GEO-ENVIRONMENTAL ASSESSMENT REPORT
BILLET ROAD - PARCEL B
ROMFORD
BELLWAY HOMES LTD
GEA-21912S-20-255
FEBRUARY 2022

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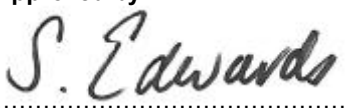

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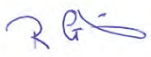

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Rob Glavin

Document Revisions

Rev	Date	Author	Approved	Issued	Remarks
0	26/06/20	CJM	SJE	RJG	-
A	07/07/20	CJM	SJE	RJG	Updated with geotechnical laboratory results
B	17/02/22	CJM	SJE	RJG	Parcels Renamed

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EXECUTIVE SUMMARY

A Geo-Environmental Assessment was requested by Bellway Homes Ltd. The purpose of the assessment is for due diligence to identify any contaminative or geotechnical issues associated with former land use at *Billet Road - Parcel B, Romford* which might impact on the site purchase and redevelopment.

SITE DETAILS	
Approximate site area	8 ha
Current use / historic use	The site is currently disused, but a historic landfill is present on site.
Proposed use	Residential redevelopment.

PHASE 1 NON-INTRUSIVE INVESTIGATION	
Expected geology	Made ground / Boyn Hill Gravel / London Clay Formation
Groundwater	The Boyn Hill Gravel is a Secondary 'A' Aquifer. There are records of two abstraction within 1 km. The site is not with a groundwater SPZ.
Surface water	There are no significant surface water features in the vicinity.

PHASE 2 EXPLORATORY INVESTIGATION	
Ground Conditions	Ground conditions comprised made ground/landfill fill underlain by the Boyn Hill Gravel. The underlying solid geology is London Clay.
Contamination	Localised contamination in relation to lead and PAH and more widespread asbestos contamination. The source of contamination is predominantly within the landfill area. Hydrocarbon o contamination of groundwater recorded in association with staining and odours in the smear zone.
Geotechnical issues	Variable thickness of made ground across majority of the site due to landfilling. Concrete obstructions encountered locally within the shallow made ground.

RECOMMENDATIONS	
Geotechnical	Traditional strip/trench footings feasible in shallow natural soils present around the northern, eastern and southern site boundaries. Ground improvement or piles will be required in the area of landfill. Consideration should be given to treating the landfill, possibly using rapid impact compaction techniques. Buried concrete classes DS-2 and AC-3z will apply to new foundation concrete, whilst a CBR value of < 2 % should be assumed for preliminary design of roads and hardstanding.

Remediation	*i.* Clean capping in areas of private gardens and public soft landscaping; *ii.* Upgraded/ protected water supply services; *iii.* Gas protection to all structures, details subject to the results of a longer period of gas monitoring period; and *iv.* Groundwater / source zone remediation subject to a Detailed Qualitative Risk Assessment.
Waste classification	An allowance should be made for approximately 10% of arisings to be hazardous category. All other non-natural arisings are assumed to be non-inert hon-hazardous category
Re-use of site-won materials	It is unlikely that general arisings will be suitable for reuse on the site, but if such material is identified it should be re-used only in accordance with a Material Management Plan prepared under the CL:Aire Code of Practice

SECTION 1 INTRODUCTION

1.1 Bellway Homes Ltd (Bellway) proposes to purchase and develop an area of land located at Billet Road, Romford (Parcel B), for residential development purposes. The proposed development comprises low-rise residential dwellings with private gardens and associated infrastructure. The development also includes areas of public open space as detailed on the PRP proposed site layout plan, ref. AA8832-SK001 Rev C, dated February 2020 (presented in Appendix 1). IDOM Merebrook Limited (IDOM) has been commissioned by Bellway to undertake preliminary site investigation works for due diligence purposes, to advise on the geo-environmental implications of the purchase and redevelopment of the site for the proposed end use.

1.2 The objectives of the investigation are to:

i. Assess surface and sub-surface ground conditions present at the site;

ii. Identify hazards associated with ground contamination which may place constraints on the site and the proposed development;

iii. Evaluate the risks associated with any identified hazards;

iv. Provide preliminary recommendations for the mitigation of any significant risks identified; and

v. Provide preliminary geotechnical recommendations.

1.3 A Phase 1 (Non-intrusive Investigation) and a Phase 2a (Preliminary Exploratory Investigation) have been undertaken for the subject site.

1.4 This report presents the findings of the geo-environmental investigation and provides an interpretation of the geo-environmental conditions that exist at the site. The contaminative status of the site and the implications with respect to development have been interpreted in accordance with the current government guidance on source-pathway-receptor risk assessment. This report uses a Tier 1 risk assessment to ascribe a conservative qualitative appraisal of the hazards associated with the site.

1.5 This report has been prepared for Bellway for the sole purpose described above and no extended duty of care to any third party is implied or offered. Third parties making reference to the report should consult Bellway and IDOM as to the extent to which the findings may be appropriate for their use.

SECTION 2 PHASE 1 (NON-INTRUSIVE INVESTIGATION)

2.1 INTRODUCTION

2.1.1 The non-intrusive investigation has been conducted with reference to the documents and sources detailed in Table 1 below:

Table 1: Published Data and Information Sources

SOURCE DATA	GROUNDSURE DATA
BGS 1:50,000 Series Geological Sheet 257: Romford	Ordnance Survey (OS) historical maps scaled at 1:10,560, 1:10,000, 1:2,500 and 1:1,250 dated 1864 - 2020
BGS Geology of Britain 1:50,000 online maps	Water abstraction, discharge and pollution data
Radon: guidance on protection measures for new dwellings	Registered waste management sites
Environment Agency (EA) online data maps	Mining records and natural ground stability data
UK National Air Quality Archive, online	Protected areas of environmentally sensitive land use or conservation
Planning Records	Other relevant designations and/or authorisations and Trade Directory entries

2.1.2 The above sources are all authoritative and it is believed that they are reasonably reliable. However, independent verification of the information supplied has not necessarily been carried out and IDOM cannot be held liable for inaccuracies or deficiencies in the information.

2.2 SITE LOCATION AND SETTING

2.2.1 The site is located to the south of Billet Road, Little Heath, RM6 5SX, approximately 4 km west of the centre of Romford.

2.2.2 The site occupies an area of approximately eight hectares located at National Grid Reference 547317, 189499. The site boundary is indicated on drawing ref. 21912s-304-002, presented in Appendix 1 of this report.

2.2.3 The site is irregular in shape and is partly bounded to the north by Billet Road, beyond which is open farmland associated with Red House Farm. Immediately to the northwest is an industrial and commercial mixed-use area. This area is occupied by a workshop, a scaffolding company, a car maintenance and storage company, a hydrotherapy business, a kennel and cattery, and a residential property.

2.2.4 Hydrocarbon staining and the presence of scrap metal were noted on the surface near to the car maintenance company.

2.2.5 To the east, the site is bounded by residential properties and to the west the site is bounded by a sports ground and open grassland. Immediately to the south, land is occupied by open grassland, beyond which is the A12.

2.2.6 The site is currently disused and stands as open grassland. Evidence of waste comprising concrete, brick, metal and plastic was noted to be sporadic across the site, but more concentrated immediately to the south of the industrial/commercial area within the northwest of the site. A hoarding was present along the boundary with Billet Road which continued around the perimeter of the industrial/commercial area. A bund had been mounded against this hoarding, and areas where the bund material had been scraped in the northwest of the site, exposed fragments of potential asbestos-containing cement sheet material (ACM).

2.2.7 The topography was generally level across the site.

2.2.8 Potential contamination on site is associated with the evidence of waste material across the surface and worked ground in relation to the bund. There are also potential off-site sources of contamination associated with the nearby industrial business to the northwest, specifically related to the car maintenance and storage company. Evidence of ACM were noted during the site reconnaissance.

2.3 SITE HISTORY

2.3.1 The site history, based on a review of the historic and current maps, dating from 1871 to 2020 is summarised below. Potentially contaminative land uses are shown in **bold**. Copies of key maps used in this review are provided in Appendix 2.

Table 2: Summary of the key features shown on historic maps

DATA SOURCE	SITE / SURROUNDINGS
1871 (1:10,560 scale).	The site was occupied by open farmland. Footpaths with adjacent drainage ditches were present in the south and west portions of the site.
	Hainault House was present immediately off site, to the northwest. Surrounding land was predominantly open farmland with occasional associated farm buildings.
1894 to 1895 (1:10,560 scale).	A small building was present on site in the southwest.
	A '**Smithy**' (Blacksmith) was present approximately 350 m off site to the east.
1921 (1:10,560 scale).	No significant changes to the previous map edition on the site.
	The '**Smithy**' was no longer labelled. **'Isolation Hospital'** and an **asylum** were present 750 m and 850 m to the southwest, respectively.
1938 (1:10,560 scale).	No significant changes to the previous map edition on the site.
	A small amount of residential development had occurred along Billet Road, within 100 m to the west of the site.
1939	No significant changes to the previous map edition on the site.

DATA SOURCE	SITE / SURROUNDINGS
(1:10,560 scale).	Sports facilities, including tennis courts and a bowling green had been constructed immediately off site to the east.
1962 to 1963 (1:1,250 scale).	The drainage ditch in the south of the site was no longer labelled and had possibly been **infilled**. The small building in the southwest had been demolished.
	Residential development had occurred within 100 m off site to the east. The Isolation Hospital and asylum were referred to as "Chadwell Heath Hospital" and "Goodmayes Hospital," respectively.
1968 to 1969 (1:10,560 scale).	No significant changes to the previous map edition on site.
	Mass residential development had occurred in surrounding land within 500 m to the east and south of the site.
1977 to 1981 (1:10,560 scale).	Footpaths and drainage ditches were no longer labelled on the site which may have been **infilled**.
	No significant changes to the previous map edition in surrounding land.
1992 to 2020 (1:10,560 scale).	The site remained clear vacant space during this period.
	The **industrial/commercial land** immediately off site to the northwest experienced gradual development during this period

2.3.2 In summary, according to the historic plans the site has remained largely undeveloped. Minor changes such as the removal of a small building in the southwest and the possible infilling of drainage ditches are the main features highlighted from this resource.

2.3.3 The surrounding land has predominantly experienced gradual residential development. The industrial/commercial land immediately to the northwest appeared to have been constructed within the 1990s and has seen gradual development.

2.3.4 The nearby industrial land to the northwest may have potentially significant off-site contaminative land uses.

2.3.5 Given the nature of the historical mapping process (scale, representation of conditions at discrete time intervals frequency *etc*.), any such maps and plans may not provide a comprehensive account of a site's history. Identification of pertinent land uses and associated potentially contaminative activities, may therefore be absent from mapping records.

2.4 GEOLOGY

2.4.1 The published geological map indicates the presence of superficial drift deposits of the Boyn Hill Gravel Member comprising sand and gravel with possible lenses of silt, clay or peat. This stratum is typically poorly sorted and predominantly composed of flints with some quartz.

2.4.2 The underlying bedrock geology comprises the London Clay Formation which consists of a blue and grey clay with occasional silt and sand.

2.4.3 The published geological map does also indicate made ground to be present across the majority of the site, associated with landfilling. This feature was not highlighted on the historical maps, other than being the probable reason why the drainage ditches and footpaths were no longer labelled after 1977.

2.4.4 There are two relevant historic logs:

i. TQ48NE32 (approximately 75 m east within residential land): This location consisted of four trial pits. The trial pits encountered topsoil and made ground to depths ranging from of 0.3 and 0.6 meters below ground level (m bgl). The Boyn Hill Gravel Member was underlain and comprised dense brown sand and gravel to depths of between 2.4 m and 3.6 m bgl. The London Clay Formation (Stiff blue and grey clay or stiff blue clay) was encountered at depths of 2.4 m bgl.

ii. TQ48NE118 (70 m south): Topsoil was encountered to a depth of 0.3 m bgl, underlain by silty clay (to 2.9 m bgl), dense gravel with some sand (to 3.2 m bgl) and firm grey and brown mottled gravelly clay (to 4.0 m bgl). The London Clay Formation was not encountered at this position.

2.4.5 No historic boreholes had been undertaken within the landfilled area therefore the thickness of fill is unknown.

2.4.6 The Groundsure Report indicates the presence an historic landfill on site, known as 'Hainault House Farm'. According to the report, operator waste licence records demonstrate waste was accepted from 1970 to 1973, however, the type of waste accepted is unspecified.

2.5 HYDROGEOLOGY

2.5.1 The Environment Agency (EA) classify the superficial Boyn Hill Gravel Member as a Secondary 'A' Aquifer. The London Clay Formation is classified as an unproductive stratum.

2.5.2 The site does not lie within a groundwater Source Protection Zone.

2.5.3 There are two relevant groundwater abstraction records within one kilometre of the site:

i. Goodmayes Hospital (935 – 994 m to the southwest) for the purposes of commercial, industrial and public services; and,

ii. Seven Kings Pumping Station (948 m to the south) for the purposes of potable water supply.

2.5.4 These groundwater abstraction licences are no longer active.

2.6 HYDROLOGY

2.6.1 There is a minor surface water feature located approximately 4 m to the southwest of site, which appears to be a drainage ditch. The Groundsure report indicates many small minor drainage features in surrounding land to the west of the site.

2.6.2 There are no major surface water features within 1 km of the site.

2.6.3 There is one surface water abstraction licence within 1 km of the site located 588 m north west for Aldborough Hall Farm for the purposes of spray irrigation. This licence is no longer active.

2.6.4 The Groundsure report identifies there to be no risk of surface water flooding at the site and a low risk of groundwater flooding at the site.

2.7 CURRENT SITE ISSUES

2.7.1 Potentially significant environmental issues have been investigated within relevant distances of the site, based on the database of records supplied by Groundsure. These relate to the following searches:

i. Water discharge or pollution incidents within 250 m of the site;

ii. Waste management sites within 250 m of the site;

iii. Statutory authorisations within 50 m of the site;

iv. Trade directory entries of possible contaminative use within 50 m of the site;

v. Special protection or conservation areas within 50 m of the site; and

vi. Any other relevant issues.

2.7.2 Potentially significant environmental issues identified by the above searches are summarised in Table 3 below.

Table 3: Potentially significant environmental issues

ENVIRONMENTAL CATEGORY	DESCRIPTION
Water discharge or pollution incidents within 250 m	There was a trade discharge record associated with mineral workings (91 m east), dated from 15 January 1970 until 1 October 1996, into a tributary of Mayesbrook River.
Waste management sites within 250 m	The site was an active landfill from 1970 to 1973. Given the age of the landfill, it is unlikely to be lined. Another landfill record was present approximately 140 m to the north known as 'Tarmac Aggregates Limited.' This facility accepted non-biodegradable wastes and is now closed.

ENVIRONMENTAL CATEGORY	DESCRIPTION
Statutory authorisations within 50 m	There are no statutory authorisations within 50 m of the site.
Trade directory entries of possible contaminative use within 50 m	There are no relevant trade entries identified by the Groundsure, however, 'Hainault Motors' is present in industrial land immediately to the northwest.
Special protection or conservation areas within 50 m	There are no special protection or conservation areas within 50 m of the site.

2.8 INDICATIVE GROUND STABILITY HAZARDS

2.8.1 As detailed in the Groundsure report:

i. There is a moderate risk of shrink-swell clays on site;

ii. There is a very low risk of running sands, compressible deposits, collapsible deposits and landslides; and

iii. There is a negligible risk of ground dissolution of rocks.

2.9 RADON GAS

2.9.1 The site does not lie within a Radon Affected Area as defined by the former Health Protection Agency, now Public Health England (as less than 1 % of houses are above the action level). Guidance issued by the Buildings Research Establishment (BRE-211) indicates that no protective measures are necessary.

2.10 AIR QUALITY

2.10.1 The site lies within a designated Air Quality Management Area (AQMA) for Redbridge Council. The AQMA was declared on the 31 December 2003 for Nitrogen Dioxide and Particulate Matter PM_{10}.

2.11 ECOLOGY

2.11.1 Information from environmental and ecological datasets was obtained from a review of the MAGIC (Multi-Agency Geographic Information for the Countryside) website and the Groundsure report in order to identify any ecological receptors that might be relevant to the contamination risk assessment for the site. There are no species or habitats considered to be potentially relevant ecological receptors.

2.12 PREVIOUS INVESTIGATIONS

2.12.1 There are no known previous investigations for the site.

2.13 PRELIMINARY CONCEPTUAL SITE MODEL AND RISK ASSESSMENT

2.13.1 From the Phase 1 assessment a preliminary site conceptual model and risk assessment have been produced using the framework established in Part IIA of the *Environmental Protection Act 1990* and detailed in Contaminated Land Report *CLR11 - Model Procedures for the Management of Land Contamination*.

2.13.2 Risk from contamination has been assessed using the source-pathway-receptor and pollutant linkage methodology, whereby a risk can only exist if all elements of: source, pathway and receptor, are present.

2.13.3 Potential Sources at the site comprise:

i. Made ground associated with the landfilled area;

ii. Made ground associated with a small demolished building and suspected infilled drainage ditches;

iii. Surface waste comprising concrete, brick, metal, plastic and cement sheet fragments (potential ACM) as detailed during the site reconnaissance; and

iv. Off-site contamination associated with contaminative trades within the industrial area to the northwest.

2.13.4 Potential Pathways

2.13.5 Whilst in its current use and form, potential risks remain low, the proposed development will open the potential exposure for dust generation, dermal contact or ingestion. Open pathways also include those to controlled waters (Secondary A Aquifer), the potential for ground gas generation from the landfill and the migration of contamination to and from adjacent land.

2.13.6 Potential Receptors

2.13.7 Receptors include current and future site users, controlled waters, construction workers and infrastructure.

2.13.8 Pollutant Linkages and Risk Ratings

2.13.9 From the Phase 1 assessment a preliminary site conceptual model has been produced as Table 4 which identifies the potential pollutant linkages. These have been used to inform the Phase 2 intrusive investigation presented in the subsequent sections.

Table 4: Preliminary Conceptual Model

POSSIBLE POLLUTANT LINKAGE			RISK CHARACTERISATION
POTENTIAL SOURCES	**PATHWAYS**	**RECEPTORS**	
Heavy metals and hydrocarbons, asbestos (made ground)	Contact with contaminated soil	Human health (current users)	**Low to Moderate risk identified** Potential for made ground/landfill which can contain elevated metals and hydrocarbons although the site is currently hoarded and access is restricted.
	Ingestion and inhalation of contaminated soil and dust	Human health (current users)	
Heavy metals and hydrocarbons (made ground)	Contact with contaminated soil	Human health (future residents and construction workers)	**Moderate risk identified** Potential for made ground/landfill which can contain elevated metals and hydrocarbons.
	Ingestion and inhalation of contaminated soil and dust	Human health (future residents and construction workers)	
Asbestos (made ground)	Ingestion and inhalation of contaminated soil and dust	Human health (future residents and construction workers)	**Moderate risk** Potential for made ground to contain asbestos from demolition of buildings and within the landfill.
Contamination (all forms)	Vertical migration to aquifer	Controlled waters	**Moderate risk identified** Potential for contamination to affect the shallow gravel aquifer.
Contamination (all forms)	Horizontal migration to surface water	Controlled waters	**Low risk identified** No surface waters are in the vicinity.
Hydrocarbons	Direct contact	Plastic water pipes	**Moderate risk identified** Cannot rule out presence of hydrocarbon contamination at this stage.
Hazardous Gas/Vapours In soil	Ingress into buildings and voids	Human health (future residents and construction workers)	**Moderate risk identified** Potential for made ground/landfill which could act as source of hazardous gas. Cannot rule out fuel spillages as source of vapours.
Adjacent Land	Horizontal migration	Future site users and neighbouring residents	**Moderate risk identified** Potential for contamination to migrate from the nearby off site industrial area to the site, and for site derived contamination to be liberated and migrate off site.

SECTION 3 SITE INVESTIGATION RATIONALE

3.1 INTRODUCTION

3.1.1 A site investigation rationale has been devised in accordance with the findings of the Phase 1 investigation and the resultant preliminary conceptual site model and risk assessment. Priority contaminants were identified as metals, hydrocarbons and asbestos.

3.1.2 Intrusive sampling locations were chosen on the basis of providing broad spatial coverage of the site, ensuring the landfill area was investigated. Sampling locations also included the scraped material used to form the bund in the north of site, as nearby visible ACM had been noted.

3.2 SITE INVESTIGATION METHODS

3.2.1 An intrusive investigation was carried out by IDOM on 26 May to 2 June 2020 and comprised the following scope of work:

i. Four cable percussion boreholes (MBH02 to MBH05) to a maximum depth of 20 m below ground level (m bgl);

ii. 31 machine-dug trial holes (MTP01 to MTP31) to a maximum depth of 3.4 m bgl; and

iii. Six hand-dug shallow trial holes (MHP04 to MHP09) to sample the bund.

3.2.2 Exploratory hole locations are indicated on drawing 21912s-304-002, in Appendix 1. Logging of exploratory holes was undertaken by a IDOM Officer. Exploratory hole logs are contained in Appendix 3.

3.2.3 Light cable percussion equipment was used to advance boreholes MBH02 to MBH05. Standard Penetration Tests (SPTs) were performed at regular intervals. The tests involved driving a steel cone tipped series of rods into the ground over a distance of 450 mm using the repeated blows of a 63.5 kg weight allowed to free fall over a distance of 760 mm. The total number of blows required for the final 300 mm penetration (the 'N' value) is recorded on the borehole logs.

3.2.4 Monitoring wells were installed in:

i. MBH02 with a response zone in the Boyn Hill Gravel;

ii. MBH03 with a response zone in the made ground;

iii. MBH05 with a response zone in the made ground.

3.2.5 Representative soil samples were taken from various depths and strata to assess the contaminative status of the site. Soil samples were submitted to an MCERTS/ UKAS accredited laboratory for chemical analysis of a broad suite of potential contaminants. The results are provided in Appendix 4.

3.2.6 A programme of geotechnical laboratory testing was performed on selected soil samples obtained from the boreholes, comprising classification and strength tests. Chemical testing was also undertaken to assess the aggressiveness of the ground with respect to buried concrete. The results are provided in Appendix 5.

SECTION 4 GROUND CONDITIONS

4.1 SURFACE GROUND CONDITIONS

4.1.1 Surfacing was predominantly described as topsoil across the site, comprising a sandy gravelly clay or gravelly clayey sand. Gravel comprised flint.

4.1.2 Made ground was reported from surface at MTP07, MTP08 and MTP09 comprising varying consistencies of clay, sand and gravel. Gravel content comprised flint, brick and concrete with occasional inclusions of wood, and plastic.

4.1.3 The Boyn Hill Gravel Member was described to outcrop at three positions: MTP03, MTP13 and MTP15. This material was observed as orange-brown and grey sandy gravelly clay or pale grey clayey sandy gravel. The gravel content was flint.

4.2 SUB-SURFACE GROUND CONDITIONS

4.2.1 The ground conditions encountered were consistent with published geology, comprising made ground, underlain by Boyn Hill Gravel and subsequently underlain by the London Clay Formation.

4.2.2 A summary of the ground conditions encountered is presented in Table 5, whilst a more detailed assessment of the strata is contained in the following sections of the report.

Table 5: Summary of Sub-surface Ground Conditions

STRATA	DEPTH TO TOP RANGE (m bgl)	THICKNESS RANGE (m)
Made Ground	0.0	0.8 – 4.1
Boyn Hill Gravel Member	0.8 – 4.1	0.6 – 5.4
London Clay Formation	1.3 – 4.7	Depth not proven

4.2.3 Made Ground

4.2.3.1 Made ground was predominantly encountered across the site, apart from in the northeast and at the southern extent. At these locations, topsoil was directly underlain by the Boyn Hill Gravel Member or the Boyn Hill Gravel Member outcropped at surface.

4.2.3.2 Made ground was found to either overlie the Boyn Hill Gravel Member or landfill material.

4.2.3.3 Shallow made ground was generally described as orange-brown and grey sandy gravelly clay with gravel content comprising predominantly flint, brick, concrete and breeze block fragments. The shallow soil material sampled near to the bund (MTP08 at 0.1 m, and MTP09 at 0.05 - 0.1 m) was broadly consistent with the content of the bund. This comprised grey-brown sandy gravelly clay. Gravel content comprised flint, brick, concrete and charcoal with occasional plastic inclusions.

4.2.3.4 Hydrocarbon odours and staining was noted in made ground at MTP28 from a depth of 0.3 m to 1.4 m bgl.

4.2.3.5 Landfill material was found to underlie made ground predominantly in the central portion, excluding the northeast and southern extents. The landfill generally comprised varying consistencies of black-grey or green-grey sand, gravel and clay. Anthropogenic content comprised brick, concrete, wood, metal (occasional scrap mechanical parts), paper, cardboard, glass and wire.

4.2.3.6 A significant amount of putrescible material was observed within the landfill. This suggests geotechnical risks are potentially significant as there is a risk of settlement of the landfilled material. In order to form a suitable development platform, remediation/treatment of landfill is likely to be required.

4.2.3.7 Hydrocarbon odours and occasional hydrocarbon staining, accompanied by an iridescent sheen where groundwater was struck, was noted throughout the landfill area.

4.2.3.8 Due to the unstable nature of the landfilled material, natural ground was often unable to be encountered, and therefore the thickness of landfill was rarely proven. The thickness of landfill material was proven at two positions (MTP18 at 2.8 m bgl, and MBH05 at 4.1 m bgl).

4.2.3.9 Groundwater was encountered at depths ranging from 0.9 m to 2.3 m bgl. The Groundwater is not considered to be continuous but may be partially in continuity with the underlying aquifer.

4.2.3.10 Atterberg Limits tests carried out on three samples of cohesive made ground indicate that the soil can be classified as clay of high and very high plasticity. The plasticity index of the soil was found to range between 30 and 49 %, and in accordance with NHBC guidelines, this soil is of medium and high volume change potential. Moisture contents were also determined and ranged from 11 to 35 %.

4.2.3.11 SPTs carried out within the predominantly cohesive made ground encountered in borehole MBH05 recorded ‘N’ values ranging from 4 to 7, indicating the presence of soft (very low to low strength) ground conditions. In MBH03, an SPT ‘N’ value of 8 was recorded at a depth of 1.0 m bgl, indicating loose ground conditions.

4.2.4 **Boyn Hill Gravel Member**

4.2.4.1 This stratum generally comprised orange-brown and grey sandy gravelly clay, becoming a more sandy gravel at depth. Gravel content comprised flint.

4.2.4.2 A hydrocarbon odour was noted at MTP13 at approximately one metre below ground level.

4.2.4.3 Groundwater was encountered at depths ranging from 1.8 m to 2.6 m bgl in this stratum.

4.2.4.4 Atterberg Limits tests carried out on two samples of superficial clay indicate that the soil can be classified as clay of high plasticity. Plasticity index values of 34 and 35 % were recorded for the soil, and in accordance with NHBC guidelines, this soil is of medium volume change potential. Moisture contents of 19 and 21 % were also determined for these samples.

4.2.4.5 Sieve analysis carried out on two samples of granular soil described the material as brown slightly gravelly slightly clayey sand or yellowish brown very sandy gravel.

4.2.4.6 SPTs performed within the predominantly granular Boyn Hill Gravel Member revealed 'N' values ranging from 29 to 45, indicating typically dense conditions. In boreholes MBH03 and MBH05, SPT 'N' values of 9 and 10 were recorded in superficial deposits of clay, suggesting firm medium strength conditions.

4.2.5 **The London Clay Formation**

4.2.5.1 This stratum was encountered where the Boyn Hill Gravel Member was proven, as indicated within the borehole logs.

4.2.5.2 The stratum was described as a stiff brown-grey mottled blue-grey slightly sandy clay, becoming more blue-grey with depth.

4.2.5.3 No visual or olfactory evidence of contamination or groundwater was encountered in this stratum.

4.2.5.4 Atterberg Limits tests carried out on four samples of London Clay indicate that the soil can be classified as clay of very high plasticity. The plasticity index of the soil was found to range between 44 and 48 %, and in accordance with NHBC guidelines, this soil is of high volume change potential. Moisture contents were also determined and ranged from 28 to 35 %.

4.2.5.5 Triaxial tests were performed on fourteen undisturbed samples of clay obtained from depths of between 2.0 and 18.5 m bgl in the boreholes. The tests revealed average undrained shear strengths generally ranging from 88 to 277 kN/m². These results are indicative of stiff and very stiff (high and very high strength) ground conditions. In borehole MBH04, tests performed on samples recovered from depths of between 2.0 and 7.0 m bgl, recorded average undrained shear strengths in the range 50 to 67 kN/m², indicative of firm medium strength conditions.

4.2.5.6 SPTs undertaken within this stratum recorded 'N' values ranging from 11 to 43, indicative of firm to very stiff (medium to very high strength) conditions. An SPT refusal was recorded in MBH02 at a depth of 9.0 m bgl and is attributed to a hard grey mudstone layer present between 9.2 and 9.9 m bgl. Mudstone layers were also encountered in MBH04 at 4.8 m bgl and MBH05 at 6.9 m bgl, with layer thicknesses ranging from 0.6 to 0.9 m.

SECTION 5 PRELIMINARY GEOTECHNICAL RECOMMENDATIONS

5.1 FOUNDATIONS

5.1.1 The proposed development comprises low-rise residential houses with private gardens, parking, areas of public open space and associated infrastructure. It is understood that site levels are to be raised with materials imported onto site.

5.1.2 The ground investigation revealed ground conditions consisting of variable thicknesses of made ground (0.8 – 4.1 m thick) underlain by superficial deposits of Boyn Hill Gravel (0.6 – 5.4 m thick). Below these deposits the London Clay Formation was encountered at depths of between 1.3 and 4.7 m bgl.

5.1.3 SPTs undertaken within the made ground revealed soft or loose ground conditions, whilst the granular superficial deposits were found to be typically dense in nature. Locally, deposits of superficial clay were found to be firm medium strength in nature. SPTs performed in the London Clay recorded firm to very stiff (medium to very high strength) ground conditions.

5.1.4 Exploratory holes situated close to the northern, eastern and southern boundaries of the site have revealed the presence of natural soils at relatively shallow depths. Traditional strip / trench footings are therefore likely to be achievable in these areas. Assuming clay soils of high-volume change potential, a minimum depth of 1.0 m will apply to footings founded within firm / stiff clay. Where medium dense sand or gravel is present at shallow depth, a minimum footing depth of 0.75 m will apply. All footings should extend through made ground to found within an underlying competent natural stratum.

5.1.5 Allowable bearing pressures (ABPs) of 100 kN/m² will be achievable for footings up to 1.0 m wide founded within firm / stiff (medium / high strength) clay, whilst ABPs of 125 kN/m² will apply to footings in medium dense sand or gravel. Where footings are likely to traverse between cohesive and granular soils, light mesh reinforcement should be incorporated into the footings in order to cater for any differential settlement.

5.1.6 Across the majority of the site, which has been subject to landfilling, the investigation has revealed highly variable and generally weak ground conditions within the upper 3 – 4 m. As such, the ground conditions are not considered to be suitable for traditional shallow foundations. Therefore, alternative foundation solutions, such as ground improvement or piles, will need to be adopted.

5.1.7 Prior to constructing foundations, consideration should be given to treatment of the existing fill, as raising site levels will likely induce some settlement within these soils. A suitable technique for this site could be Rapid Impact Compaction (RIC) which would provide full depth treatment of the fill materials beneath all roads, hardstanding and buildings and significantly reduce the potential for long term settlement within the landfill.

5.1.8 In terms of foundations, consideration could be given to employing ground improvement techniques (vibro stone columns) at the site. Stone columns could be installed along the lines of all load bearing walls and keyed into the underlying competent London Clay to depths of around 6 m in order to provide a more uniform founding medium. This would enable strip footings to be constructed on the improved ground at depths of around 1 m. Allowable bearing pressures of around 100 kN/m² are likely to be achievable for footings up to 1 m wide. Light mesh reinforcement will need to be incorporated into all footings constructed on vibro treated ground. In order to assess the suitability of using ground improvement a specialist contractor should ideally be invited to attend site to view the ground conditions for themselves.

5.1.9 If ground treatment is not deemed economically or technically suitable for the development or does not yield the required allowable bearing pressures for the imposed building loads, then a piled foundation solution should be adopted.

5.1.10 It is envisaged that either driven or bored / Continuous Flight Auger (CFA) piles could be adopted at the site. Driven piles could possibly be utilised as they have the advantage that no arisings are generated, however, the effects of noise / vibrations are likely to be an issue given the proximity of the existing residential development.

5.1.11 The advantage of using bored / CFA piles is the low noise / vibration of the system, however, arisings are generated by bored / CFA piles. Piles would need to be taken through the made ground and superficial deposits to found within the underlying competent London Clay. Minimum pile lengths of around 10 m will be required at the site.

5.1.12 It is recommended that the advice of a specialist contractor be sought in order to determine the most appropriate / cost effective system and to advise on pile diameters, depths and safe working capacity. A guide to safe working loads for individual bored / CFA piles of varying diameter is presented in the table below. Pile calculations have been based on assessing skin friction and end bearing resistance in the undisturbed natural strata. No allowance has been made at this stage for any potential drag down (negative skin friction). This should be assessed and allowed for by the designer.

5.1.13 The calculations assume a pile penetrating into the stiff natural clay, whilst no contribution from existing fill materials has been allowed for. A factor of safety of 2.6 has been applied to the calculated ultimate capacities. Greater safe working capacities would be achievable if piles were taken to greater depth thereby benefiting

from increased skin friction contribution and possible greater end bearing resistance. As discussed, these values are for guidance purposes only and should be verified by a specialist contractor. In addition, the safe working loads given are for individual isolated piles. The group effect should be assessed during the design stage.

Table 6: Safe Working Capacities for bored / CFA Piles

Pile Diameter (mm)	Safe Working Capacity (kN)
300	125
450	210
600	305

5.1.14 It is noted that obstructions (concrete boulders or slabs) have been encountered at shallow depth within the made ground in a small number of locations across the site. Ground improvement and/or piling contractors will need to take this into consideration when determining the suitability of vibro/piling techniques and equipment.

5.2 EXCAVATIONS AND GROUNDWATER

5.2.1 Based on the ground conditions observed at the site, any shallow excavations have the potential to become unstable in the short term, therefore, if man-entry is required, excavations should be supported by shoring or otherwise battered back to a safe angle in order to protect the workforce from possible collapse.

5.2.2 Groundwater was encountered during the intrusive investigation in the majority of locations at depths of between 0.9 and 2.3 m bgl within the made ground and between 1.8 and 2.6 m bgl in the Boyn Hill Gravel. In view of this, it is considered likely that groundwater ingress will occur in shallow excavations, therefore, provision for dewatering during the construction period should be considered.

5.3 FLOOR SLABS

5.3.1 In view of the variable thicknesses of made ground across the site, along with the presence of natural clay at shallow depth in some areas, it is recommended that suspended floor slabs are adopted for the proposed development.

5.4 BURIED CONCRETE

5.4.1 Recommendations given in BRE Special Digest 1:2005 *"Concrete in aggressive ground"* have been followed in order to give recommendations with respect to buried concrete.

5.4.2 Water soluble sulphate analysis was carried out on forty-four soil samples obtained from depths of between 0.05 and 14.5 m bgl with soil pH determination also carried out on these samples. Water soluble sulphate contents ranged between 0.0085 and 1.1 g/l. In accordance with BRE guidelines the characteristic value is calculated by determining the mean of the highest 20 % of results. In this case the characteristic value is 0.65 g/l. On this basis the Design Sulphate Class is DS-2.

5.4.3 The pH values in the soil samples varied between 5.2 and 10.2. The mean of the lowest 20 % of values is 5.8 which represents the characteristic value. Mobile groundwater conditions have been assumed and on this basis the Aggressive Chemical Environment for Concrete (ACEC) class for the site is AC-3z.

5.5 ROADS AND PAVED AREAS

5.5.1 For preliminary design purposes it is recommended that a California Bearing Ratio (CBR) value of < 2 % is assumed for the made ground and shallow natural clay. Once the positions of proposed roads and areas of hardstanding have been finalised, testing could be undertaken to determine an appropriate design CBR value.

5.6 SOAKAWAYS

5.6.1 The recent ground investigation has revealed variable thicknesses of made ground across the site, whilst groundwater strikes were recorded in the upper 2.0 – 2.6 m. Therefore, the soils at the site are not considered to be suitable for the use of shallow soakaways.

SECTION 6 ENVIRONMENTAL ASSESSMENT

6.1 SOIL QUALITY

6.1.1 A total of 43 soil samples were submitted to the laboratory for chemical analysis, including nine samples from natural ground and 34 samples from made ground. The laboratory chemical analysis certificates are contained in Appendix 4. The results of the analysis are summarised in Table 7. Not all made ground samples were analysed for a full suite, as 13 were scheduled for asbestos presence, only.

