS Report No: 23-04624	Date Sampled	30/03/23	30/03/23	30/03/23	30/03/23	
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH049.871	BH058.993	BH0612.942	BH099.724	
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	
Order No: POR015074	Depth (m)	9.87	8.99	12.94	9.72	
Reporting Date: 13/04/2023	DETS Sample No	645201	645202	645203	645204	

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6 : HS_1D_MS_AL	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aliphatic >C6 - C8 : HS_1D_MS_AL	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aliphatic >C8 - C10 : EH_CU_1D_AL	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aliphatic >C10 - C12 : EH_CU_1D_AL	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aliphatic >C12 - C16 : EH_CU_1D_AL	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aliphatic >C16 - C21 : EH_CU_1D_AL	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aliphatic >C21 - C34 : EH_CU_1D_AL	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aliphatic (C5 - C34) : HS_1D_MS+EH_CU_1D_AL	ug/l	< 70	NONE	< 70	< 70	< 70	< 70	
Aromatic >C5 - C7 : HS_1D_MS_AR	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aromatic >C7 - C8 : HS_1D_MS_AR	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aromatic >C8 - C10 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aromatic >C10 - C12 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aromatic >C12 - C16 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aromatic >C16 - C21 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aromatic >C21 - C35 : EH_CU_1D_AR	ug/l	< 10	NONE	< 10	< 10	< 10	< 10	
Aromatic (C5 - C35) : HS_1D_MS+EH_CU_1D_AR	ug/l	< 70	NONE	< 70	< 70	< 70	< 70	
Total >C5 - C35 : HS_1D_MS+EH_CU_1D_Total	ug/l	< 140	NONE	< 140	< 140	< 140	< 140	

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Water Analysis Certificate - BTEX / MTBE						
DETS Report No: 23-04624	Date Sampled	30/03/23	30/03/23	30/03/23	30/03/23	
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH049.871	BH058.993	BH0612.942	BH099.724	
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	
Order No: POR015074	Depth (m)	9.87	8.99	12.94	9.72	
Reporting Date: 13/04/2023	DETS Sample No	645201	645202	645203	645204	

Determinand	Unit	RL	Accreditation					
Benzene : HS_1D_MS	ug/l	< 1	ISO17025	< 1	< 1	< 1	< 1	
Toluene : HS_1D_MS	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Ethylbenzene : HS_1D_MS	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
p & m-xylene : HS_1D_MS	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	
o-xylene : HS_1D_MS	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
MTBE : HS_1D_MS	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	

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UKAS TESTING 4480

Water Analysis Certificate - Volatile Organic Compounds (VOC)						
DETS Report No: 23-04624	Date Sampled	30/03/23	30/03/23	30/03/23	30/03/23	
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH049.871	BH058.993	BH0612.942	BH099.724	
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	
Order No: POR015074	Depth (m)	9.87	8.99	12.94	9.72	
Reporting Date: 13/04/2023	DETS Sample No	645201	645202	645203	645204	

Determinand	Unit	RL	Accreditation					
Dichlorodifluoromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Vinyl Chloride	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Chloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Chloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Bromomethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Trichlorofluoromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,1-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
MTBE	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	
trans-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,1-Dichloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
cis-1,2-Dichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
2,2-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Chloroform	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Bromochloromethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	
1,1,1-Trichloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,1-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Carbon Tetrachloride	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,2-Dichloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	
Benzene	ug/l	< 1	ISO17025	< 1	< 1	< 1	< 1	
1,2-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Trichloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Bromodichloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Dibromomethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
TAME	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
cis-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Toluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
trans-1,3-Dichloropropene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,1,2-Trichloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	
1,3-Dichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Tetrachloroethene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Dibromochloromethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,2-Dibromoethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Chlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,1,1,2-Tetrachloroethane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Ethyl Benzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
m,p-Xylene	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	
o-Xylene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Styrene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Bromoform	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	
Isopropylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,1,2,2-Tetrachloroethane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	
1,2,3-Trichloropropane	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
n-Propylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
Bromobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
2-Chlorotoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,3,5-Trimethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
4-Chlorotoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
tert-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,2,4-Trimethylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
sec-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
p-Isopropyltoluene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,3-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,4-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
n-Butylbenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
1,2-Dichlorobenzene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	
,2-Dibromo-3-chloropropane	ug/l	< 10	ISO17025	< 10	< 10	< 10	< 10	
Hexachlorobutadiene	ug/l	< 5	ISO17025	< 5	< 5	< 5	< 5	

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 23-04624	Date Sampled	30/03/23
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH049.871
Project / Job Ref: STP3966D	Additional Refs	BH04
Order No: POR015074	Depth (m)	9.87
Reporting Date: 13/04/2023	DETS Sample No	645201

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 23-04624	Date Sampled	30/03/23
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH058.993
Project / Job Ref: STP3966D	Additional Refs	BH05
Order No: POR015074	Depth (m)	8.99
Reporting Date: 13/04/2023	DETS Sample No	645202

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 23-04624	Date Sampled	30/03/23
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.942
Project / Job Ref: STP3966D	Additional Refs	BH06
Order No: POR015074	Depth (m)	12.94
Reporting Date: 13/04/2023	DETS Sample No	645203

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Volatile Organic Compounds TIC (VOC)		
DETS Report No: 23-04624	Date Sampled	30/03/23
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH099.724
Project / Job Ref: STP3966D	Additional Refs	BH09
Order No: POR015074	Depth (m)	9.72
Reporting Date: 13/04/2023	DETS Sample No	645204

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 5	< 5
2	N/a	N/a	µg/l	< 5	< 5
3	N/a	N/a	µg/l	< 5	< 5
4	N/a	N/a	µg/l	< 5	< 5
5	N/a	N/a	µg/l	< 5	< 5

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds (SVOC)						
DETS Report No: 23-04624	Date Sampled	30/03/23	30/03/23	30/03/23	30/03/23	
Soiltechnics Ltd	Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH049.871	BH058.993	BH0612.942	BH099.724	
Project / Job Ref: STP3966D	Additional Refs	BH04	BH05	BH06	BH09	
Order No: POR015074	Depth (m)	9.87	8.99	12.94	9.72	
Reporting Date: 13/04/2023	DETS Sample No	645201	645202	645203	645204	

Determinand	Unit	RL	Accreditation					
Phenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
1,2,4-Trichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2-Nitrophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Nitrobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
0-Cresol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
bis(2-chloroethoxy)methane	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
bis(2-chloroethyl)ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2,4-Dichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2-Chlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
1,3-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
1,4-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
1,2-Dichlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2,4-Dimethylphenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Isophorone	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Hexachloroethane	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
p-Cresol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2,4,6-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2,4,5-Trichlorophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
4-Chloro-3-methylphenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2-Methylnaphthalene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Hexachlorocyclopentadiene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Hexachlorobutadiene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2,6-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Dimethyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2-Chloronaphthalene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
4-Chloroanaline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
4-Nitrophenol	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
4-Chlorophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
3-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
4-Nitroaniline	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
4-Bromophenyl phenyl ether	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Hexachlorobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
2,4-Dinitrotoluene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Diethyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Dibenzofuran	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Azobenzene	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Dibutyl phthalate	ug/l	< 0.1	NONE	< 0.1	7.4	20.3	7.5	
Carbazole	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
bis(2-ethylhexyl)phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Benzyl butyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Di-n-octyl phthalate	ug/l	< 0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 23-04624	Date Sampled	30/03/23
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH049.871
Project / Job Ref: STP3966D	Additional Refs	BH04
Order No: POR015074	Depth (m)	9.87
Reporting Date: 13/04/2023	DETS Sample No	645201

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 23-04624	Date Sampled	30/03/23
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH058.993
Project / Job Ref: STP3966D	Additional Refs	BH05
Order No: POR015074	Depth (m)	8.99
Reporting Date: 13/04/2023	DETS Sample No	645202

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 23-04624	Date Sampled	30/03/23
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH0612.942
Project / Job Ref: STP3966D	Additional Refs	BH06
Order No: POR015074	Depth (m)	12.94
Reporting Date: 13/04/2023	DETS Sample No	645203

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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Water Analysis Certificate - Semi Volatile Organic Compounds TIC (SVOC)		
DETS Report No: 23-04624	Date Sampled	30/03/23
Soiltechnics Ltd	Time Sampled	None Supplied
Site Reference: Rockingham Enterprise Area, Corby	TP / BH No	BH099.724
Project / Job Ref: STP3966D	Additional Refs	BH09
Order No: POR015074	Depth (m)	9.72
Reporting Date: 13/04/2023	DETS Sample No	645204

Compound No	Compound Name	% Match	Units	RL	Estimated Concentration
1	N/a	N/a	µg/l	< 0.1	< 0.1
2	N/a	N/a	µg/l	< 0.1	< 0.1
3	N/a	N/a	µg/l	< 0.1	< 0.1
4	N/a	N/a	µg/l	< 0.1	< 0.1
5	N/a	N/a	µg/l	< 0.1	< 0.1

There were no / other compounds identified with a match of >90%

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UKAS TESTING 4480

Water Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 23-04624
Soiltechnics Ltd
Site Reference: Rockingham Enterprise Area, Corby
Project / Job Ref: STP3966D
Order No: POR015074
Reporting Date: 13/04/2023