6.1.2 An initial screening exercise has been undertaken whereby contaminant concentrations recorded in soils have been assessed against *Suitable for Use Levels* (S4ULs) published in 2015 by LQM/CIEH[1]. These precautionary screening levels are designed to be representative of minimal risk to human health in a number of land use scenarios. In this report S4ULs have been selected for a residential land use where the possibility of consumption of homegrown produce exists and using a site specific soil organic matter of 2.5 %. For lead the DEFRA Category 4 Screening

[1] Nathanail, C. P., McCaffrey, C., Gillett, A. G., Ogden, R. C. and Nathanail, J. F. 2015. *The LQM/CIEH S4ULs for Human Health Risk Assessment*. Land Quality Press, Nottingham. Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3100. All rights reserved. Including August 2015 nickel update.

Level[2] has been used as this is based on updated toxicological data and a low risk to human health. An additional set of phytotoxin screening levels have been adopted from 'The Code of Agricultural Practice for the Protection of Soil' Ministry of Agriculture, Fisheries and Food (MAFF), 1993, which are protective of healthy plant growth.

Table 7: Summary of Soils Chemical Analysis Results

CONTAMINANT	UNITS	MAX	MEAN	No of Tests	SCREENING LEVEL (SL)	No > SL*
HUMAN HEALTH RISK ASSESSMENT						
Asbestos in soil	-	-	-	43	Detected	7
pH	-	9.0	7.0	30	5 – 9	0
Arsenic	$mg.kg^{-1}$	22	13.49	30	37	0
Cadmium	$mg.kg^{-1}$	4.9	0.36	30	11	0
Chromium (total)	$mg.kg^{-1}$	260	37.49	30	910	0
Hexavalent Chromium	$mg.kg^{-1}$	< 4.0	< 4.0	30	6	0
Lead	$mg.kg^{-1}$	1400	132.24	30	200	3
Mercury	$mg.kg^{-1}$	1.2	0.52	30	40	0
Nickel	$mg.kg^{-1}$	36	21.9	30	130	0
Selenium	$mg.kg^{-1}$	4.7	1.22	30	250	0
TPH Aliphatic >EC_5 - EC_6	$mg.kg^{-1}$	< 0.001	< 0.001	30	78	0
TPH Aliphatic >EC_6 - EC_8	$mg.kg^{-1}$	< 0.001	< 0.001	30	230	0
TPH Aliphatic >EC_8 - EC_{10}	$mg.kg^{-1}$	< 0.001	< 0.001	30	65	0
TPH Aliphatic >EC_{10} - EC_{12}	$mg.kg^{-1}$	< 1.0	< 1.0	30	330	0
TPH Aliphatic >EC_{12} - EC_{16}	$mg.kg^{-1}$	5.5	2.12	30	2400	0
TPH Aliphatic >EC_{16} - EC_{21}	$mg.kg^{-1}$	17	8.53	30	92000	0
TPH Aliphatic >EC_{21} - EC_{35}	$mg.kg^{-1}$	130	16.47	30	92000	0
TPH Aromatic >EC_5 - EC_7	$mg.kg^{-1}$	< 0.001	< 0.001	30	140	0
TPH Aromatic >EC_7 - EC_8	$mg.kg^{-1}$	< 0.001	< 0.001	30	290	0
TPH Aromatic >EC_8 - EC_{10}	$mg.kg^{-1}$	< 0.001	< 0.001	30	83	0
TPH Aromatic >EC_{10} - EC_{12}	$mg.kg^{-1}$	11	1.33	30	180	0
TPH Aromatic >EC_{12} - EC_{16}	$mg.kg^{-1}$	120	7.02	30	330	0
TPH Aromatic >EC_{16} - EC_{21}	$mg.kg^{-1}$	310	24.03	30	540	0
TPH Aromatic >EC_{21} - EC_{35}	$mg.kg^{-1}$	310	35.7	30	1500	0
Benzene	$mg.kg^{-1}$	< 1.0	< 1.0	30	0.17	0

[2] SP1010 *Development of Category 4 Screening Levels Main Report* (Dec 2013) and SP1010 *Policy Companion Document* (Mar 2014).

CONTAMINANT	UNITS	MAX	MEAN	No of Tests	SCREENING LEVEL (SL)	No > SL*
HUMAN HEALTH RISK ASSESSMENT						
Toluene	$mg.kg^{-1}$	< 1.0	< 1.0	30	290	0
Ethylbenzene	$mg.kg^{-1}$	< 1.0	< 1.0	30	110	0
Xylene	$mg.kg^{-1}$	< 1.0	< 1.0	30	130	0
Acenaphthene	$mg.kg^{-1}$	47	1.767	30	210	0
Acenaphthylene	$mg.kg^{-1}$	4.6	0.22	30	170	0
Anthracene	$mg.kg^{-1}$	38	1.52	30	2400	0
Benz(a)anthracene	$mg.kg^{-1}$	34	1.73	30	7.2	1
Benzo(a)pyrene	$mg.kg^{-1}$	26	1.41	30	2.2	2
Benzo(b)fluoranthene	$mg.kg^{-1}$	26	1.48	30	2.6	2
Benzo(ghi)perylene	$mg.kg^{-1}$	12	0.75	30	320	0
Benzo(k)fluoranthene	$mg.kg^{-1}$	18	0.957	30	77	0
Chrysene	$mg.kg^{-1}$	22	1.24	30	15	0
Dibenz(ah)anthracene	$mg.kg^{-1}$	2.9	0.194	30	0.24	2
Fluoranthene	$mg.kg^{-1}$	84	4.109	30	280	0
Fluorene	$mg.kg^{-1}$	61	2.21	30	170	0
Indeno(123-cd)pyrene	$mg.kg^{-1}$	12	0.69	30	27	0
Naphthalene	$mg.kg^{-1}$	2.7	0.14	30	2.3	0
Phenanthrene	$mg.kg^{-1}$	150	5.71	30	95	0
Pyrene	$mg.kg^{-1}$	64	3.28	30	620	0
Phenol	$mg.kg^{-1}$	< 1.0	< 1.0	30	120	0
PHYTOTOXICITY RISK ASSESSMENT						
Copper	$mg.kg^{-1}$	78	23.25	30	200	0
Nickel	$mg.kg^{-1}$	36	21.9	30	110	0
Zinc	$mg.kg^{-1}$	1400	116.57	30	300	2

Notes: * Number of samples exceeding screening level nd = not detected

6.1.3 **Zootoxic Metals (harmful to human health)**

6.1.3.1 Lead concentrations exceeded relevant assessment criteria for human health at three locations:

i. MTP01 at 0.05 m bgl (Topsoil);

ii. MTP07 at 1.8 m bgl (Landfill material); and

iii. MTP14 ta 1.9 m bgl (Landfill material.

6.1.3.2 The concentrations within the landfill waste are likely to be attributed to metal within the landfill waste, however, no specific source is noted within the topsoil sample.

6.1.3.3 No contamination was encountered in any natural samples analysed.

6.1.4 **Phytotoxic Metals (harmful to plant health)**

6.1.4.1 Concentrations of zinc exceeded relevant assessment criteria for phytotoxic metals (harmful to plant life) at two locations. Both of these concentrations were encountered within deep landfill waste (MTP07 at 1.8 m bgl and MTP14 at 1.9 m bgl).

6.1.4.2 No contamination was encountered in any natural samples analysed.

6.1.5 **Organic Contaminants**

6.1.5.1 In relation to organic contamination, polyaromatic hydrocarbons (PAH) exceeded relevant assessment criteria for human health in two samples of made ground. Concentrations of Benzo(b)fluoranthene, Benzo(a)pyrene and Dibenz(a,h)anthracene exceeded relevant assessment criteria for human health in a sample of made ground at MTP07, from depth of 0.6 m gl. This sample was reported to contain brick, concrete ad charcoal. The same PAH species, in addition to benzo(a)anthracene exceeded relevant assessment criteria for human health in a deeper sample of landfill waste at MTP04, from a depth of 1.45 m bgl. This sample was also collected at the depth of a groundwater strike and may be a potential smear zone.

6.1.5.2 No contamination was encountered in any natural samples analysed.

6.1.6 **Inorganic Contaminants**

6.1.6.1 Asbestos was detected in seven out of 30 made ground samples analysed, in the form of Chrysotile and Amosite fibres in both shallow made ground and deeper landfill material. Concentrations ranged from trace (< 0.001%) to 1.433 % and were predominantly encountered in the north-western portion and in the centre of the site, within the deeper landfilled area.

6.2 **GROUNDWATER**

6.2.1 Groundwater level monitoring and sampling was undertaken on 3 June 2020. Borehole MBH5 was sampled on 5 June 2020. Resting waters levels were recorded at 1.2 m – 2.15 m bgl.

6.2.2 Samples were submitted to the laboratory for analysis of a typical contamination suite. Screening levels for groundwater have been derived from the maximum concentrations set out in the Water Supply (Water Quality) Regulations 2016 (England) where prescribed, or for those determinands not included, the 1989 regulations. The laboratory chemical analysis certificate is contained in Appendix 6

and groundwater level data is contained in Appendix 7. A summary of groundwater contaminant concentrations is contained in Table 8.

Table 8: Summary of Groundwater Chemical Analysis Results

CONTAMINANT	UNITS	MAX	MEAN	SCREEN LEVEL (SL)	>SL*
pH	-	6.9	7.4	6.5**	0
Arsenic	$\mu g.l^{-1}$	3.13	2.04	10	0
Cadmium	$\mu g.l^{-1}$	0.14	0.03	5	0
Chromium (total)	$\mu g.l^{-1}$	<LOD	<LOD	50	0
Copper	$\mu g.l^{-1}$	8.1	3.6	2000	0
Lead	$\mu g.l^{-1}$	2.8	1.13	10	0
Mercury	$\mu g.l^{-1}$	<LOD	<LOD	1	0
Nickel	$\mu g.l^{-1}$	30.0	18.4	20	1
Selenium	$\mu g.l^{-1}$	4.4	2.37	10	0
Zinc	$\mu g.l^{-1}$	9.6	8.47	5000	0
Cyanide	$\mu g.l^{-1}$	<LOD	<LOD	50	0
Sulphate	$mg.l^{-1}$	952.0	487.4	250	2
TPH	$\mu g.l^{-1}$	270	96.7	10	1
BTEX	$\mu g.l^{-1}$	<LOD	<LOD	-	0
PAH (total)	$\mu g.l^{-1}$	20.4	7.28	-	0
PAH****	$\mu g.l^{-1}$	<LOD	<LOD	0.1	0
Benzo(a)pyrene	$\mu g.l^{-1}$	<LOD	<LOD	0.01	0
Naphthalene	$\mu g.l^{-1}$	<0.66	0.227	-	0
Phenols	$\mu g.l^{-1}$	<LOD	<LOD	0.5	0

Notes: * Samples exceeding screen level
** Minimum value applies (i.e. most acid)
*** Not detected above screening level
*** sum of benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(ghi)perylene & indeno(1,2,3-cd)pyrene

6.2.3 Nickel was recorded above the relevant screening level in MBH2; however, no elevated concentrations of nickel were recorded in site soils, across the site. This borehole was installed with a response zone in the Boyn Hill Gravel Member. The source of the nickel contamination is considered likely to be diffuse pollution and unrelated to site soils. No significant hydrocarbon contamination was detected to suggest the presence of a smear zone.

6.2.4 Elevated TPH concentrations were recorded in borehole MBH5, associated wilt elevated PAH compounds. Soils in near-by trial pits were noted to have a hydrocarbon sheen and odour.

6.2.5 Elevated sulphate concentrations are likely to be naturally derived as a result of the underlying geology and will be taken into account with regard to the potential impact on concrete in the geotechnical section of this report.

6.3 HAZARDOUS GAS

6.3.1 Gas monitoring has been undertaken on 3 June 2020. Levels of methane, carbon dioxide and oxygen were recorded in each standpipe, together with associated parameters including borehole flow and ambient air pressure. The results of these gas monitoring rounds are contained in Appendix 7.

6.3.2 The monitoring rounds were undertaken at barometric pressure of 1006 to 1008 mb. No positive flow was recorded. During the monitoring round methane (CH_4) was detected at a maximum of < 0.1 % by volume (% v/v), carbon dioxide (CO_2) was detected to a maximum of 5.3 % v/v with a corresponding depleted oxygen concentration of 12.7 % v/v. The highest concentration of carbon dioxide was recorded in MBH2 which had a response zone installed in the Boy Hill Gravel.

6.4 WASTE CLASSIFICATION, OFF-SITE DISPOSAL OR RE-USE

6.4.1 Waste Considerations

6.4.1.1 The chemical data has been classified using Hazwaste Online for waste disposal and based on this, the majority of made ground soils would be classed as a non-hazardous. One sample of landfill waste from MTP07 at a depth of 1.8 m bgl recorded a hazardous concentration of lead at 1400 mg/kg. Acceptance of the material would be at the discretion of the landfill operator. The Hazwaste Online report is included in Appendix 4.

6.4.1.2 Natural soils would be classified as an inert waste for disposal.

6.4.1.3 Materials, including waste soils which are not to be retained on site, should be removed and disposed of in accordance with all relevant statues including the Environmental Protection Act 1990 (as amended), The Controlled Waste Regulations 2012 (as amended), The Waste (England and Wales) Regulations 2011 (as amended) , The Hazardous Waste (England and Wales), Regulations 2005 as amended, The Waste Management (England and Wales) Regulations 2006, and The Environmental Permitting (England and Wales) Regulations 2016 (as amended).

6.4.1.4 It is a requirement of these regulations that waste sent to landfill should have been subject to measures to reduce the amount of waste, reduce harmful or hazardous properties and facilitate recycling. These requirements may be satisfied by measures such as segregation and screening of wastes to recover suitable fill and material for crushing, segregation of inert materials and putrescible wastes.

6.4.2 Re-use Considerations

6.4.2.1 As a sustainable alternative to off-site disposal, it may be possible to re-use site-won soils provided the following criteria are met:

i. Use of the material will not create an unacceptable risk of pollution to the environment or harm to human health;

ii. The material must be chemically and geotechnically suitable without further treatment;

iii. There must be certainty of use within the scheme;

iv. Material should only be used in the quantity necessary for that use.

6.4.2.2 Provided these criteria are met, the re-use of site-won materials is unlikely to be deemed a waste activity. Production of a *Materials Management Plan* under the industry *CL:AIRE Code of Practice on the Definition of Waste* represents a robust method of demonstrating that the proposed re-use of material meets the criteria and is not liable for landfill tax.

6.4.2.3 Materials, including waste soils which are not to be retained on site, should be removed and disposed of in accordance with all relevant statues including the Environmental Protection Act 1990 (as amended), The Controlled Waste Regulations 2012 (as amended), The Waste (England and Wales) Regulations 2011 (as amended) , The Hazardous Waste (England and Wales), Regulations 2005 as amended, The Waste Management (England and Wales) Regulations 2006, and The Environmental Permitting (England and Wales) Regulations 2016 (as amended).

6.4.2.4 It is a requirement of these regulations that waste sent to landfill should have been subject to measures to reduce the amount of waste, reduce harmful or hazardous properties and facilitate recycling. These requirements may be satisfied by measures such as segregation and screening of wastes to recover suitable fill and material for crushing, segregation of inert materials and putrescible wastes.

SECTION 7 RISK ASSESSMENT

7.1 The potential sources of contamination at the site and the implications with respect to development have been interpreted in accordance with the current government guidance on source-pathway-receptor risk assessment.

7.2 The investigations demonstrate that the former uses of the site have resulted in generally localised contamination of the shallow made ground and within deeper landfill material, with reference to lead, zinc (phytotoxin) and PAH. Asbestos presence appears to be more widespread and located predominantly within the landfill waste. These materials are considered for their potential to act as sources for a number of pollutant linkages.

7.3 The potential impacts of contamination sources have been considered with respect to the following receptors:

i. The general public and present site users,

ii. Residents of future development,

iii. Groundwater,

iv. Surface water,

v. Construction workers,

vi. Adjacent land, and

vii. Infrastructure.

7.4 In each case the existence of a pollutant linkage requires a pathway by which the receptor could be exposed to the source. A qualitative assessment of risk is thus considered in the first instance with respect to the site in its current condition and is summarised in the sections below.

7.5 **The general public and present site users**

7.5.1 The site is currently disused and hoarded, preventing access to the public. Based on the generally localised nature of contamination and the depth at which it has been encountered, the risk of exposure is considered to be low.

7.6 **Residents of future development**

7.6.1 Soil contamination (chemical)

7.6.1.1 Despite the generally localised nature of contamination encountered, the made ground/landfill materials are unsuitable for reuse and clean cover will be required to imported. This will provide a sufficient barrier to sever pollutant exposure pathways to underlying contamination. The risk of exposure is considered to be low.

7.6.2 Asbestos

7.6.2.1 Relatively widespread contamination has been encountered in both made ground and landfill material. Clean cover will be required for soft landscaping to provide a sufficient barrier to sever pollutant exposure pathways to underlying contamination.

7.6.3 Hazardous Soil Gas/Vapours (including hydrocarbon vapours)

7.6.3.1 CIRIA guidance has been followed to assess the recorded soil gas and flow conditions. Results of preliminary monitoing are presented in Appendix 8 which indicates that the site may fall into NHBC Characteristic Situation 2 based on methane concentration. **As only one round of gas monitoring has been undertaken, and that the site is underlain by a potentially significant gassing source, further monitoring is suggested to assess the appropriate gas regime**. It is noted that the highest carbon dioxide detection was in MBH2 which was installed with a response zone in the natural Boyn Hill Gravel. Although this may suggest ground gas is migrating off site, further gas monitoring would confirm this. A moderate risk is assigned until further monitoring data is available.

7.6.3.2 No significant hydrocarbon contamination has been encountered therefore the risk from vapours is considered to be low.

7.7 **Controlled waters**

7.7.1 Groundwater analysis has only indicated significant concentrations of hydrocarbons nickel and sulphate. With the absence of any significant on-site soil-based source the risk from site derived contamination by sulphate and nickel is considered to be low. Staining and odours soils have been noted across the landfill site, and although corresponding concentrations in soils are generally low, there does appear to be an impact, potentially associated with the groundwater smear zone.

7.7.2 As a result of the observed impacts, the risk to controlled waters is considered to be moderate.

7.8 **Construction workers**

7.8.1 Potentially, construction workers are initially at the greatest risk from exposure to hazardous contamination due to excavation works and during the handling of materials including imported soils. Providing that dust levels are kept within statutory limits and appropriate health and safety procedures are adhered to during the construction phase, the levels of chemical contamination recorded to date are not considered to present an acute risk to human health.

7.9 **Adjacent land**

7.9.1 The contamination encountered appears to be largely associated with the on site landfill. Contamination entering site from adjacent may be possible however the bunded area against the boundary and the hardstanding throughout the industrial/commercial area to the northwest would reduce mobility. The risk from adjacent land is currently considered to be low.

7.10 **Infrastructure**

7.10.1 Concentrations of phytotoxins (zinc) have been encountered in made ground that would inhibit healthy plant growth. These elevated concentrations were, however, from deep landfill material. The introduction of imported clean cover would reduce the risk of exposure.

7.10.2 Limited contamination with the potential to permeate polymeric services has been identified by this investigation, however it is recommended that the utility provider is consulted with respect to their requirements for water supply pipes.

7.10.3 Utility companies apply strict guideline levels on use of polymeric pipes and may consider all made ground unsuitable for typical plastic pipe materials to be used.

SECTION 8 UPDATED CONCEPTUAL MODEL

8.1 Following completion of phases 1 and 2 of the investigation and a qualitative risk assessment, the conceptual model for the site, with relation to pollutant linkages, has been updated. The revised model is presented in Table 9 below.

Table 9: Revised Conceptual Model

POSSIBLE POLLUTANT LINKAGE			RISK CHARACTERISATION
POTENTIAL SOURCES	**PATHWAYS**	**RECEPTORS**	
Heavy metals, hydrocarbons and asbestos (made ground)	Contact with contaminated soil	Human health (current users)	**Low to moderate risk identified** The site is currently disused and hoarded.
	Ingestion and inhalation of contaminated soil and dust	Human health (current users)	
Heavy metals and hydrocarbons (made ground)	Contact with contaminated soil	Human health (future residents and construction workers)	**Low to moderate risk identified** Contamination in made ground has been identified but the introduction of clean cover will sever the exposure pathway to future site users. Providing construction workers adhere to appropriate health and safety procedures and are given regular toolbox talks with reference to the landfill, the risk is considered to be low.
	Ingestion and inhalation of contaminated soil and dust	Human health (future residents and construction workers)	
Asbestos (made ground)	Ingestion and inhalation of contaminated soil and dust	Human health (future residents and construction workers)	**Low to moderate risk identified** Contamination in made ground has been identified but the introduction of clean cover will sever the exposure pathway to future site users. Providing construction workers adhere to appropriate health and safety procedures and are given regular toolbox talks with reference to the landfill, the risk is considered to be low.
Contamination (all forms)	Vertical migration to aquifer	Controlled waters	**Moderate risk identified** Groundwater and soil data indicate there Is not a significant site derived soil-based source. However, contamination of groundwater, as well as staining and odours have been recorded.
Contamination (all forms)	Horizontal migration to surface water	Controlled waters	**Low risk identified** No surface waters in the vicinity
Hydrocarbons	Direct contact	Plastic water pipes	**Low to Moderate risk identified** Limited contamination with the potential to permeate polymeric pipes has been identified b this investigation.
Hazardous Gas/Vapours In soil	Ingress into buildings and voids	Human health (future residents and construction workers)	**Low to Moderate risk identified** Based on the limited ground gas monitoring undertaken to date the risk is considered to be low to moderate, however, further monitoring is suggested to assign an appropriate gas regime for the landfilled area.
Adjacent Land	Horizontal migration from neighbouring industrial/commercial land	Human health (future residents and construction workers)	**Low risk identified** The contamination encountered is largely associated with the on site landfill and associated contamination from the neighbouring land has not been encountered.

SECTION 9 PRELIMINARY REMEDIATION STRATEGY

9.1 The identified risks at the site can be mitigated by removal of either the source, pathway or receptor. With reference to the conceptual model for the site a remediation strategy, based on source or pathway removal, has been designed.

9.2 The proposed residential development comprises private dwellings with associated private gardens. The on-site made ground/landfill material is deemed unsuitable for reuse therefore the introduction of clean cover for soft landscaping is required. This will comprise the provision of 600 mm clean cover in private gardens and 300 mm in areas of communal soft landscaping. Clean cover was to be placed over a concrete crush dig barrier.

9.3 In addition, it is considered that there will be a requirement for some localised source material removal improve groundwater quality and some treatment of dissolved phase contamination.

9.4 Upgraded/ protected water supply pipes will be required.

9.5 Gas protection will be required and the scope and detail of this will depend upon a longer period of monitoring however for guidance purposes it is likely that NHBC Amber 2 or CIRIA CS3 conditions will apply as a minimum.

9.6 Geotechnical risks are potentially the most significant with reference to the landfill, as there is a risk of settlement from the putrescible content and also localised softer areas.

9.7 Stabilisation is likely to be required to provide ground improvement. This will be combined with other treatment techniques such as sorting and screening to remove the proportion of landfill waste which cannot be treated. This will require disposal to landfill. Stabilisation will also reduce mobility of contamination off-site.

9.8 Gas protection measures will be required, however, further gas monitoring is recommended to better understand the appropriate gas regime to be adopted given the potential on site landfill gassing source.

9.9 Potential risks to construction workers have been identified and the adoption of appropriate Health and Safety procedures will ensure that risks to operatives from hazardous materials at the site are minimised. Operatives should not be allowed to eat, drink or smoke on site except in designated areas and should be required to wash all exposed skin at the end of each shift. Operatives should be informed of the potential hazards at the site and should be required to report any observations of suspect material.

9.10 Materials, including waste soils which are not to be retained on site, should be removed and disposed of in accordance with all relevant statues including the Environmental Protection Act 1990 (as amended), The Controlled Waste Regulations 2012 (as amended), The Waste (England and Wales) Regulations 2011

(as amended) , The Hazardous Waste (England and Wales), Regulations 2005 as amended, The Waste Management (England and Wales) Regulations 2006, and The Environmental Permitting (England and Wales) Regulations 2016 (as amended).

9.11 It is estimated that approximately 10% of material arisings are likely to be classified as hazardous for the purposes of disposal.

9.12 It is recommended that this report is submitted to the regulators (Local Authority EHO and Planners, Environment Agency Planning Liaison and NHBC) for approval prior to commencement of the works.

9.13 Any observations of ground conditions atypical of those already described should be reported to IDOM immediately so that an assessment of appropriate action can be made.

SECTION 10 CONCLUSIONS

10.1 A Phase 2 site investigation has been undertaken on the site south of Billet Road, Romford referred to as Parcel B.

10.2 An assessment of the Groundsure database indicates the potential for landfill on the site, from between 1970 and 1973. The site is currently vacant and stands as grassland. The surrounding area has undergone typical residential development.

10.3 Subsurface ground conditions were consistent with published records. Made ground consistent with a landfill site was found over much of the site. The superficial deposits are Boyn Hill Gravel underlain by a bedrock of London Clay Formation.

10.4 In view of the variable nature of made ground and superficial deposits at the site, traditional shallow foundations will not be suitable. Therefore, foundation options including ground improvement or piles will need to be adopted. In addition it is considered likely that rapid impact compaction or other treatment will be necessary to reduce settlement potential for external areas.

10.5 A CBR value of < 2% should be assumed for the preliminary design of roads and hardstanding, whilst ground floor slabs should be suspended.

10.6 Contamination with the potential to impact receptors has been identified on site, this includes:

i. Heavy metal, asbestos and hydrocarbon contamination in the made ground with the potential to impact future site users;

ii. Hydrocarbon contamination in the groundwater with the potential to impact the underlying Secondary A Aquifer;

iii. Hydrocarbon contamination with the potential to impact services/ structural development; and,

iv. Hazardous gas generation from the made ground with the potential to impact future residential properties.

10.7 Remedial actions proposed to make the site suitable for the end use are for:

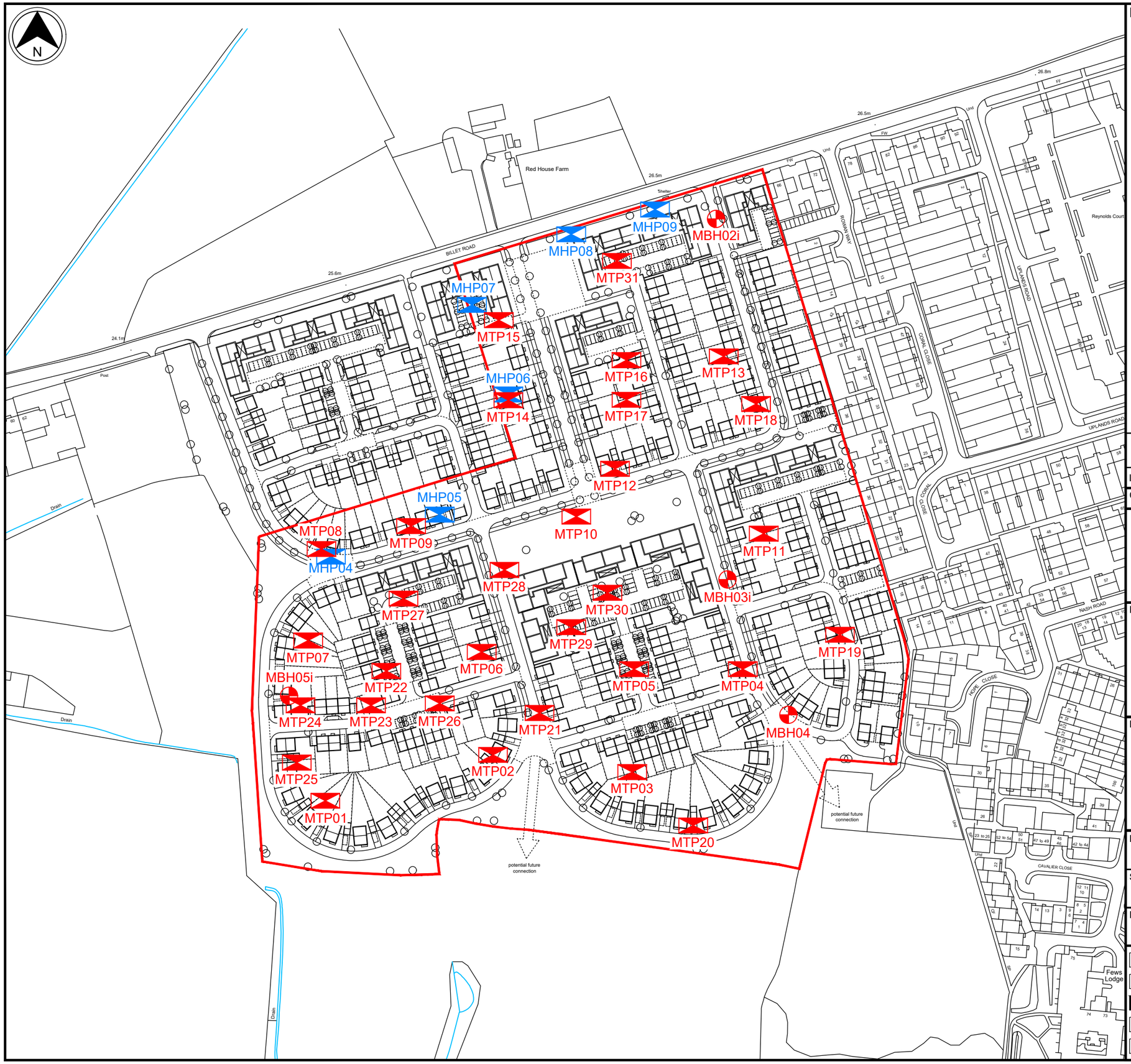
i. Clean capping in areas of private gardens and public soft landscaping;

ii. Upgraded/ protected water supply services;

iii. Gas protection to all structures, details subject to the results of a longer period of gas monitoring period; and

iv. Groundwater / source zone remediation subject to a Detailed Qualitative Risk Assessment.

APPENDIX 1 ▪ Drawings



Legend

- Site boundary
- MBHref — Merebrook borehole with location reference
- MTPref — Merebrook trial pit with location reference
- MBHrefi — Merebrook borehole with location reference and installed
- MHPref — Merebrook hand dug pit with location reference

First Issue	09-06-2020	JB	CAH
Issue Details	Dwn	Chd	App'd

Client: PRELIMINARY

Bellway Homes Ltd

Project: Billet Road - Site B

Dwg Title: Exploratory Holes Locations

Dwg No. 21912s-304-002		Revision -
Scale 1:2000	Date June 2020	Frame Dimensions mm (A3) 392 x 277
Drawn JB	Checked CAH	Approved CAH

London
Kent
Manchester
Stirling

IDOM

Cromford Mills, Mill Lane, Matlock, Derbyshire DE4 3RQ
t: +44(0)1773 829 988 e: info.derbyshire@idom.com

0m 20m 40m 60m 80m

Rev	Date	Description
-	11/02/20	First issue
A	18/02/20	Amendments to mix
B	02/03/20	Amendments to mix
C	05/03/20	Additional unit added

Dwn	Ckd
RJE	IBB
RJE	IBB
HD	RJE
RJE	IBB

Drawn	RJE
Checked	IBB
Date	11/02/2020
Scale @ A1	1:1000

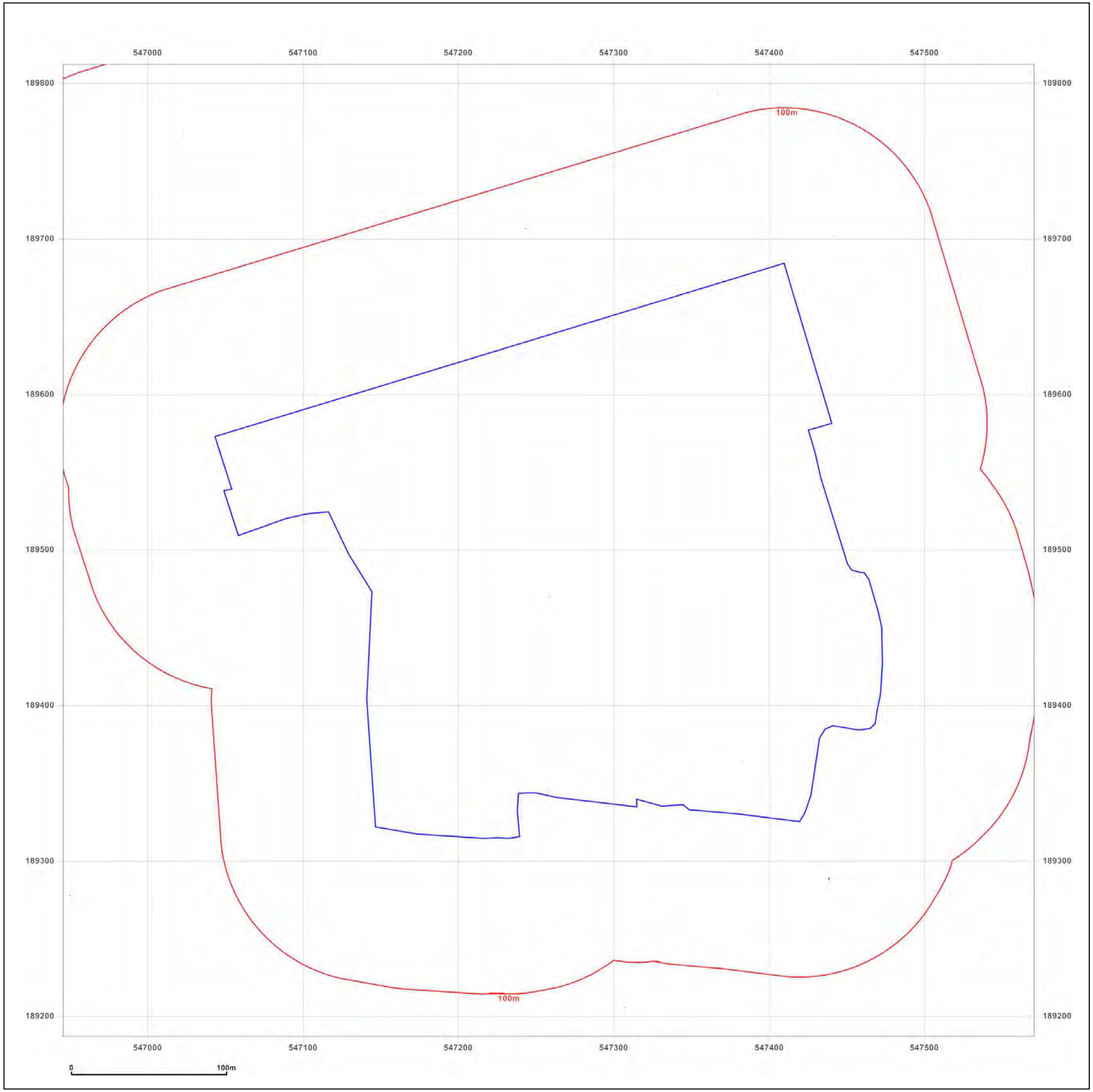
LAND OFF BILLET ROAD
REDBRIDGE
PROPOSED SITE LAYOUT
COMBINED LAND PARCELS

AA8832-SK001
REV C

FOR COMMENT

PRP

APPENDIX 2 ▪ Historical Plans



Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: County Series

Map date: **1864**

Scale: 1:2,500

Printed at: 1:2,500

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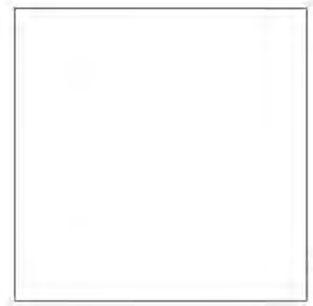

Surveyed 1864
Revised 1864
Edition N/A
Copyright N/A
Levelled N/A

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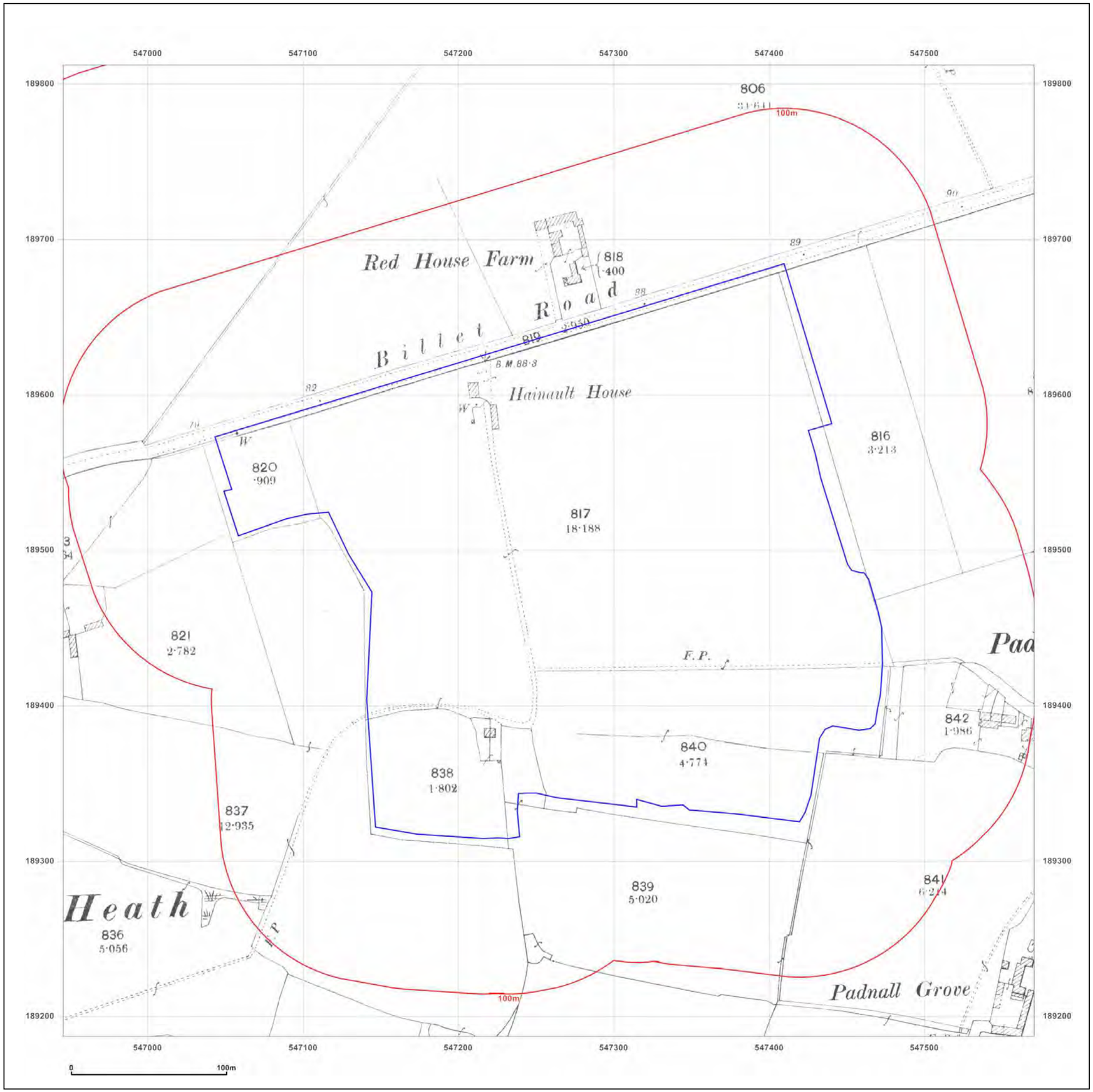

Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

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Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: County Series

Map date: **1896**

Scale: 1:2,500

Printed at: 1:2,500

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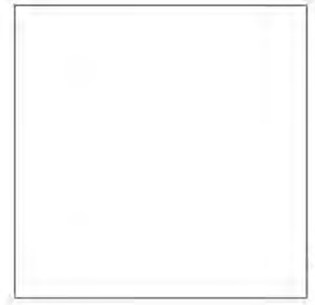

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Edition 1896
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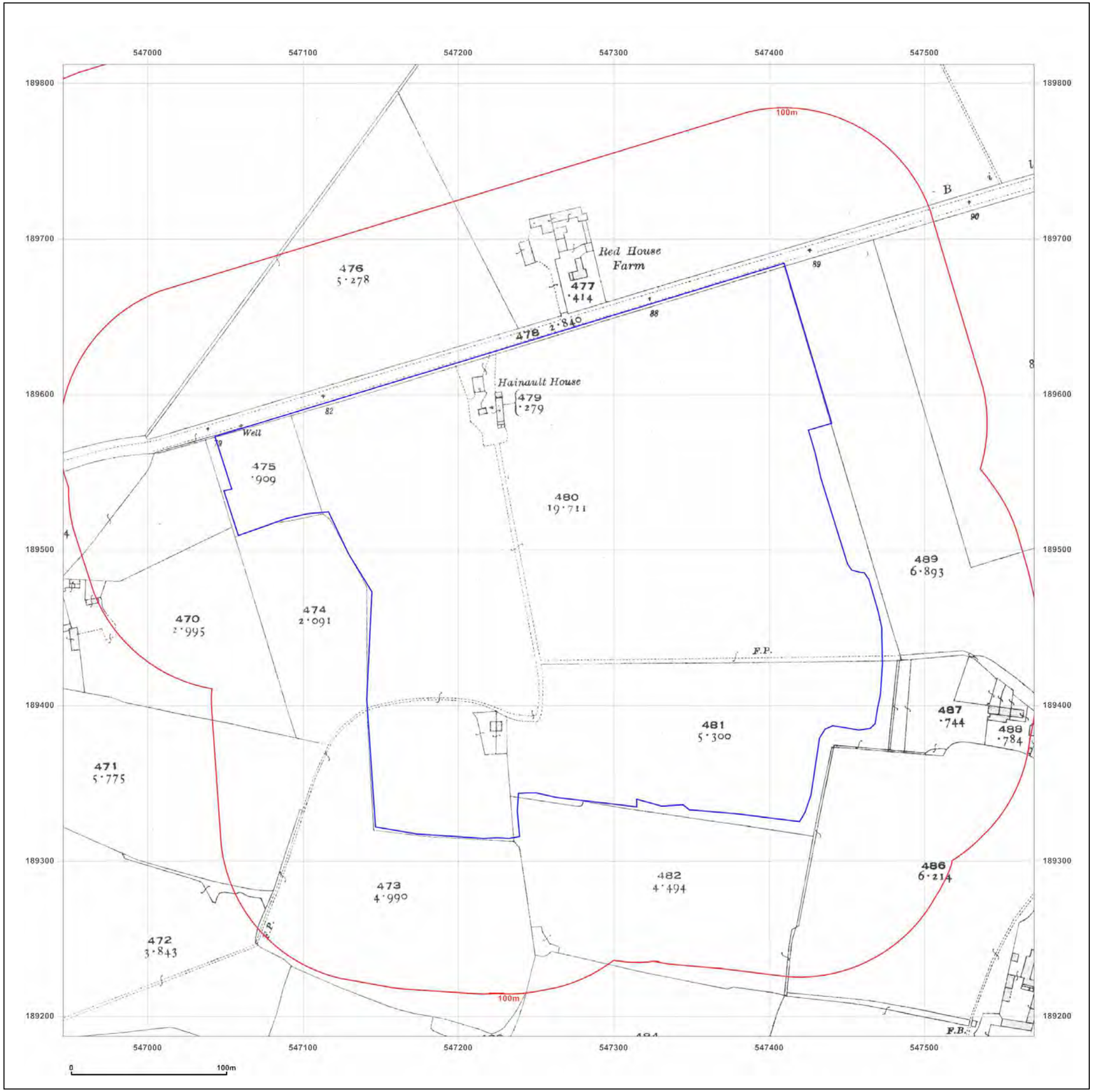

Groundsure INSIGHTS

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66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: County Series
Map date: **1920**
Scale: 1:2,500
Printed at: 1:2,500

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Revised 1920
Edition N/A
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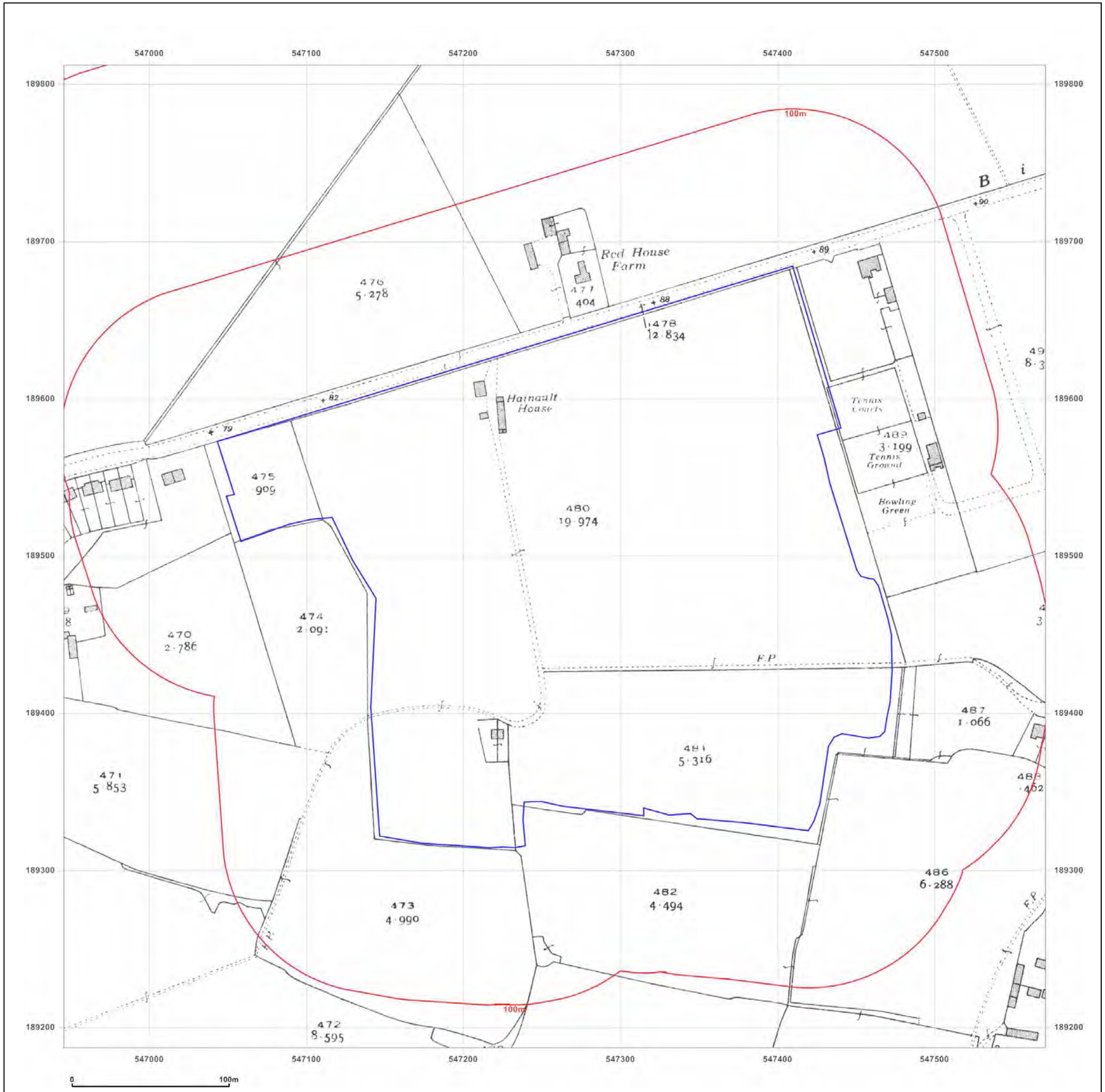

Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: County Series

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Printed at: 1:2,500

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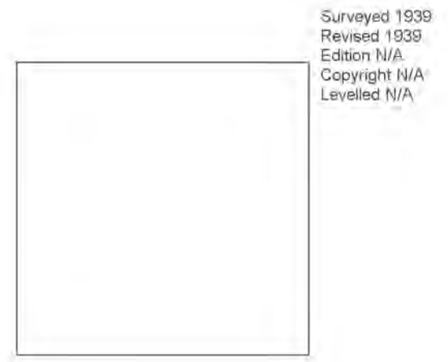

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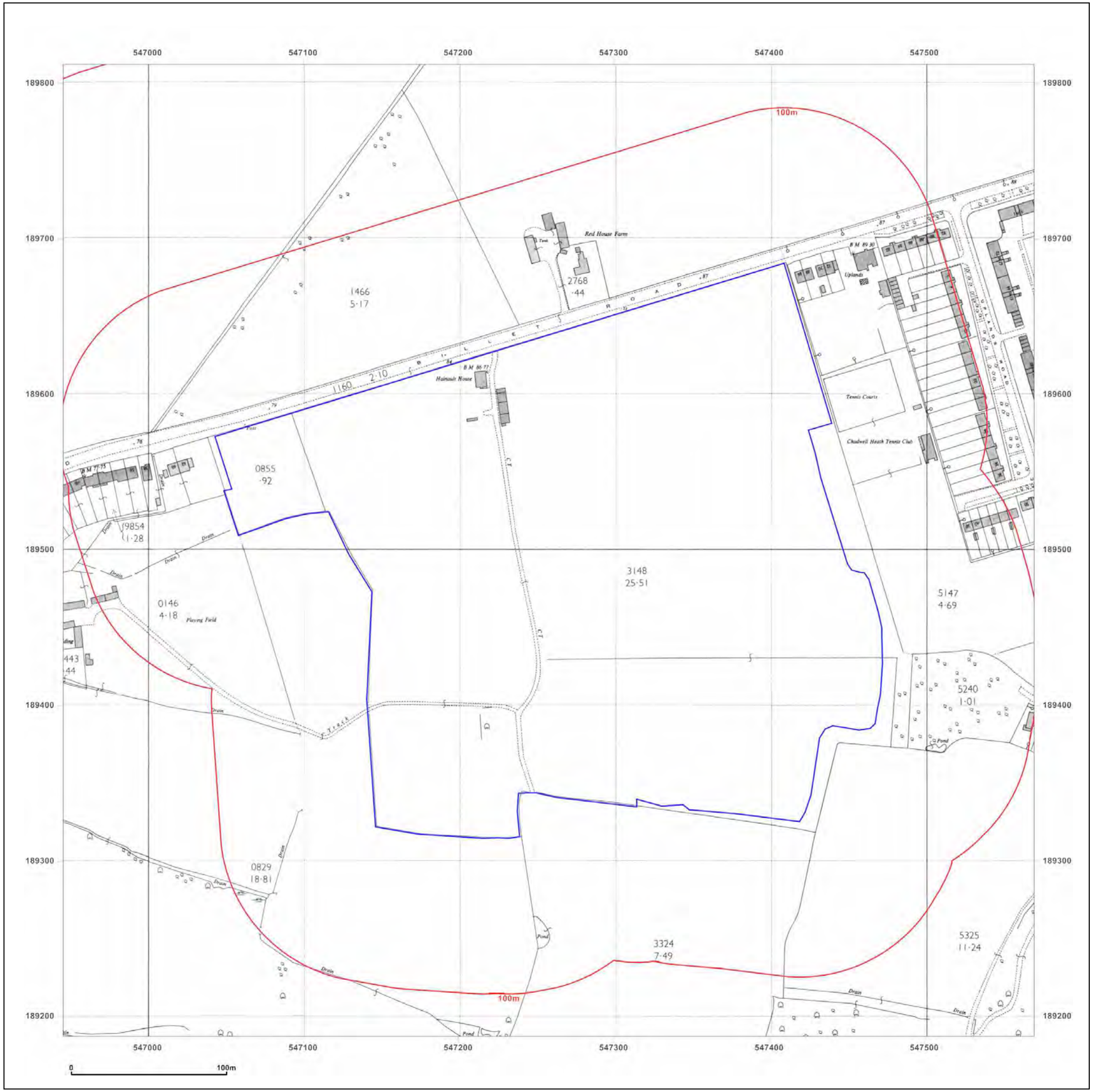

Groundsure INSIGHTS

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66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

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Report Ref: HMD-154-6783701
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Map Name: National Grid

Map date: **1962**

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Printed at: 1:2,500

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Surveyed 1962
Revised 1962
Edition 1964
Copyright 1964
Levelled 1961

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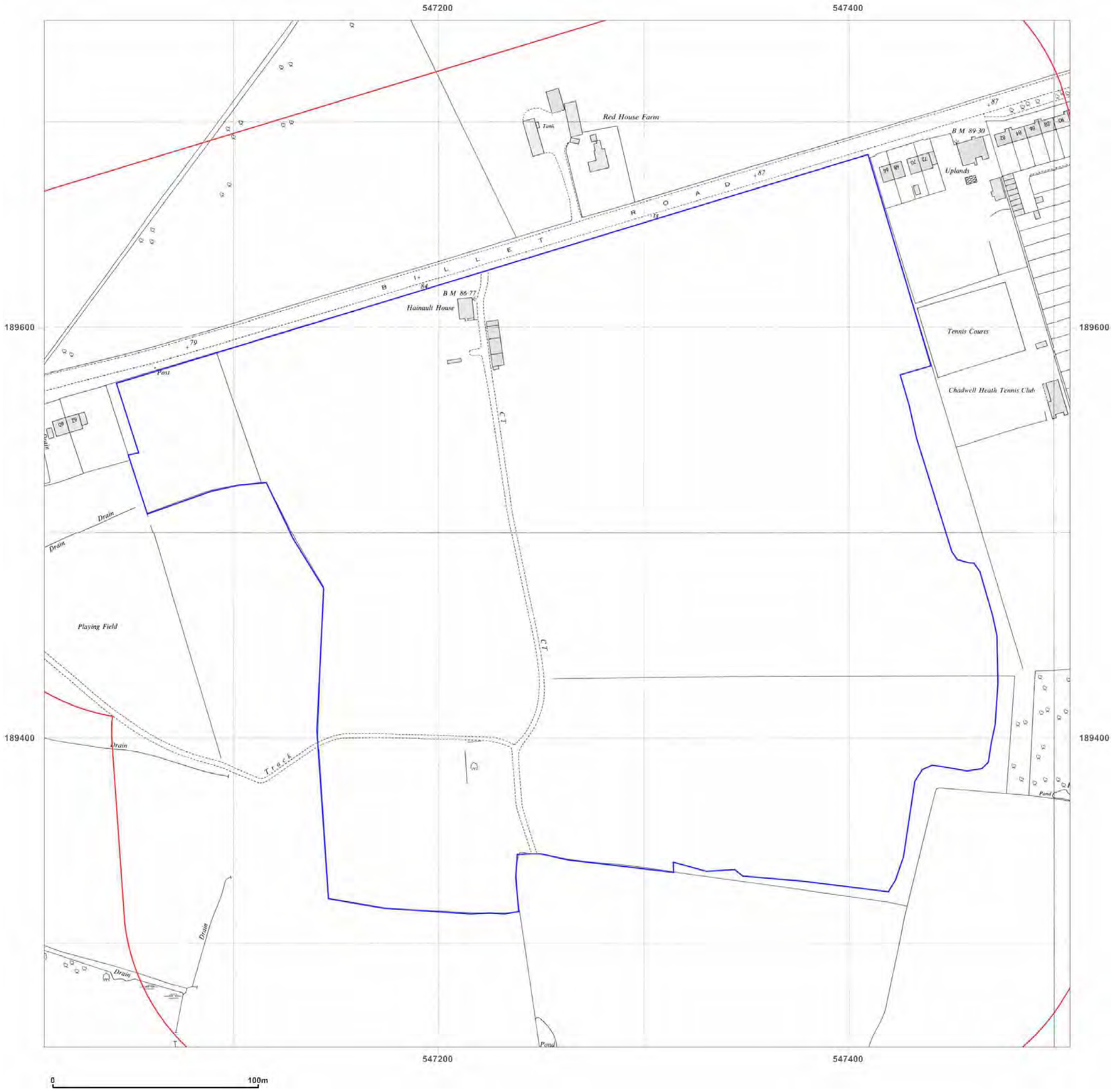

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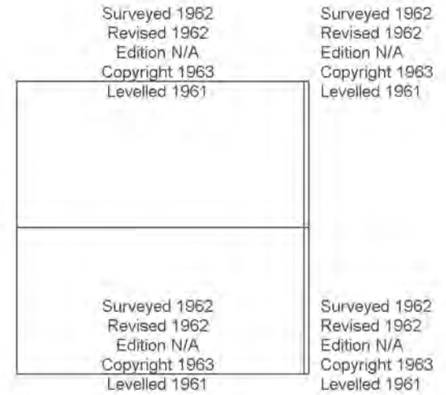

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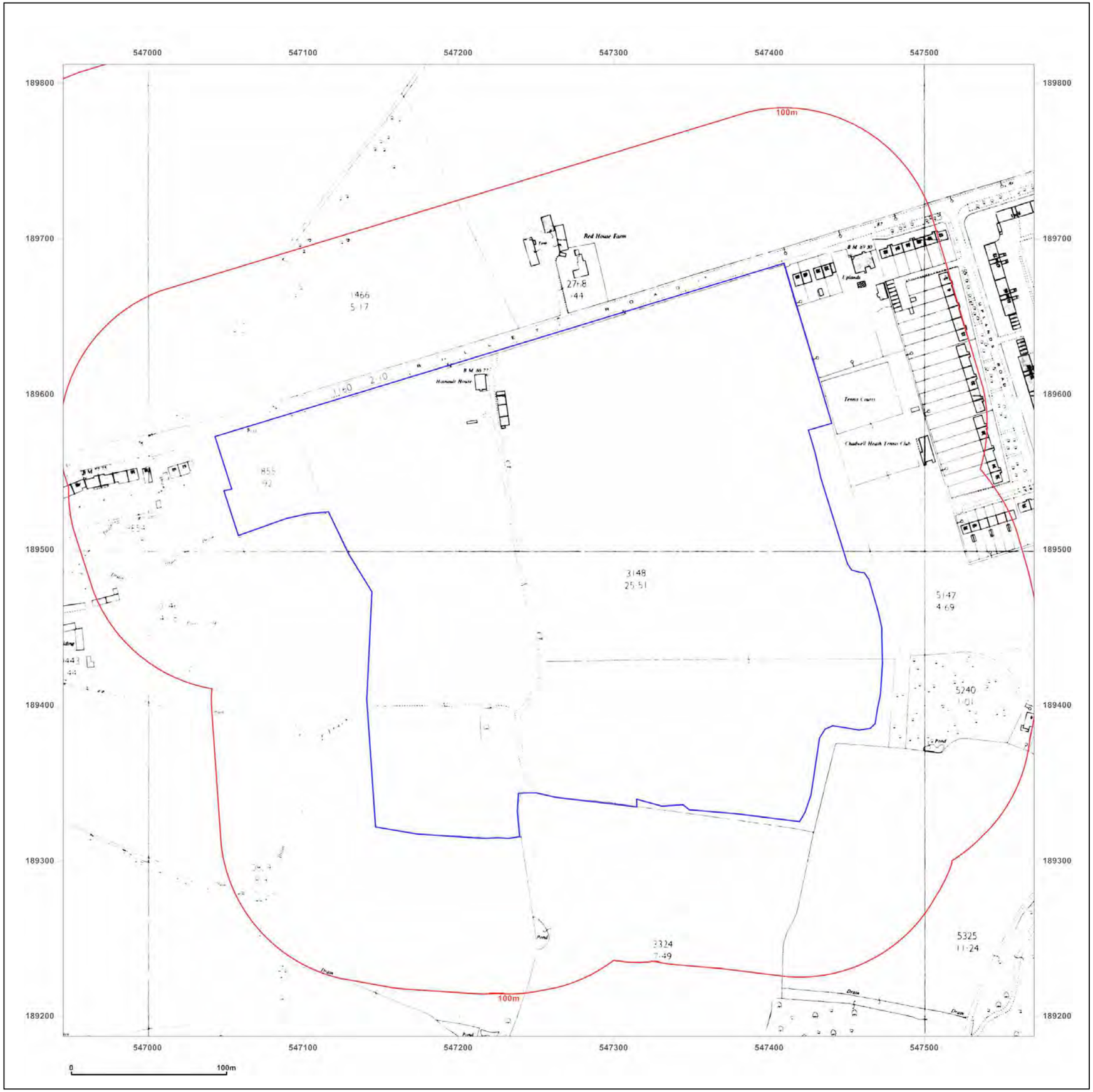

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Grid Ref: 547258, 189499

Map Name: National Grid

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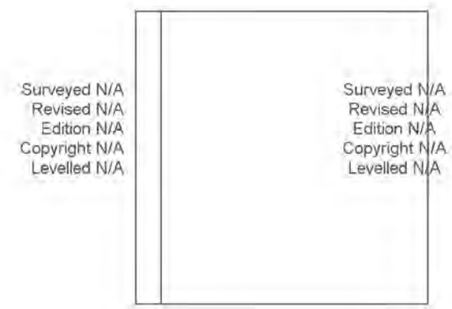

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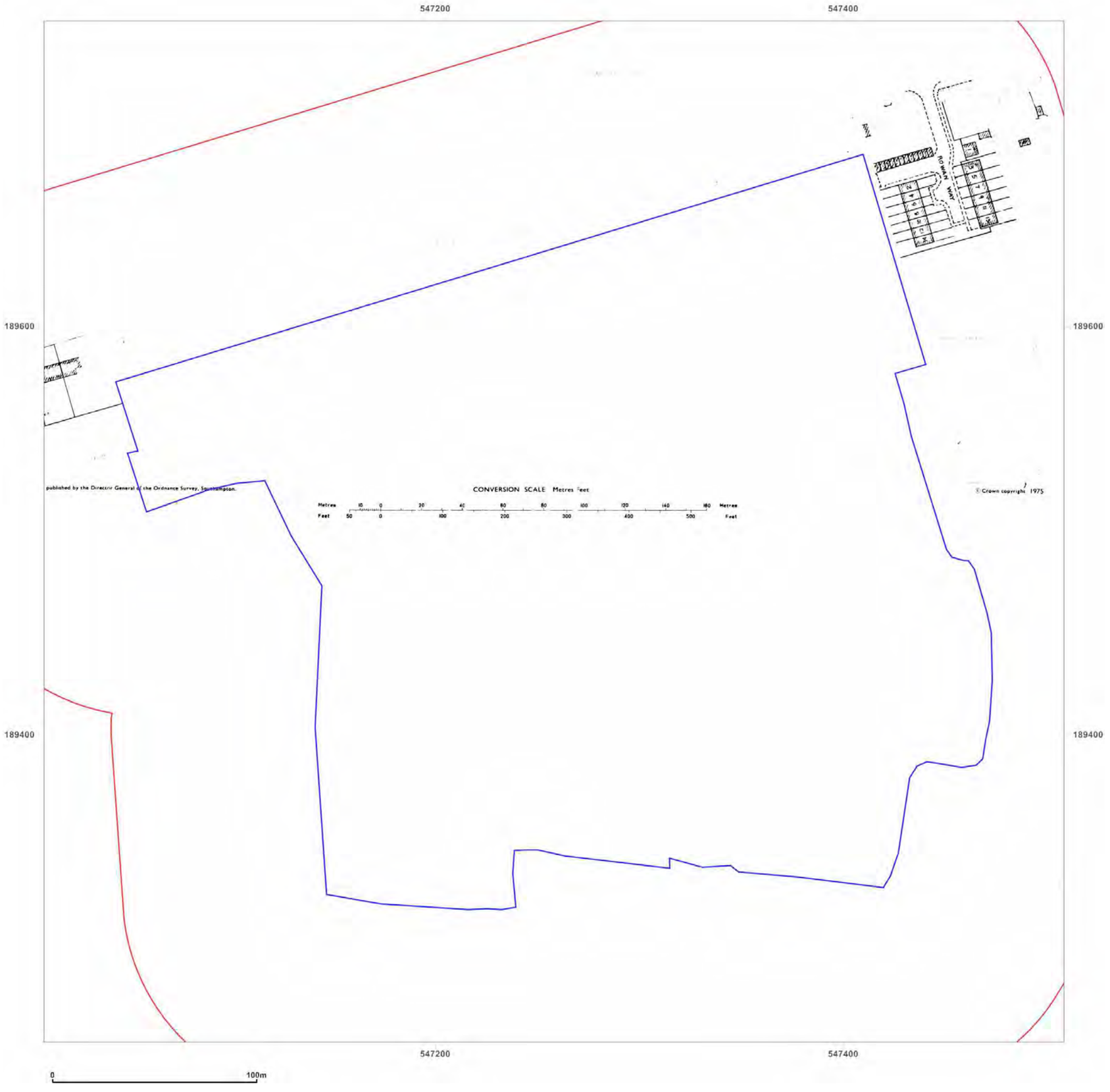

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Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

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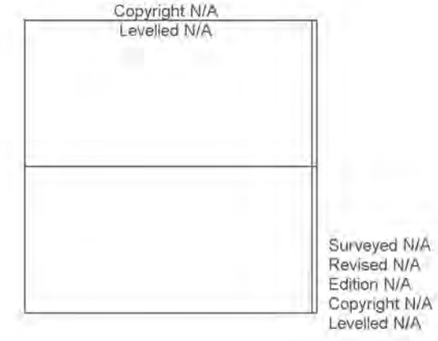

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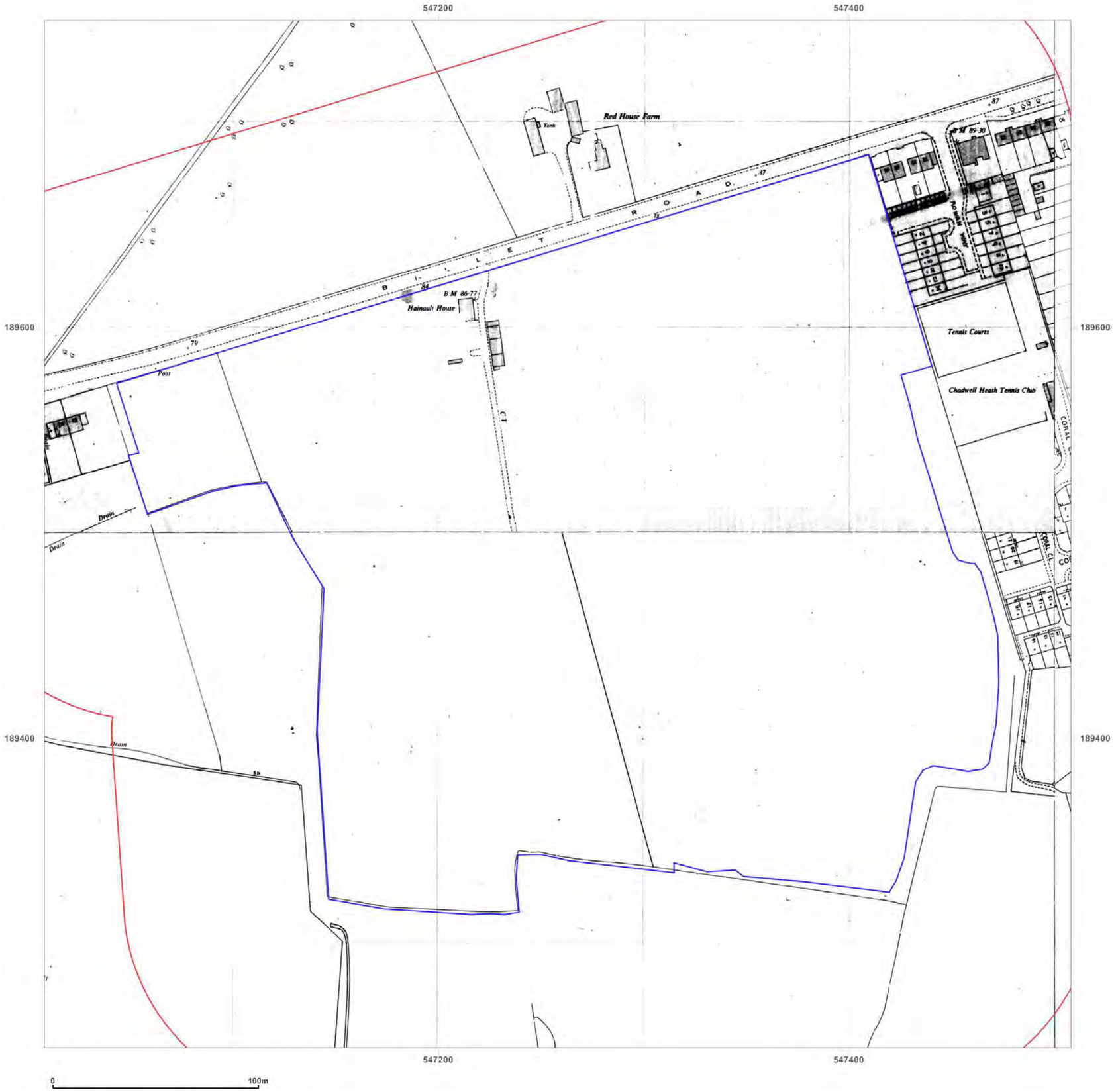

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Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: National Grid

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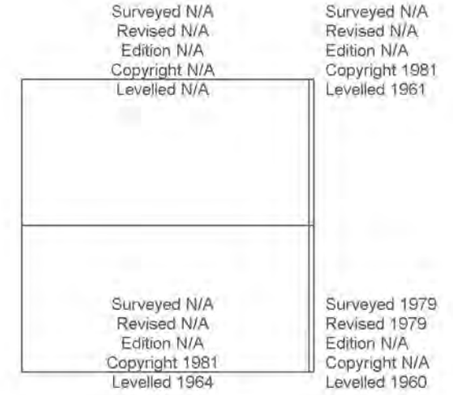

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Site Details:

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Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: National Grid

Map date: **1979-1981**

Scale: 1:1,250

Printed at: 1:2,000

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Surveyed 1979
Revised 1979
Edition N/A
Copyright N/A
Levelled 1961

Surveyed 1962
Revised 1980
Edition N/A
Copyright 1981
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Site Details:

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Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: National Grid

Map date: **1991**

Scale: 1:1,250

Printed at: 1:2,000

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Revised N/A
Edition N/A
Copyright 1991
Levelled N/A

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Copyright 1991
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Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: National Grid

Map date: **1992-1995**

Scale: 1:1,250

Printed at: 1:2,000

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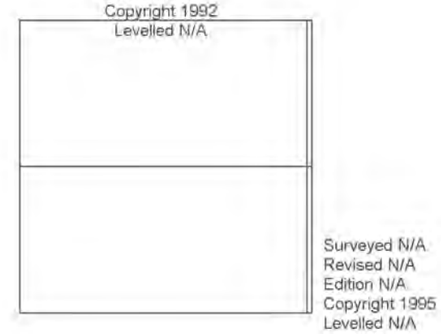

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Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: National Grid

Map date: **1992-1995**

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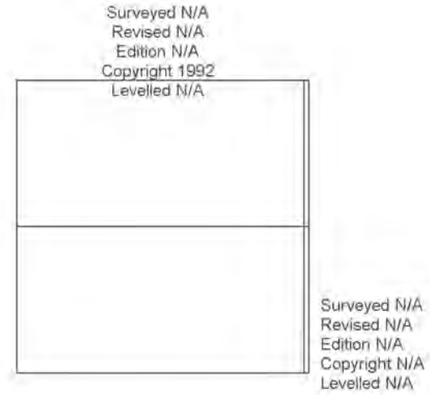