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Water	UF	Alkalinity	Determination of alkalinity by titration against hydrochloric acid using bromocresol green as the end point	E103
Water	F	Ammoniacal Nitrogen	Determination of ammoniacal nitrogen by discrete analyser.	E126
Water	UF	BTEX	Determination of BTEX by headspace GC-MS	E101
Water	F	Cations	Determination of cations by filtration followed by ICP-MS	E102
Water	UF	Chemical Oxygen Demand (COD)	Determination using a COD reactor followed by colorimetry	E112
Water	F	Chloride	Determination of chloride by filtration & analysed by ion chromatography	E109
Water	F	Chromium - Hexavalent	Determination of hexavalent chromium by acidification, addition of 1,5 diphenylcarbazide followed by	E116
Water	UF	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E115
Water	UF	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E115
Water	UF	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through liquid:liquid extraction with cyclohexane	E111
Water	F	Diesel Range Organics (C10 - C24)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	Dissolved Organic Content (DOC)	Determination of DOC by filtration followed by low heat with persulphate addition followed by IR dete	E110
Water	UF	Electrical Conductivity	Determination of electrical conductivity by electrometric measurement	E123
Water	F	EPH (C10 – C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID	E104
Water	F	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of liquid:liquid extraction with hexane followed by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E104
Water	F	Fluoride	Determination of Fluoride by filtration & analysed by ion chromatography	E109
Water	F	Hardness	Determination of Ca and Mg by ICP-MS followed by calculation	E102
Leachate	F	Leachate Preparation - NRA	Based on National Rivers Authority leaching test 1994	E301
Leachate	F	Leachate Preparation - WAC	Based on BS EN 12457 Pt1, 2, 3	E302
Water	F	Metals	Determination of metals by filtration followed by ICP-MS	E102
Water	F	Mineral Oil (C10 - C40)	Determination of liquid:liquid extraction with hexane followed by GI-FID	E104
Water	F	Nitrate	Determination of nitrate by filtration & analysed by ion chromatography	E109
Water	UF	Monohydric Phenol	Determination of phenols by distillation followed by colorimetry	E121
Water	F	PAH - Speciated (EPA 16)	Determination of PAH compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E105
Water	F	PCB - 7 Congeners	Determination of PCB compounds by concentration through SPE cartridge, collection in dichlorometha	E108
Water	UF	Petroleum Ether Extract (PEE)	Gravimetrically determined through liquid:liquid extraction with petroleum ether	E111
Water	UF	pH	Determination of pH by electrometric measurement	E107
Water	F	Phosphate	Determination of phosphate by filtration & analysed by ion chromatography	E109
Water	UF	Redox Potential	Determination of redox potential by electrometric measurement	E113
Water	F	Sulphate (as SO4)	Determination of sulphate by filtration & analysed by ion chromatography	E109
Water	UF	Sulphide	Determination of sulphide by distillation followed by colorimetry	E118
Water	F	SVOC	Determination of semi-volatile organic compounds by concentration through SPE cartridge, collection in dichloromethane followed by GC-MS	E106
Water	UF	Toluene Extractable Matter (TEM)	Gravimetrically determined through liquid:liquid extraction with toluene	E111
Water	UF	Total Organic Carbon (TOC)	Low heat with persulphate addition followed by IR detection	E110
Water	F	TPH CWG (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C35. C5 to C8 by headspace GC-MS	E104
Water	F	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of liquid:liquid extraction with hexane, fractionating with SPE followed by GC-FID for C8 to C44. C5 to C8 by headspace GC-MS	E104
Water	UF	VOCs	Determination of volatile organic compounds by headspace GC-MS	E101
Water	UF	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E101

Key

F Filtered
UF Unfiltered

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

UKAS TESTING 4480

List of HWOL Acronyms and Operators

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total

Det - Acronym
Benzene - HS_1D_MS
Ethylbenzene - HS_1D_MS
MTBE - HS_1D_MS
TPH CWG - Aliphatic >C10 - C12 - EH_CU_1D_AL
TPH CWG - Aliphatic >C12 - C16 - EH_CU_1D_AL
TPH CWG - Aliphatic >C16 - C21 - EH_CU_1D_AL
TPH CWG - Aliphatic >C21 - C34 - EH_CU_1D_AL
TPH CWG - Aliphatic >C5 - C34 - HS_1D_MS+EH_CU_1D_AL
TPH CWG - Aliphatic >C5 - C6 - HS_1D_MS_AL
TPH CWG - Aliphatic >C6 - C8 - HS_1D_MS_AL
TPH CWG - Aliphatic >C8 - C10 - EH_CU_1D_AL
TPH CWG - Aromatic >C10 - C12 - EH_CU_1D_AR
TPH CWG - Aromatic >C12 - C16 - EH_CU_1D_AR
TPH CWG - Aromatic >C16 - C21 - EH_CU_1D_AR
TPH CWG - Aromatic >C21 - C35 - EH_CU_1D_AR
TPH CWG - Aromatic >C5 - C7 - HS_1D_MS_AR
TPH CWG - Aromatic >C7 - C8 - HS_1D_MS_AR
TPH CWG - Aromatic >C8 - C10 - EH_CU_1D_AR
TPH CWG - Aromatic C5 - C35 - HS_1D_MS+EH_CU_1D_AR
TPH CWG - Total >C5 - C35 - HS_1D_MS+EH_CU_1D_Total
Toluene - HS_1D_MS
m & p-xylene - HS_1D_MS
o-Xylene - HS_1D_MS

APPENDIX 5
WAC Test Results

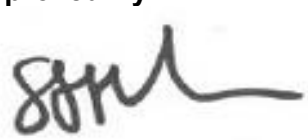
eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	23-25835-1
Initial Date of Issue:	07-Aug-2023
Re-Issue Details:	
Client	Storefield Aggregates
Client Address:	Furnace Park Old Telford Way Telford Way Industrial Estate Kettering Northants NN16 8UN
Contact(s):	Adam Crane Jonah Clarke Weighbridge Steve Molcher
Project	Telford Way

Quotation No.:		**Date Received:**	01-Aug-2023
Order No.:	TW069	**Date Instructed:**	01-Aug-2023
No. of Samples:	1		
Turnaround (Wkdays):	5	**Results Due:**	07-Aug-2023
Date Approved:	07-Aug-2023		

Approved By:



Details: Stuart Henderson, Technical Manager

Results - Single Stage WAC

Project: Telford Way

Chemtest Job No:	23-25835				**Landfill Waste Acceptance Criteria Limits**		
Chemtest Sample ID:	1682103						
Sample Ref:	Processed						
Sample ID:	TW069						
Sample Location:	G.B						
Top Depth(m):							
Bottom Depth(m):							
Sampling Date:	28-Jul-2023				**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**Accred.**	**Units**				
Total Organic Carbon	2625	M	%	0.40	3	5	6
Loss On Ignition	2610	M	%	1.8	--	--	10
Total BTEX	2760	M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	M	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg	< 2.0	100	--	--
pH	2010	M		11.4	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0050	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0005	0.0051	0.5	2	25
Barium	1455	U	0.008	0.078	20	100	300
Cadmium	1455	U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455	U	0.010	0.10	0.5	10	70
Copper	1455	U	0.014	0.14	2	50	100
Mercury	1455	U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455	U	0.028	0.28	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0050	0.4	10	40
Lead	1455	U	0.0011	0.011	0.5	10	50
Antimony	1455	U	0.012	0.12	0.06	0.7	5
Selenium	1455	U	0.0005	0.0050	0.1	0.5	7
Zinc	1455	U	0.023	0.23	4	50	200
Chloride	1220	U	140	1400	800	15000	25000
Fluoride	1220	U	< 0.050	< 1.0	10	150	500
Sulphate	1220	U	34	340	1000	20000	50000
Total Dissolved Solids	1020	N	620	6200	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	8.5	85	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	13

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Test Methods

SOP	Title	Parameters included	Method summary
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key

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

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

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

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	23-25839-1
Initial Date of Issue:	07-Aug-2023
Re-Issue Details:	
Client	Storefield Aggregates
Client Address:	Furnace Park Old Telford Way Telford Way Industrial Estate Kettering Northants NN16 8UN
Contact(s):	Adam Crane Jonah Clarke Weighbridge Steve Molcher
Project	Telford Way
Quotation No.:	
Order No.:	TW071
No. of Samples:	1
Turnaround (Wkdays):	5
Date Approved:	07-Aug-2023
Approved By:	
Details:	Stuart Henderson, Technical Manager

Date Received:	01-Aug-2023
Date Instructed:	01-Aug-2023
Results Due:	07-Aug-2023

Results - Single Stage WAC

Project: Telford Way

					Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	23-25839						
Chemtest Sample ID:	1682107						
Sample Ref:	Old Unprocessed						
Sample ID:	TW071						
Sample Location:	G.B						
Top Depth(m):							
Bottom Depth(m):							
Sampling Date:	28-Jul-2023				**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Determinand	**SOP**	**Accred.**	**Units**				
Total Organic Carbon	2625	M	%	0.61	3	5	6
Loss On Ignition	2610	M	%	3.9	--	--	10
Total BTEX	2760	M	mg/kg	< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg	< 0.10	1	--	--
TPH Total WAC	2670	M	mg/kg	< 10	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg	< 2.0	100	--	--
pH	2010	M		11.4	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0060	--	To evaluate	To evaluate
Eluate Analysis			**10:1 Eluate mg/l**	**10:1 Eluate mg/kg**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0004	0.0038	0.5	2	25
Barium	1455	U	0.006	0.056	20	100	300
Cadmium	1455	U	< 0.00011	< 0.0011	0.04	1	5
Chromium	1455	U	0.011	0.11	0.5	10	70
Copper	1455	U	0.0026	0.026	2	50	100
Mercury	1455	U	< 0.00005	< 0.00050	0.01	0.2	2
Molybdenum	1455	U	0.016	0.16	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0050	0.4	10	40
Lead	1455	U	0.0006	0.0056	0.5	10	50
Antimony	1455	U	0.0057	0.057	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0050	0.1	0.5	7
Zinc	1455	U	0.020	0.20	4	50	200
Chloride	1220	U	120	1200	800	15000	25000
Fluoride	1220	U	< 0.050	< 1.0	10	150	500
Sulphate	1220	U	59	590	1000	20000	50000
Total Dissolved Solids	1020	N	490	4900	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.30	1	-	-
Dissolved Organic Carbon	1610	U	5.6	56	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.090
Moisture (%)	7.3

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Test Methods

SOP	Title	Parameters included	Method summary
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

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>	"greater than"
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LOD	Limit of detection

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Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

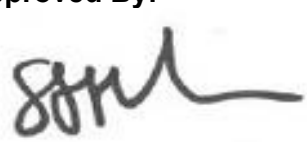
If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Amended Report

Report No.:	23-28353-4		
Initial Date of Issue:	19-Sep-2023	**Date of Re-Issue:**	19-Sep-2023
Re-Issue Details:	This report has been revised and directly supersedes 23-28353-3 in its entirety		
Client	Soiltechnics Limited		
Client Address:	1st Floor Unit 9 Westpoint Enterprise Park Clarence Avenue Trafford Park Manchester M17 1QS		
Contact(s):	Admin		
Project	STP3966D Rockingham Enterprise Area, Corby		
Quotation No.:	Q23-32322	**Date Received:**	23-Aug-2023
Order No.:	POR016257	**Date Instructed:**	23-Aug-2023
No. of Samples:	2		
Turnaround (Wkdays):	7	**Results Due:**	01-Sep-2023
Date Approved:	19-Sep-2023	**Subcon Results Due:**	14-Sep-2023

Approved By:



Details: Stuart Henderson, Technical Manager

Results - Soil

Project: STP3966D Rockingham Enterprise Area, Corby

Client: Soiltechnics Limited			**Chemtest Job No.:**		23-28353	23-28353
Quotation No.: Q23-32322			**Chemtest Sample ID.:**		1692631	1692632
Order No.: POR016257			Client Sample Ref.:		3	3
			Client Sample ID.:		SP01.3	SP02.3
			Sample Location:		SP01	SP02
			Sample Type:		SOIL	SOIL
			Top Depth (m):		0.00	0.00
			Date Sampled:		21-Aug-2023	21-Aug-2023
Determinand	**Accred.**	**SOP**	**Units**	**LOD**		
Moisture	N	2030	%	0.020	8.0	5.0
Alkali Reserve	N	2105	g NaOH eq	0.010	< 0.010	< 0.010
Dioxin (Subcon)	S		ng/kg	N/A	See Attached	See Attached
Furans (Subcon)	S		ng/kg	N/A	See Attached	See Attached
pH	M	2010		4.0	10.9	10.6
Chromium (Hexavalent)	N	2490	mg/kg	0.50	0.57	< 0.50