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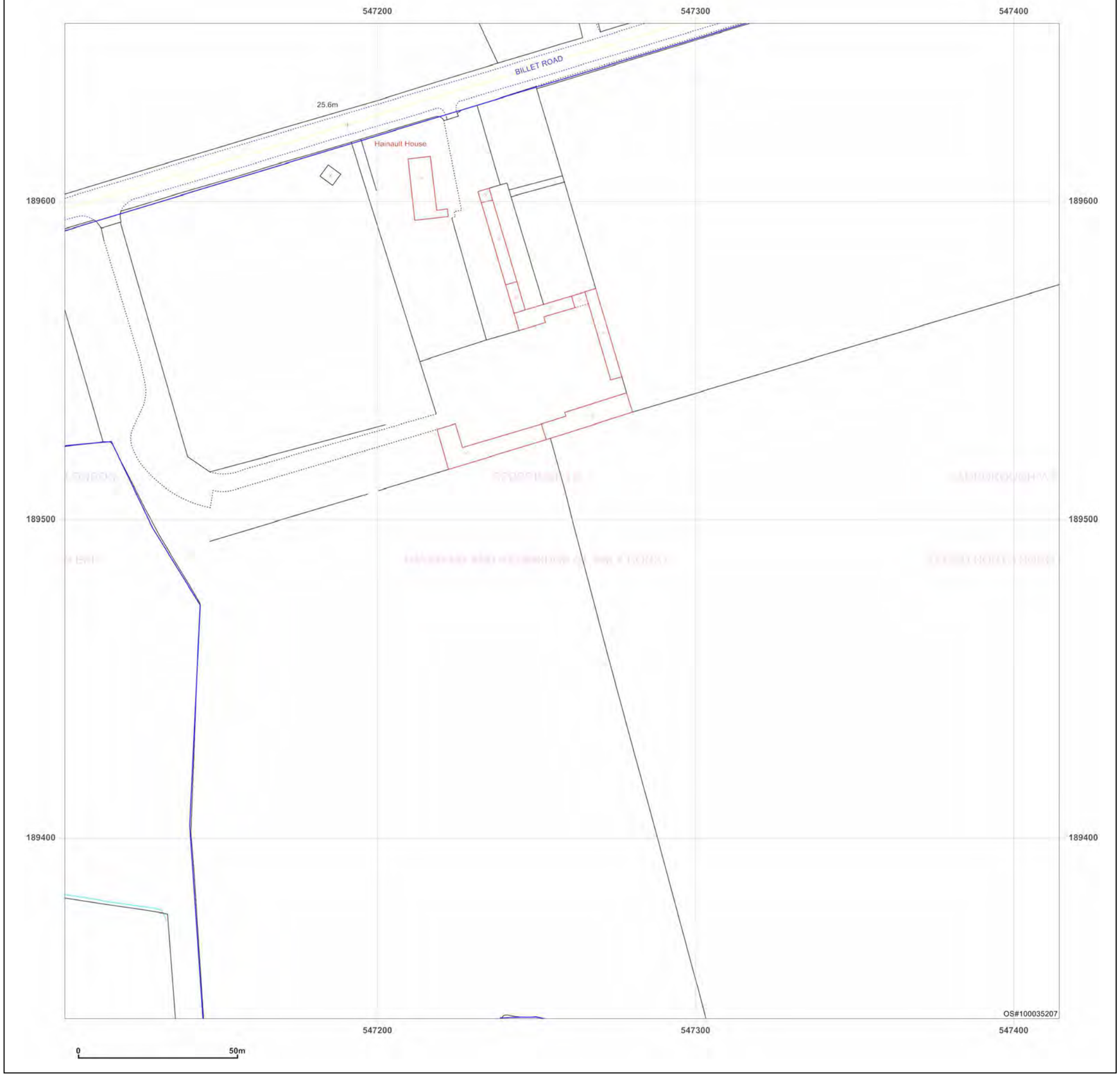

Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

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Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: LandLine
Map date: **2003**
Scale: 1:1,250
Printed at: 1:1,250

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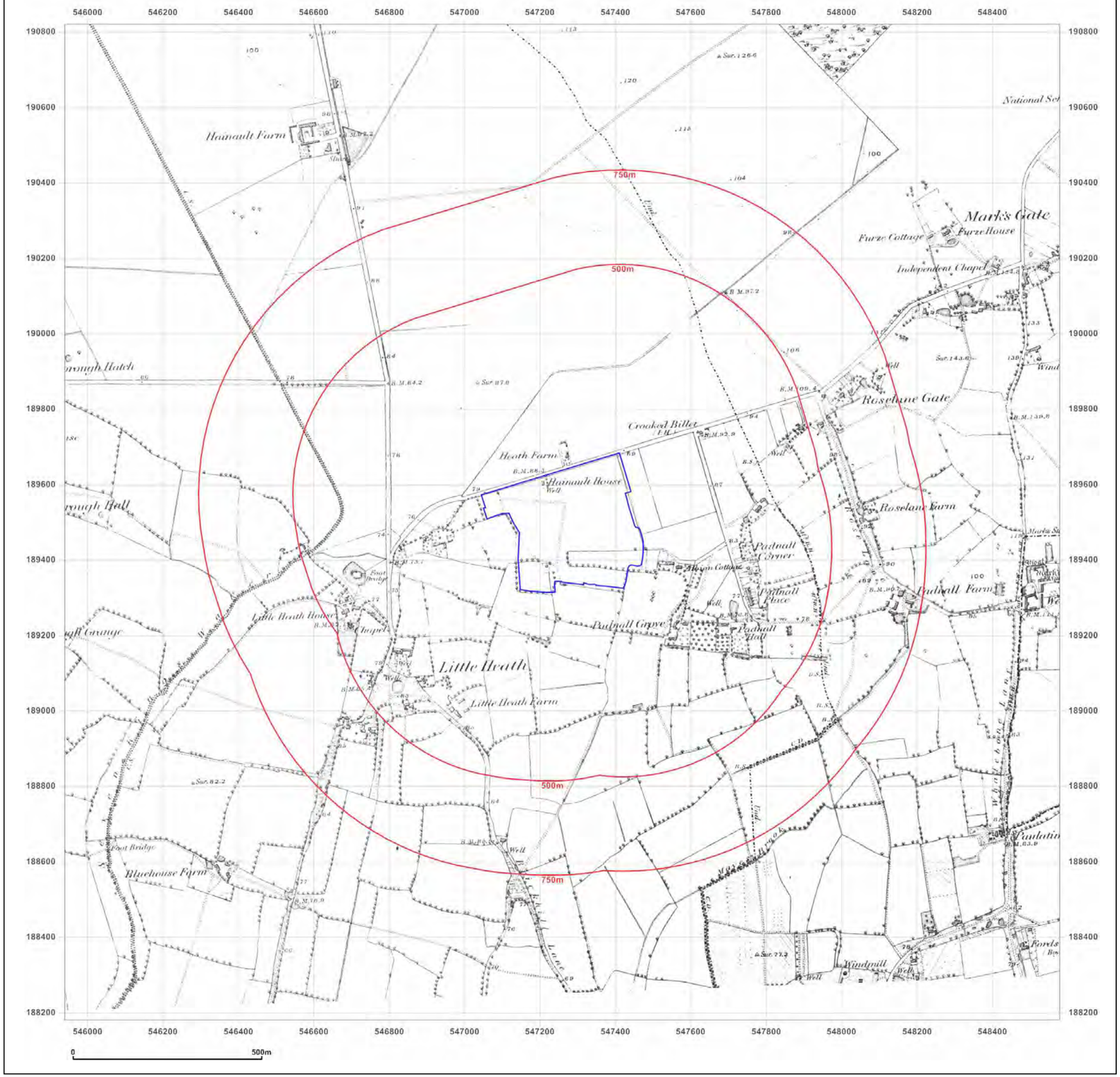

Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: County Series

Map date: **1871**

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Printed at: 1:10,560

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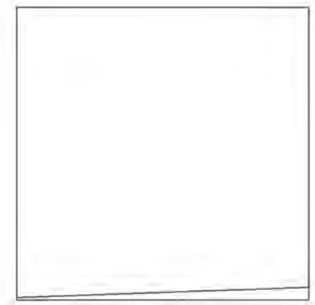
Surveyed 1871
Revised 1871
Edition N/A
Copyright N/A
Levelled N/A



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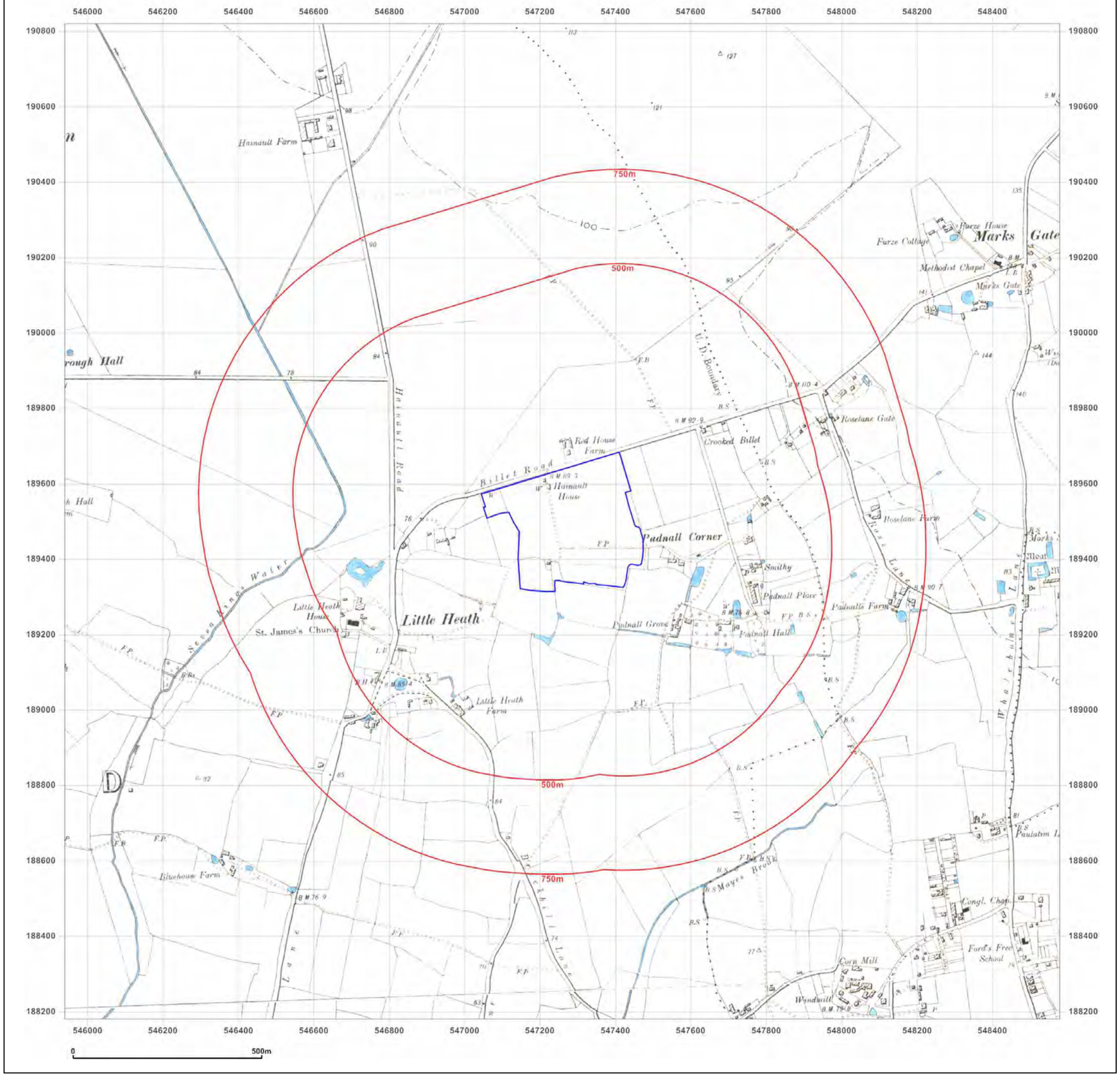

Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: County Series

Map date: **1894-1895**

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Surveyed 1871
Revised 1895
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1862
Revised 1894
Edition N/A
Copyright N/A
Levelled N/A

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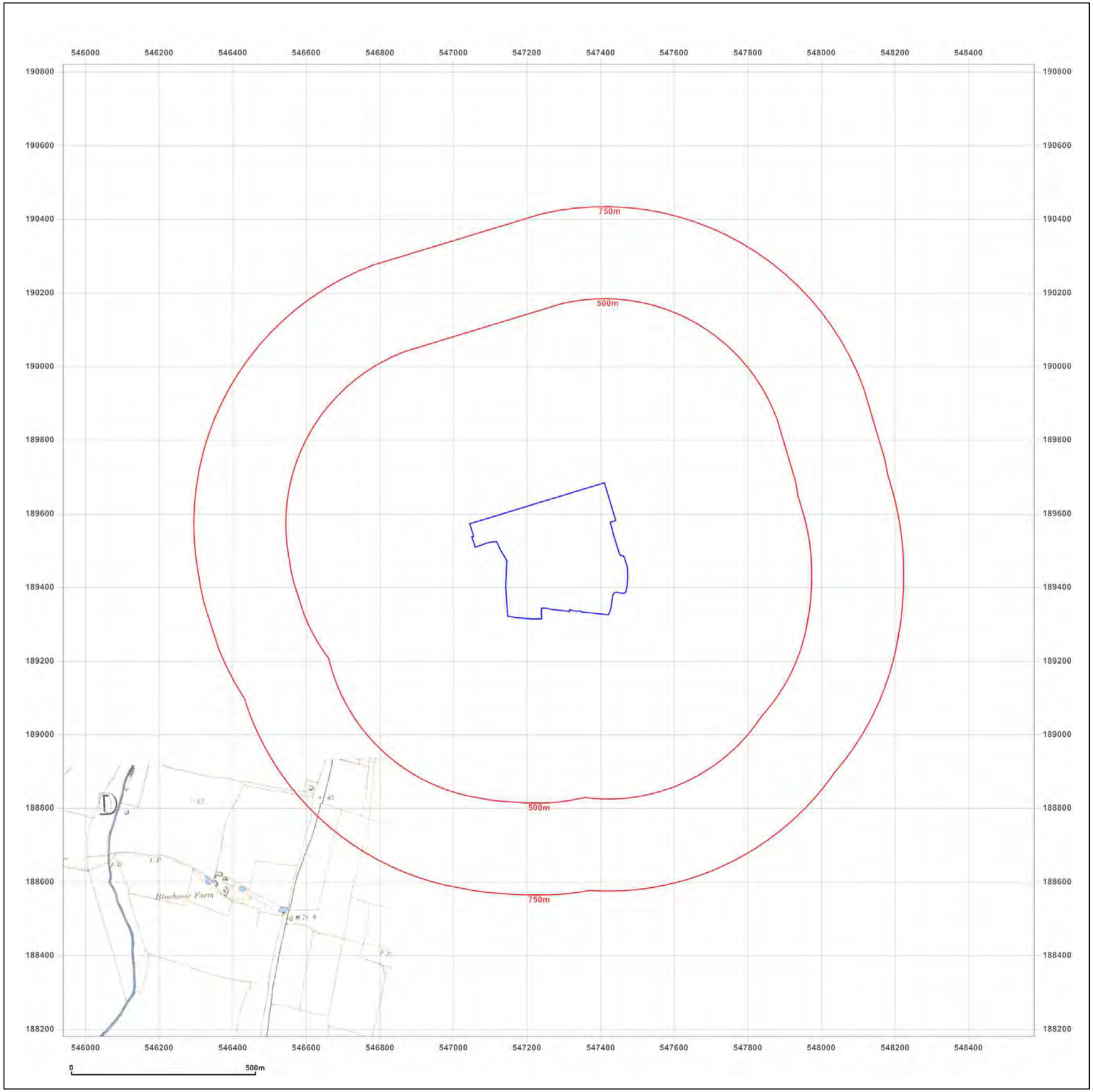

Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: County Series

Map date: **1895**

Scale: 1:10,560

Printed at: 1:10,560

N
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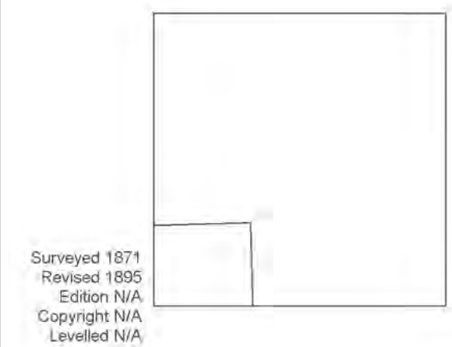

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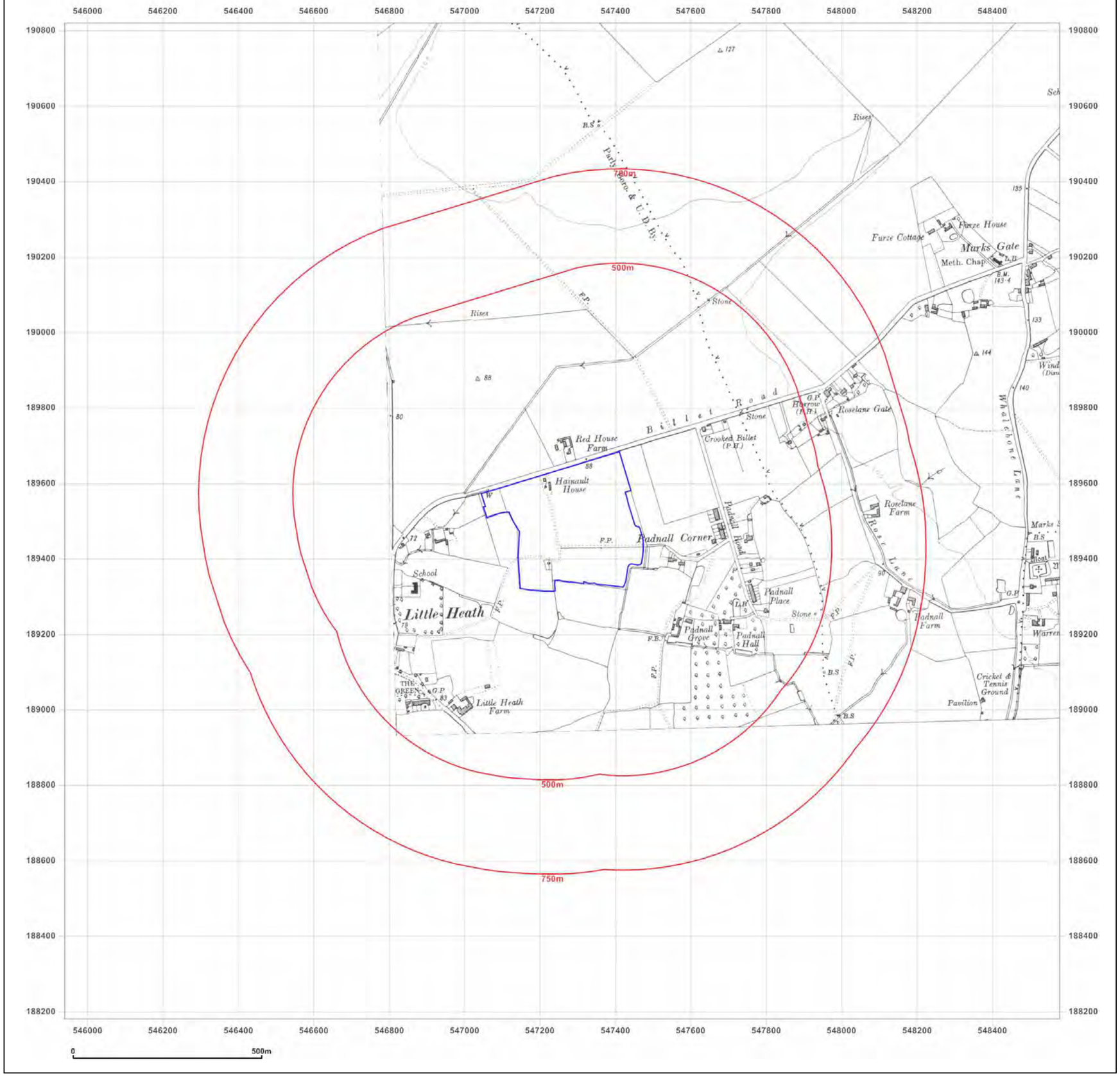

Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: County Series

Map date: **1914**

Scale: 1:10,560

Printed at: 1:10,560

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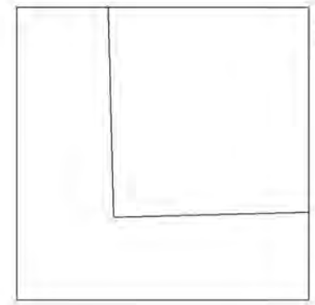

Surveyed 1871
Revised 1914
Edition N/A
Copyright N/A
Levelled N/A

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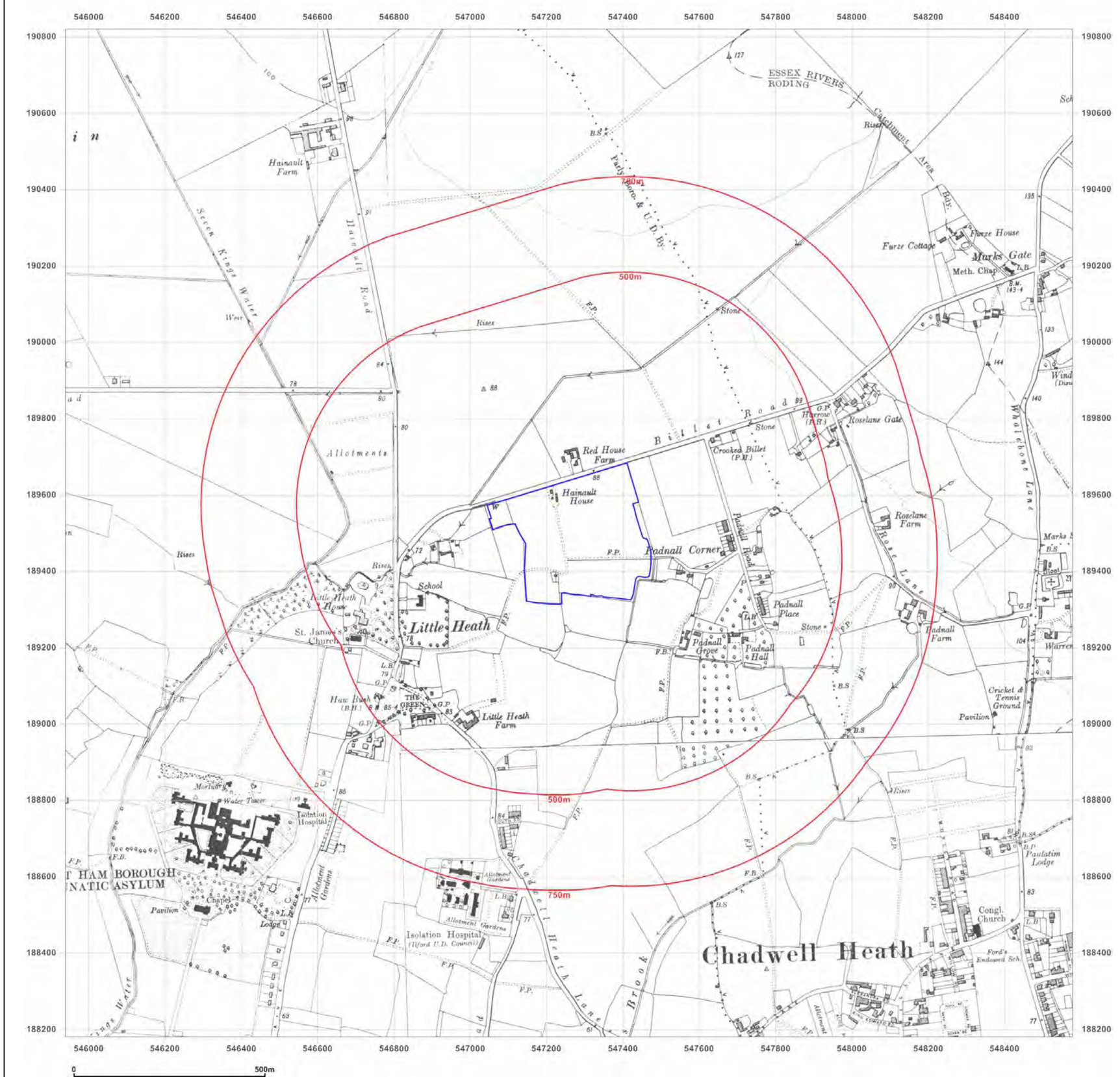

Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: County Series

Map date: **1921**

Scale: 1:10,560

Printed at: 1:10,560

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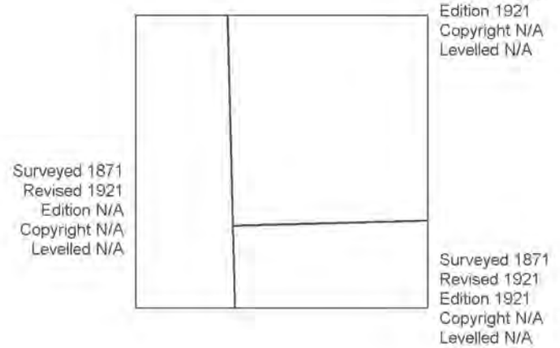

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Production date: 05 June 2020

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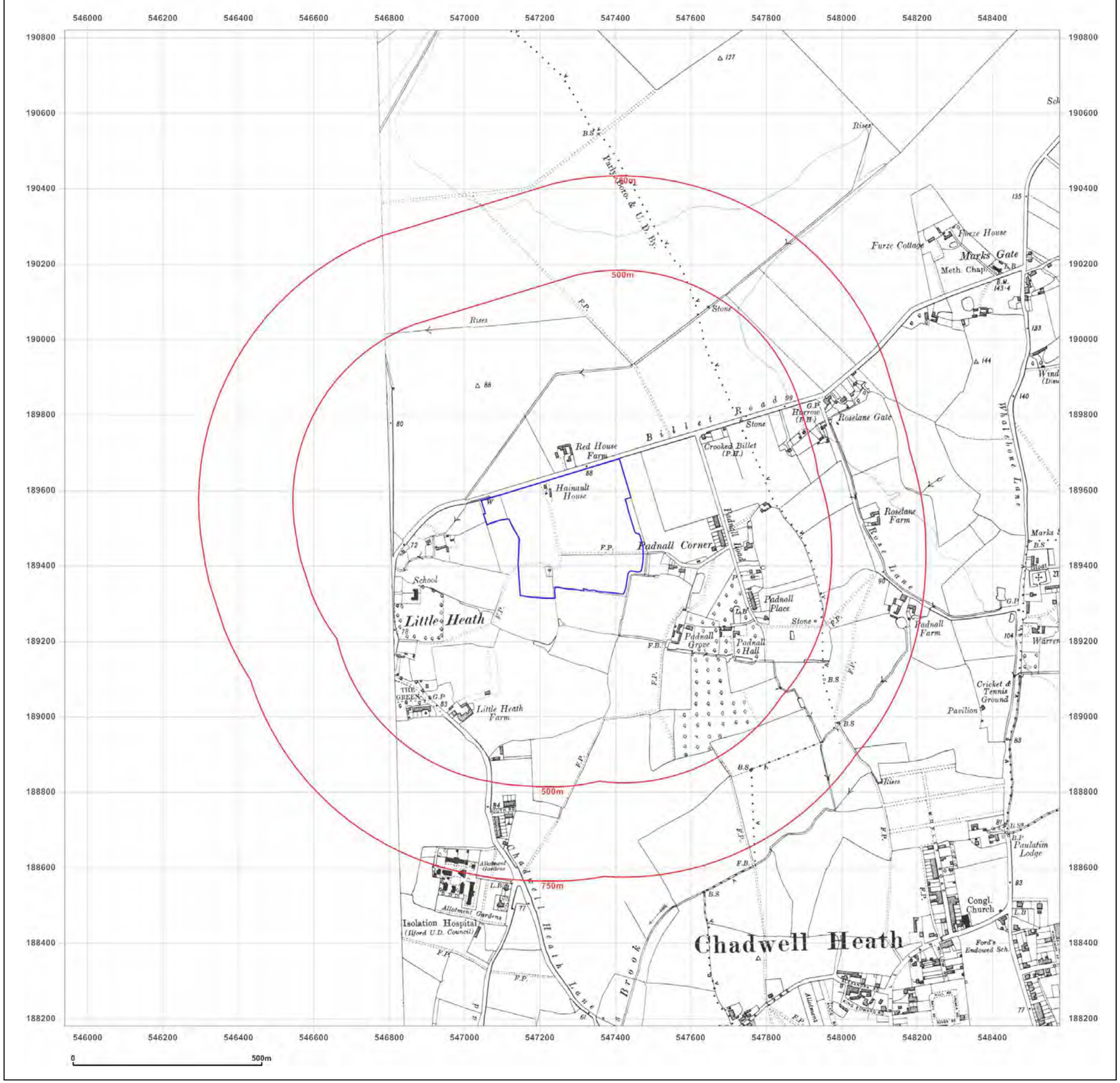

Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: County Series

Map date: **1921**

Scale: 1:10,560

Printed at: 1:10,560

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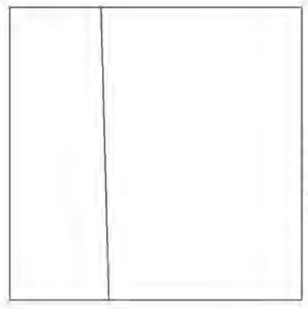

Surveyed 1871
Revised 1921
Edition N/A
Copyright N/A
Levelled N/A

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Production date: 05 June 2020

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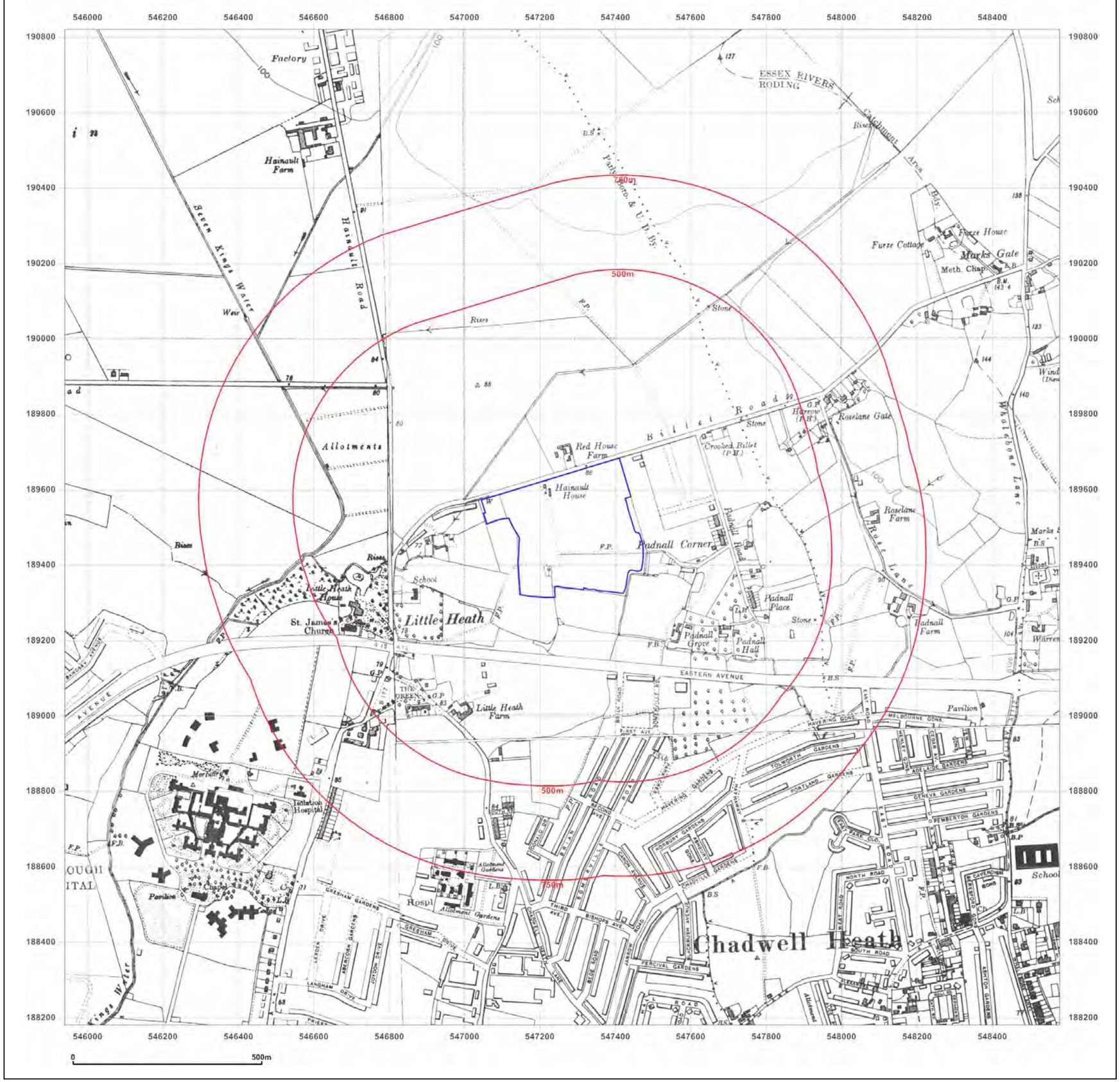

Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: County Series

Map date: **1938**

Scale: 1:10,560

Printed at: 1:10,560

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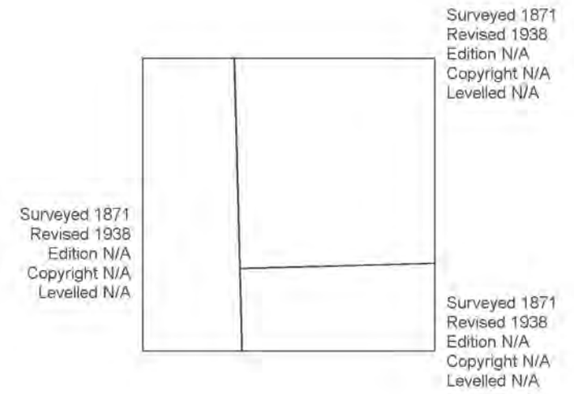

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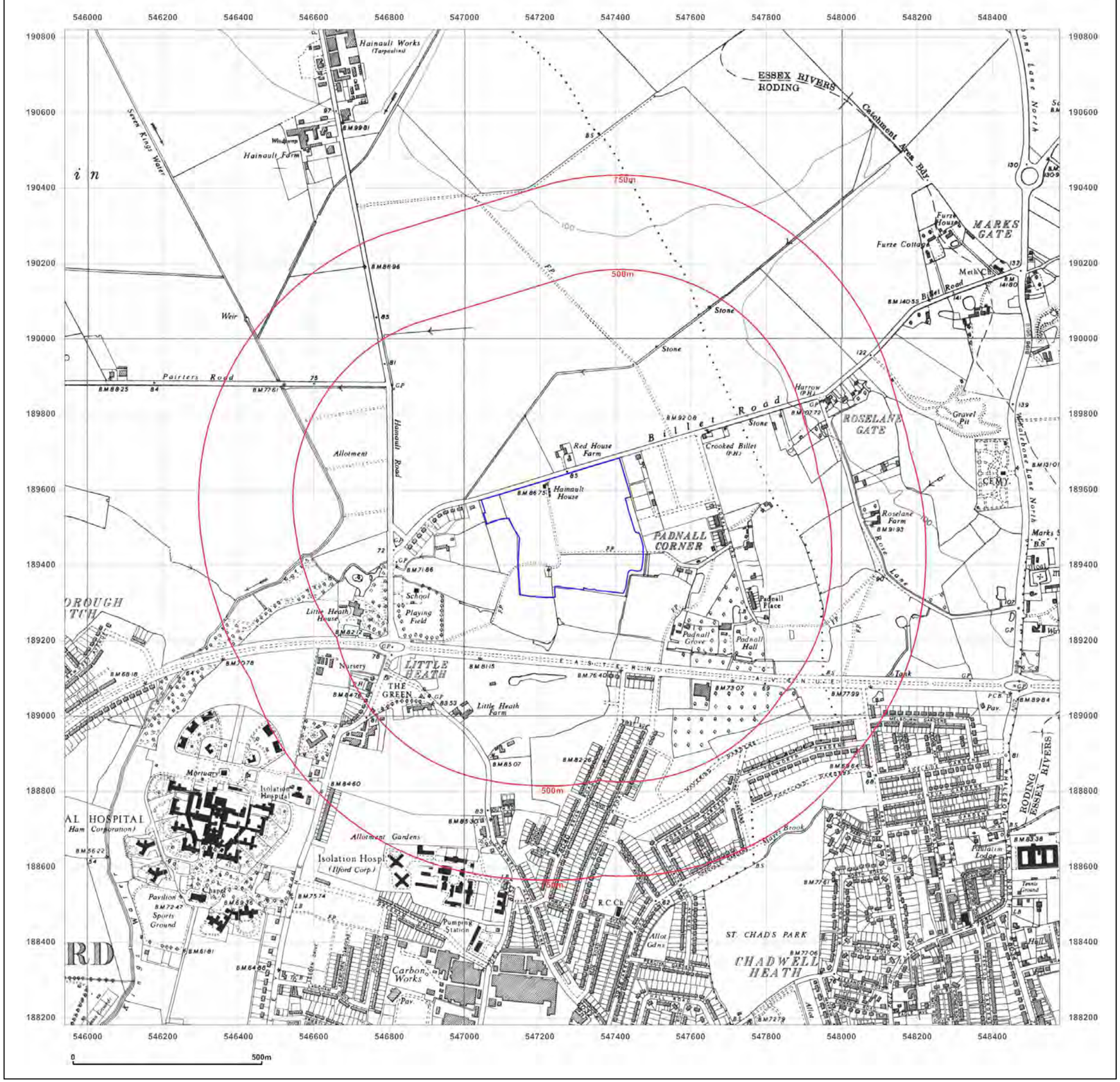

Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: Provisional

Map date: **1951**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed N/A
Revised 1950
Edition N/A
Copyright 1951
Levelled N/A

Surveyed N/A
Revised 1950
Edition N/A
Copyright 1951
Levelled N/A

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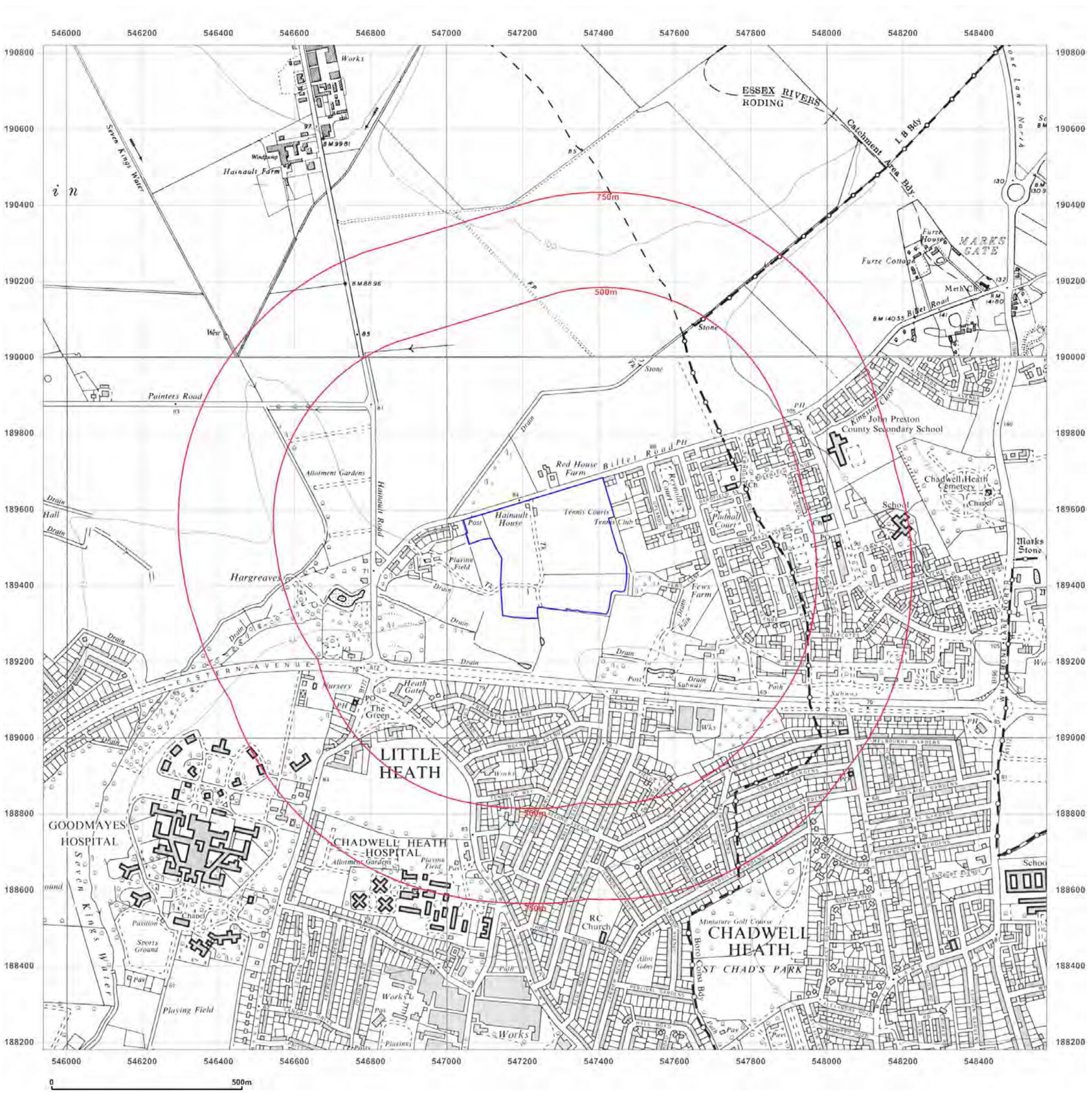

Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: Provisional

Map date: **1968-1969**

Scale: 1:10,560

Printed at: 1:10,560

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Surveyed N/A
Revised 1969
Edition N/A
Copyright 1951
Levelled N/A

Surveyed N/A
Revised 1968
Edition N/A
Copyright 1968
Levelled N/A

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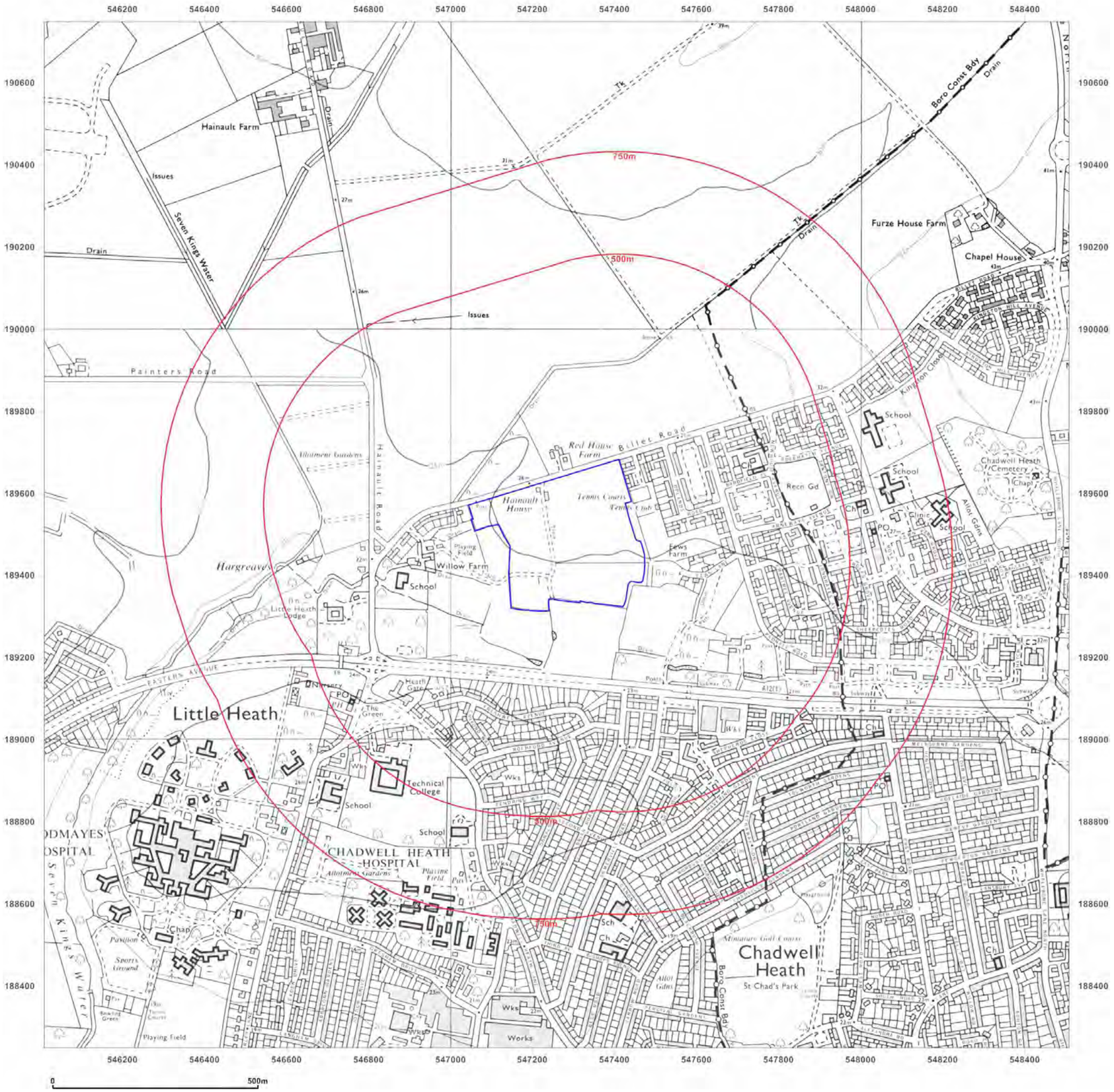

Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: National Grid

Map date: **1972-1975**

Scale: 1:10,000

Printed at: 1:10,000

N
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Surveyed 1970
Revised 1972
Edition N/A
Copyright 1972
Levelled 1962

Surveyed 1974
Revised 1975
Edition N/A
Copyright N/A
Levelled N/A

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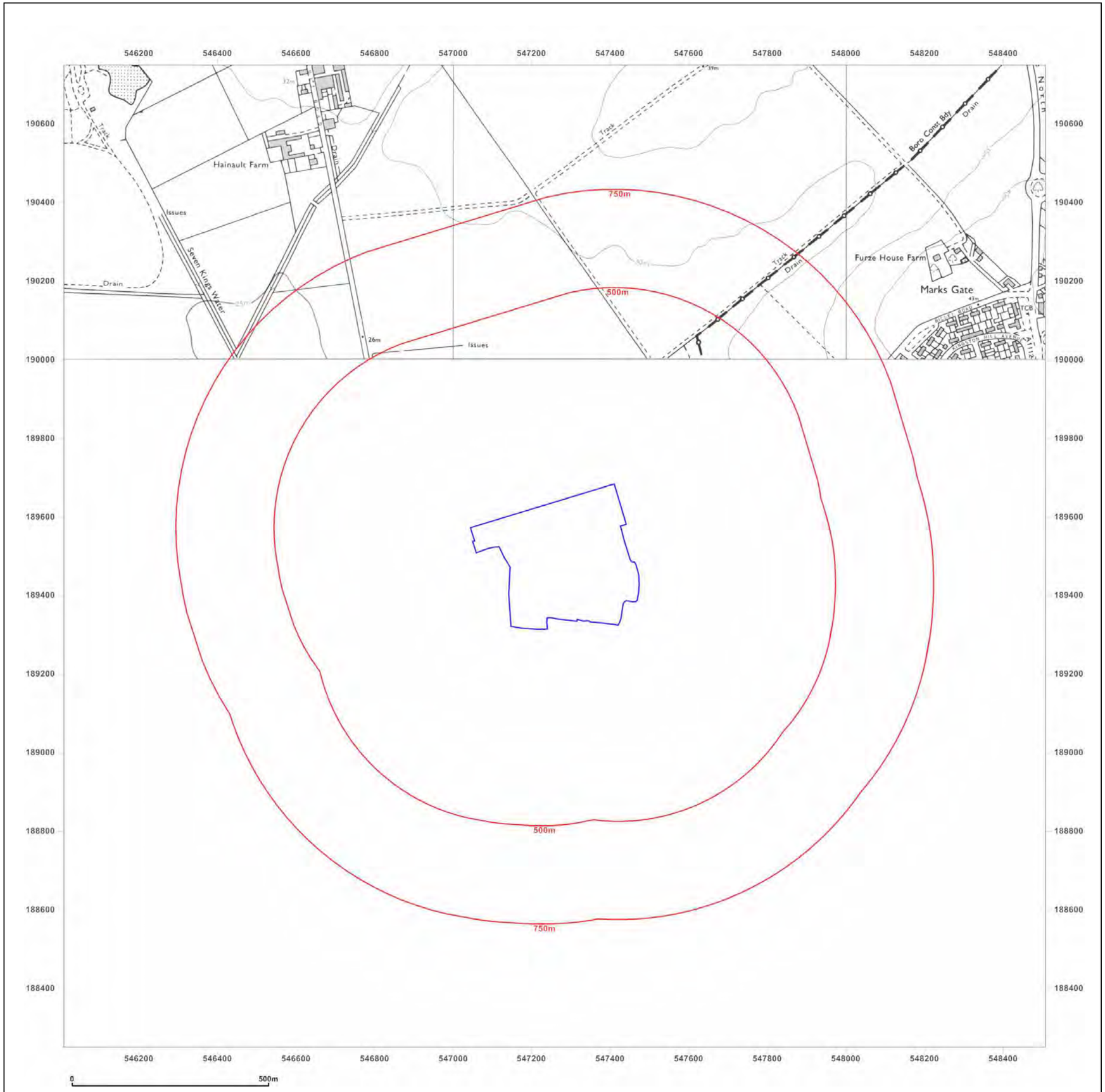

Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: National Grid

Map date: **1989**

Scale: 1:10,000

Printed at: 1:10,000

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Surveyed 1986
Revised 1989
Edition N/A
Copyright N/A
Levelled N/A

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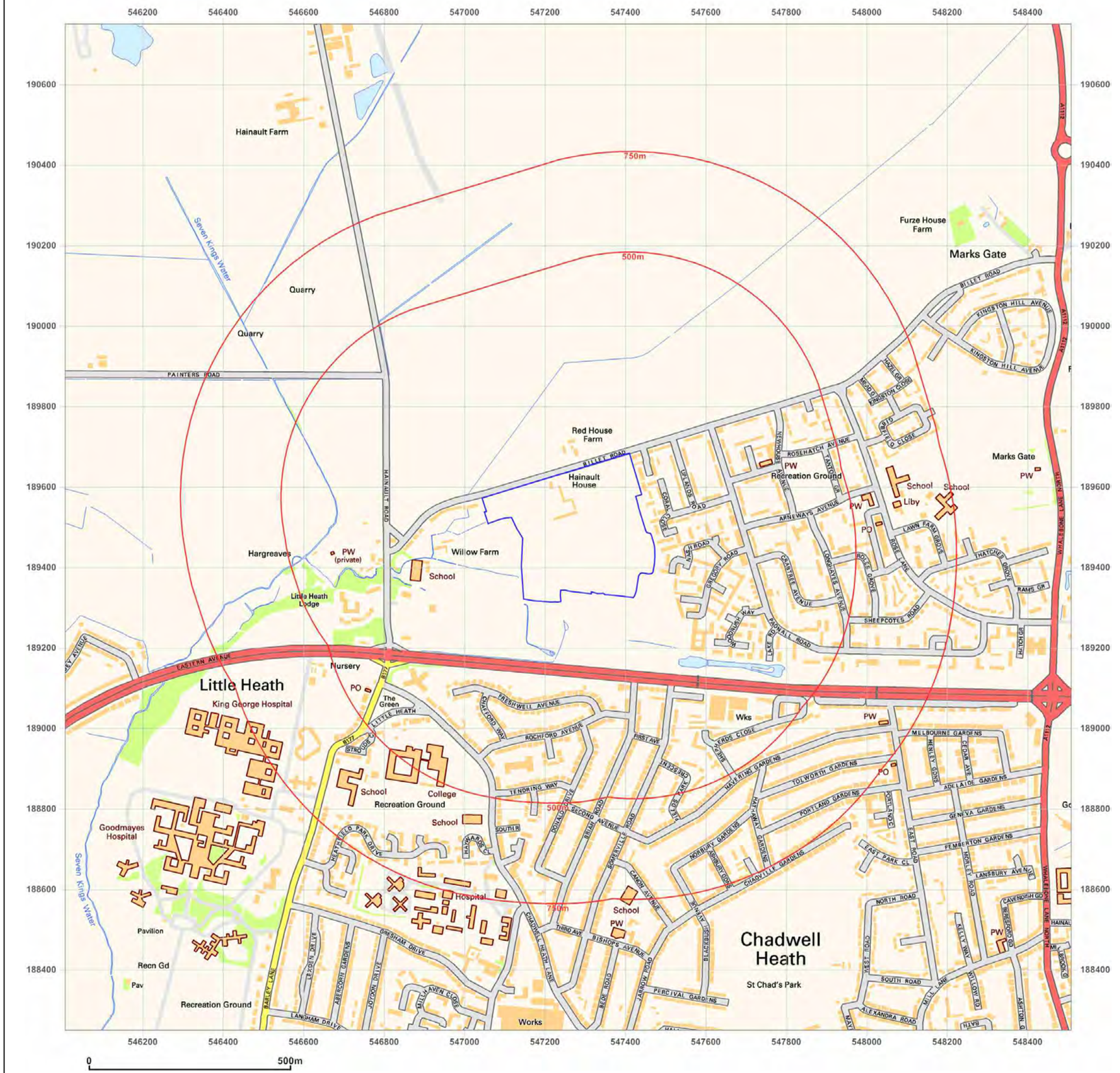

Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

Printed at: 1:10,000

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Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

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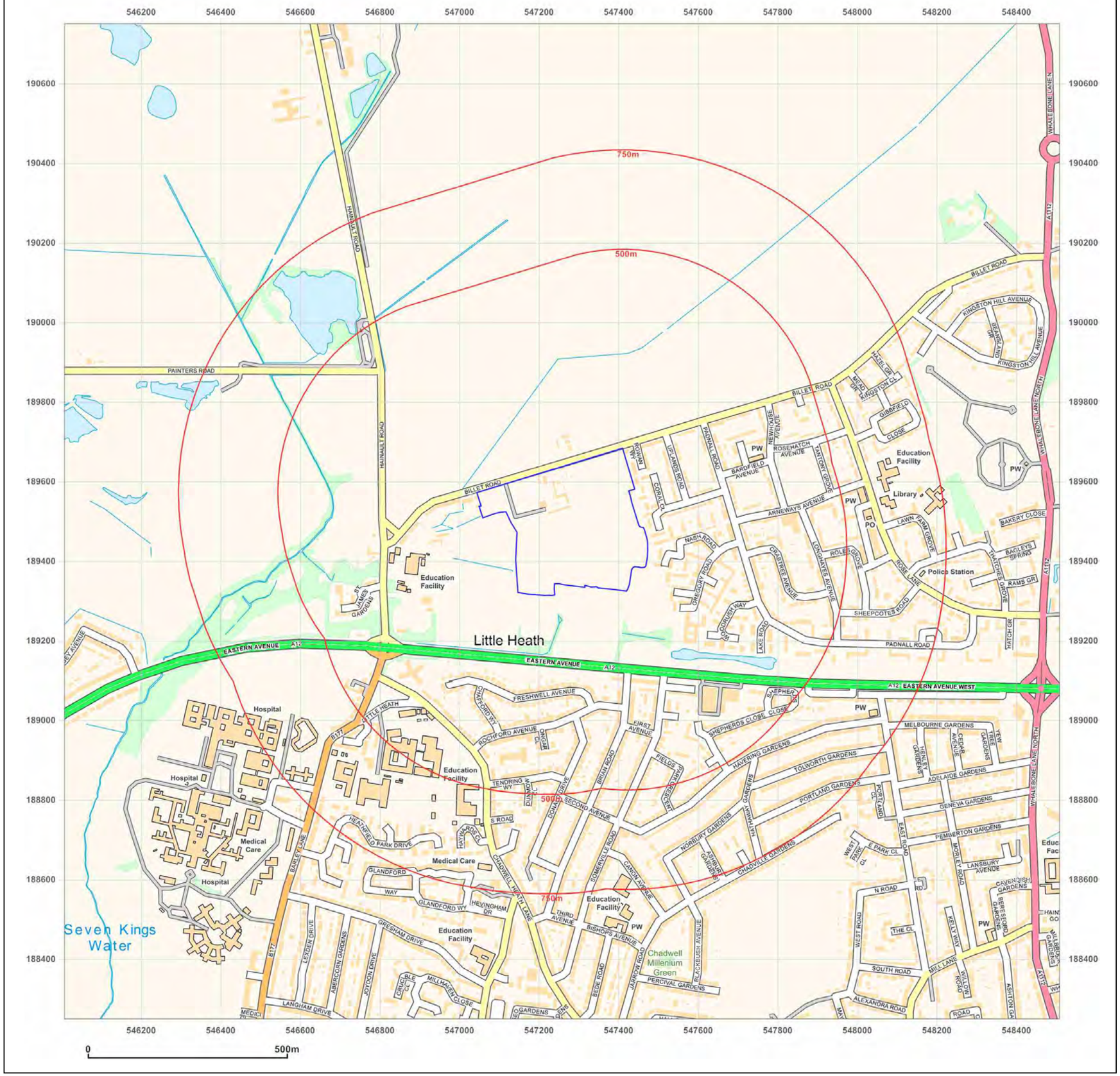

Groundsure INSIGHTS

Site Details:

66, BILLET ROAD, CHADWELL HEATH, RM6 5PP

Client Ref: 20-554-CAH-21912s
Report Ref: HMD-154-6783701
Grid Ref: 547258, 189499

Map Name: National Grid

Map date: **2020**

Scale: 1:10,000

Printed at: 1:10,000

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APPENDIX 3

- Exploratory Hole Logs
- BGS Borehole Logs

IDOM

Borehole Log

Borehole No.: MBH02

Sheet 1 of 2

Project Name:	Billet Road	Project No.: 21912s	Hole Type: CP
Location:	Romford	Co-ords: 547392E - 189662N	Scale: 1:50
Equipment:		Level (m):	Logged By: CAH
		Dates: 26/05/2020	

Well	Wtr Strk	Sample and In Situ Testing: Depth (m)	Type	Results	Coring: FI	TCR	SCR	RQD	Depth (m)	Level (m)	Legend	Stratum Description
									0.10			MADE GROUND comprising brownish grey slightly sandy gravelly clay. Sand is fine to coarse. Gravels are fine to coarse subangular to subrounded flint, brick, concrete and wood.
		0.30	D									MADE GROUND comprising brownish grey slightly clayey sandy GRAVEL. Sand is fine to coarse. Gravels are fine to coarse subangular to subrounded flint and brick.
		0.50	D									
		1.00	D						1.20			Dense orangish brown sandy GRAVEL. Sand is fine to coarse. Gravels are fine to coarse subangular to subrounded flint. (Boyn Hill Gravel Member).
		1.50	D									
		1.50	SPT(S)	N=34 (2,6/8,9,9,8)								
		2.00	B									
		2.50	B									
		2.50	SPT(C)	N=38 (7,10/11,10,9,8)								
		3.50	B									
		3.50	SPT(C)	N=30 (2,4/5,6,9,10)								
		4.50	B									
		4.50	SPT(C)	N=29 (3,4/5,8,8,8)								
		6.00	B									
		6.00	SPT(C)	N=45 (2,4/6,8,12,19)								
		6.60	D						6.60			Stiff brownish grey mottled bluish grey slightly sandy CLAY. Sand is fine. (Weathered London Clay Formation).
		7.00	D						6.90			Stiff bluish grey slightly sandy CLAY. Sand is fine. (London Clay Formation).
		7.50 - 7.95	U	Ublow=30								
		7.95	D									
		8.50	D									
		9.00	D									
		9.00	SPT(S)	50 (25 for 135mm/50 for 68mm)					9.20			Hard grey MUDSTONE. (London Clay Formation).
		10.00	D						9.90			Continued on Next Sheet

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
SPT(C) = Standard Penetration Test (Cone)
SPT(S) = Standard Penetration Test (Split Spoon)

HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)
FI = fracture index
TCR = total core recovery
SCR = solid core recovery
RQD = rock quality designation

Remarks

Coordinates and levels, where indicated, must not be used for design purposes.
The user is responsible for verifying all site and setting out dimensions.

Hand dig to 1.2m Drilled in 150mm, cased to 7m. Install to 6.50m

IDOM

Borehole Log

Borehole No. **MBH02**

Sheet 2 of 2

Project Name: Billet Road	Project No. 21912s	Co-ords: 547392E - 189662N	Hole Type CP
Location: Romford		Level (m):	Scale 1:50
Equipment:		Dates: 26/05/2020	Logged By CAH

Well	Wtr Strk	Sample and In Situ Testing			Coring				Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results	FI	TCR	SCR	RQD				
												Stiff bluish grey slightly sandy CLAY. Sand is fine. (London Clay Formation).
		10.50 - 10.90	U	Ublow=30								
		10.90	D									
									11.20			Very stiff bluish grey slightly sandy CLAY with frequent bands of grey sand. Sand is fine. (London Clay Formation).
		11.50	D									
		12.00	D									
		12.00	SPT(S)	N=29 (2,3/5,6,7,11)								
		13.00	D									
		13.50 - 13.85	U	Ublow=90								
		13.85	D									
		14.50	D									
		15.00	D									
		15.00	SPT(S)	N=34 (3,4/6,8,9,11)								
		16.00	D									
		16.50 - 16.85	U	Ublow=60								
		16.85	D									
		17.50	D									
		18.00	D									
		18.00	SPT(S)	N=36 (3,4/7,8,10,11)								
		19.00	D									
		19.50 - 19.90	U	Ublow=100								
		19.90	D									
		19.90	D						20.00			End of Borehole at 20.00m

11 12 13 14 15 16 17 18 19 20

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
SPT(C) = Standard Penetration Test (Cone)
SPT(S) = Standard Penetration Test (Split Spoon)

HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)
FI = fracture index
TCR = total core recovery
SCR = solid core recovery
RQD = rock quality designation

Remarks

Coordinates and levels, where indicated, must not be used for design purposes.
The user is responsible for verifying all site and setting out dimensions.

Hand dig to 1.2m Drilled in 150mm, cased to 7m. Install to 6.50m

IDOM

Borehole Log

Borehole No. **MBH03**

Sheet 1 of 3

Project Name: Billet Road	Project No. 21912s	Co-ords: 547398E - 189473N	Hole Type CP
Location: Romford		Level (m):	Scale 1:50
Equipment:		Dates: 27/05/2020	Logged By CAH

Well	Wtr Strk	Sample and In Situ Testing			Coring				Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results	FI	TCR	SCR	RQD				
		0.30	D									MADE GROUND comprising brownish grey slightly sandy gravelly clay. Sand is fine to coarse. Gravels are fine to coarse subangular to subrounded flint, brick, concrete and wood.
		0.50	D									
		1.00	D									
		1.00	SPT(C)	N=8 (1,3/2,2,2,2)					1.10			
									1.20			MADE GROUND comprising orangish brown slightly clayey sandy gravel. Sand is fine to coarse. Gravels are fine to coarse subangular to subrounded flint with rare brick fragments.
		1.50	B									MADE GROUND comprising dark brownish grey sandy gravel. Sand is fine to coarse. Gravels are fine to coarse subangular to subrounded brick, flint and concrete. Occasional ash.
		2.00	SPT(C)	N=13 (1,2/3,3,3,4)								
		2.20	B						2.20			Soft to firm brownish grey mottled bluish grey slightly sandy CLAY. Sand is fine. (Head Deposits).
		3.00	B						2.80			Firm brownish grey gravelly CLAY. Gravels are fine to coarse subangular to subrounded flint. (Boyn Hill Gravel Member).
		3.00	SPT(C)	N=9 (1,2/2,2,2,3)								
		3.50	D						3.50			Stiff bluish grey slightly sandy CLAY with frequent bands of grey sand. Sand is fine. (London Clay Formation).
		4.00	B									
		4.00	D									
		4.00	U	Ublow=15								
		5.00	D									
		5.00	SPT(S)	N=17 (1,2/4,3,5,5)								
		6.00	D									
		6.50 - 6.90	U	Ublow=30								
		6.90	D									
		7.50	D									
		8.00	D									
		8.00	SPT(S)	N=25 (2,3/5,6,6,8)								
		9.00	D									
		9.50 - 9.90	U	Ublow=55								
		9.90	D						9.80			
												Continued on Next Sheet

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
SPT(C) = Standard Penetration Test (Cone)
SPT(S) = Standard Penetration Test (Split Spoon)

HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)
FI = fracture index
TCR = total core recovery
SCR = solid core recovery
RQD = rock quality designation

Remarks

Coordinates and levels, where indicated, must not be used for design purposes.
The user is responsible for verifying all site and setting out dimensions.

Drilled to 4.5m in 200mm Then reduced to 150mm, cased to 9m. Install to 3m.

IDOM

Borehole Log

Borehole No. **MBH03**

Sheet 2 of 3

Project Name: Billet Road	Project No. 21912s	Co-ords: 547398E - 189473N	Hole Type CP
Location: Romford		Level (m):	Scale 1:50
Equipment:		Dates: 27/05/2020	Logged By CAH

Well	Wtr Strk	Sample and In Situ Testing			Coring				Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results	FI	TCR	SCR	RQD				
		10.50	D									
		11.00	D									
		11.00	SPT(S)	N=40 (10,8/8,11,10,11)								
		12.00	D									
		12.50 - 12.95	U	Ublow=70								
		12.95	D									
		13.50	D									
		14.00	D									
		14.00	SPT(S)	N=36 (5,6/7,9,10,10)								
		15.00	D									
		15.50 - 15.90	U	Ublow=85								
		15.90	D									
		16.50	D									
		17.00	D									
		17.00	SPT(S)	N=36 (4,6/7,9,10,10)								
		18.00	D									
		18.50	D									
		18.50 - 18.90	U	Ublow=70								
		18.90	D									
		20.00	D									Continued on Next Sheet

11 12 13 14 15 16 17 18 19 20

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
SPT(C) = Standard Penetration Test (Cone)
SPT(S) = Standard Penetration Test (Split Spoon)

HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)
FI = fracture index
TCR = total core recovery
SCR = solid core recovery
RQD = rock quality designation

Remarks

Coordinates and levels, where indicated, must not be used for design purposes.
The user is responsible for verifying all site and setting out dimensions.

Drilled to 4.5m in 200mm Then reduced to 150mm, cased to 9m. Install to 3m.

IDOM

Borehole Log

Borehole No.: MBH03

Sheet 3 of 3

Project Name:	Billet Road	Project No. 21912s	Co-ords: 547398E - 189473N
Location:	Romford		Level (m):
Equipment:			Dates: 27/05/2020

Hole Type: CP

Scale: 1:50

Logged By: CAH

Well	Wtr Strk	Sample and In Situ Testing			Coring				Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results	FI	TCR	SCR	RQD				
		20.00	SPT(S)	N=43 (7,7/8,11,11,13)								End of Borehole at 20.00m

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
SPT(C) = Standard Penetration Test (Cone)
SPT(S) = Standard Penetration Test (Split Spoon)

HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)
FI = fracture index
TCR = total core recovery
SCR = solid core recovery
RQD = rock quality designation

Remarks

Coordinates and levels, where indicated, must not be used for design purposes.
The user is responsible for verifying all site and setting out dimensions.

Drilled to 4.5m in 200mm Then reduced to 150mm, cased to 9m. Install to 3m.

IDOM

Borehole Log

Borehole No.: MBH04

Sheet 1 of 3

Project Name:	Billet Road	Project No.: 21912s	Co-ords: 547430E - 189402N
Location:	Romford		Level (m):
Equipment:			Dates: 01/06/2020

Hole Type: CP

Scale: 1:50

Logged By: CAH

Well	Wtr Strk	Sample and In Situ Testing: Depth (m)	Type	Results	Coring: FI	TCR	SCR	RQD	Depth (m)	Level (m)	Legend	Stratum Description
		0.30	D									MADE GROUND comprising brownish grey slightly sandy gravelly clay. Sand is fine to coarse. Gravels are fine to coarse subangular to subrounded flint, brick, concrete and wood.
		0.50	D									
									0.80			
		1.00	B									Firm to stiff orangish brown mottled pale grey slightly sandy gravelly CLAY. Sand is fine to coarse. Gravels are fine to coarse subangular to subrounded flint. (Boyn Hill Gravel Member).
		1.00	SPT(C)	N=13 (1,2/2,3,4,4)								
		1.30	D						1.30			
												Stiff brownish grey mottled bluish grey slightly sandy CLAY. Sand is fine. (Weathered London Clay Formation).
		2.00	D									
		2.00 - 2.30	U	Ublow=11								
									2.90			
		3.00	D									Stiff bluish grey slightly sandy CLAY. Sand is fine. (London Clay Formation).
		3.00	D									
		3.00	SPT(S)	N=11 (2,2/2,2,3,4)								
		3.50	D									
		4.00 - 4.40	U	Ublow=30								
		4.40	D									
									4.80			
		4.90	D									Hard bluish grey MUDSTONE. (London Clay Formation).
									5.40			
		5.50	D									Stiff bluish grey slightly sandy CLAY with frequent bands of grey sand. Sand is fine. (London Clay Formation).
		5.50	SPT(S)	N=22 (1,2/3,6,6,7)								
		6.50	D									
		7.00 - 7.45	U	Ublow=45								
		7.45	D									
		8.00	D									
		8.50	D									
		8.50	SPT(S)	N=25 (2,3/5,5,6,9)								
		9.50	D									
		10.00 - 10.40	U	Ublow=50								

Continued on Next Sheet

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
SPT(C) = Standard Penetration Test (Cone)
SPT(S) = Standard Penetration Test (Split Spoon)

HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)
FI = fracture index
TCR = total core recovery
SCR = solid core recovery
RQD = rock quality designation

Remarks

Coordinates and levels, where indicated, must not be used for design purposes.
The user is responsible for verifying all site and setting out dimensions.

Drilled to 4.5m in 200mm Then reduced to 150mm, cased to 6m.

IDOM

Borehole Log

Borehole No. **MBH04**

Sheet 2 of 3

Project Name: Billet Road	Project No. 21912s	Co-ords: 547430E - 189402N	Hole Type CP
Location: Romford		Level (m):	Scale 1:50
Equipment:		Dates: 01/06/2020	Logged By CAH

Well	Wtr Strk	Sample and In Situ Testing			Coring				Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results	FI	TCR	SCR	RQD					
		10.40	D									Stiff bluish grey slightly sandy CLAY with frequent bands of grey sand. Sand is fine. (London Clay Formation).	
		11.00	D										11
		11.50	D										
		11.50	SPT(S)	N=28 (3,5/5,7,8,8)									12
		12.50	D										
		13.00 - 13.45	U	Ublow=50									13
		13.45	D										
		14.00	D										14
		14.50	D										
		14.50	SPT(S)	N=38 (5,5/7,10,9,12)									15
		15.50	D										
		16.00 - 16.40	U	Ublow=80									16
		16.40	D										
		17.00	D										17
		17.50	D										
		17.50	SPT(S)	N=40 (5,6/8,9,10,13)									18
		18.50	D										
		19.00 - 19.40	U	Ublow=100									19
		19.40	D										
		20.00	D						20.00			Continued on Next Sheet	20

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
SPT(C) = Standard Penetration Test (Cone)
SPT(S) = Standard Penetration Test (Split Spoon)

HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)
FI = fracture index
TCR = total core recovery
SCR = solid core recovery
RQD = rock quality designation

Remarks

Coordinates and levels, where indicated, must not be used for design purposes.
The user is responsible for verifying all site and setting out dimensions.

Drilled to 4.5m in 200mm Then reduced to 150mm, cased to 6m.

IDOM

Borehole Log

Borehole No.
MBH04
Sheet 3 of 3

Project Name: Billet Road	Project No. 21912s	Co-ords: 547430E - 189402N	Hole Type CP
Location: Romford		Level (m):	Scale 1:50
Equipment:		Dates: 01/06/2020	Logged By CAH

Well	Wtr Strk	Sample and In Situ Testing			Coring				Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results	FI	TCR	SCR	RQD				
		20.00	SPT(S)	N=39 (3,4/8,9,9,13)								End of Borehole at 20.00m

21
22
23
24
25
26
27
28
29
30

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
SPT(C) = Standard Penetration Test (Cone)
SPT(S) = Standard Penetration Test (Split Spoon)

HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)
FI = fracture index
TCR = total core recovery
SCR = solid core recovery
RQD = rock quality designation

Remarks

Coordinates and levels, where indicated, must not be used for design purposes.
The user is responsible for verifying all site and setting out dimensions.

Drilled to 4.5m in 200mm Then reduced to 150mm, cased to 6m.

IDOM

Borehole Log

Borehole No. **MBH05**

Sheet 1 of 3

Project Name: Billet Road	Project No. 21912s	Co-ords: 547168E - 189412N	Hole Type CP
Location: Romford		Level (m):	Scale 1:50
Equipment:		Dates: 02/06/2020	Logged By CAH

Well	Wtr Strk	Sample and In Situ Testing			Coring				Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results	FI	TCR	SCR	RQD				
		0.30	D						0.20			TOPSOIL comprising firm greyish brown sandy clay. Abundant organic material.
		0.50	D									MADE GROUND comprising firm to stiff orangish brown mottled grey slightly gravelly sandy clay with frequent organic material. Gravels are fine to coarse subangular flint with occasional brick fragments.
		1.00	B						0.80			MADE GROUND comprising firm to stiff dark blackish grey mottled orangish brown slightly gravelly sandy clay. Gravels are fine to coarse subangular flint, brick and concrete.
		1.00	SPT(C)	N=4 (1,0/0,1,1,2)								
		2.00	B						1.60			MADE GROUND comprising firm to stiff dark blackish grey mottled orangish brown slightly gravelly sandy clay with common cloth, plastic and bags. Gravels are fine to coarse subangular flint, brick and concrete.
		2.00	SPT(C)	N=6 (1,0/1,1,1,3)								
		3.00	B									
		3.00	SPT(C)	N=7 (2,2/2,2,1,2)								
		4.00	B									
		4.00	D						4.10			Stiff brownish grey slightly sandy gravelly CLAY. Sand is fine to coarse. Gravels are fine to coarse subangular to subrounded flint. (Boyn Hill Gravel Member).
		4.00	SPT(S)	N=10 (1,2/2,2,3,3)					4.70			Stiff bluish grey slightly sandy CLAY. Sand is fine. (London Clay Formation).
		5.00	D									
		5.00 - 5.40	U	Ublow=20								
		5.40	D									
		6.00	D									
		6.50	D									
		6.50	SPT(S)	N=21 (1,3/4,4,6,7)								
		7.00	D						6.90			Hard bluish grey MUDSTONE. (London Clay Formation).
									7.50			Stiff bluish grey slightly sandy CLAY with frequent bands of grey sand. Sand is fine. (London Clay Formation).
		8.00 - 8.40	U	Ublow=55								
		8.40	D									
		9.00	D									
		9.50	D									
		9.50	SPT(S)	N=27 (2,3/5,6,7,9)								

Continued on Next Sheet

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
SPT(C) = Standard Penetration Test (Cone)
SPT(S) = Standard Penetration Test (Split Spoon)

HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)
FI = fracture index
TCR = total core recovery
SCR = solid core recovery
RQD = rock quality designation

Remarks

Coordinates and levels, where indicated, must not be used for design purposes.
The user is responsible for verifying all site and setting out dimensions.