Results - 2 Stage WAC

Project: STP3966D Rockingham Enterprise Area, Corby

							Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	23-28353								
Chemtest Sample ID:	1692631								
Sample Ref:	3								
Sample ID:	SP01.3								
Sample Location:	SP01								
Top Depth(m):	0.00								
Bottom Depth(m):									
Sampling Date:	21-Aug-2023								
Determinand	**SOP**	**Accred.**	**Units**				**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	M	%			0.24	3	5	6
Loss On Ignition	2610	M	%			2.9	--	--	10
Total BTEX	2760	M	mg/kg			< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg			< 0.10	1	--	--
TPH Total WAC	2670	M	mg/kg			< 10	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg			< 2.0	100	--	--
pH	2010	M				10.9	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg			0.0080	--	To evaluate	To evaluate
Eluate Analysis			**2:1 mg/l**	**8:1 mg/l**	**2:1 mg/kg**	**Cumulative mg/kg 10:1**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0010	< 0.0002	0.0019	0.0010	0.5	2	25
Barium	1455	U	0.012	0.006	0.023	0.070	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	0.0040	< 0.0005	0.036	0.5	10	70
Copper	1455	U	0.0098	0.020	0.020	0.010	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.012	0.036	0.023	0.34	0.5	10	30
Nickel	1455	U	0.0021	< 0.0005	0.0041	0.0021	0.4	10	40
Lead	1455	U	< 0.0005	0.0032	< 0.0005	0.029	0.5	10	50
Antimony	1455	U	0.0023	0.047	0.0047	0.43	0.06	0.7	5
Selenium	1455	U	0.0020	0.0017	0.0039	0.017	0.1	0.5	7
Zinc	1455	U	< 0.003	0.031	< 0.003	0.28	4	50	200
Chloride	1220	U	1100	130	2300	2300	800	15000	25000
Fluoride	1220	U	0.24	< 0.050	< 1.0	< 1.0	10	150	500
Sulphate	1220	U	820	150	1600	2200	1000	20000	50000
Total Dissolved Solids	1020	N	4400	800	8700	12000	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	70	9.9	140	160	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	8.0

Leachate Test Information	
Leachant volume 1st extract/l	0.335
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.178

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: STP3966D Rockingham Enterprise Area, Corby

							Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	23-28353								
Chemtest Sample ID:	1692632								
Sample Ref:	3								
Sample ID:	SP02.3						**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Sample Location:	SP02								
Top Depth(m):	0.00								
Bottom Depth(m):									
Sampling Date:	21-Aug-2023								
Determinand	**SOP**	**Accred.**	**Units**						
Total Organic Carbon	2625	M	%			0.46	3	5	6
Loss On Ignition	2610	M	%			3.2	--	--	10
Total BTEX	2760	M	mg/kg			< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg			< 0.10	1	--	--
TPH Total WAC	2670	M	mg/kg			< 10	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg			< 2.0	100	--	--
pH	2010	M				10.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg			0.0040	--	To evaluate	To evaluate
Eluate Analysis			**2:1 mg/l**	**8:1 mg/l**	**2:1 mg/kg**	**Cumulative mg/kg 10:1**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0027	0.0003	0.0053	0.0049	0.5	2	25
Barium	1455	U	0.005	< 0.005	0.011	0.0033	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.018	0.0088	0.037	0.012	2	50	100
Mercury	1455	U	0.00021	< 0.00005	0.00041	0.00013	0.01	0.2	2
Molybdenum	1455	U	0.21	0.020	0.42	0.32	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	0.040	0.028	0.080	0.29	0.06	0.7	5
Selenium	1455	U	0.017	0.0017	0.034	0.027	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	< 0.003	< 0.003	4	50	200
Chloride	1220	U	960	46	1900	1000	800	15000	25000
Fluoride	1220	U	0.14	< 0.050	< 1.0	< 1.0	10	150	500
Sulphate	1220	U	800	92	1600	1400	1000	20000	50000
Total Dissolved Solids	1020	N	4100	1700	8200	19000	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	54	4.2	110	74	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	5.0

Leachate Test Information	
Leachant volume 1st extract/l	0.341
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.110

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Test Methods

SOP	Title	Parameters included	Method summary
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2105	Alkali Reserve	Alkali Reserve	Titration
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge
650	Characterisation of Waste (Leaching WAC)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key

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

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

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

APPENDIX 5

L-STP3966D-WAC-01 Incinerator Bottom Ash Testing Results

Soiltechnics Limited
Registered in England 2680759
Registered office: Cedar Barn, NN6 9PY

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Unit 9
Clarence Avenue
Trafford Park
Manchester
M17 1QS

t: 0161 9470270
e: mail@soiltechnics.net
w: www.soiltechnics.net

FAO Emily Wright
Storefield Aggregates
Sent by email: emily@storefield.co.uk

Date: 21st September 2023
Your Ref: WAC Extended Suite
Our Ref: L-STP3966D-WAC-01

Dear Emily,

Rockingham Enterprise Area, Corby – Waste Acceptance Criteria (WAC) testing IBA ash extended suite

Further to our recent discussions we are pleased to provide the following results of the extended WAC testing undertaken on the screened samples of the IBA ash, from your process site at Corby. It is understood that the waste stream is being considered for inclusion within the backfill materials for the construction of the development platform at the Corby Enterprise Site, where the specified acceptable wastes to be detailed within the Waste Recovery Plan will be limited to inert wastes.

Previous Works

Soiltechnics has previously undertaken an evaluation of Client provided laboratory testing (WAC testing), which indicated the presence of very high metals, which would traditionally trigger a 'hazardous waste' classification.

However, research into UK domestic refuse IBA waste shows that the metal compounds formed are not typically ecotoxic and with detailed consideration can be classified as non-hazardous. Further information can be found to support this conclusion in WRc document 'Assessment of Hazardous Classification of UK IBA'. Report for the January to December 2011 IBA dataset'. Ref: UC9213.05. December 2012.

In order to support the above, Soiltechnics has undertaken further sampling, taken from the fine and coarse grade processed material stream for WAC analysis, Cr VI, alkaline reserve testing with pH analysis, and for dioxins and furans.

Current Works

The following samples were taken from the process:

- SP01.3 (fine grained process materials); and
- SP02.3 (coarse grained processed materials).

Samples were submitted for the above detailed extended suite stage 1 analysis (hazardous waste assessment) and further WAC analysis. The results are reported in Chemtest report 23-28353-4 (19th September 2023) and Marchwood Report 23-28353 (19th September 2023).

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Laboratory test Results – Hazardous Classification

The supplementary analysis indicates that the hazardous waste limit for dioxins of 15µg/kg is not exceeded in either the fine or coarse grained processed samples, with test results ranging between 0.04 to 0.06µg/l.

The pH of the samples ranged between 10.9 (fine grained sample) and 10.6 (coarse grained sample). Due to elevated pH results in previous rounds of analysis, an alkali reserve test was also undertaken to provide a more detailed assessment on corrosivity. The detailed analysis for corrosivity in both samples indicates that the pH + 1/12th of the alkaline reserve test is also below the corrosivity threshold of 14.5. Therefore the material is not considered corrosive.

Concentrations of Chromium (VI) ranged between 0.57mg/kg and <0.5mg/kg, which is significantly below any hazardous waste threshold.

Overall, the additional Stage 1 analysis on the material confirms no other hazard statement applies, and the material can be considered 'non-hazardous' waste.

Laboratory test Results – WAC Assessment

The WAC analysis shows the presence of elevated concentrations of antimony, chloride, sulphate, and total dissolved solids in both samples above the threshold for inert waste.

Therefore, the materials would not be classified as an Inert Waste, based on the current testing.

It should also be noted that previous analysis on the processed IBA material also failed the inert waste criteria. Antimony and chloride and TDS being a common failure point in both rounds.

Conclusions

Based on the extended suite Stage 1 testing and WAC testing, the waste stream could be classified as non-hazardous material, pending agreement from the Environment Agency regarding the applicability of research into the low-toxicity of the metal compounds typically present in domestic IBA material.

However, WAC analysis shows that an Inert classification cannot be applied, and therefore any receiving facility must be permitted to accept non-hazardous waste.

It is recommended that a formal discussion is held with the Environment Agency to request acceptance of this waste stream as infill in the development platform at Rockingham Enterprise Area, as a specific exemption may need to be included within the permit.

Yours sincerely,

Claire Moreira BSc (Hons) MSc, MSc, CSci. FGS. DoWCoP QP 422
Senior Geo-environmental Consultant, Soiltechnics Limited

Enc: Laboratory test results 23-28353-4 (Chemtest) & 23-28353 (Marchwood), dated 19th September 2023

CERTIFICATE OF ANALYSIS

MSSL reference: 23-58813

Report date: 19-09-2023

Customer: Eurofins Chemtest Ltd
Depot Road,
Newmarket,
Suffolk,
CB8 0AL

Customer contact(s): Amy Woolston

Customer reference: 23-28353
Customer PO: 25477
Customer sampling date: 21-08-2023
Date received: 25-08-2023

Analysis started: 13-09-2023
Analysis complete: 19-09-2023
Conforming: YES

This report shall not be reproduced except when in full without approval of the laboratory.

Results only relate to the items tested. Results apply to the samples as received.

Conformance is contingent upon accurate information being provided by the customer and customer compliance with relevant sample handling and storage conditions prior to receipt at the laboratory.

All opinions and interpretations expressed within this report are outside Marchwood's scope of accreditation.