Drilled to 4.5m in 200mm, Then reduced to 150mm, cased to 15m. Install to 4m.

IDOM

Borehole Log

Borehole No. **MBH05**

Sheet 2 of 3

Project Name: Billet Road	Project No. 21912s	Co-ords: 547168E - 189412N	Hole Type CP
Location: Romford		Level (m):	Scale 1:50
Equipment:		Dates: 02/06/2020	Logged By CAH

Well	Wtr Strk	Sample and In Situ Testing			Coring				Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results	FI	TCR	SCR	RQD				
												Stiff bluish grey slightly sandy CLAY with frequent bands of grey sand. Sand is fine. (London Clay Formation).
		10.50	D									
		11.00 - 11.35	U	Ublow=90								
		12.00	D									
		12.50	D									
		12.50	SPT(S)	N=27 (2,2/5,6,7,9)								
		13.50	D									
		14.00 - 14.40	U	Ublow=100								
		14.40	D									
		15.00	D									
		15.50	D									
		15.50	SPT(S)	N=36 (4,6/7,9,9,11)								
		16.50	D									
		17.00 - 17.35	U	Ublow=100								
		17.35	D									
		18.00	D									
		18.50	D									
		18.50	SPT(S)	N=38 (5,7/8,9,9,12)								
		19.50	D									
		20.00	D						20.00			Continued on Next Sheet

11 12 13 14 15 16 17 18 19 20

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
SPT(C) = Standard Penetration Test (Cone)
SPT(S) = Standard Penetration Test (Split Spoon)

HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)
FI = fracture index
TCR = total core recovery
SCR = solid core recovery
RQD = rock quality designation

Remarks

Coordinates and levels, where indicated, must not be used for design purposes.
The user is responsible for verifying all site and setting out dimensions.

Drilled to 4.5m in 200mm, Then reduced to 150mm, cased to 15m. Install to 4m.

IDOM

Borehole Log

Borehole No.
MBH05
Sheet 3 of 3

Project Name: Billet Road	Project No. 21912s	Co-ords: 547168E - 189412N	Hole Type CP
Location: Romford		Level (m):	Scale 1:50
Equipment:		Dates: 02/06/2020	Logged By CAH

Well	Wtr Strk	Sample and In Situ Testing			Coring				Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results	FI	TCR	SCR	RQD				
		20.00	SPT(S)	N=31 (3,3/6,7,8,10)								End of Borehole at 20.00m

21
22
23
24
25
26
27
28
29
30

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
SPT(C) = Standard Penetration Test (Cone)
SPT(S) = Standard Penetration Test (Split Spoon)

HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)
FI = fracture index
TCR = total core recovery
SCR = solid core recovery
RQD = rock quality designation

Remarks

Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Drilled to 4.5m in 200mm, Then reduced to 150mm, cased to 15m. Install to 4m.

IDOM

TRIAL PIT LOG

TrialPit No
MTP01
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547187.00 - 189357.00 Level:	Date 26/05/2020
Location: Romford		Dimensions (m): 2.80 x 0.80 Depth 2.80	Scale 1:25 Logged CAH
Equipment: JCB			

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.05 - 0.10	D,J					TOPSOIL. Firm greyish brown sandy clay. Abundant organic material.
				0.40			Firm to stiff orangish brown mottled grey slightly gravelly sandy CLAY with occasional organic material. Gravels are fine to coarse subangular flint. (Boyn Hill Gravel Member).
	0.70 - 0.75	D,J					
				1.50			Yellowish orange slightly silty gravelly fine to coarse SAND. Gravels are fine to coarse subrounded to rounded flint. (Boyn Hill Gravel Member).
	1.60 - 1.65	D,J					
▼				2.40			Yellowish brown slightly silty sandy GRAVEL. Sand is fine to coarse. Gravels are fine to coarse subrounded to rounded flint. (Boyn Hill Gravel Member).
				2.80			End of Pit at 2.800m

1
2
3
4
5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable till 1.5 m bgl.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

TRIAL PIT LOG

TrialPit No: MTP02
Sheet 1 of 1

Project Name:	Billet Road	Project No. 21912s	Co-ords: 547275.00 - 189381.00 Level:	Date 26/05/2020
Location:	Romford		Dimensions (m): 3.00 x 0.80 Depth 3.00	Scale 1:25
Equipment:	JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10 - 0.15	D,J					TOPSOIL. Firm greyish brown sandy clay. Abundant organic material.
				0.30			
	0.40 - 0.45	D,J					MADE GROUND comprising firm to stiff orangish brown mottled grey slightly gravelly sandy clay with occasional organic material and rare brick fragments. Gravels are fine to coarse subangular flint.
				1.20			Orangish brown mottled pale grey slightly silty SAND and GRAVEL. Sand is fine to coarse. Gravels are fine to coarse subangular to rounded flint. Rare cobble flints. (Boyn Hill Gravel Member). *Pocket of grey clayey gravel.*
▼	2.80 - 3.60	D,J					
				3.00			End of Pit at 3.000m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable till 2.0 m bgl.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP03
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547348.00 - 189372.00 Level:	Date 26/05/2020
Location: Romford		Dimensions (m): 2.70 × 0.60 Depth 3.00	Scale 1:25
Equipment: JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.05 - 0.10	D,J					Pale grey slightly clayey sandy GRAVEL. Sand is fine to coarse. Gravels are fine to coarse subangular to rounded flint. frequent organic material. (Boyn Hill Gravel Member).
	0.40 - 0.45	D,J		0.35			Firm to stiff orangish brown mottled grey slightly gravelly sandy CLAY with occasional organic material. Gravels are fine to coarse subangular flint. (Boyn Hill Gravel Member).
				0.60			Firm orangish brown mottled pale grey slightly sandy CLAY with occasional fine subangular flints and pockets of organic material. Sand is fine to coarse. (Boyn Hill Gravel Member).
							Pocket of pale bluish grey sand and gravel.
▼	1.80 - 1.85	D,J					*Slow seepage.*
				2.60			Firm bluish grey slightly sandy CLAY. Sand is fine. (London Clay Formation).
				3.00			End of Pit at 3.000m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP04
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547406.00 - 189426.00 Level:	Date 26/05/2020
Location: Romford		Dimensions (m): 2.80 × 0.80 Depth 2.45	Scale 1:25
Equipment: JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.05 - 0.10	D,J					TOPSOIL. Brownish grey slightly sandy gravelly clay. Sand is fine to coarse. Gravels are fine to coarse subangular flint.
	0.70 - 0.75	D,J		0.60			MADE GROUND comprising firm to stiff orangish brown mottled grey slightly gravelly sandy clay with occasional organic material and rare brick fragments. Gravels are fine to coarse subangular flint.
▼	1.45 - 1.50	D,J		1.30			MADE GROUND (Landfill) comprising soft dark greenish black slightly gravelly sandy clay. Sand is fine to coarse. Gravels are fine to medium subangular to subrounded flint, brick, concrete, wood, metal, paper, scrap, mechanical parts. Strong hydrocarbon odour and staining.
	2.40 - 2.45	D,J		2.45			End of Pit at 2.450m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable till 1.3 m bgl.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

TRIAL PIT LOG

TrialPit No: MTP05

Sheet 1 of 1

Project Name:	Billet Road	Project No. 21912s	Co-ords: 547349.00 - 189426.00 Level:	Date 26/05/2020
Location:	Romford		Dimensions (m): 2.80 x 0.80 Depth 2.40	Scale 1:25
Equipment:	JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10 - 0.15	D,J					TOPSOIL. Firm greyish brown sandy clay. Abundant organic material.
				0.50			MADE GROUND comprising firm to stiff orangish brown mottled grey slightly gravelly sandy clay with occasional organic material. Gravels are fine to coarse subangular flint.
				1.20			MADE GROUND comprising soft blackish grey mottled dark greenish grey slightly gravelly sandy clay with frequent bricks. Gravels are fine to medium subangular to rounded flint. Sand is fine to coarse. Slight hydrocarbon odour.
	1.40 - 1.45	D,J					
▼				1.60			MADE GROUND (Landfill) comprising soft dark greenish black slightly gravelly sandy clay. Sand is fine to coarse. Gravels are fine to medium subangular to subrounded flint, brick, concrete, wood, metal, paper, scrap, mechanical parts. Strong hydrocarbon odour and staining. *Concrete boulder (0.7 x 0.4 x 0.3 meters).* *Rapid inpour of water from east.*
	2.40 - 2.45	D,J		2.40			End of Pit at 2.400m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability

Sides stable.

Remarks

Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP06
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547269.00 - 189435.00 Level:	Date 26/05/2020
Location: Romford		Dimensions (m): 2.90 x 0.80 Depth 3.00	Scale 1:25 Logged CAH
Equipment: JCB			

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.05 - 0.10	D,J					TOPSOIL. Firm greyish brown sandy clay. Abundant organic material.
				0.30			
	0.40 - 0.45	D,J					Firm to stiff orangish brown mottled grey slightly gravelly sandy CLAY with occasional organic material. Gravels are fine to coarse subangular flint. (Boyn Hill Gravel Member).
				0.60			Orangish brown mottled pale grey slightly silty SAND and GRAVEL with frequent pockets of soft greenish grey slightly silty sandy clay. Sand is fine to coarse. Gravels are fine to coarse subangular to rounded flint. Rare cobble flints. (Boyn Hill Gravel Member).
	1.70 - 1.75	D,J					
				2.80			Very stiff orangish brown mottled bluish grey slightly sandy CLAY. Sand is fine. (Weathered London Clay Formation).
▼	2.90 - 2.95	D,J		3.00			*Slow seepage.* End of Pit at 3.000m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP07
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547178.00 - 189441.00 Level:	Date 26/05/2020
Location: Romford		Dimensions (m): 3.20 × 0.80 Depth 2.50	Scale 1:25 Logged CAH
Equipment: JCB			

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10 - 0.15	D,J					MADE GROUND firm orangish brown slightly gravelly clayey fine to coarse sand with frequent whole bricks. Gravels are fine to coarse subangular to subrounded flint, brick, concrete, wood and charcoal.
							Concrete boulder and surface drainage pipes.
	0.60 - 0.65	D,J					
				0.90			MADE GROUND (Landfill) soft blackish grey slightly sandy gravelly clay. Sand is fine to coarse. Gravels are fine to coarse subangular to subrounded flint, brick, concrete, tile, metal, paper, plastic and glass. Strong hydrocarbon odour and sheen.
▼	1.80 - 1.85	D,J					
	2.30 - 2.35	D,J					
				2.50			End of Pit at 2.500m

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D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable till 1.0 m bgl.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP08
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547185.00 - 189489.00 Level:	Date 26/05/2020
Location: Romford		Dimensions (m): 2.80 x 0.70 Depth 2.40	Scale 1:25 Logged CAH
Equipment: JCB			

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10 - 0.15	D,J					MADE GROUND comprising stiff grey becoming brown slightly sandy gravelly clay. Sand is fine to coarse. Gravels are fine to coarse angular to subrounded brick, concrete, plastic, sheets, bin liners, breezeblocks and charcoal.
							Concrete boulders.
							Fine to medium yellowish orange sand pocket.
	1.20 - 1.25	D,J		1.20			MADE GROUND (Landfill) comprising soft dark greenish grey slightly gravelly sandy clay. Gravels are fine subangular brick and concrete. Sand is fine to coarse.
▼				1.50			MADE GROUND (Landfill) comprising dark blackish grey slightly sandy gravelly clay. Sand is fine to coarse. Gravels are fine to coarse subangular brick, concrete, wood, metal, carboard, wire, plastic and scrap metal.
	1.90 - 1.95	D,J					
				2.40			End of Pit at 2.400m

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D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable till 1.5 m bgl.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP09
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547232.00 - 189501.00 Level:	Date 26/05/2020
Location: Romford		Dimensions (m): 2.70 x 0.60 Depth 2.60	Scale 1:25 Logged CAH
Equipment: JCB			

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.05 - 0.10	D,J					MADE GROUND comprising stiff greyish brown slightly sandy gravelly clay. Sand is fine to coarse. Gravels are fine to coarse subangular to subrounded brick, concrete, flint, plastic and charcoal.
							Concrete boulder.
	1.15 - 1.20	D,J		1.10			MADE GROUND (Landfill) comprising soft dark greenish grey slightly gravelly sandy clay. Gravels are fine subangular brick and concrete. Sand is fine to coarse. frequent metal, wire, cable, plastic. Hydrocarbon odour and sheen.
▼	2.00 - 2.05	D,J					
	2.50 - 2.55	D,J		2.60			End of Pit at 2.600m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

TRIAL PIT LOG

TrialPit No: MTP10
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547318.00 - 189506.00 Level:	Date 26/05/2020
Location: Romford		Dimensions (m): 2.50 x 0.70 Depth 2.60	Scale 1:25
Equipment: JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.05 - 0.10	D,J		0.20			TOPSOIL comprising greyish brown slightly clayey gravelly fine to coarse sand. Gravels are fine to medium subrounded to rounded flint. Abundant organic material.
	0.40 - 0.45	D,J					MADE GROUND comprising very stiff structureless bluish grey mottled orangish brown slightly sandy gravelly clay with occasional organic matter. Sand is fine to coarse. Gravels are medium to coarse subrounded to rounded flint.
				1.20			MADE GROUND (landfill) comprising stiff dark greenish grey slightly sandy gravelly clay. Sand is fine to coarse. Gravels are fine to coarse subangular to subrounded brick, wood, concrete. frequent plastic and cloth. Hydrocarbon odour and sheen.
▼	1.90 - 1.95	D,J					
	2.50 - 2.55	D,J					*Cable and glass bottles.*
				2.60			End of Pit at 2.600m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable till 1.2 m bgl.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP11
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547417.00 - 189497.00 Level:	Date 27/05/2020
Location: Romford		Dimensions (m): 2.80 x 0.80 Depth 2.50	Scale 1:25 Logged CAH
Equipment: JCB			

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.05 - 0.10	D,J					TOPSOIL comprising greyish brown clayey fine to coarse sand. Abundant organic material.
				0.20			
	0.30 - 0.35	D,J					MADE GROUND comprising firm to stiff orangish brown mottled grey slightly gravelly sandy clay with occasional organic material. Gravels are fine to coarse subangular flint.
				0.80			MADE GROUND comprising stiff dark greyish black slightly gravelly sandy clay. Gravels are medium to coarse subangular to subrounded flint, brick and wood. Pockets of hydrocarbon staining which increases with depth.
							Concrete boulder.
	1.30 - 1.35	D,J					
▼							*Common metal, wood, brick, cloth, tile, plastic with a strong hydrocarbon odour.*
	2.40 - 2.45	D,J					
				2.50			End of Pit at 2.500m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable till 1.0 m bgl.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

TRIAL PIT LOG

TrialPit No: MTP12
Sheet 1 of 1

Project Name:	Billet Road	Project No. 21912s	Co-ords: 547339.00 - 189531.00 Level:	Date 27/05/2020
Location:	Romford		Dimensions (m): 2.70 x 0.80 Depth 3.30	Scale 1:25
Equipment:	JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.05 - 0.10	D,J					TOPSOIL comprising greyish brown clayey fine to coarse sand. Abundant organic material.
				0.35			
	0.50 - 0.55	D,J					MADE GROUND comprising firm to stiff orangish brown mottled grey slightly gravelly sandy clay with occasional organic material and pockets of fine to medium yellowish sand. Gravels are fine to coarse subangular flint.
				1.40			
	1.55 - 1.60	D,J					MADE GROUND comprising stiff dark greyish black slightly gravelly sandy clay with occasional hydrocarbon stains. Gravels are fine to coarse angular to subrounded flint, brick, concrete and wood.
▼							*Slow seepage.* *Glass, brick, metal, plastic, board, bottles, cans with a strong hydrocarbon odour.*
				3.30			End of Pit at 3.300m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable till 2.0 m bgl.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP13
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547396.00 - 189590.00 Level:	Date 27/05/2020
Location: Romford		Dimensions (m): 3.00 × 0.70 Depth 3.20	Scale 1:25
Equipment: JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	1.00 - 1.05	D,J					Firm to stiff orangish brown mottled grey slightly gravelly sandy CLAY with occasional organic material. Gravels are fine to coarse subangular flint. (Boyn Hill Gravel Member).
							Strong hydrocarbon odour.
				1.60			Brownish yellow silty fine to coarse SAND. (Boyn Hill Gravel Member).
	2.40 - 2.45	D,J		2.40			Brownish orange silty SAND and GRAVEL. Sand is fine to coarse. Gravels are fine to coarse subangular to subrounded flint and quartz vein. (Boyn Hill Gravel Member).
▼							*Slow seepage.*
	3.10 - 3.15	D,J		3.20			End of Pit at 3.200m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable till 2.4 m bgl.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP14
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547283.00 - 189567.00 Level:	Date 27/05/2020
Location: Romford		Dimensions (m): 2.90 x 0.80 Depth 2.00	Scale 1:25 Logged CAH
Equipment: JCB			

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.60 - 0.65	D,J					MADE GROUND comprising firm to stiff orangish brown mottled grey slightly gravelly sandy clay with occasional organic material. Gravels are fine to coarse subangular flint.
	0.90 - 0.95	D,J		0.80			MADE GROUND (landfill) comprising firm dark greenish grey slightly gravelly sandy clay. Gravels are fine to coarse angular to subrounded flint, brick, concrete, clay pipe and wood. frequent metal, wire, plastic, cloth, board, clinker and pipe.
▼	1.30 - 1.35	D,J					
	1.90 - 1.95	D,J		2.00			End of Pit at 2.000m

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D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable till 0.8 m bgl.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

TRIAL PIT LOG

TrialPit No: MTP15
Sheet 1 of 1

Project Name:	Billet Road	Project No. 21912s	Co-ords: 547278.00 - 189609.00 Level:	Date 27/05/2020
Location:	Romford		Dimensions (m): 3.70 x 0.80 Depth 3.10	Scale 1:25
Equipment:	JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.10 - 0.15	D,J					Firm to stiff orangish brown mottled grey slightly gravelly sandy CLAY with occasional organic material. Gravels are fine to coarse subangular flint. (Boyn Hill Gravel Member).
				0.40			
	0.60 - 0.65	D,J					Reddish brown mottled yellowish orange slightly silty sandy CLAY with occasional pockets of bluish grey interbedded with reddish brown slightly silty sandy clay. Sand is fine to coarse. (Boyn Hill Gravel Member).
	1.40 - 1.45	D,J					
				1.50			Yellowish brown slightly clayey silty fine to coarse SAND with pockets of reddish brown slightly silty sandy clay. (Boyn Hill Gravel Member).
	2.50 - 2.55	D,J					
				3.10			End of Pit at 3.100m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable till 1.5 m bgl.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP16
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547345.00 - 189588.00 Level:	Date 27/05/2020
Location: Romford		Dimensions (m): 3.10 x 0.70 Depth 2.40	Scale 1:25
Equipment: JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
							TOPSOIL comprising greyish brown slightly gravelly sandy clay. Gravels are fine to coarse subangular to subrounded flint. Abundant organic material.
				0.30			MADE GROUND comprising firm to stiff orangish brown mottled grey slightly gravelly sandy clay with occasional organic material, brick and concrete fragments. Gravels are fine to coarse subangular flint.
				1.40			Reddish brown slightly clayey silty fine to coarse SAND. (Boyn Hill Gravel Member).
▼							*Slow seepage.*
				2.40			End of Pit at 2.400m

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable till 1.5 m bgl.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP17
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547345.00 - 189567.00 Level:	Date 27/05/2020
Location: Romford		Dimensions (m): 3.20 x 0.80 Depth 1.70	Scale 1:25
Equipment: JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
							TOPSOIL comprising greyish brown slightly gravelly sandy clay. Gravels are fine to coarse subangular to subrounded flint. Abundant organic material.
				0.30			MADE GROUND comprising firm to stiff orangish brown mottled grey slightly gravelly sandy clay with occasional organic material. Gravels are fine to coarse subangular flint.
▼				1.40			MADE GROUND comprising dark blackish grey slightly clayey gravelly fine to coarse sand with frequent plastic, cloth, fabric and wood. Gravels are fine to coarse angular to subrounded flint, brick and concrete.
				1.70			End of Pit at 1.700m

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

TRIAL PIT LOG

TrialPit No: MTP18
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547413.00 - 189565.00 Level:	Date 27/05/2020
Location: Romford		Dimensions (m): 2.00 x 0.80 Depth 3.40	Scale 1:25
Equipment: JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
							TOPSOIL comprising stiff brownish grey slightly gravelly clayey fine to coarse sand. Gravels are fine to coarse subangular to subrounded flint.
				0.30			MADE GROUND comprising firm to stiff orangish brown mottled grey slightly gravelly sandy clay with occasional organic material. Gravels are fine to coarse subangular flint.
							Concrete boulder (1.5 x 0.4 x 0.5 meters).
				1.40			MADE GROUND (landfill) comprising dark greyish black slightly gravelly sandy clay. Gravels are fine to coarse angular to subrounded brick, concrete and metal wire. Pockets of water. Hydrocarbon staining and odour.
							Hydrocarbon odour and staining.
	2.90 - 2.95	D,J		2.80			Very soft greenish brown slightly gravelly sandy CLAY. Gravels are fine to medium subangular to rounded flint. Sand is medium to coarse. (Boyn Hill Gravel Member).
				3.40			End of Pit at 3.400m

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D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP19
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547457.00 - 189444.00 Level:	Date 27/05/2020
Location: Romford		Dimensions (m): 2.30 x 0.80 Depth 2.90	Scale 1:25 Logged CAH
Equipment: JCB			

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.30			TOPSOIL comprising stiff brownish grey slightly gravelly clayey fine to coarse sand. Gravels are fine to coarse subangular to subrounded flint.
				1.30			MADE GROUND comprising firm to stiff orangish brown mottled grey slightly gravelly sandy clay with occasional organic material. Gravels are fine to coarse subangular flint.
				1.60			MADE GROUND comprising soft greenish grey slightly gravelly sandy clay. Gravels are fine to coarse subangular to subrounded flint, brick and concrete. Pockets of black staining.
							Greyish brown slightly silty SAND and GRAVEL. Sand is fine to coarse. Gravels are fine to coarse subangular to subrounded flint. (Boyn Hill Gravel Member).
▼				2.40			Firm brownish orange mottled pale grey slightly sandy CLAY. Sand is fine to coarse. (Weathered London Clay Formation).
				2.90			End of Pit at 2.900m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP20
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547380.00 - 189344.00 Level:	Date 27/05/2020
Location: Romford		Dimensions (m): 2.80 x 0.80 Depth 2.60	Scale 1:25 Logged CAH
Equipment: JCB			

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.15			TOPSOIL comprising stiff brownish grey slightly gravelly clayey fine to coarse sand. Gravels are fine to coarse subangular to subrounded flint.
							Firm to stiff orangish brown mottled grey slightly gravelly sandy CLAY with occasional organic material. Gravels are fine to coarse subangular flint. Pockets of bluish grey gravelly clay. (Boyn Hill Gravel Member).
				1.00			Bluish grey mottled yellowish brown slightly silty gravelly fine to coarse SAND. Gravels are fine to medium subangular to subrounded flint and quartz vein. (Boyn Hill Gravel Member).
▼				2.60			End of Pit at 2.600m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP21
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547300.00 - 189403.00 Level:	Date 27/05/2020
Location: Romford		Dimensions (m): 2.70 x 0.90 Depth 2.50	Scale 1:25
Equipment: JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.20			TOPSOIL comprising stiff brownish grey slightly gravelly clayey fine to coarse sand. Gravels are fine to coarse subangular to subrounded flint.
							Firm to stiff orangish brown mottled grey slightly gravelly sandy CLAY with occasional organic material. Gravels are fine to coarse subangular flint. (Boyn Hill Gravel Member).
				1.20			Firm greenish grey mottled greyish brown slightly gravelly sandy CLAY. Gravels are fine to coarse subangular to subrounded flint. Sand is fine to coarse. (Boyn Hill Gravel Member).
▼				1.80			Brownish grey slightly clayey SAND and GRAVEL. Sand is fine to coarse. Gravels are fine to coarse subrounded to rounded flint. (Boyn Hill Gravel Member).
				2.30			Firm orangish brown mottled reddish brown sandy CLAY. Sand is fine to coarse. (Weathered London Clay Formation).
				2.50			End of Pit at 2.500m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP22
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547219.00 - 189425.00 Level:	Date 27/05/2020
Location: Romford		Dimensions (m): 2.90 × 0.90 Depth 1.20	Scale 1:25
Equipment: JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.20			TOPSOIL comprising stiff brownish grey slightly gravelly clayey fine to coarse sand. Gravels are fine to coarse subangular to subrounded flint.
				0.70			MADE GROUND comprising firm to stiff orangish brown mottled grey slightly gravelly sandy clay with occasional organic material. Gravels are fine to coarse subangular flint.
				1.20			MADE GROUND (landfill) comprising blackish grey slightly sandy gravelly clay. Sand is fine to coarse. Gravels are fine to coarse subangular brick, wood, concrete, cloth and plastic. *Very strong paint odour.* End of Pit at 1.200m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP23
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547211.00 - 189407.00 Level:	Date 27/05/2020
Location: Romford		Dimensions (m): 3.30 × 0.80 Depth 1.10	Scale 1:25
Equipment: JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
							TOPSOIL. Firm greyish brown sandy clay. Abundant organic material.
				0.20			MADE GROUND comprising firm to stiff orangish brown mottled grey slightly gravelly sandy clay with occasional organic material. Gravels are fine to coarse subangular flint.
				0.60			MADE GROUND (landfill) comprising blackish grey slightly sandy gravelly clay. Sand is fine to coarse. Gravels are fine to coarse subangular brick, concrete, wood, metal, cloth, scrap metal, metal rope cable, bottles and plastic.
▼				1.10			End of Pit at 1.100m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP24
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547174.00 - 189416.00 Level:	Date 27/05/2020
Location: Romford		Dimensions (m): 2.20 × 0.80 Depth 1.80	Scale 1:25
Equipment: JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.15			TOPSOIL comprising stiff brownish grey slightly gravelly clayey fine to coarse sand. Gravels are fine to coarse subangular to subrounded flint.
							MADE GROUND comprising firm to stiff orangish brown mottled grey slightly gravelly sandy clay with occasional organic material. Gravels are fine to coarse subangular flint.
▼				0.70			MADE GROUND (landfill) comprising blackish grey slightly sandy gravelly clay. Sand is fine to coarse. Gravels are fine to coarse subangular brick, concrete, wood, metal, cloth, manhole cover, copper pipe, bottles and plastic.
				1.80			End of Pit at 1.800m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP25
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547172.00 - 189377.00 Level:	Date 02/06/2020
Location: Romford		Dimensions (m): 2.90 × 0.80 Depth 1.50	Scale 1:25
Equipment: JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.15			TOPSOIL comprising stiff brownish grey slightly gravelly clayey fine to coarse sand. Gravels are fine to coarse subangular to subrounded flint.
				0.50			MADE GROUND comprising firm to stiff orangish brown mottled grey slightly gravelly sandy clay with occasional organic material and brick fragments. Gravels are fine to coarse subangular flint.
▼							MADE GROUND comprising firm blackish grey slightly sandy gravelly clay with frequent wood, metal, plastic and concrete. Sand is fine to coarse. Gravels are fine to coarse angular to subrounded brick and concrete.
				1.50			End of Pit at 1.500m

1
2
3
4
5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP26
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547247.00 - 189408.00 Level:	Date 02/06/2020
Location: Romford		Dimensions (m): 2.60 × 0.70 Depth 1.40	Scale 1:25
Equipment: JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.02			TOPSOIL comprising stiff brownish grey slightly gravelly clayey fine to coarse sand. Gravels are fine to coarse subangular to subrounded flint.
							MADE GROUND comprising firm to stiff orangish brown mottled grey slightly gravelly sandy clay with occasional organic material and brick fragments. Gravels are fine to coarse subangular flint.
				0.60			MADE GROUND comprising firm blackish grey slightly sandy gravelly clay with frequent wood, metal, plastic, cloth, bottles, glass and concrete. Sand is fine to coarse. Gravels are fine to coarse angular to subrounded brick and concrete.
▼				1.40			End of Pit at 1.400m

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2
3
4
5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP27
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547228.00 - 189463.00 Level:	Date 02/06/2020
Location: Romford		Dimensions (m): 2.70 × 0.70 Depth 1.25	Scale 1:25
Equipment: JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.25			TOPSOIL comprising stiff brownish grey slightly gravelly clayey fine to coarse sand. Gravels are fine to coarse subangular to subrounded flint.
				0.70			MADE GROUND comprising firm to stiff orangish brown mottled grey slightly gravelly sandy clay with occasional organic material and brick fragments. Gravels are fine to coarse subangular flint.
				1.25			MADE GROUND comprising firm blackish grey slightly sandy gravelly clay with frequent metal pipe, glass, tile, paper and plastic bags. Sand is fine to coarse. Gravels are fine to coarse angular to subrounded brick and concrete.
							End of Pit at 1.250m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP28
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547281.00 - 189478.00 Level:	Date 02/06/2020
Location: Romford		Dimensions (m): 3.40 x 0.80 Depth 3.20	Scale 1:25
Equipment: JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
							TOPSOIL comprising stiff brownish grey slightly gravelly clayey fine to coarse sand. Gravels are fine to coarse subangular to subrounded flint.
				0.30			MADE GROUND comprising firm to stiff orangish brown mottled grey slightly gravelly sandy clay with occasional organic material, brick fragments and pockets of hydrocarbon staining and odour. Gravels are fine to coarse subangular flint. *Concrete obstruction (1.1 x 1.0 meters).*
				1.40			Yellowish orange mottled bluish grey slightly gravelly sandy CLAY. Gravels are fine to coarse subrounded to rounded flint. Sand is fine to coarse. (Boyn Hill Gravel Member).
				3.20			End of Pit at 3.200m

1 2 3 4 5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP29
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547316.00 - 189448.00 Level:	Date 02/06/2020
Location: Romford		Dimensions (m): 2.70 × 0.80 Depth 2.40	Scale 1:25 Logged CAH
Equipment: JCB			

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.15			TOPSOIL comprising stiff brownish grey slightly gravelly clayey fine to coarse sand. Gravels are fine to coarse subangular to subrounded flint.
							Orangish brown mottled pale grey slightly clayey sandy GRAVEL with pockets of greenish black clay. Sand is fine to coarse. Gravels are fine to coarse subangular to rounded flint. (Boyn Hill Gravel Member).
				1.40			Soft greenish black mottled bluish green slightly clayey gravelly fine to coarse SAND. Gravels are fine to coarse subangular to rounded flint. (Boyn Hill Gravel Member).
				2.40			End of Pit at 2.400m

1
2
3
4
5

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable till collapse at 1.4 m bgl.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

IDOM

TRIAL PIT LOG

TrialPit No
MTP30
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547335.00 - 189466.00 Level:	Date 02/06/2020
Location: Romford		Dimensions (m): 2.40 × 0.70 Depth 1.20	Scale 1:25
Equipment: JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.20			TOPSOIL comprising stiff brownish grey slightly gravelly clayey fine to coarse sand. Gravels are fine to coarse subangular to subrounded flint.
							Orangish brown mottled pale grey slightly clayey sandy GRAVEL with pockets of greenish black clay. Sand is fine to coarse. Gravels are fine to coarse subangular to rounded flint. (Boyn Hill Gravel Member).
							Concrete obstruction.
				0.90			MADE GROUND comprising blackish grey mottled greenish black slightly clayey sandy gravel. Sand is fine to coarse. Gravels are fine to coarse angular to subangular brick, tile and concrete.
				1.20			End of Pit at 1.200m

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

TRIAL PIT LOG

TrialPit No: MTP31
Sheet 1 of 1

Project Name: Billet Road	Project No. 21912s	Co-ords: 547340.00 - 189640.00 Level:	Date 02/06/2020
Location: Romford		Dimensions (m): 2.60 x 0.80 Depth 2.20	Scale 1:25
Equipment: JCB			Logged CAH

Water Strike	Samples & In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.40			TOPSOIL comprising stiff brownish grey slightly gravelly clayey fine to coarse sand. Gravels are fine to coarse subangular to subrounded flint.
				2.20			Yellowish orange, reddish brown and pale grey slightly silty clayey fine to coarse SAND. (Boyn Hill Gravel Member). End of Pit at 2.200m

D = small disturbed sample (tub)
J = organic sample (amber glass jar)
V = volatile sample (amber glass vial)
B = bulk bag sample
HSV = hand shear vane (kPa)
PP = pocket penetrometer (kg.cm2)
PID = photoionisation detector (ppm)

Stability
Sides stable.

Remarks
Coordinates and levels, where indicated, must not be used for design purposes. The user is responsible for verifying all site and setting out dimensions.

Services checked and C.A.T. scanned.

APPENDIX 4

- Soil Chemistry
- Summary Spreadsheet
- Laboratory Analysis Certificates

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Analytical Report Number : 20-11647

Project / Site name:	Billet Road	**Samples received on:**	28/05/2020
Your job number:	21912S	**Sample instructed/ Analysis started on:**	28/05/2020
Your order number:		**Analysis completed by:**	05/06/2020
Report Issue Number:	1	**Report issued on:**	05/06/2020
Samples Analysed:	53 soil samples		

Signed: Karolina Marek

Karolina Marek
PL Head of Reporting Team

For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 20-11647

Project / Site name: Billet Road

Lab Sample Number				1520731	1520732	1520733	1520734	1520735
Sample Reference				MWS01	MWS01	MWS01	MWS03	MWS04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	1.30	1.80	0.10	0.10
Date Sampled				21/05/2020	21/05/2020	21/05/2020	21/05/2020	21/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	3.6	11	18	10	4.9
Total mass of sample received	kg	0.001	NONE	0.60	0.60	0.60	0.60	0.60
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Chrysotile & Amosite	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	< 0.001	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	< 0.001	-	-
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	7.6	8.3	7.7	7.3	8.6
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.023	0.075	0.23	0.026	0.061
Sulphide	mg/kg	1	MCERTS	< 1.0	1.6	25	< 1.0	22
Organic Matter	%	0.1	MCERTS	0.9	1.1	1.5	1.9	5.5
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.90
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	1.1
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.42	< 0.05	1.5
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.58	1.4	< 0.05	13
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.12	0.25	< 0.05	3.5
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.94	1.6	< 0.05	19
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.84	1.4	< 0.05	16
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.68	0.80	< 0.05	7.9
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.50	0.74	< 0.05	4.7
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.86	0.90	< 0.05	8.1
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.28	0.62	< 0.05	5.2
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.60	0.74	< 0.05	7.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.40	0.63	< 0.05	3.3
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	1.0
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.46	0.72	< 0.05	4.1
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	6.26	10.2	< 0.80	96.8
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	12	17	16	9.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.3	< 0.2	0.3	0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22	29	44	37	24
Copper (aqua regia extractable)	mg/kg	1	MCERTS	16	150	55	370	51
Lead (aqua regia extractable)	mg/kg	1	MCERTS	30	240	130	56	75
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.8	0.9	0.8	0.5
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18	23	48	53	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	48	140	150	380	120

Analytical Report Number: 20-11647

Project / Site name: Billet Road

Lab Sample Number				1520731	1520732	1520733	1520734	1520735
Sample Reference				MWS01	MWS01	MWS01	MWS03	MWS04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	1.30	1.80	0.10	0.10
Date Sampled				21/05/2020	21/05/2020	21/05/2020	21/05/2020	21/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	6.0	3.1	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	11	19	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	39	15	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	56	37	< 10
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	6.9
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	55
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	12	14	< 10	400
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	20	23	< 10	460

Analytical Report Number: 20-11647

Project / Site name: Billet Road

Lab Sample Number				1520736	1520737	1520738	1520739	1520740
Sample Reference				MWS05	MWS05	MWS06	MWS08	MWS09a
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.50	1.50	1.10	2.80
Date Sampled				21/05/2020	21/05/2020	21/05/2020	21/05/2020	21/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	4.1	1.1	6.8	8.6	12
Total mass of sample received	kg	0.001	NONE	0.60	0.60	0.60	0.60	0.60
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	Not-detected	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.5	9.1	8.5	8.8	10.4
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.062	0.033	0.15	0.34	0.29
Sulphide	mg/kg	1	MCERTS	72	3.2	20	52	200
Organic Matter	%	0.1	MCERTS	6.9	0.2	2.7	2.3	2.4
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.40
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.98
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.26	< 0.05	0.95
Phenanthrene	mg/kg	0.05	MCERTS	0.62	< 0.05	3.3	0.86	9.4
Anthracene	mg/kg	0.05	MCERTS	0.21	< 0.05	1.2	0.41	3.5
Fluoranthene	mg/kg	0.05	MCERTS	1.4	< 0.05	11	2.5	22
Pyrene	mg/kg	0.05	MCERTS	1.5	< 0.05	11	2.4	20
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.81	< 0.05	6.4	0.93	10
Chrysene	mg/kg	0.05	MCERTS	0.67	< 0.05	4.0	0.76	5.8
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.97	< 0.05	6.6	1.0	9.0
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.53	< 0.05	3.5	0.46	3.9
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.2	< 0.05	6.2	1.1	8.0
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.60	< 0.05	2.8	0.49	2.9
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.96	< 0.05	0.86
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.90	< 0.05	3.1	0.69	3.6
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	9.30	< 0.80	60.1	11.6	101
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	4.8	1.6	10	14	14
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.4	0.7	0.4	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22	8.3	24	29	58
Copper (aqua regia extractable)	mg/kg	1	MCERTS	55	23	120	66	37
Lead (aqua regia extractable)	mg/kg	1	MCERTS	35	7.6	200	190	100
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.8	0.6	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17	3.0	22	27	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	100	12	160	130	280

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Lab Sample Number				1520736	1520737	1520738	1520739	1520740
Sample Reference				MWS05	MWS05	MWS06	MWS08	MWS09a
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.50	1.50	1.10	2.80
Date Sampled				21/05/2020	21/05/2020	21/05/2020	21/05/2020	21/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	4.6	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	11	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	77	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	92	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	3.2
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	9.5	3.7	60
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	58	< 10	75	21	230
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	690	< 10	370	130	390
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	750	< 10	460	150	690

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Lab Sample Number				1520741	1520742	1520743	1520744	1520745
Sample Reference				MTP01	MTP02	MTP03	MTP03	MTP04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.05	0.10	0.05	0.40	0.05
Date Sampled				21/05/2020	21/05/2020	26/05/2020	26/05/2020	26/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	5.6	6.9	1.9	6.6	7.5
Total mass of sample received	kg	0.001	NONE	0.60	0.60	0.60	0.60	0.60
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	5.7	6.6	6.9	7.5	6.5
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.026	0.026	0.030	0.015	0.025
Sulphide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	1.9
Organic Matter	%	0.1	MCERTS	4.9	5.8	2.6	0.6	2.7
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.35	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.20	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.47	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.26	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.40	1.4	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.38	1.3	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	1.0	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.75	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	1.5	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.39	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	1.2	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.74	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.20	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.82	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	10.6	< 0.80	< 0.80	< 0.80
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	12	22	18	11
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	28	52	22	36	29
Copper (aqua regia extractable)	mg/kg	1	MCERTS	33	25	22	18	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	260	83	39	17	58
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.8	1.2	< 0.3	< 0.3	0.8
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	18	22	26	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	1.8	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	78	78	38	46	54

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Lab Sample Number				1520741	1520742	1520743	1520744	1520745
Sample Reference				MTP01	MTP02	MTP03	MTP03	MTP04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.05	0.10	0.05	0.40	0.05
Date Sampled				21/05/2020	21/05/2020	26/05/2020	26/05/2020	26/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	12	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	46	21	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	57	23	< 10	< 10	< 10

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Lab Sample Number				1520746	1520747	1520748	1520749	1520750
Sample Reference				MTP04	MTP04	MTP05	MTP05	MTP05
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.45	2.40	0.10	1.40	2.40
Date Sampled				26/05/2020	26/05/2020	26/05/2020	26/05/2020	26/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	-	< 0.1	-	< 0.1
Moisture Content	%	N/A	NONE	5.1	-	4.4	-	10
Total mass of sample received	kg	0.001	NONE	0.60	-	0.60	-	0.60
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	-	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	< 0.001	-
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.2	-	6.3	-	8.3
Total Cyanide	mg/kg	1	MCERTS	< 1	-	2	-	< 1
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.35	-	0.040	-	0.040
Sulphide	mg/kg	1	MCERTS	2.4	-	1.4	-	15
Organic Matter	%	0.1	MCERTS	7.1	-	2.9	-	0.2
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	5.4	-	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	2.7	-	< 0.05	-	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	4.6	-	< 0.05	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	47	-	< 0.05	-	< 0.05
Fluorene	mg/kg	0.05	MCERTS	61	-	< 0.05	-	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	150	-	< 0.05	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	38	-	< 0.05	-	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	84	-	< 0.05	-	0.47
Pyrene	mg/kg	0.05	MCERTS	64	-	< 0.05	-	0.42
Benzo(a)anthracene	mg/kg	0.05	MCERTS	34	-	< 0.05	-	0.22
Chrysene	mg/kg	0.05	MCERTS	22	-	< 0.05	-	0.21
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	26	-	< 0.05	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	18	-	< 0.05	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	26	-	< 0.05	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	12	-	< 0.05	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	2.9	-	< 0.05	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	12	-	< 0.05	-	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	604	-	< 0.80	-	1.32
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	-	12	-	12
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	-	< 0.2	-	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	< 4.0	-	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	-	31	-	22
Copper (aqua regia extractable)	mg/kg	1	MCERTS	24	-	18	-	9.7
Lead (aqua regia extractable)	mg/kg	1	MCERTS	42	-	57	-	20
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	0.5	-	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	11	-	18	-	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	4.7	-	< 1.0	-	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	42	-	50	-	38

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Project / Site name: Billet Road

Lab Sample Number				1520746	1520747	1520748	1520749	1520750
Sample Reference				MTP04	MTP04	MTP05	MTP05	MTP05
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.45	2.40	0.10	1.40	2.40
Date Sampled				26/05/2020	26/05/2020	26/05/2020	26/05/2020	26/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	5.5	-	< 2.0	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	17	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	130	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	150	-	< 10	-	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	11	-	< 1.0	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	120	-	< 2.0	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	310	-	< 10	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	310	-	< 10	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	760	-	< 10	-	< 10

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Project / Site name: Billet Road

Lab Sample Number				1520751	1520752	1520753	1520754	1520755
Sample Reference				MTP06	MTP06	MTP07	MTP07	MTP07
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	1.70	0.10	0.60	1.80
Date Sampled				26/05/2020	26/05/2020	26/05/2020	26/05/2020	26/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	8.9	19	8.4	13	20
Total mass of sample received	kg	0.001	NONE	0.60	0.60	0.60	0.60	0.60
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	Amosite
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	-	Not-detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	< 0.001
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	7.0	5.9	8.0	8.4	8.5
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.021	0.034	0.038	0.16	0.15
Sulphide	mg/kg	1	MCERTS	< 1.0	3.3	< 1.0	44	98
Organic Matter	%	0.1	MCERTS	0.9	0.8	1.8	2.1	1.8
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.50	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	1.6	1.4
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	1.8	1.0
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.0	9.2	3.4
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.20	3.4	1.0
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.8	17	4.0
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.6	15	3.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.77	8.1	1.7
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.96	5.4	1.7
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.76	7.9	2.1
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.56	5.3	0.92
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.76	7.1	1.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.39	3.0	0.88
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.99	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.54	3.7	0.99
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	9.29	90.1	24.0
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	14	13	15	18
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	39	42	31	26	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	19	13	29	38	50
Lead (aqua regia extractable)	mg/kg	1	MCERTS	28	19	110	150	1400
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.5	0.7	1.1
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	26	20	21	23	18
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	58	63	120	180	310

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Project / Site name: Billet Road

Lab Sample Number				1520751	1520752	1520753	1520754	1520755
Sample Reference				MTP06	MTP06	MTP07	MTP07	MTP07
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	1.70	0.10	0.60	1.80
Date Sampled				26/05/2020	26/05/2020	26/05/2020	26/05/2020	26/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	34	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	35	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	3.0	11	12
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	10	76	36
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	18	210	73
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	31	290	120

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Project / Site name: Billet Road

Lab Sample Number				1520756	1520757	1520758	1520759	1520760
Sample Reference				MTP07	MTP08	MTP08	MTP08	MTP09
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.30	0.10	1.20	1.90	0.05
Date Sampled				26/05/2020	26/05/2020	26/05/2020	26/05/2020	26/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	-	< 0.1	-	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	-	11	-	18	8.0
Total mass of sample received	kg	0.001	NONE	-	0.60	-	0.60	0.60
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	-	Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Not-detected	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.004	-	-	0.395	-
Asbestos Quantification Total	%	0.001	ISO 17025	0.004	-	-	0.395	-
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	7.7	-	9.0	7.6
Total Cyanide	mg/kg	1	MCERTS	-	< 1	-	< 1	< 1
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	0.051	-	0.32	0.028
Sulphide	mg/kg	1	MCERTS	-	< 1.0	-	80	< 1.0
Organic Matter	%	0.1	MCERTS	-	2.6	-	1.9	1.8
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	-	1.0	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.36	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	0.67	-	0.66	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	0.15	-	0.45	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	-	1.4	-	4.3	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	1.1	-	3.9	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	0.91	-	1.5	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	0.70	-	1.4	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	0.99	-	1.5	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	0.53	-	0.68	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	0.80	-	1.6	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	0.47	-	0.69	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	-	0.24	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	0.53	-	0.91	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	8.29	-	19.3	< 0.80
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	16	-	11	19
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	-	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0	-	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	34	-	31	34
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	44	-	55	16
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	110	-	150	37
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	0.6	-	1.0	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	25	-	23	29
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	2.1	-	< 1.0	2.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	140	-	120	53

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Project / Site name: Billet Road

Lab Sample Number				1520756	1520757	1520758	1520759	1520760
Sample Reference				MTP07	MTP08	MTP08	MTP08	MTP09
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.30	0.10	1.20	1.90	0.05
Date Sampled				26/05/2020	26/05/2020	26/05/2020	26/05/2020	26/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	-	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	-	22	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	22	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	5.8	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	20	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	12	-	95	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	19	-	120	< 10

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Project / Site name: Billet Road

Lab Sample Number				1520761	1520762	1520763	1520764	1520765
Sample Reference				MTP09	MTP09	MTP09	MTP10	MTP10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.15	2.00	2.50	0.05	0.40
Date Sampled				26/05/2020	26/05/2020	26/05/2020	26/05/2020	26/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	-	-	-	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	-	-	-	5.6	6.4
Total mass of sample received	kg	0.001	NONE	-	-	-	0.60	0.60
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	Amosite	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	1.433	-	0.002	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	1.43	-	0.002	-	-
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	-	6.1	6.5
Total Cyanide	mg/kg	1	MCERTS	-	-	-	< 1	< 1
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	-	-	0.024	0.072
Sulphide	mg/kg	1	MCERTS	-	-	-	1.5	< 1.0
Organic Matter	%	0.1	MCERTS	-	-	-	4.0	2.6
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	0.29	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	0.84	0.36
Pyrene	mg/kg	0.05	MCERTS	-	-	-	0.78	0.35
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	0.36	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	-	-	0.50	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	0.39	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	0.24	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	0.32	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	0.18	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	0.26	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	-	-	4.16	< 0.80
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	13	15
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	-	-	-	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	27	34
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	24	26
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	90	80
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	0.8	0.6
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	17	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	73	80

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Project / Site name: Billet Road

Lab Sample Number				1520761	1520762	1520763	1520764	1520765
Sample Reference				MTP09	MTP09	MTP09	MTP10	MTP10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.15	2.00	2.50	0.05	0.40
Date Sampled				26/05/2020	26/05/2020	26/05/2020	26/05/2020	26/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	-	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	-	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	< 10	< 10

Analytical Report Number: 20-11647

Project / Site name: Billet Road

Lab Sample Number				1520766	1520767	1520768	1520769	1520770
Sample Reference				MTP10	MTP10	MTP11	MTP11	MTP11
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.90	2.50	0.05	0.30	1.30
Date Sampled				26/05/2020	26/05/2020	27/05/2020	27/05/2020	27/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	-	-	< 0.1	-	< 0.1
Moisture Content	%	N/A	NONE	-	-	5.6	-	13
Total mass of sample received	kg	0.001	NONE	-	-	0.60	-	0.60
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	-	-	-
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	-	5.8	-	7.3
Total Cyanide	mg/kg	1	MCERTS	-	-	< 1	-	< 1
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	-	0.0089	-	0.043
Sulphide	mg/kg	1	MCERTS	-	-	1.7	-	7.2
Organic Matter	%	0.1	MCERTS	-	-	4.8	-	0.6
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	-	< 0.80	-	< 0.80
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	9.1	-	14
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	< 0.2	-	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	-	-	< 4.0	-	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	24	-	46
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	18	-	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	61	-	30
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	< 0.3	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	12	-	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	52	-	54

Analytical Report Number: 20-11647

Project / Site name: Billet Road

Lab Sample Number				1520766	1520767	1520768	1520769	1520770
Sample Reference				MTP10	MTP10	MTP11	MTP11	MTP11
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.90	2.50	0.05	0.30	1.30
Date Sampled				26/05/2020	26/05/2020	27/05/2020	27/05/2020	27/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
o-xylene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	-	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	-	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	< 0.001	-	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	< 2.0	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10	-	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	-	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	-	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	-	< 0.001	-	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	< 2.0	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	< 10	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	< 10	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10	-	< 10

Analytical Report Number: 20-11647

Project / Site name: Billet Road

Lab Sample Number				1520771	1520772	1520773	1520774	1520775
Sample Reference				MTP11	MTP12	MTP12	MTP12	MTP13
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.40	0.05	0.50	1.55	3.10
Date Sampled				27/05/2020	27/05/2020	27/05/2020	27/05/2020	27/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	-	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	-	5.6	4.8	7.9	10
Total mass of sample received	kg	0.001	NONE	-	0.60	0.60	0.60	0.60
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Not-detected	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	5.7	6.0	8.1	7.3
Total Cyanide	mg/kg	1	MCERTS	-	< 1	< 1	< 1	< 1
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	0.0085	0.013	0.10	0.015
Sulphide	mg/kg	1	MCERTS	-	2.4	2.1	7.2	19
Organic Matter	%	0.1	MCERTS	-	4.3	2.7	0.5	< 0.1
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	0.45	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	0.55	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	< 0.05	0.26	3.5	< 0.05
Anthracene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	0.86	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	-	0.37	0.48	3.3	< 0.05
Pyrene	mg/kg	0.05	MCERTS	-	0.34	0.43	2.7	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	0.22	1.1	< 0.05
Chrysene	mg/kg	0.05	MCERTS	-	< 0.05	0.32	1.2	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	0.20	0.62	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	< 0.05	0.20	0.42	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	0.18	0.70	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	0.35	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	0.47	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	< 0.80	2.29	16.2	< 0.80
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	13	13	15	6.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	-	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	23	26	39	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	19	18	22	5.6
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	85	77	35	6.8
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	0.8	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	15	17	34	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	67	70	47	21

Analytical Report Number: 20-11647

Project / Site name: Billet Road

Lab Sample Number				1520771	1520772	1520773	1520774	1520775
Sample Reference				MTP11	MTP12	MTP12	MTP12	MTP13
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.40	0.05	0.50	1.55	3.10
Date Sampled				27/05/2020	27/05/2020	27/05/2020	27/05/2020	27/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	-	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	< 2.0	4.6	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	< 10	21	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	< 10	12	31	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	18	57	< 10

Analytical Report Number: 20-11647

Project / Site name: Billet Road

Lab Sample Number				1520776	1520777	1520778	1520779	1520780
Sample Reference				MTP14	MTP14	MTP14	MTP14	MTP15
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	0.90	1.30	1.90	0.10
Date Sampled				27/05/2020	27/05/2020	27/05/2020	27/05/2020	27/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	-	-	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	7.7	-	-	25	5.2
Total mass of sample received	kg	0.001	NONE	0.60	-	-	0.60	0.60
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	6.8	-	-	7.7	6.7
Total Cyanide	mg/kg	1	MCERTS	< 1	-	-	< 1	< 1
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.025	-	-	0.60	0.032
Sulphide	mg/kg	1	MCERTS	< 1.0	-	-	480	< 1.0
Organic Matter	%	0.1	MCERTS	0.3	-	-	2.4	0.7
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	-	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	-	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	-	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	-	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	-	0.24	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	-	-	1.0	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	0.32	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-	2.4	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	2.1	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	1.3	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	-	-	1.3	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-	1.6	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-	0.52	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	1.1	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	1.0	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	0.24	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	-	-	1.2	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	-	-	14.3	< 0.80
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	-	-	22	11
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	-	-	4.9	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	-	-	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	-	-	260	24
Copper (aqua regia extractable)	mg/kg	1	MCERTS	8.4	-	-	78	6.2
Lead (aqua regia extractable)	mg/kg	1	MCERTS	11	-	-	860	14
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	-	-	0.9	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	-	-	36	13
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	-	-	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	28	-	-	1400	35

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Project / Site name: Billet Road

Lab Sample Number				1520776	1520777	1520778	1520779	1520780
Sample Reference				MTP14	MTP14	MTP14	MTP14	MTP15
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	0.90	1.30	1.90	0.10
Date Sampled				27/05/2020	27/05/2020	27/05/2020	27/05/2020	27/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	-	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	-	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	-	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	-	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	-	15	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	-	100	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	-	120	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	-	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	-	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	-	-	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	-	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	-	8.1	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	-	16	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	-	53	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	-	78	< 10

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Lab Sample Number				1520781	1520782	1520783		
Sample Reference				MTP15	MTP15	MTP17		
Sample Number				None Supplied	None Supplied	None Supplied		
Depth (m)				1.40	2.50	2.90		
Date Sampled				27/05/2020	27/05/2020	27/05/2020		
Time Taken				None Supplied	None Supplied	None Supplied		
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1		
Moisture Content	%	N/A	NONE	12	14	14		
Total mass of sample received	kg	0.001	NONE	0.60	0.60	0.60		
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-		
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-		
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-		
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-		
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	5.2	5.4	7.3		
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1		
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.048	0.020	0.019		
Sulphide	mg/kg	1	MCERTS	1.9	< 1.0	< 1.0		
Organic Matter	%	0.1	MCERTS	< 0.1	< 0.1	0.5		
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80		
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.4	7.5	16		
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2		
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0		
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	36	7.6	36		
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	4.0	9.7		
Lead (aqua regia extractable)	mg/kg	1	MCERTS	12	3.5	22		
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3		
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	31	16	31		
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	42	14	46		

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Lab Sample Number				1520781	1520782	1520783		
Sample Reference				MTP15	MTP15	MTP17		
Sample Number				None Supplied	None Supplied	None Supplied		
Depth (m)				1.40	2.50	2.90		
Date Sampled				27/05/2020	27/05/2020	27/05/2020		
Time Taken				None Supplied	None Supplied	None Supplied		
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001		
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001		
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001		
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0		
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0		
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0		
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10		

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001		
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001		
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001		
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0		
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10		
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10		
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10		

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Your Order No:

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
1520733	MWS01	1.80	129	Loose Fibres	**Chrysotile & Amosite**	< 0.001	**< 0.001**
1520749	MTP05	1.40	159	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**
1520755	MTP07	1.80	134	Loose Fibres	**Amosite**	< 0.001	**< 0.001**
1520756	MTP07	2.30	132	Loose Fibrous Debris	**Chrysotile**	0.004	**0.004**
1520759	MTP08	1.90	134	Hard/Cement Type Material	**Chrysotile**	0.395	**0.395**
1520761	MTP09	1.15	177	Hard/Cement Type Material	**Chrysotile**	1.433	**1.43**
1520763	MTP09	2.50	128	Loose Fibrous Debris	**Amosite**	0.002	**0.002**
1520767	MTP10	2.50	175	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

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* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1520731	MWS01	None Supplied	0.40	Brown loam with gravel and vegetation.
1520732	MWS01	None Supplied	1.30	Brown clay and loam with gravel and vegetation.
1520733	MWS01	None Supplied	1.80	Brown clay and loam with gravel and vegetation.
1520734	MWS03	None Supplied	0.10	Brown clay and loam with gravel and vegetation.
1520735	MWS04	None Supplied	0.10	Brown gravelly loam.
1520736	MWS05	None Supplied	0.10	Brown gravelly loam with vegetation.
1520737	MWS05	None Supplied	0.50	Light brown gravelly loam.
1520738	MWS06	None Supplied	1.50	Brown gravelly loam.
1520739	MWS08	None Supplied	1.10	Brown clay and loam with gravel.
1520740	MWS09a	None Supplied	2.80	Brown clay and loam with gravel.
1520741	MTP01	None Supplied	0.05	Light brown loam with gravel and vegetation.
1520742	MTP02	None Supplied	0.10	Light brown loam with gravel and vegetation.
1520743	MTP03	None Supplied	0.05	Light brown loam with gravel and vegetation.
1520744	MTP03	None Supplied	0.40	Brown clay and loam with gravel.
1520745	MTP04	None Supplied	0.05	Brown loam with gravel and vegetation.
1520746	MTP04	None Supplied	1.45	Brown clay and loam with gravel and tar.
1520747	MTP04	None Supplied	2.40	-
1520748	MTP05	None Supplied	0.10	Brown loam with gravel and vegetation.
1520749	MTP05	None Supplied	1.40	-
1520750	MTP05	None Supplied	2.40	Brown loam and clay with gravel.
1520751	MTP06	None Supplied	0.40	Brown gravelly loam with vegetation.
1520752	MTP06	None Supplied	1.70	Brown clay and loam.
1520753	MTP07	None Supplied	0.10	Brown loam and clay with gravel and glass.
1520754	MTP07	None Supplied	0.60	Brown loam and clay with gravel and vegetation.
1520755	MTP07	None Supplied	1.80	Brown clay and loam with gravel and vegetation.
1520756	MTP07	None Supplied	2.30	-
1520757	MTP08	None Supplied	0.10	Brown loam with gravel and vegetation.
1520758	MTP08	None Supplied	1.20	-
1520759	MTP08	None Supplied	1.90	Brown clay and loam with gravel.
1520760	MTP09	None Supplied	0.05	Brown loam with gravel and vegetation.
1520761	MTP09	None Supplied	1.15	-
1520762	MTP09	None Supplied	2.00	-
1520763	MTP09	None Supplied	2.50	-
1520764	MTP10	None Supplied	0.05	Brown loam with gravel and vegetation.
1520765	MTP10	None Supplied	0.40	Brown loam with gravel and vegetation.
1520766	MTP10	None Supplied	1.90	-
1520767	MTP10	None Supplied	2.50	-
1520768	MTP11	None Supplied	0.05	Brown loam with gravel and vegetation.
1520769	MTP11	None Supplied	0.30	-
1520770	MTP11	None Supplied	1.30	Brown clay and loam with gravel.
1520771	MTP11	None Supplied	2.40	-
1520772	MTP12	None Supplied	0.05	Brown loam with gravel and vegetation.
1520773	MTP12	None Supplied	0.50	Brown loam with gravel and vegetation.
1520774	MTP12	None Supplied	1.55	Brown clay and loam with gravel.
1520775	MTP13	None Supplied	3.10	Brown sand with gravel.
1520776	MTP14	None Supplied	0.60	Brown loam and clay with gravel.
1520777	MTP14	None Supplied	0.90	-
1520778	MTP14	None Supplied	1.30	-
1520779	MTP14	None Supplied	1.90	Brown clay and loam with gravel.
1520780	MTP15	None Supplied	0.10	Brown gravelly loam.
1520781	MTP15	None Supplied	1.40	Brown clay and sand.
1520782	MTP15	None Supplied	2.50	Brown sand.
1520783	MTP17	None Supplied	2.90	Brown clay and sand with gravel.

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Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Sample ID	Other_ID	Sample Type	Job	Sample Number	Sample Deviation Code	test_name	test_ref	Test Deviation code
MTP01		S	20-11647	1520741	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP01		S	20-11647	1520741	bc	Sulphide in soil	L010-PL	c
MTP01		S	20-11647	1520741	bc	TPHCWG (Soil)	L088/76-PL	b
MTP01		S	20-11647	1520741	bc	Total cyanide in soil	L080-PL	c
MTP02		S	20-11647	1520742	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP02		S	20-11647	1520742	bc	Sulphide in soil	L010-PL	c
MTP02		S	20-11647	1520742	bc	TPHCWG (Soil)	L088/76-PL	b
MTP02		S	20-11647	1520742	bc	Total cyanide in soil	L080-PL	c
MTP03		S	20-11647	1520743	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP03		S	20-11647	1520743	b	TPHCWG (Soil)	L088/76-PL	b
MTP03		S	20-11647	1520744	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP03		S	20-11647	1520744	b	TPHCWG (Soil)	L088/76-PL	b
MTP04		S	20-11647	1520745	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP04		S	20-11647	1520745	b	TPHCWG (Soil)	L088/76-PL	b
MTP04		S	20-11647	1520746	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP04		S	20-11647	1520746	b	TPHCWG (Soil)	L088/76-PL	b
MTP05		S	20-11647	1520748	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP05		S	20-11647	1520748	b	TPHCWG (Soil)	L088/76-PL	b
MTP05		S	20-11647	1520750	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP05		S	20-11647	1520750	b	TPHCWG (Soil)	L088/76-PL	b
MTP06		S	20-11647	1520751	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP06		S	20-11647	1520751	b	TPHCWG (Soil)	L088/76-PL	b
MTP06		S	20-11647	1520752	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP06		S	20-11647	1520752	b	TPHCWG (Soil)	L088/76-PL	b
MTP07		S	20-11647	1520753	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP07		S	20-11647	1520753	b	TPHCWG (Soil)	L088/76-PL	b
MTP07		S	20-11647	1520754	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP07		S	20-11647	1520754	b	TPHCWG (Soil)	L088/76-PL	b
MTP07		S	20-11647	1520755	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP07		S	20-11647	1520755	b	TPHCWG (Soil)	L088/76-PL	b
MTP08		S	20-11647	1520757	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP08		S	20-11647	1520757	b	TPHCWG (Soil)	L088/76-PL	b
MTP08		S	20-11647	1520759	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP08		S	20-11647	1520759	b	TPHCWG (Soil)	L088/76-PL	b
MTP09		S	20-11647	1520760	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP09		S	20-11647	1520760	b	TPHCWG (Soil)	L088/76-PL	b
MTP10		S	20-11647	1520764	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP10		S	20-11647	1520764	b	TPHCWG (Soil)	L088/76-PL	b
MTP10		S	20-11647	1520765	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP10		S	20-11647	1520765	b	TPHCWG (Soil)	L088/76-PL	b
MTP11		S	20-11647	1520768	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP11		S	20-11647	1520768	b	TPHCWG (Soil)	L088/76-PL	b
MTP11		S	20-11647	1520770	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP11		S	20-11647	1520770	b	TPHCWG (Soil)	L088/76-PL	b
MTP12		S	20-11647	1520772	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP12		S	20-11647	1520772	b	TPHCWG (Soil)	L088/76-PL	b
MTP12		S	20-11647	1520773	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP12		S	20-11647	1520773	b	TPHCWG (Soil)	L088/76-PL	b
MTP12		S	20-11647	1520774	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP12		S	20-11647	1520774	b	TPHCWG (Soil)	L088/76-PL	b
MTP13		S	20-11647	1520775	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b

MTP13		S	20-11647	1520775	b	TPHCWG (Soil)	L088/76-PL	b
MTP14		S	20-11647	1520776	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP14		S	20-11647	1520776	b	TPHCWG (Soil)	L088/76-PL	b
MTP14		S	20-11647	1520779	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP14		S	20-11647	1520779	b	TPHCWG (Soil)	L088/76-PL	b
MTP15		S	20-11647	1520780	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP15		S	20-11647	1520780	b	TPHCWG (Soil)	L088/76-PL	b
MTP15		S	20-11647	1520781	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP15		S	20-11647	1520781	b	TPHCWG (Soil)	L088/76-PL	b
MTP15		S	20-11647	1520782	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP15		S	20-11647	1520782	b	TPHCWG (Soil)	L088/76-PL	b
MTP17		S	20-11647	1520783	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MTP17		S	20-11647	1520783	b	TPHCWG (Soil)	L088/76-PL	b
MWS01		S	20-11647	1520731	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MWS01		S	20-11647	1520731	bc	Sulphide in soil	L010-PL	c
MWS01		S	20-11647	1520731	bc	TPHCWG (Soil)	L088/76-PL	b
MWS01		S	20-11647	1520731	bc	Total cyanide in soil	L080-PL	c
MWS01		S	20-11647	1520732	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MWS01		S	20-11647	1520732	bc	Sulphide in soil	L010-PL	c
MWS01		S	20-11647	1520732	bc	TPHCWG (Soil)	L088/76-PL	b
MWS01		S	20-11647	1520732	bc	Total cyanide in soil	L080-PL	c
MWS01		S	20-11647	1520733	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MWS01		S	20-11647	1520733	bc	Sulphide in soil	L010-PL	c
MWS01		S	20-11647	1520733	bc	TPHCWG (Soil)	L088/76-PL	b
MWS01		S	20-11647	1520733	bc	Total cyanide in soil	L080-PL	c
MWS03		S	20-11647	1520734	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MWS03		S	20-11647	1520734	bc	Sulphide in soil	L010-PL	c
MWS03		S	20-11647	1520734	bc	TPHCWG (Soil)	L088/76-PL	b
MWS03		S	20-11647	1520734	bc	Total cyanide in soil	L080-PL	c
MWS04		S	20-11647	1520735	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MWS04		S	20-11647	1520735	bc	Sulphide in soil	L010-PL	c
MWS04		S	20-11647	1520735	bc	TPHCWG (Soil)	L088/76-PL	b
MWS04		S	20-11647	1520735	bc	Total cyanide in soil	L080-PL	c
MWS05		S	20-11647	1520736	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MWS05		S	20-11647	1520736	bc	Sulphide in soil	L010-PL	c
MWS05		S	20-11647	1520736	bc	TPHCWG (Soil)	L088/76-PL	b
MWS05		S	20-11647	1520736	bc	Total cyanide in soil	L080-PL	c
MWS05		S	20-11647	1520737	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MWS05		S	20-11647	1520737	bc	Sulphide in soil	L010-PL	c
MWS05		S	20-11647	1520737	bc	TPHCWG (Soil)	L088/76-PL	b
MWS05		S	20-11647	1520737	bc	Total cyanide in soil	L080-PL	c
MWS06		S	20-11647	1520738	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MWS06		S	20-11647	1520738	bc	Sulphide in soil	L010-PL	c
MWS06		S	20-11647	1520738	bc	TPHCWG (Soil)	L088/76-PL	b
MWS06		S	20-11647	1520738	bc	Total cyanide in soil	L080-PL	c
MWS08		S	20-11647	1520739	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MWS08		S	20-11647	1520739	bc	Sulphide in soil	L010-PL	c
MWS08		S	20-11647	1520739	bc	TPHCWG (Soil)	L088/76-PL	b
MWS08		S	20-11647	1520739	bc	Total cyanide in soil	L080-PL	c
MWS09a		S	20-11647	1520740	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
MWS09a		S	20-11647	1520740	bc	Sulphide in soil	L010-PL	c
MWS09a		S	20-11647	1520740	bc	TPHCWG (Soil)	L088/76-PL	b
MWS09a		S	20-11647	1520740	bc	Total cyanide in soil	L080-PL	c

Waste Classification Report

AQ82K-ZCJWK-H94TT

Job name

21912s - Billet Road, Romford - Parcel C

Description/Comments

Project

Site

Related Documents

#	Name	Description
None		

Waste Stream Template

Example waste stream template for contaminated soils

Classified by

Name:
Chris McCartney
Date:
19 Jun 2020 16:04 GMT
Telephone:
01773 829988

Company:
Idom Merebrook Ltd
1 Leonard Place
Westerham Road
Keston
BR2 6HQ

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	06 Nov 2019
Advanced Hazardous Waste Classification	07 Nov 2019

Report

Created by: Chris McCartney
Created date: 19 Jun 2020 16:04 GMT

Job summary

Classification of sample: MTP01[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
MTP01[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
0.05 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		28 mg/kg	1.462	40.924 mg/kg	0.00409 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<**LOD**
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		33 mg/kg	1.126	37.154 mg/kg	0.00372 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	260 mg/kg		260 mg/kg	0.026 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		20 mg/kg	2.976	59.525 mg/kg	0.00595 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<**LOD**
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		78 mg/kg	1.245	97.088 mg/kg	0.00971 %		
8	TPH (C6 to C40) petroleum group			TPH		67 mg/kg		67 mg/kg	0.0067 %		
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				5.7	pH		5.7	pH	5.7 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
19		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
21		fluoranthene				0.4	mg/kg		0.4	mg/kg	0.00004 %		
			205-912-4	206-44-0									
22		pyrene				0.38	mg/kg		0.38	mg/kg	0.000038 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.058 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No liquid phase visible

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0067%)

Classification of sample: MTP02[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
MTP02[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
0.10 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		52 mg/kg	1.462	76.001 mg/kg	0.0076 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		25 mg/kg	1.126	28.147 mg/kg	0.00281 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	83 mg/kg		83 mg/kg	0.0083 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		18 mg/kg	2.976	53.573 mg/kg	0.00536 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.8 mg/kg	2.554	4.596 mg/kg	0.00046 %		
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		78 mg/kg	1.245	97.088 mg/kg	0.00971 %		
8	TPH (C6 to C40) petroleum group			TPH		33 mg/kg		33 mg/kg	0.0033 %		
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				6.6	pH		6.6	pH	6.6 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				0.35	mg/kg		0.35	mg/kg	0.000035 %		
			201-469-6	83-32-9									
18		fluorene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
			201-695-5	86-73-7									
19		phenanthrene				0.47	mg/kg		0.47	mg/kg	0.000047 %		
			201-581-5	85-01-8									
20		anthracene				0.26	mg/kg		0.26	mg/kg	0.000026 %		
			204-371-1	120-12-7									
21		fluoranthene				1.4	mg/kg		1.4	mg/kg	0.00014 %		
			205-912-4	206-44-0									
22		pyrene				1.3	mg/kg		1.3	mg/kg	0.00013 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				1	mg/kg		1	mg/kg	0.0001 %		
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.75	mg/kg		0.75	mg/kg	0.000075 %		
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				1.5	mg/kg		1.5	mg/kg	0.00015 %		
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				0.39	mg/kg		0.39	mg/kg	0.000039 %		
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				1.2	mg/kg		1.2	mg/kg	0.00012 %		
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				0.74	mg/kg		0.74	mg/kg	0.000074 %		
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				0.82	mg/kg		0.82	mg/kg	0.000082 %		
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0401 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No liquid phase visible

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0033%)