Accreditation Key:

Y : ISO/IEC 17025 M : MCERTS
N : Non Accredited (S) : Subcontracted

Notes:

Reported by: Aleksandra Olas
Position: Scientist

Approved by: Giuseppe Reitano
Position: Technical Laboratory Manager
For/on behalf of Marchwood Scientific Services Ltd

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1668

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Marchwood, 371 Millbrook Road West, Southampton SO15 0HW

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333889 Dioxin Results Summary

Sample Type : Soil
MSS Sample Ref : 333889
Customer Sample Ref : 1692631 SP01
Sample Condition : Conforming
Test Method : 2002a

Dioxins/ Furans

Analysis	Accreditation	Lower Bound	Upper Bound
WHO2005 TEQ	Y	0.302	0.814
Fish TEQ	Y	0.793	1.29
Birds TEQ	Y	0.121	0.996
I-TEQ	Y	0.335	0.784

333889 Dioxin Results

Sample Type : Soil
MSS Sample Ref : 333889
Customer Sample Ref : 1692631 SP01
Sample Condition : Conforming
Test Method : 2002a

Congener	LOD	Detected	Lower Bound	Upper Bound	Recovery	UKAS
Dioxins/Furans	ng/Kg	ng/Kg	ng/Kg TEQ	ng/Kg TEQ	%	
2378-TCDD	0.0774	< 0.0774	0.00000	0.0774	97	Y
12378-PeCDD	0.220	< 0.220	0.00000	0.220	128	Y
123478-HxCDD	0.266	1.49	0.149	0.149	82	Y
123678-HxCDD	0.287	< 0.287	0.00000	0.0287	80	Y
123789-HxCDD	0.284	< 0.284	0.00000	0.0284		Y
1234678-HpCDD	0.354	10.8	0.108	0.108	71	Y
OCDD	0.462	43.7	0.0131	0.0131	88	Y
Dioxins total		56.0	0.270	0.625		
2378-TCDF	0.246	< 0.246	0.00000	0.0246	65	Y
12378-PeCDF	0.208	< 0.208	0.00000	0.00625	101	Y
23478-PeCDF	0.219	< 0.219	0.00000	0.0657	88	Y
123478-HxCDF	0.151	< 0.151	0.00000	0.0151	68	Y
123678-HxCDF	0.142	< 0.142	0.00000	0.0142	68	Y
234678-HxCDF	0.140	< 0.140	0.00000	0.0140	68	Y
123789-HxCDF	0.151	< 0.151	0.00000	0.0151	67	Y
1234678-HpCDF	0.183	3.12	0.0312	0.0312	59	Y
1234789-HpCDF	0.192	< 0.192	0.00000	0.00192	72	Y
OCDF	0.150	2.54	0.00076	0.00076		Y
Furans total		5.66	0.0320	0.189		
Dioxin/Furan total		61.7	0.302	0.814		

333890 Dioxin Results Summary

Sample Type : Soil
MSS Sample Ref : 333890
Customer Sample Ref : 1692632 SP02
Sample Condition : Conforming
Test Method : 2002a

Dioxins/ Furans

Analysis	Accreditation	Lower Bound	Upper Bound
WHO2005 TEQ	Y	0.205	0.672
Fish TEQ	Y	0.565	1.02
Birds TEQ	Y	0.0789	0.773
I-TEQ	Y	0.229	0.600

333890 Dioxin Results

Sample Type : Soil
MSS Sample Ref : 333890
Customer Sample Ref : 1692632 SP02
Sample Condition : Conforming
Test Method : 2002a

Congener	LOD	Detected	Lower Bound	Upper Bound	Recovery	UKAS
Dioxins/Furans	ng/Kg	ng/Kg	ng/Kg TEQ	ng/Kg TEQ	%	
2378-TCDD	0.0789	< 0.0789	0.00000	0.0789	102	Y
12378-PeCDD	0.249	< 0.249	0.00000	0.249	119	Y
123478-HxCDD	0.185	1.08	0.108	0.108	72	Y
123678-HxCDD	0.193	< 0.193	0.00000	0.0193	74	Y
123789-HxCDD	0.191	< 0.191	0.00000	0.0191		Y
1234678-HpCDD	0.259	7.20	0.0720	0.0720	74	Y
OCDD	0.443	34.6	0.0104	0.0104	86	Y
Dioxins total		42.9	0.190	0.556		
2378-TCDF	0.161	< 0.161	0.00000	0.0161	74	Y
12378-PeCDF	0.161	< 0.161	0.00000	0.00482	87	Y
23478-PeCDF	0.126	< 0.126	0.00000	0.0379	97	Y
123478-HxCDF	0.105	< 0.105	0.00000	0.0105	68	Y
123678-HxCDF	0.107	< 0.107	0.00000	0.0107	63	Y
234678-HxCDF	0.105	< 0.105	0.00000	0.0105	64	Y
123789-HxCDF	0.103	< 0.103	0.00000	0.0103	70	Y
1234678-HpCDF	0.0682	1.42	0.0142	0.0142	58	Y
1234789-HpCDF	0.0735	< 0.0735	0.00000	0.00074	69	Y
OCDF	0.119	< 0.119	0.00000	0.00004		Y
Furans total		1.42	0.0142	0.116		
Dioxin/Furan total		44.3	0.205	0.672		

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Interim Report

Report No.:	23-28353-0
Initial Date of Issue:	
Re-Issue Details:	
Client	Soiltechnics Limited
Client Address:	1st Floor Unit 9 Westpoint Enterprise Park Clarence Avenue Trafford Park Manchester M17 1QS
Contact(s):	Admin
Project	STP3966D Rockingham Enterprise Area, Corby

Quotation No.:	Q23-32322	**Date Received:**	23-Aug-2023
Order No.:	POR016257	**Date Instructed:**	23-Aug-2023
No. of Samples:	2		
Turnaround (Wkdays):	7	**Results Due:**	01-Sep-2023
Date Approved:		**Subcon Results Due:**	14-Sep-2023
Approved By:			

Details:

Please note that the interim data available has passed our Quality Control Criteria but has not been verified by an approved signatory and may be subject to amendment on approval. Chemtest cannot therefore be held responsible for decisions made on interim data sets but only for the data submitted on a final report containing an approval date and signature.

Results - Soil

Project: STP3966D Rockingham Enterprise Area, Corby

Client: Soiltechnics Limited			**Chemtest Job No.:**		23-28353	23-28353
Quotation No.: Q23-32322			**Chemtest Sample ID.:**		1692631	1692632
Order No.: POR016257			Client Sample Ref.:		3	3
			Client Sample ID.:		SP01.3	SP02.3
			Sample Location:		SP01	SP02
			Sample Type:		SOIL	SOIL
			Top Depth (m):		0.00	0.00
			Date Sampled:		21-Aug-2023	21-Aug-2023
Determinand	**Accred.**	**SOP**	**Units**	**LOD**		
Moisture	N	2030	%	0.020	8.0	5.0
Alkali Reserve	N	2105	g NaOH eq	0.010	< 0.010	< 0.010
Dioxin (Subcon)	S		ng/kg	N/A	To Follow	To Follow
Furans (Subcon)	S		ng/kg	N/A	To Follow	To Follow
pH	M	2010		4.0	10.9	10.6
Chromium (Hexavalent)	N	2490	mg/kg	0.50	0.57	< 0.50

Results - 2 Stage WAC

Project: STP3966D Rockingham Enterprise Area, Corby

							Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	23-28353								
Chemtest Sample ID:	1692631								
Sample Ref:	3								
Sample ID:	SP01.3						**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Sample Location:	SP01								
Top Depth(m):	0.00								
Bottom Depth(m):									
Sampling Date:	21-Aug-2023								
Determinand	**SOP**	**Accred.**	**Units**						
Total Organic Carbon	2625	M	%			0.24	3	5	6
Loss On Ignition	2610	M	%			2.9	--	--	10
Total BTEX	2760	M	mg/kg			< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg			< 0.10	1	--	--
TPH Total WAC	2670	M	mg/kg			< 10	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg			< 2.0	100	--	--
pH	2010	M				10.9	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg			0.0080	--	To evaluate	To evaluate
Eluate Analysis			**2:1 mg/l**	**8:1 mg/l**	**2:1 mg/kg**	**Cumulative mg/kg 10:1**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0010	< 0.0002	0.0019	0.0010	0.5	2	25
Barium	1455	U	0.012	0.006	0.023	0.070	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	0.0040	< 0.0005	0.036	0.5	10	70
Copper	1455	U	0.0098	0.020	0.020	0.010	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.012	0.036	0.023	0.34	0.5	10	30
Nickel	1455	U	0.0021	< 0.0005	0.0041	0.0021	0.4	10	40
Lead	1455	U	< 0.0005	0.0032	< 0.0005	0.029	0.5	10	50
Antimony	1455	U	0.0023	0.047	0.0047	0.43	0.06	0.7	5
Selenium	1455	U	0.0020	0.0017	0.0039	0.017	0.1	0.5	7
Zinc	1455	U	< 0.003	0.031	< 0.003	0.28	4	50	200
Chloride	1220	U	1100	130	2300	2300	800	15000	25000
Fluoride	1220	U	0.24	< 0.050	< 1.0	< 1.0	10	150	500
Sulphate	1220	U	820	150	1600	2200	1000	20000	50000
Total Dissolved Solids	1020	N	4400	800	8700	12000	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	70	9.9	140	160	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	8.0

Leachate Test Information	
Leachant volume 1st extract/l	0.335
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.178

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: STP3966D Rockingham Enterprise Area, Corby

							Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	23-28353								
Chemtest Sample ID:	1692632								
Sample Ref:	3								
Sample ID:	SP02.3								
Sample Location:	SP02								
Top Depth(m):	0.00								
Bottom Depth(m):									
Sampling Date:	21-Aug-2023								
Determinand	**SOP**	**Accred.**	**Units**				**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	M	%			0.46	3	5	6
Loss On Ignition	2610	M	%			3.2	--	--	10
Total BTEX	2760	M	mg/kg			< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg			< 0.10	1	--	--
TPH Total WAC	2670	M	mg/kg			< 10	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg			< 2.0	100	--	--
pH	2010	M				10.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg			0.0040	--	To evaluate	To evaluate
Eluate Analysis			**2:1 mg/l**	**8:1 mg/l**	**2:1 mg/kg**	**Cumulative mg/kg 10:1**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0027	0.0003	0.0053	0.0049	0.5	2	25
Barium	1455	U	0.005	< 0.005	0.011	0.0033	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.018	0.0088	0.037	0.012	2	50	100
Mercury	1455	U	0.00021	< 0.00005	0.00041	0.00013	0.01	0.2	2
Molybdenum	1455	U	0.21	0.020	0.42	0.32	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	0.040	0.028	0.080	0.29	0.06	0.7	5
Selenium	1455	U	0.017	0.0017	0.034	0.027	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	< 0.003	< 0.003	4	50	200
Chloride	1220	U	960	46	1900	1000	800	15000	25000
Fluoride	1220	U	0.14	< 0.050	< 1.0	< 1.0	10	150	500
Sulphate	1220	U	800	92	1600	1400	1000	20000	50000
Total Dissolved Solids	1020	N	4100	1700	8200	19000	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	54	4.2	110	74	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	5.0

Leachate Test Information	
Leachant volume 1st extract/l	0.341
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.110

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Test Methods

SOP	Title	Parameters included	Method summary
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2105	Alkali Reserve	Alkali Reserve	Titration
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge
650	Characterisation of Waste (Leaching WAC)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key

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

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

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

Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Amended Report

Report No.:	23-28353-4		
Initial Date of Issue:	19-Sep-2023	**Date of Re-Issue:**	19-Sep-2023
Re-Issue Details:	This report has been revised and directly supersedes 23-28353-3 in its entirety		
Client	Soiltechnics Limited		
Client Address:	1st Floor Unit 9 Westpoint Enterprise Park Clarence Avenue Trafford Park Manchester M17 1QS		
Contact(s):	Admin		
Project	STP3966D Rockingham Enterprise Area, Corby		
Quotation No.:	Q23-32322	**Date Received:**	23-Aug-2023
Order No.:	POR016257	**Date Instructed:**	23-Aug-2023
No. of Samples:	2		
Turnaround (Wkdays):	7	**Results Due:**	01-Sep-2023
Date Approved:	19-Sep-2023	**Subcon Results Due:**	14-Sep-2023

Approved By:

Details: Stuart Henderson, Technical Manager

Results - Soil

Project: STP3966D Rockingham Enterprise Area, Corby

Client: Soiltechnics Limited			**Chemtest Job No.:**		23-28353	23-28353
Quotation No.: Q23-32322			**Chemtest Sample ID.:**		1692631	1692632
Order No.: POR016257			Client Sample Ref.:		3	3
			Client Sample ID.:		SP01.3	SP02.3
			Sample Location:		SP01	SP02
			Sample Type:		SOIL	SOIL
			Top Depth (m):		0.00	0.00
			Date Sampled:		21-Aug-2023	21-Aug-2023
Determinand	**Accred.**	**SOP**	**Units**	**LOD**		
Moisture	N	2030	%	0.020	8.0	5.0
Alkali Reserve	N	2105	g NaOH eq	0.010	< 0.010	< 0.010
Dioxin (Subcon)	S		ng/kg	N/A	See Attached	See Attached
Furans (Subcon)	S		ng/kg	N/A	See Attached	See Attached
pH	M	2010		4.0	10.9	10.6
Chromium (Hexavalent)	N	2490	mg/kg	0.50	0.57	< 0.50

Results - 2 Stage WAC

Project: STP3966D Rockingham Enterprise Area, Corby

							Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	23-28353								
Chemtest Sample ID:	1692631								
Sample Ref:	3								
Sample ID:	SP01.3						**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Sample Location:	SP01								
Top Depth(m):	0.00								
Bottom Depth(m):									
Sampling Date:	21-Aug-2023								
Determinand	**SOP**	**Accred.**	**Units**						
Total Organic Carbon	2625	M	%			0.24	3	5	6
Loss On Ignition	2610	M	%			2.9	--	--	10
Total BTEX	2760	M	mg/kg			< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg			< 0.10	1	--	--
TPH Total WAC	2670	M	mg/kg			< 10	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg			< 2.0	100	--	--
pH	2010	M				10.9	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg			0.0080	--	To evaluate	To evaluate
Eluate Analysis			**2:1 mg/l**	**8:1 mg/l**	**2:1 mg/kg**	**Cumulative mg/kg 10:1**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0010	< 0.0002	0.0019	0.0010	0.5	2	25
Barium	1455	U	0.012	0.006	0.023	0.070	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	0.0040	< 0.0005	0.036	0.5	10	70
Copper	1455	U	0.0098	0.020	0.020	0.010	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.012	0.036	0.023	0.34	0.5	10	30
Nickel	1455	U	0.0021	< 0.0005	0.0041	0.0021	0.4	10	40
Lead	1455	U	< 0.0005	0.0032	< 0.0005	0.029	0.5	10	50
Antimony	1455	U	0.0023	0.047	0.0047	0.43	0.06	0.7	5
Selenium	1455	U	0.0020	0.0017	0.0039	0.017	0.1	0.5	7
Zinc	1455	U	< 0.003	0.031	< 0.003	0.28	4	50	200
Chloride	1220	U	1100	130	2300	2300	800	15000	25000
Fluoride	1220	U	0.24	< 0.050	< 1.0	< 1.0	10	150	500
Sulphate	1220	U	820	150	1600	2200	1000	20000	50000
Total Dissolved Solids	1020	N	4400	800	8700	12000	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	70	9.9	140	160	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	8.0

Leachate Test Information	
Leachant volume 1st extract/l	0.335
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.178

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: STP3966D Rockingham Enterprise Area, Corby

							Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	23-28353								
Chemtest Sample ID:	1692632								
Sample Ref:	3								
Sample ID:	SP02.3								
Sample Location:	SP02								
Top Depth(m):	0.00								
Bottom Depth(m):									
Sampling Date:	21-Aug-2023								
Determinand	**SOP**	**Accred.**	**Units**				**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	M	%			0.46	3	5	6
Loss On Ignition	2610	M	%			3.2	--	--	10
Total BTEX	2760	M	mg/kg			< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg			< 0.10	1	--	--
TPH Total WAC	2670	M	mg/kg			< 10	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg			< 2.0	100	--	--
pH	2010	M				10.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg			0.0040	--	To evaluate	To evaluate
Eluate Analysis			**2:1 mg/l**	**8:1 mg/l**	**2:1 mg/kg**	**Cumulative mg/kg 10:1**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0027	0.0003	0.0053	0.0049	0.5	2	25
Barium	1455	U	0.005	< 0.005	0.011	0.0033	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.018	0.0088	0.037	0.012	2	50	100
Mercury	1455	U	0.00021	< 0.00005	0.00041	0.00013	0.01	0.2	2
Molybdenum	1455	U	0.21	0.020	0.42	0.32	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	0.040	0.028	0.080	0.29	0.06	0.7	5
Selenium	1455	U	0.017	0.0017	0.034	0.027	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	< 0.003	< 0.003	4	50	200
Chloride	1220	U	960	46	1900	1000	800	15000	25000
Fluoride	1220	U	0.14	< 0.050	< 1.0	< 1.0	10	150	500
Sulphate	1220	U	800	92	1600	1400	1000	20000	50000
Total Dissolved Solids	1020	N	4100	1700	8200	19000	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	54	4.2	110	74	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	5.0

Leachate Test Information	
Leachant volume 1st extract/l	0.341
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.110

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Test Methods

SOP	Title	Parameters included	Method summary
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2105	Alkali Reserve	Alkali Reserve	Titration
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge
650	Characterisation of Waste (Leaching WAC)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
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I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

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

DRAWINGS

Rockingham Enterprise Area, Corby
STP3996D

soiltechnics
environmental • geotechnical • building fabric

Potential for future development

Potential for future development

A

Ch 0m

B

Ch 0m

FFL 114
3000m²

FFL 113
3000m²

FFL 115
4000m²

Final phase
(potential retail/commercial use)

Final phase
(potential retail/commercial use)

Ecological offsetting

FFL 114.5
2000m²

FFL 112
2000m²

FFL 115
2000m²

FFL 109
2000m²

FFL 110
1500m²

FFL 110
3000m²

Dry Attenuation Basin No. 2

Potential land parcel for future development

FFL 110
4000m²

FFL 110.5
2000m²

FFL 111
4000m²

Retained Open Mosaic Habitat

FFL 109
4000m²

Access from Phoenix Parkway

Retained ecological habitat

Access from Steel Road

Dry Attenuation Basin No. 1

Potential land parcel for future development

A

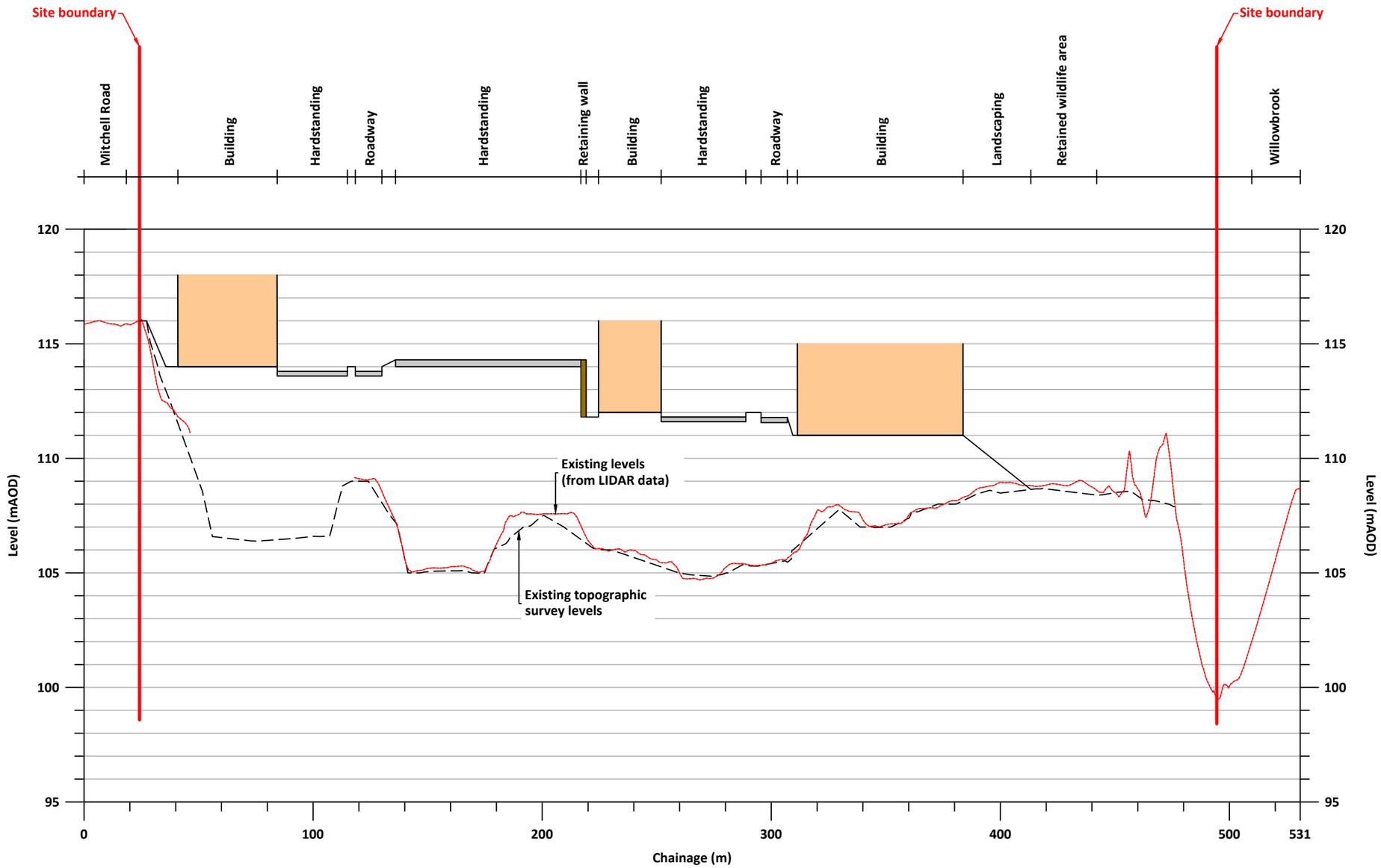
B

Title	Scale	Drawing number
Plan showing potential development schematic and section locations	1:1500 at A1	03

Report Ref: STP3996D-G01
Revision: 01

September 2020

soiltechnics
environmental • geotechnical • building fabric



Notes

1. Section location indicated on Drawing 03
2. LIDAR data has been obtained from https://data.gov.uk/ (LIDAR Composite DSM - 25cm) licensed under the Open Government Licence v.3.0

Title	Scale	Drawing number
Section A-A indicating existing and potential proposed site levels	1:2000 at A3 (horizontal) 1:200 at A3 (vertical)	04a

soiltechnics
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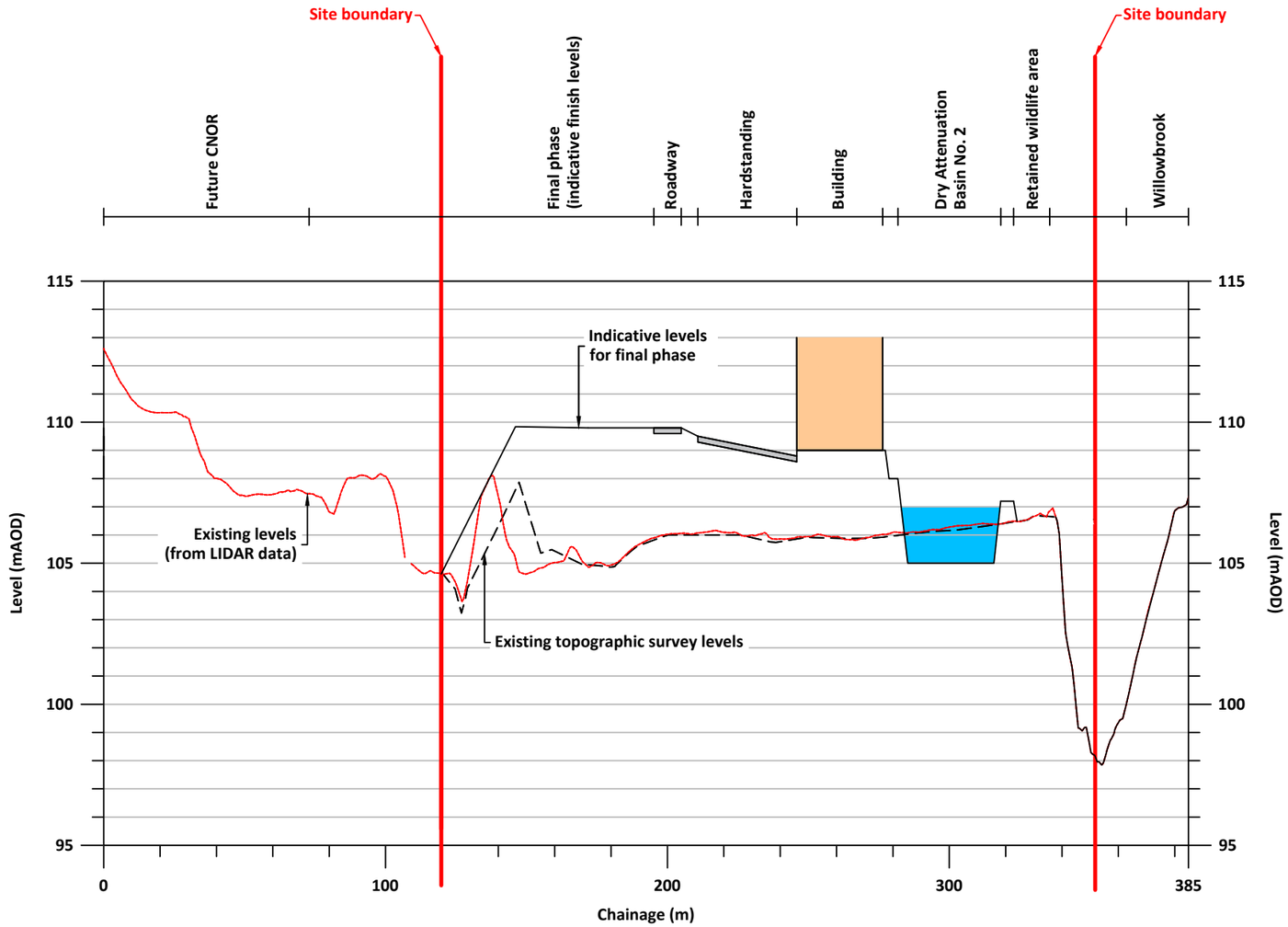
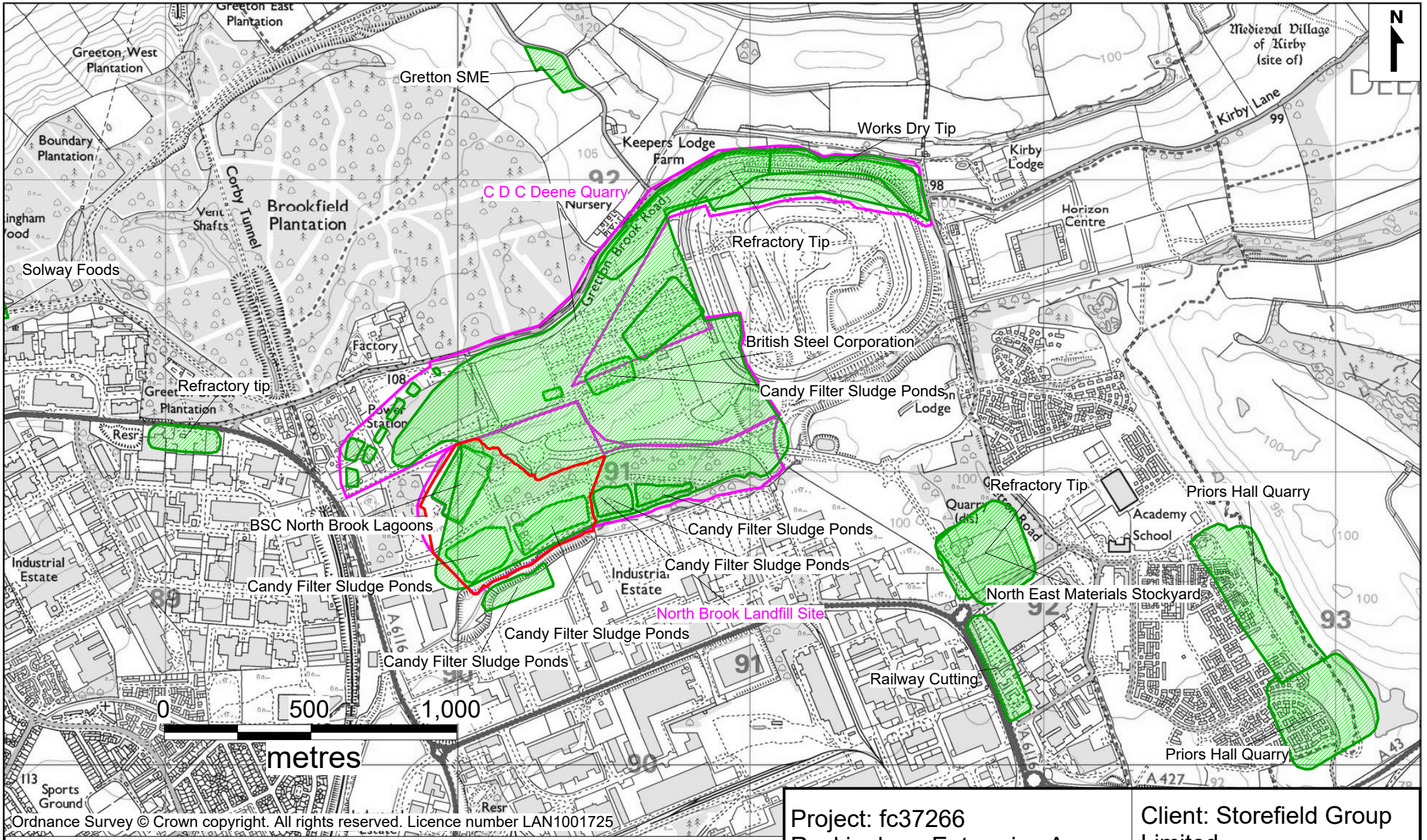


Notes

1. Section location indicated on Drawing 03
2. LIDAR data has been obtained from https://data.gov.uk/ (LIDAR Composite DSM - 25cm) licensed under the Open Government Licence v.3.0

Title	Scale	Drawing number
Section B-B indicating existing and potential proposed site levels	1:2000 at A3 (horizontal) 1:200 at A3 (vertical)	04b



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Site

Historic landfill

Currently permitted (but closed) landfill site

Project: fc37266
Rockingham Enterprise Area

Client: Storefield Group Limited

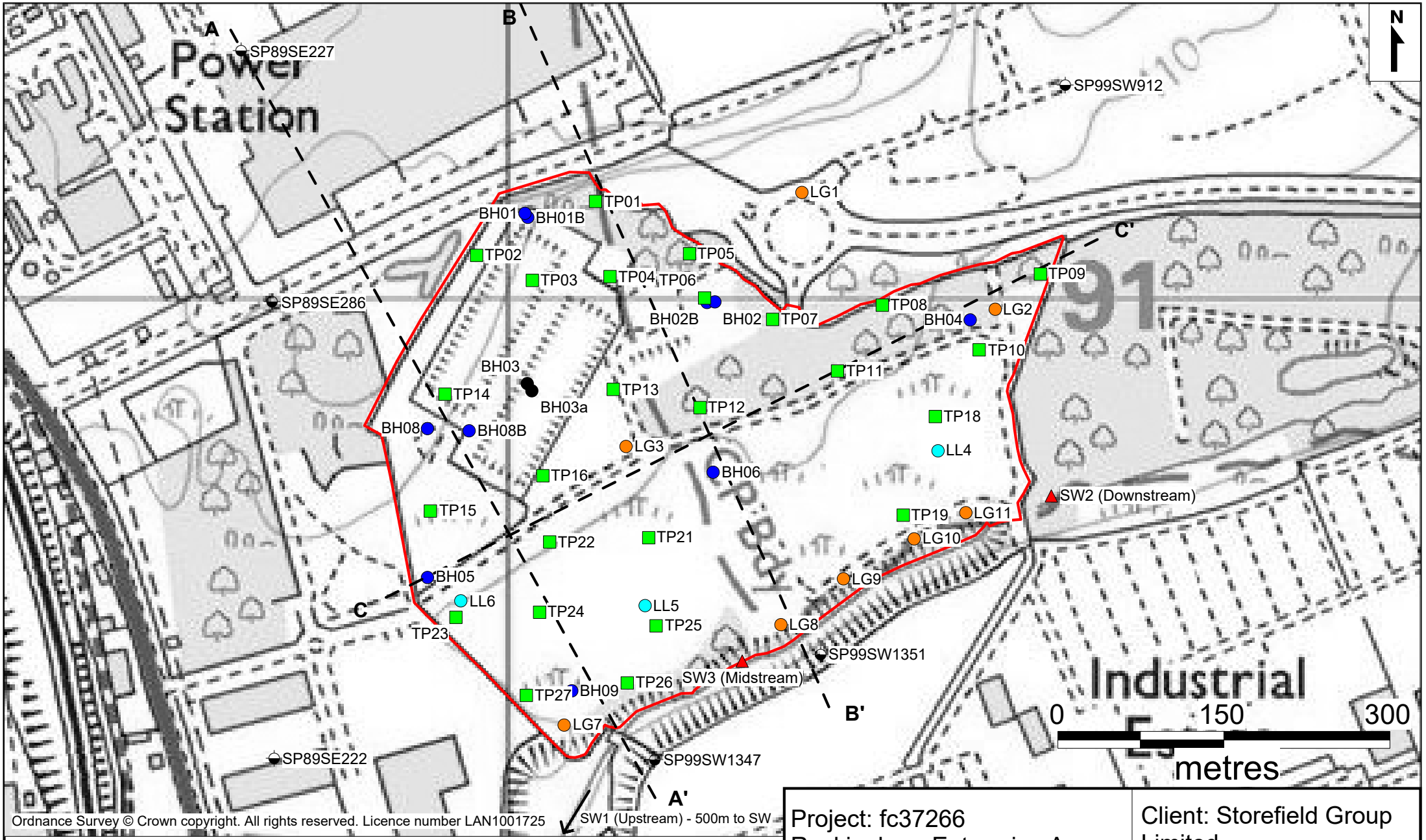
firth consultants
environmental risk assessment
Polygon Yard, 39a Islington Rd
Bristol BS3 1QB
Tel: 0117 379 0022
www.firthconsultants.co.uk

Figure 2

Scale: as shown

Date: 08/06/23

Historic landfills in vicinity of site



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- Borehole on BGS database
- Historic gas monitoring well
- Historic leachate monitoring well
- Soiltechnics trial pit
- Soiltechnics borehole
- Soiltechnics monitoring well
- Site
- Location of cross-section
- Surface water monitoring location

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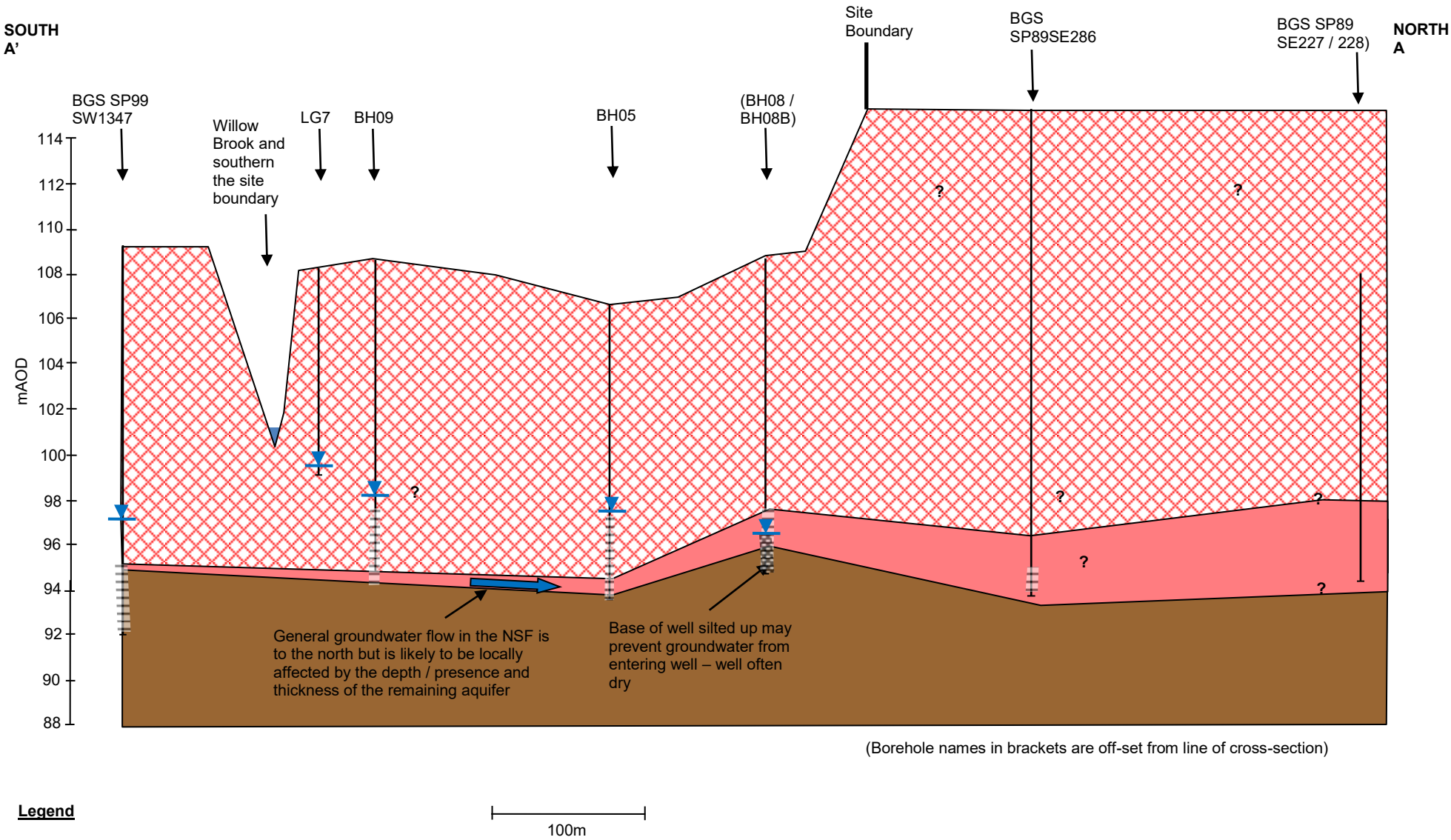
Figure 3

Scale: as shown

Date: 08/06/23

Site investigation locations



(Borehole names in brackets are off-set from line of cross-section)

Legend

- Made Ground / Infilled Waste
- Northampton Sand Formation (NSF)
- Whitby Mudstone Formation
- Groundwater Level

100m

Project: fc37266 Corby	Client: Storefield Group Limited
Figure 4	South-North (west) Schematic Geological Cross Section (A - A')
Scale: see key	
Date: 08/06/23	

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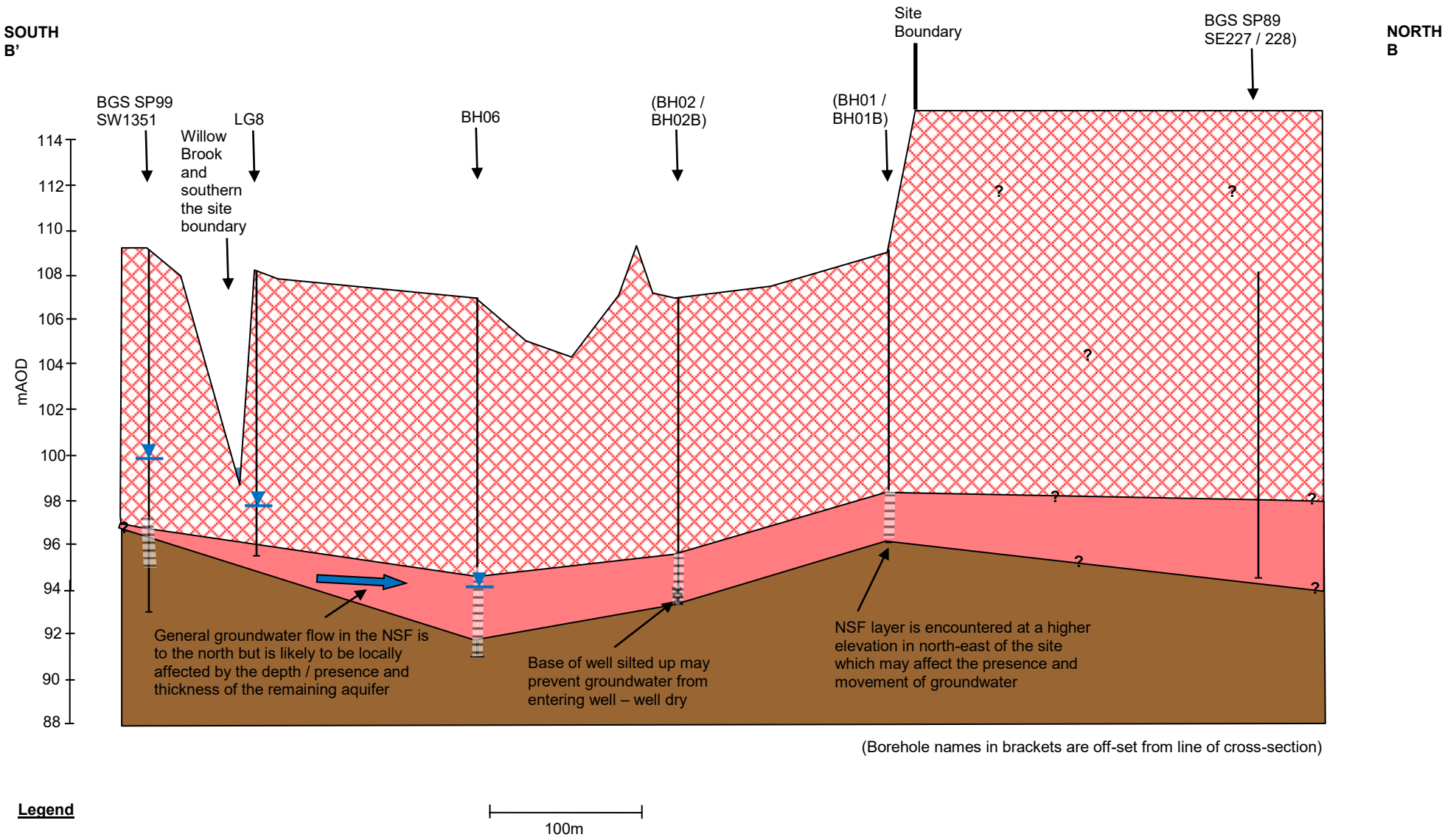

Project: fc37266 Corby	Client: Storefield Group Limited
Figure 5 Scale: see key Date: 08/06/23	South-North (east) Schematic Geological Cross Section (B- B')

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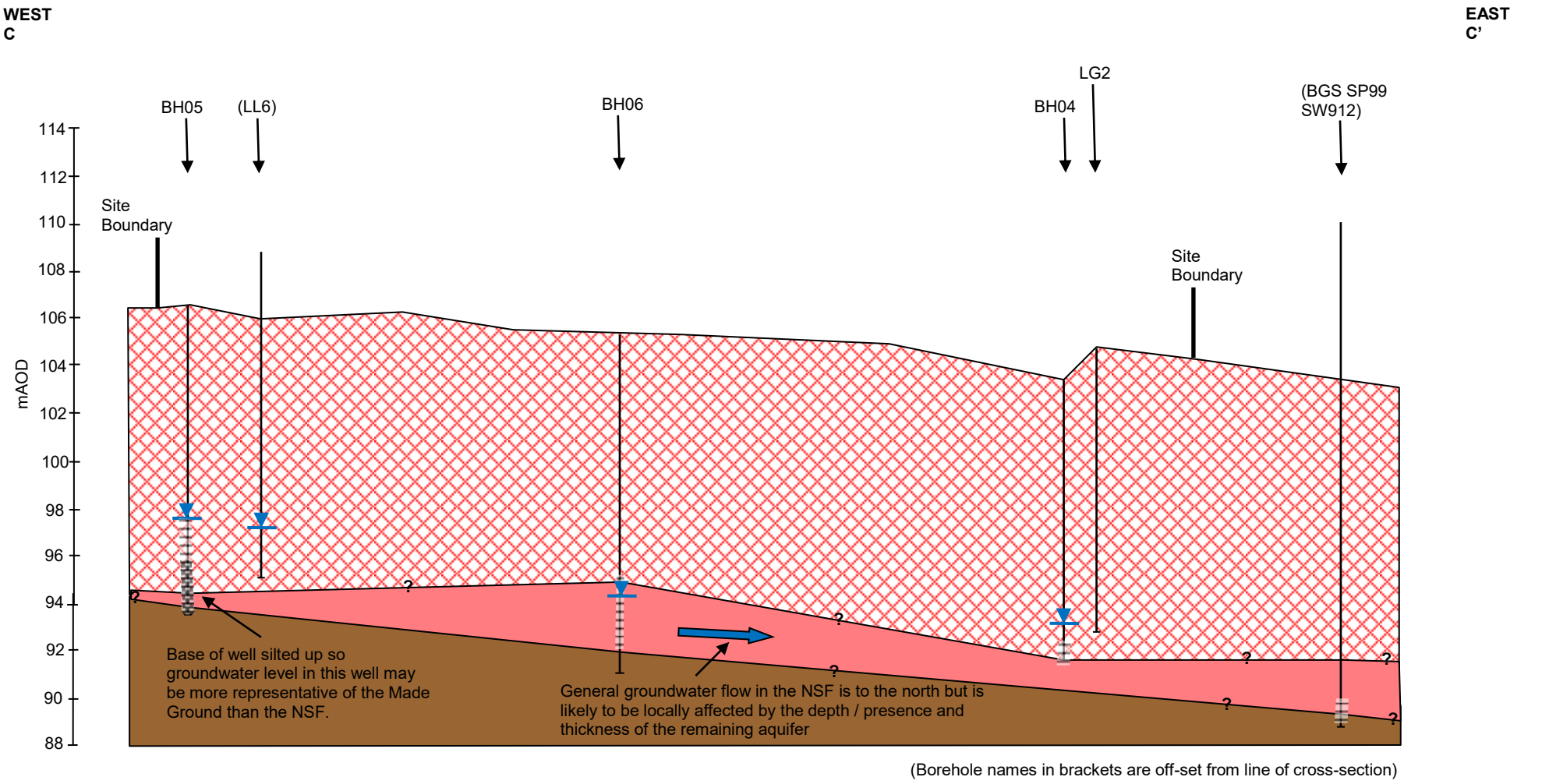

Project: fc37266 Corby	Client: Storefield Group Limited
Figure 6	West - East Schematic Geological Cross Section (C- C')
Scale: see key	
Date: 20/04/23	

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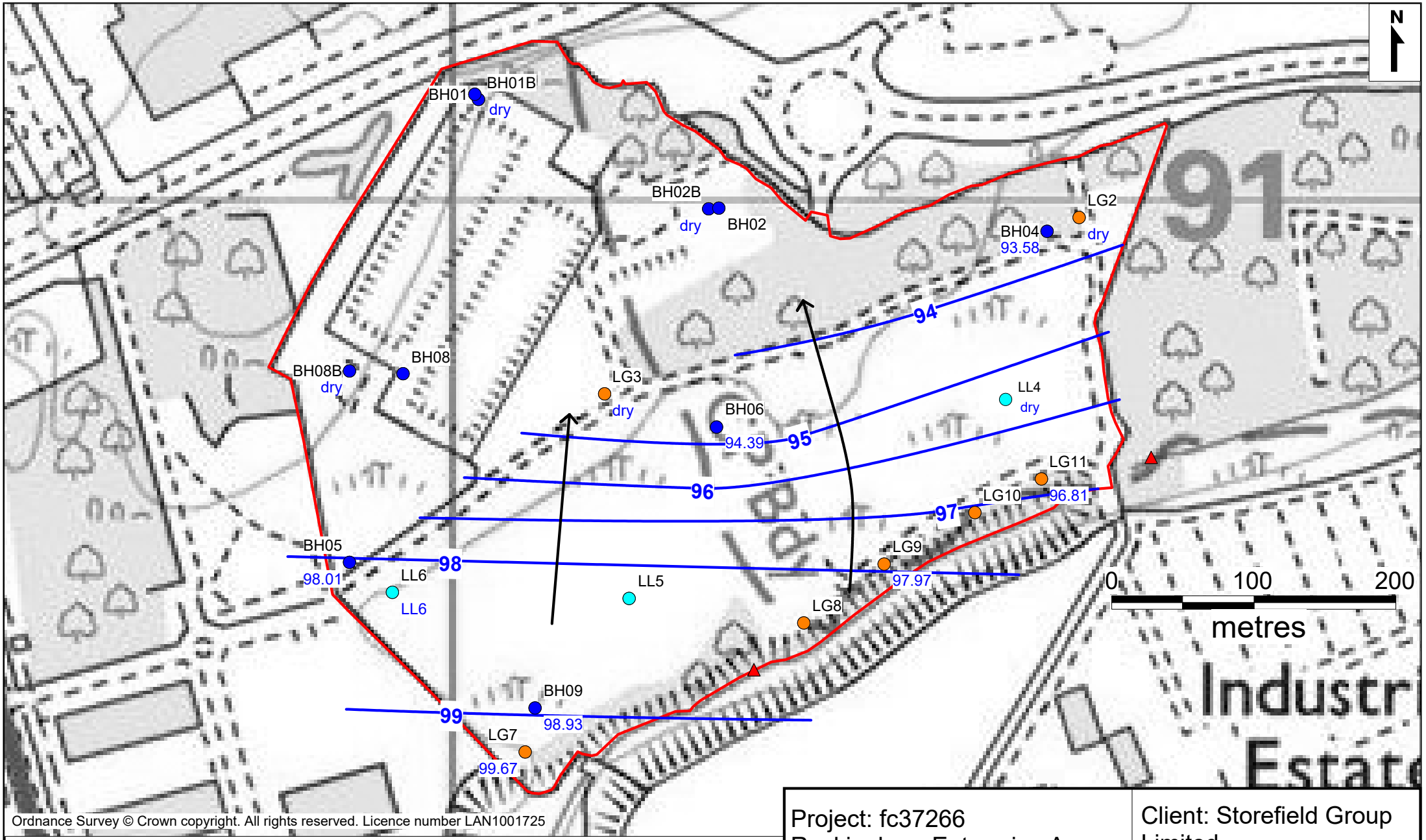

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Site
Historic gas monitoring well
Historic leachate monitoring well
Soiltechnics monitoring well
98.93 Groundwater level on 30/3/23 (mAOD)
Piezometric contour
Surface water monitoring location
Direction of groundwater flow

Project: fc37266
Rockingham Enterprise Area

Client: Storefield Group Limited

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Figure 7

Scale: as shown

Date: 08/06/23

Groundwater piezometry

Land off Napier Road
Corby

soiltechnics
environmental ▪ geotechnical ▪ building fabric

N

Existing -v- Proposed

Minimum Elevation	Maximum Elevation	Band Area (m²)	True Area (m²)	Volume (m³)	Volume / True Area
-4.5	-4	0.18	*0.18*	0.00	*0.00*
-4	-3.5	302.42	*302.60*	44.77	*0.15*
-3.5	-3	358.55	*661.15*	243.47	*0.37*
-3	-2.5	405.78	*1066.93*	429.29	*0.40*
-2.5	-2	465.03	*1531.96*	645.89	*0.42*
-2	-1.5	476.91	*2008.87*	880.21	*0.44*
-1.5	-1	1666.54	*3675.41*	1304.55	*0.35*
-1	-0.5	1459.64	*5135.05*	2155.54	*0.42*
-0.5	0	4402.97	*9538.02*	3522.90	*0.37*
0	0.5	8090.68	*157437.49*	76774.36	*0.49*
0.5	1	7601.04	*149346.81*	72536.21	*0.49*
1	1.5	3661.60	*141745.77*	69895.45	*0.49*
1.5	2	4871.97	*138084.17*	67979.01	*0.49*
2	2.5	8114.67	*133212.20*	64639.30	*0.49*
2.5	3	11048.01	*125097.53*	60078.50	*0.48*
3	3.5	17981.26	*114049.52*	52392.09	*0.46*
3.5	4	13715.08	*96068.26*	44333.95	*0.46*
4	4.5	9511.78	*82353.18*	38597.53	*0.47*
4.5	5	9948.67	*73041.40*	34210.63	*0.47*
5	5.5	11925.66	*63092.73*	28599.09	*0.45*
5.5	6	11880.86	*51167.07*	22366.07	*0.44*
6	6.5	8850.12	*39286.21*	17187.79	*0.44*
6.5	7	6317.19	*30436.09*	13603.93	*0.45*
7	7.5	6165.85	*24118.90*	10551.03	*0.44*
7.5	8	3588.29	*17953.05*	8022.05	*0.45*
8	8.5	5404.18	*14364.76*	6045.17	*0.42*
8.5	9	3271.89	*8960.58*	3460.79	*0.39*
9	9.5	2721.27	*5688.69*	2090.69	*0.37*
9.5	10	689.30	*2967.42*	1291.16	*0.44*
10	10.5	2045.45	*2278.12*	776.57	*0.34*
10.5	11	232.67	*232.67*	17.01	*0.07*
				Total area:	***166975.51***
				Total CUT volume (m³):	***9226.62***
				Total FILL volume (m³):	***695448.38***
				Total VOLUME (m³):	***686221.76***

Title

Volume comparison of existing topo to proposed development for overall site

Scale

1:2500 at A3

Drawing number

SK103

Revision: 0

September 2020

DO NOT SCALE FROM THIS DRAWING

REFERENCE

- APPLICATION BOUNDARY
- PHASE 1 - Through roads, southern area including attenuation basins
- PHASE 2 - Northern Area
- Proposed Retaining Wall

Potential for future development

Potential for future development

FFL 114
3000m²

FFL 113
3000m²

FFL 115
4000m²

PHASE 2

FFL 114.5
2000m²

FFL 112
2000m²

FFL 115
2000m²

Final phase
(potential retail/commercial use)

Final phase
(potential retail/commercial use)

Ecological offsetting

Potential land parcel for future development

FFL 110
1500m²

FFL 109
2000m²

FFL 110
3000m²

PHASE 1

Dry Attenuation Basin No. 2

FFL 110
4000m²

FFL 110.5
2000m²

FFL 111
4000m²

Retained Open Mosaic Habitat

FFL 109
4000m²

Access from Phoenix Parkway

Retained ecological habitat

Potential access route

Dry Attenuation Basin No. 1

Potential land parcel for future development

Commercial use units

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REVISION	DETAILS	DATE	DRAWN	CHK'D	APP'D
B	Development Plan Updated	28/09/20	CT		

CLIENT
Storefield Group Limited

PROJECT
Land off Phoenix Parkway
Corby

PRELIMINARY

DRAWING TITLE
Phasing Plan - Built Development

DRG No.	REV
GM10604-008	B

DRG SIZE	SCALE	DATE
A1	1:1250	25/09/19

DRAWN BY	CHECKED BY	APPROVED BY
SG	AJM	AJM

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