Classification of sample: MTP03[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
MTP03[3]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
0.05 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		22 mg/kg	1.462	32.154 mg/kg	0.00322 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		22 mg/kg	1.126	24.77 mg/kg	0.00248 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	39 mg/kg		39 mg/kg	0.0039 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		22 mg/kg	2.976	65.478 mg/kg	0.00655 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		38 mg/kg	1.245	47.299 mg/kg	0.00473 %		
8	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				6.9	pH		6.9	pH	6.9 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
19		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
21		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
22		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0237 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: MTP03[4]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
MTP03[4]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
0.40 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		36 mg/kg	1.462	52.616 mg/kg	0.00526 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		18 mg/kg	1.126	20.266 mg/kg	0.00203 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	17 mg/kg		17 mg/kg	0.0017 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		26 mg/kg	2.976	77.383 mg/kg	0.00774 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		46 mg/kg	1.245	57.257 mg/kg	0.00573 %		
8	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				7.5	pH		7.5	pH	7.5 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
19		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
21		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
22		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0252 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: MTP04[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
MTP04[3]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
0.05 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		29 mg/kg	1.462	42.385 mg/kg	0.00424 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		19 mg/kg	1.126	21.392 mg/kg	0.00214 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	58 mg/kg		58 mg/kg	0.0058 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		15 mg/kg	2.976	44.644 mg/kg	0.00446 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		54 mg/kg	1.245	67.215 mg/kg	0.00672 %		
8	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				6.5	pH		6.5	pH	6.5 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
19		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
21		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
22		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0262 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: MTP04[4]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
MTP04[4]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
1.45 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		18 mg/kg	1.462	26.308 mg/kg	0.00263 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		24 mg/kg	1.126	27.021 mg/kg	0.0027 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	42 mg/kg		42 mg/kg	0.0042 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		11 mg/kg	2.976	32.739 mg/kg	0.00327 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4.7 mg/kg	2.554	12.002 mg/kg	0.0012 %		
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		42 mg/kg	1.245	52.278 mg/kg	0.00523 %		
8	TPH (C6 to C40) petroleum group			TPH		910 mg/kg		910 mg/kg	0.091 %		
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14	●	pH				8.2	pH		8.2	pH	8.2 pH		
				PH									
15		naphthalene				2.7	mg/kg		2.7	mg/kg	0.00027 %		
		601-052-00-2	202-049-5	91-20-3									
16	●	acenaphthylene				4.6	mg/kg		4.6	mg/kg	0.00046 %		
			205-917-1	208-96-8									
17	●	acenaphthene				47	mg/kg		47	mg/kg	0.0047 %		
			201-469-6	83-32-9									
18	●	fluorene				61	mg/kg		61	mg/kg	0.0061 %		
			201-695-5	86-73-7									
19	●	phenanthrene				150	mg/kg		150	mg/kg	0.015 %		
			201-581-5	85-01-8									
20	●	anthracene				38	mg/kg		38	mg/kg	0.0038 %		
			204-371-1	120-12-7									
21	●	fluoranthene				84	mg/kg		84	mg/kg	0.0084 %		
			205-912-4	206-44-0									
22	●	pyrene				64	mg/kg		64	mg/kg	0.0064 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				34	mg/kg		34	mg/kg	0.0034 %		
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				22	mg/kg		22	mg/kg	0.0022 %		
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				26	mg/kg		26	mg/kg	0.0026 %		
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				18	mg/kg		18	mg/kg	0.0018 %		
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				26	mg/kg		26	mg/kg	0.0026 %		
		601-032-00-3	200-028-5	50-32-8									
28	●	indeno[123-cd]pyrene				12	mg/kg		12	mg/kg	0.0012 %		
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				2.9	mg/kg		2.9	mg/kg	0.00029 %		
		601-041-00-2	200-181-8	53-70-3									
30	●	benzo[ghi]perylene				12	mg/kg		12	mg/kg	0.0012 %		
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.172 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No liquid phase visible

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.091%)

Classification of sample: MTP05[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
MTP05[3]
Sample Depth:
0.10 m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		31 mg/kg	1.462	45.308 mg/kg	0.00453 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		18 mg/kg	1.126	20.266 mg/kg	0.00203 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	57 mg/kg		57 mg/kg	0.0057 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		18 mg/kg	2.976	53.573 mg/kg	0.00536 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		50 mg/kg	1.245	62.236 mg/kg	0.00622 %		
8	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					2 mg/kg	1.884	3.768 mg/kg	0.000377 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				6.3	pH		6.3	pH	6.3 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
19		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
21		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
22		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
31		phenol				5.4	mg/kg		5.4	mg/kg	0.00054 %		
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0273 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: MTP05[4]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
MTP05[4]
Sample Depth:
2.40 m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		22 mg/kg	1.462	32.154 mg/kg	0.00322 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		9.7 mg/kg	1.126	10.921 mg/kg	0.00109 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	20 mg/kg		20 mg/kg	0.002 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		27 mg/kg	2.976	80.359 mg/kg	0.00804 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		38 mg/kg	1.245	47.299 mg/kg	0.00473 %		
8	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				8.3	pH		8.3	pH	8.3 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
19		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
21		fluoranthene				0.47	mg/kg		0.47	mg/kg	0.000047 %		
			205-912-4	206-44-0									
22		pyrene				0.42	mg/kg		0.42	mg/kg	0.000042 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.22	mg/kg		0.22	mg/kg	0.000022 %		
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.21	mg/kg		0.21	mg/kg	0.000021 %		
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.022 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: MTP06[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
MTP06[3]
Sample Depth:
0.40 m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		39 mg/kg	1.462	57.001 mg/kg	0.0057 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		19 mg/kg	1.126	21.392 mg/kg	0.00214 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	28 mg/kg		28 mg/kg	0.0028 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		26 mg/kg	2.976	77.383 mg/kg	0.00774 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		58 mg/kg	1.245	72.193 mg/kg	0.00722 %		
8	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				7	pH		7	pH	7pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
19		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
21		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
22		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0284 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: MTP06[4]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
MTP06[4]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
1.70 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		42 mg/kg	1.462	61.385 mg/kg	0.00614 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		13 mg/kg	1.126	14.637 mg/kg	0.00146 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	19 mg/kg		19 mg/kg	0.0019 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		20 mg/kg	2.976	59.525 mg/kg	0.00595 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		63 mg/kg	1.245	78.417 mg/kg	0.00784 %		
8	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				5.9	pH		5.9	pH	5.9 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0261 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: MTP07[4]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
MTP07[4]
Sample Depth:
0.10 m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		31 mg/kg	1.462	45.308 mg/kg	0.00453 %		
	215-160-9 / 1308-38-9							
2	chromium in chromium(VI) compounds { chromium(VI) oxide }		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
3	copper { dicopper oxide; copper (I) oxide }		29 mg/kg	1.126	32.651 mg/kg	0.00327 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	1	110 mg/kg		110 mg/kg	0.011 %		
	082-001-00-6							
5	nickel { nickel chromate }		21 mg/kg	2.976	62.502 mg/kg	0.00625 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8							
7	zinc { zinc oxide }		120 mg/kg	1.245	149.366 mg/kg	0.0149 %		
	030-013-00-7 / 215-222-5 / 1314-13-2							
8	TPH (C6 to C40) petroleum group		41 mg/kg		41 mg/kg	0.0041 %		
	TPH							
9	benzene		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-020-00-8 / 200-753-7 / 71-43-2							
10	toluene		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-021-00-3 / 203-625-9 / 108-88-3							
11	ethylbenzene		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-023-00-4 / 202-849-4 / 100-41-4							
12	xylene		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-022-00-9 / 202-422-2 [1], 203-396-5 [2], 203-576-3 [3], 215-535-7 [4] / 95-47-6 [1], 106-42-3 [2], 108-38-3 [3], 1330-20-7 [4]							
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,		<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				8	pH		8	pH	8pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				1	mg/kg		1	mg/kg	0.0001 %		
			201-581-5	85-01-8									
20		anthracene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
			204-371-1	120-12-7									
21		fluoranthene				1.8	mg/kg		1.8	mg/kg	0.00018 %		
			205-912-4	206-44-0									
22		pyrene				1.6	mg/kg		1.6	mg/kg	0.00016 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.77	mg/kg		0.77	mg/kg	0.000077 %		
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.96	mg/kg		0.96	mg/kg	0.000096 %		
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				0.76	mg/kg		0.76	mg/kg	0.000076 %		
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				0.56	mg/kg		0.56	mg/kg	0.000056 %		
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				0.76	mg/kg		0.76	mg/kg	0.000076 %		
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				0.39	mg/kg		0.39	mg/kg	0.000039 %		
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				0.54	mg/kg		0.54	mg/kg	0.000054 %		
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0468 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No liquid phase visible

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0041%)

Classification of sample: MTP07[5]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
MTP07[5]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
0.60 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		26 mg/kg	1.462	38 mg/kg	0.0038 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<**LOD**
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		38 mg/kg	1.126	42.784 mg/kg	0.00428 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	150 mg/kg		150 mg/kg	0.015 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		23 mg/kg	2.976	68.454 mg/kg	0.00685 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<**LOD**
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		180 mg/kg	1.245	224.049 mg/kg	0.0224 %		
8	TPH (C6 to C40) petroleum group			TPH		325 mg/kg		325 mg/kg	0.0325 %		
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<**LOD**

#		Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number / EC Number / CAS Number							
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5							
14	●	pH PH		8.4 pH		8.4 pH	8.4 pH		
15		naphthalene 601-052-00-2 / 202-049-5 / 91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<**LOD**
16	●	acenaphthylene 205-917-1 / 208-96-8		0.5 mg/kg		0.5 mg/kg	0.00005 %		
17	●	acenaphthene 201-469-6 / 83-32-9		1.6 mg/kg		1.6 mg/kg	0.00016 %		
18	●	fluorene 201-695-5 / 86-73-7		1.8 mg/kg		1.8 mg/kg	0.00018 %		
19	●	phenanthrene 201-581-5 / 85-01-8		9.2 mg/kg		9.2 mg/kg	0.00092 %		
20	●	anthracene 204-371-1 / 120-12-7		3.4 mg/kg		3.4 mg/kg	0.00034 %		
21	●	fluoranthene 205-912-4 / 206-44-0		17 mg/kg		17 mg/kg	0.0017 %		
22	●	pyrene 204-927-3 / 129-00-0		15 mg/kg		15 mg/kg	0.0015 %		
23		benzo[a]anthracene 601-033-00-9 / 200-280-6 / 56-55-3		8.1 mg/kg		8.1 mg/kg	0.00081 %		
24		chrysene 601-048-00-0 / 205-923-4 / 218-01-9		5.4 mg/kg		5.4 mg/kg	0.00054 %		
25		benzo[b]fluoranthene 601-034-00-4 / 205-911-9 / 205-99-2		7.9 mg/kg		7.9 mg/kg	0.00079 %		
26		benzo[k]fluoranthene 601-036-00-5 / 205-916-6 / 207-08-9		5.3 mg/kg		5.3 mg/kg	0.00053 %		
27		benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 / 200-028-5 / 50-32-8		7.1 mg/kg		7.1 mg/kg	0.00071 %		
28	●	indeno[123-cd]pyrene 205-893-2 / 193-39-5		3 mg/kg		3 mg/kg	0.0003 %		
29		dibenz[a,h]anthracene 601-041-00-2 / 200-181-8 / 53-70-3		0.99 mg/kg		0.99 mg/kg	0.000099 %		
30	●	benzo[ghi]perylene 205-883-8 / 191-24-2		3.7 mg/kg		3.7 mg/kg	0.00037 %		
31		phenol 604-001-00-2 / 203-632-7 / 108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
						Total:	0.0955 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No liquid phase visible

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0325%)

Classification of sample: MTP07[6]

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:	LoW Code:	
MTP07[6]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
1.80 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1A; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.14%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		23 mg/kg	1.462	33.616 mg/kg	0.00336 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		50 mg/kg	1.126	56.294 mg/kg	0.00563 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	1400 mg/kg		1400 mg/kg	0.14 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		18 mg/kg	2.976	53.573 mg/kg	0.00536 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		310 mg/kg	1.245	385.861 mg/kg	0.0386 %		
8	TPH (C6 to C40) petroleum group			TPH		130 mg/kg		130 mg/kg	0.013 %		
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
12		xylene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
13		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
		006-007-00-5											
14		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				1.4	mg/kg		1.4	mg/kg	0.00014 %		
			201-469-6	83-32-9									
18		fluorene				1	mg/kg		1	mg/kg	0.0001 %		
			201-695-5	86-73-7									
19		phenanthrene				3.4	mg/kg		3.4	mg/kg	0.00034 %		
			201-581-5	85-01-8									
20		anthracene				1	mg/kg		1	mg/kg	0.0001 %		
			204-371-1	120-12-7									
21		fluoranthene				4	mg/kg		4	mg/kg	0.0004 %		
			205-912-4	206-44-0									
22		pyrene				3.3	mg/kg		3.3	mg/kg	0.00033 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				1.7	mg/kg		1.7	mg/kg	0.00017 %		
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				1.7	mg/kg		1.7	mg/kg	0.00017 %		
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				2.1	mg/kg		2.1	mg/kg	0.00021 %		
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				0.92	mg/kg		0.92	mg/kg	0.000092 %		
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				1.7	mg/kg		1.7	mg/kg	0.00017 %		
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				0.88	mg/kg		0.88	mg/kg	0.000088 %		
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				0.99	mg/kg		0.99	mg/kg	0.000099 %		
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.21 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No liquid phase visible

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.013%)

Classification of sample: MTP08[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
MTP08[3]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
0.10 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		34 mg/kg	1.462	49.693 mg/kg	0.00497 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		44 mg/kg	1.126	49.539 mg/kg	0.00495 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	110 mg/kg		110 mg/kg	0.011 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		25 mg/kg	2.976	74.407 mg/kg	0.00744 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2.1 mg/kg	2.554	5.363 mg/kg	0.000536 %		
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		140 mg/kg	1.245	174.26 mg/kg	0.0174 %		
8	TPH (C6 to C40) petroleum group			TPH		29 mg/kg		29 mg/kg	0.0029 %		
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5											
14		pH			PH		7.7	pH		7.7	pH	7.7 pH		
15		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
16		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
17		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
18		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
19		phenanthrene		201-581-5	85-01-8		0.67	mg/kg		0.67	mg/kg	0.000067 %		
20		anthracene		204-371-1	120-12-7		0.15	mg/kg		0.15	mg/kg	0.000015 %		
21		fluoranthene		205-912-4	206-44-0		1.4	mg/kg		1.4	mg/kg	0.00014 %		
22		pyrene		204-927-3	129-00-0		1.1	mg/kg		1.1	mg/kg	0.00011 %		
23		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.91	mg/kg		0.91	mg/kg	0.000091 %		
24		chrysene	601-048-00-0	205-923-4	218-01-9		0.7	mg/kg		0.7	mg/kg	0.00007 %		
25		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.99	mg/kg		0.99	mg/kg	0.000099 %		
26		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.53	mg/kg		0.53	mg/kg	0.000053 %		
27		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.8	mg/kg		0.8	mg/kg	0.00008 %		
28		indeno[123-cd]pyrene		205-893-2	193-39-5		0.47	mg/kg		0.47	mg/kg	0.000047 %		
29		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
30		benzo[ghi]perylene		205-883-8	191-24-2		0.53	mg/kg		0.53	mg/kg	0.000053 %		
31		phenol	604-001-00-2	203-632-7	108-95-2		<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
											Total:	0.0515 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No liquid phase visible

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0029%)

Classification of sample: MTP08[4]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
MTP08[4]
Sample Depth:
1.90 m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		31 mg/kg	1.462	45.308 mg/kg	0.00453 %		
	215-160-9 / 1308-38-9							
2	chromium in chromium(VI) compounds { chromium(VI) oxide }		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
3	copper { dicopper oxide; copper (I) oxide }		55 mg/kg	1.126	61.924 mg/kg	0.00619 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	1	150 mg/kg		150 mg/kg	0.015 %		
	082-001-00-6							
5	nickel { nickel chromate }		23 mg/kg	2.976	68.454 mg/kg	0.00685 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8							
7	zinc { zinc oxide }		120 mg/kg	1.245	149.366 mg/kg	0.0149 %		
	030-013-00-7 / 215-222-5 / 1314-13-2							
8	TPH (C6 to C40) petroleum group		142 mg/kg		142 mg/kg	0.0142 %		
	TPH							
9	benzene		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-020-00-8 / 200-753-7 / 71-43-2							
10	toluene		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-021-00-3 / 203-625-9 / 108-88-3							
11	ethylbenzene		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-023-00-4 / 202-849-4 / 100-41-4							
12	xylene		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-022-00-9 / 202-422-2 [1], 203-396-5 [2], 203-576-3 [3], 215-535-7 [4] / 95-47-6 [1], 106-42-3 [2], 108-38-3 [3], 1330-20-7 [4]							
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,		<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				9	pH		9	pH	9pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				1	mg/kg		1	mg/kg	0.0001 %		
			201-469-6	83-32-9									
18		fluorene				0.36	mg/kg		0.36	mg/kg	0.000036 %		
			201-695-5	86-73-7									
19		phenanthrene				0.66	mg/kg		0.66	mg/kg	0.000066 %		
			201-581-5	85-01-8									
20		anthracene				0.45	mg/kg		0.45	mg/kg	0.000045 %		
			204-371-1	120-12-7									
21		fluoranthene				4.3	mg/kg		4.3	mg/kg	0.00043 %		
			205-912-4	206-44-0									
22		pyrene				3.9	mg/kg		3.9	mg/kg	0.00039 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				1.5	mg/kg		1.5	mg/kg	0.00015 %		
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				1.4	mg/kg		1.4	mg/kg	0.00014 %		
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				1.5	mg/kg		1.5	mg/kg	0.00015 %		
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				0.68	mg/kg		0.68	mg/kg	0.000068 %		
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				1.6	mg/kg		1.6	mg/kg	0.00016 %		
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				0.69	mg/kg		0.69	mg/kg	0.000069 %		
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				0.24	mg/kg		0.24	mg/kg	0.000024 %		
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				0.91	mg/kg		0.91	mg/kg	0.000091 %		
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0653 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No liquid phase visible

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0142%)

Classification of sample: MTP09[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
MTP09[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
0.05 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		34 mg/kg	1.462	49.693 mg/kg	0.00497 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<**LOD**
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		16 mg/kg	1.126	18.014 mg/kg	0.0018 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	37 mg/kg		37 mg/kg	0.0037 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		29 mg/kg	2.976	86.312 mg/kg	0.00863 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	2.554	5.107 mg/kg	0.000511 %		
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		53 mg/kg	1.245	65.97 mg/kg	0.0066 %		
8	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				7.6	pH		7.6	pH	7.6 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
19		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
21		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
22		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0287 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: MTP10[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
MTP10[3]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
0.05 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		27 mg/kg	1.462	39.462 mg/kg	0.00395 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<**LOD**
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		24 mg/kg	1.126	27.021 mg/kg	0.0027 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	90 mg/kg		90 mg/kg	0.009 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		17 mg/kg	2.976	50.597 mg/kg	0.00506 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<**LOD**
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		73 mg/kg	1.245	90.864 mg/kg	0.00909 %		
8	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14	●	pH				6.1	pH		6.1	pH	6.1 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16	●	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17	●	acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18	●	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
19	●	phenanthrene				0.29	mg/kg		0.29	mg/kg	0.000029 %		
			201-581-5	85-01-8									
20	●	anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
21	●	fluoranthene				0.84	mg/kg		0.84	mg/kg	0.000084 %		
			205-912-4	206-44-0									
22	●	pyrene				0.78	mg/kg		0.78	mg/kg	0.000078 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.36	mg/kg		0.36	mg/kg	0.000036 %		
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.5	mg/kg		0.5	mg/kg	0.00005 %		
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				0.39	mg/kg		0.39	mg/kg	0.000039 %		
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				0.24	mg/kg		0.24	mg/kg	0.000024 %		
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				0.32	mg/kg		0.32	mg/kg	0.000032 %		
		601-032-00-3	200-028-5	50-32-8									
28	●	indeno[123-cd]pyrene				0.18	mg/kg		0.18	mg/kg	0.000018 %		
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
30	●	benzo[ghi]perylene				0.26	mg/kg		0.26	mg/kg	0.000026 %		
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.033 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: MTP10[4]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
MTP10[4]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
0.40 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		34 mg/kg	1.462	49.693 mg/kg	0.00497 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		26 mg/kg	1.126	29.273 mg/kg	0.00293 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	80 mg/kg		80 mg/kg	0.008 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		23 mg/kg	2.976	68.454 mg/kg	0.00685 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		80 mg/kg	1.245	99.577 mg/kg	0.00996 %		
8	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				6.5	pH		6.5	pH	6.5 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
19		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
21		fluoranthene				0.36	mg/kg		0.36	mg/kg	0.000036 %		
			205-912-4	206-44-0									
22		pyrene				0.35	mg/kg		0.35	mg/kg	0.000035 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0356 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: MTP11[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
MTP11[3]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
0.05 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		24 mg/kg	1.462	35.077 mg/kg	0.00351 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		18 mg/kg	1.126	20.266 mg/kg	0.00203 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	61 mg/kg		61 mg/kg	0.0061 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		12 mg/kg	2.976	35.715 mg/kg	0.00357 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		52 mg/kg	1.245	64.725 mg/kg	0.00647 %		
8	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				5.8	pH		5.8	pH	5.8 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
19		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
21		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
22		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0245 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: MTP11[4]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:	
MTP11[4]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
1.30 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		46	mg/kg	1.462	67.232	mg/kg	0.00672 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4	mg/kg	1.923	<7.692	mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		14	mg/kg	1.126	15.762	mg/kg	0.00158 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	30	mg/kg		30	mg/kg	0.003 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		27	mg/kg	2.976	80.359	mg/kg	0.00804 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		54	mg/kg	1.245	67.215	mg/kg	0.00672 %		
8	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
9	benzene	601-020-00-8	200-753-7	71-43-2		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				7.3	pH		7.3	pH	7.3 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
19		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
21		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
22		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0288 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: MTP12[4]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
MTP12[4]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
0.05 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		23 mg/kg	1.462	33.616 mg/kg	0.00336 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<**LOD**
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		19 mg/kg	1.126	21.392 mg/kg	0.00214 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	85 mg/kg		85 mg/kg	0.0085 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		15 mg/kg	2.976	44.644 mg/kg	0.00446 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<**LOD**
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		67 mg/kg	1.245	83.396 mg/kg	0.00834 %		
8	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				5.7	pH		5.7	pH	5.7 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
19		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
21		fluoranthene				0.37	mg/kg		0.37	mg/kg	0.000037 %		
			205-912-4	206-44-0									
22		pyrene				0.34	mg/kg		0.34	mg/kg	0.000034 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0297 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: MTP12[5]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
MTP12[5]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
0.50 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		26 mg/kg	1.462	38 mg/kg	0.0038 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<**LOD**
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		18 mg/kg	1.126	20.266 mg/kg	0.00203 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	77 mg/kg		77 mg/kg	0.0077 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		17 mg/kg	2.976	50.597 mg/kg	0.00506 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<**LOD**
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		70 mg/kg	1.245	87.13 mg/kg	0.00871 %		
8	TPH (C6 to C40) petroleum group			TPH		28 mg/kg		28 mg/kg	0.0028 %		
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				6	pH		6	pH	6pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
19		phenanthrene				0.26	mg/kg		0.26	mg/kg	0.000026 %		
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
21		fluoranthene				0.48	mg/kg		0.48	mg/kg	0.000048 %		
			205-912-4	206-44-0									
22		pyrene				0.43	mg/kg		0.43	mg/kg	0.000043 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.22	mg/kg		0.22	mg/kg	0.000022 %		
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.32	mg/kg		0.32	mg/kg	0.000032 %		
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				0.18	mg/kg		0.18	mg/kg	0.000018 %		
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0321 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No liquid phase visible

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0028%)

Classification of sample: MTP12[6]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
MTP12[6]
Sample Depth:
1.55 m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		39 mg/kg	1.462	57.001 mg/kg	0.0057 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		22 mg/kg	1.126	24.77 mg/kg	0.00248 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	35 mg/kg		35 mg/kg	0.0035 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		34 mg/kg	2.976	101.193 mg/kg	0.0101 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		47 mg/kg	1.245	58.502 mg/kg	0.00585 %		
8	TPH (C6 to C40) petroleum group			TPH		67 mg/kg		67 mg/kg	0.0067 %		
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH		PH		8.1	pH		8.1	pH	8.1 pH		
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				0.45	mg/kg		0.45	mg/kg	0.000045 %		
			201-469-6	83-32-9									
18		fluorene				0.55	mg/kg		0.55	mg/kg	0.000055 %		
			201-695-5	86-73-7									
19		phenanthrene				3.5	mg/kg		3.5	mg/kg	0.00035 %		
			201-581-5	85-01-8									
20		anthracene				0.86	mg/kg		0.86	mg/kg	0.000086 %		
			204-371-1	120-12-7									
21		fluoranthene				3.3	mg/kg		3.3	mg/kg	0.00033 %		
			205-912-4	206-44-0									
22		pyrene				2.7	mg/kg		2.7	mg/kg	0.00027 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				1.1	mg/kg		1.1	mg/kg	0.00011 %		
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				1.2	mg/kg		1.2	mg/kg	0.00012 %		
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				0.62	mg/kg		0.62	mg/kg	0.000062 %		
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				0.42	mg/kg		0.42	mg/kg	0.000042 %		
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				0.7	mg/kg		0.7	mg/kg	0.00007 %		
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				0.35	mg/kg		0.35	mg/kg	0.000035 %		
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				0.47	mg/kg		0.47	mg/kg	0.000047 %		
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0377 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No liquid phase visible

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0067%)

Classification of sample: MTP13[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
MTP13[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
3.10 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		17	mg/kg	1.462	24.846	mg/kg	0.00248 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4	mg/kg	1.923	<7.692	mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		5.6	mg/kg	1.126	6.305	mg/kg	0.00063 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	6.8	mg/kg		6.8	mg/kg	0.00068 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		23	mg/kg	2.976	68.454	mg/kg	0.00685 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		21	mg/kg	1.245	26.139	mg/kg	0.00261 %		
8	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
9	benzene	601-020-00-8	200-753-7	71-43-2		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14	●	pH				7.3	pH		7.3	pH	7.3 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16	●	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17	●	acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18	●	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
19	●	phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
20	●	anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
21	●	fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
22	●	pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
28	●	indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
30	●	benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.016 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: MTP14[3]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
MTP14[3]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
0.60 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		27 mg/kg	1.462	39.462 mg/kg	0.00395 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		8.4 mg/kg	1.126	9.457 mg/kg	0.000946 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	11 mg/kg		11 mg/kg	0.0011 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		20 mg/kg	2.976	59.525 mg/kg	0.00595 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		28 mg/kg	1.245	34.852 mg/kg	0.00349 %		
8	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				6.8	pH		6.8	pH	6.8 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
19		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
21		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
22		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0182 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: MTP14[4]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:	LoW Code:
MTP14[4]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
1.90 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		260 mg/kg	1.462	380.005 mg/kg	0.038 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		78 mg/kg	1.126	87.819 mg/kg	0.00878 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	860 mg/kg		860 mg/kg	0.086 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		36 mg/kg	2.976	107.146 mg/kg	0.0107 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		1400 mg/kg	1.245	1742.6 mg/kg	0.174 %		
8	TPH (C6 to C40) petroleum group			TPH		198 mg/kg		198 mg/kg	0.0198 %		
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				7.7	pH		7.7	pH	7.7 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				0.24	mg/kg		0.24	mg/kg	0.000024 %		
			201-695-5	86-73-7									
19		phenanthrene				1	mg/kg		1	mg/kg	0.0001 %		
			201-581-5	85-01-8									
20		anthracene				0.32	mg/kg		0.32	mg/kg	0.000032 %		
			204-371-1	120-12-7									
21		fluoranthene				2.4	mg/kg		2.4	mg/kg	0.00024 %		
			205-912-4	206-44-0									
22		pyrene				2.1	mg/kg		2.1	mg/kg	0.00021 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				1.3	mg/kg		1.3	mg/kg	0.00013 %		
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				1.3	mg/kg		1.3	mg/kg	0.00013 %		
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				1.6	mg/kg		1.6	mg/kg	0.00016 %		
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				0.52	mg/kg		0.52	mg/kg	0.000052 %		
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				1.1	mg/kg		1.1	mg/kg	0.00011 %		
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				1	mg/kg		1	mg/kg	0.0001 %		
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				0.24	mg/kg		0.24	mg/kg	0.000024 %		
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				1.2	mg/kg		1.2	mg/kg	0.00012 %		
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.341 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because No liquid phase visible

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0198%)

Classification of sample: MTP15[4]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
MTP15[4]
Sample Depth:
0.10 m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		24 mg/kg	1.462	35.077 mg/kg	0.00351 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		6.2 mg/kg	1.126	6.981 mg/kg	0.000698 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	14 mg/kg		14 mg/kg	0.0014 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		13 mg/kg	2.976	38.691 mg/kg	0.00387 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		35 mg/kg	1.245	43.565 mg/kg	0.00436 %		
8	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				6.7	pH		6.7	pH	6.7 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0166 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: MTP15[5]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
MTP15[5]
Sample Depth:
1.40 m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		36 mg/kg	1.462	52.616 mg/kg	0.00526 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		12 mg/kg	1.126	13.511 mg/kg	0.00135 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	12 mg/kg		12 mg/kg	0.0012 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		31 mg/kg	2.976	92.264 mg/kg	0.00923 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		42 mg/kg	1.245	52.278 mg/kg	0.00523 %		
8	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				5.2	pH		5.2	pH	5.2 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0251 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: MTP15[6]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
MTP15[6]
Sample Depth:
2.50 m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		7.6 mg/kg	1.462	11.108 mg/kg	0.00111 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		4 mg/kg	1.126	4.504 mg/kg	0.00045 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	3.5 mg/kg		3.5 mg/kg	0.00035 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		16 mg/kg	2.976	47.62 mg/kg	0.00476 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		14 mg/kg	1.245	17.426 mg/kg	0.00174 %		
8	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				5.4	pH		5.4	pH	5.4 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0112 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: MTP17[2]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
MTP17[2]
Sample Depth:
2.90 m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		36 mg/kg	1.462	52.616 mg/kg	0.00526 %		
2	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4 mg/kg	1.923	<7.692 mg/kg	<0.000769 %		<LOD
3	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		9.7 mg/kg	1.126	10.921 mg/kg	0.00109 %		
4	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	22 mg/kg		22 mg/kg	0.0022 %		
5	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		31 mg/kg	2.976	92.264 mg/kg	0.00923 %		
6	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
7	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		46 mg/kg	1.245	57.257 mg/kg	0.00573 %		
8	TPH (C6 to C40) petroleum group			TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
9	benzene	601-020-00-8	200-753-7	71-43-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	toluene	601-021-00-3	203-625-9	108-88-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
11	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,					<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
		ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
		006-007-00-5											
14		pH				7.3	pH		7.3	pH	7.3 pH		
				PH									
15		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-695-5	86-73-7									
19		phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-581-5	85-01-8									
20		anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-371-1	120-12-7									
21		fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-912-4	206-44-0									
22		pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
31		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0263 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Repr. 1B H360FD , Skin Sens. 1 H317 , Resp. Sens. 1 H334 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 4 H302 , Acute Tox. 4 H332

- **lead compounds with the exception of those specified elsewhere in this Annex (worst case)**

CLP index number: 082-001-00-6
Description/Comments: Worst Case: IARC considers lead compounds Group 1; Carcinogenic to humans; Lead REACH Consortium considers some lead compounds Carcinogenic category 1A
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium www.reach-lead.eu/substanceinformation.html (worst case lead compounds). Review date 29/09/2015

- **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Aquatic Chronic 2 H411 , Repr. 2 H361d , Carc. 1B H350 , Muta. 1B H340 , STOT RE 2 H373 , Asp. Tox. 1 H304 , Flam. Liq. 3 H226

- **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **pH** (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 1 H310 , Acute Tox. 1 H330 , Acute Tox. 4 H302

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Aquatic Chronic 2 H411 , Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400

- **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Skin Sens. 1 H317 , Carc. 2 H351 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 4 H302

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Skin Sens. 1 H317 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Acute Tox. 4 H302

- **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Skin Irrit. 2 H315

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400

Appendix B: Rationale for selection of metal species

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Reasonable case species based on hazard statements/molecular weight. Industrial sources include: tanning, pigment in paint, inks and glass (edit as required)

chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case CLP species based on hazard statements/molecular weight. Industrial sources include: production stainless steel, electroplating, wood preservation, anti-corrosion agents or coatings, pigments (edit as required)

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. (edit as required) Worse case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected. (edit as required)

lead {lead compounds with the exception of those specified elsewhere in this Annex (worst case)}

No Hexavalent Chromium detected

nickel {nickel chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case. Pigment cadmium sulphoselenide not likely to be present in this soil. No evidence for the other CLP entries: sodium selenite, nickel II selenite and nickel selenide, to be present in this soil. (edit as required)

zinc {zinc oxide}

No Hexavalent Chromium detected

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case as complex cyanides and those specified elsewhere in the annex are not likely to be present in this soil: [Note conversion factor based on a worst case compound: sodium cyanide] (edit as required)

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2020.170.4371.8576 (18 Jun 2020)
HazWasteOnline Database: 2020.170.4371.8576 (18 Jun 2020)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

APPENDIX 5 ▪ Geotechnical Laboratory Certificates

Darren Ettritch
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WD18 8YS

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Analytical Report Number : 20-14223

Project / Site name:	Billet Road, Romford Parcel C	**Samples received on:**	04/06/2020
Your job number:	21912S	**Sample instructed/ Analysis started on:**	12/06/2020
Your order number:	20-2-FDO-LABS	**Analysis completed by:**	26/06/2020
Report Issue Number:	1	**Report issued on:**	26/06/2020
Samples Analysed:	14 soil samples		

Signed: Karolina Marek

Karolina Marek
PL Head of Reporting Team

For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 20-14223

Project / Site name: Billet Road, Romford Parcel C
Your Order No: 20-2-FDO-LABS

Lab Sample Number				1534089	1534090	1534091	1534092	1534093
Sample Reference				MBH02	MBH02	MBH02	MBH02	MBH03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	6.60	10.90	14.50	1.50
Date Sampled				26/05/2020	26/05/2020	26/05/2020	26/05/2020	27/05/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	15	18	18	18	14
Total mass of sample received	kg	0.001	NONE	1.7	1.3	1.1	1.3	0.60
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	6.5	7.0	7.9	8.1	8.4
Total Sulphate as SO_4	%	0.005	MCERTS	0.015	0.011	0.054	0.098	0.185
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.027	0.050	0.22	0.37	0.51
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	26.8	50.0	216	369	509
Total Sulphur	%	0.005	MCERTS	0.010	0.010	0.374	0.673	0.112

* Over range data, sample was diluted and results are estimated from an extrapolated calibration. Results should be interpreted with care.

Analytical Report Number: 20-14223

Project / Site name: Billet Road, Romford Parcel C
Your Order No: 20-2-FDO-LABS

Lab Sample Number				1534094	1534095	1534096	1534097	1534098
Sample Reference				MBH03	MBH03	MBH03	MBH04	MBH04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				5.00	9.00	13.50	2.00	7.45
Date Sampled				27/05/2020	27/05/2020	27/05/2020	01/06/2020	01/06/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	17	18	15	16	17
Total mass of sample received	kg	0.001	NONE	1.0	1.0	1.5	1.6	1.2
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.2	8.0	10.2	9.5	8.5
Total Sulphate as SO_4	%	0.005	MCERTS	0.086	0.209	0.349	0.124	0.156*
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.43	1.1	0.38	0.52	0.91*
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	425	1070	380	515	908*
Total Sulphur	%	0.005	MCERTS	0.297	0.695	0.934	0.088	0.744

* Over range data, sample was diluted and results are estimated from an extrapolated calibration. Results should be interpreted with care.

Analytical Report Number: 20-14223

Project / Site name: Billet Road, Romford Parcel C
Your Order No: 20-2-FDO-LABS

Lab Sample Number				1534099	1534100	1534101	1534102	
Sample Reference				MBH04	MBH05	MBH05	MBH05	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				11.00	3.00	8.40	13.50	
Date Sampled				01/06/2020	02/06/2020	02/06/2020	02/06/2020	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	14	20	15	15	
Total mass of sample received	kg	0.001	NONE	1.5	0.60	1.2	1.1	
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.6	8.7	8.6	9.3	
Total Sulphate as SO_4	%	0.005	MCERTS	0.184	0.083	0.096	0.080	
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.88	0.45	0.48	0.42	
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	876	451	482	423	
Total Sulphur	%	0.005	MCERTS	0.293	0.221	0.316	0.469	

* Over range data, sample was diluted and results are estimated from an extrapolated calibration. Results should be interpreted with care.

Analytical Report Number : 20-14223

Project / Site name: Billet Road, Romford Parcel C

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1534089	MBH02	None Supplied	1.00	Brown loam and clay with gravel.
1534090	MBH02	None Supplied	6.60	Brown clay with gravel.
1534091	MBH02	None Supplied	10.90	Brown clay with gravel.
1534092	MBH02	None Supplied	14.50	Brown clay with gravel.
1534093	MBH03	None Supplied	1.50	Brown clay with gravel.
1534094	MBH03	None Supplied	5.00	Brown clay with gravel.
1534095	MBH03	None Supplied	9.00	Brown clay with gravel.
1534096	MBH03	None Supplied	13.50	Brown clay with gravel.
1534097	MBH04	None Supplied	2.00	Brown loam and clay with gravel.
1534098	MBH04	None Supplied	7.45	Brown loam and clay with gravel and vegetation.
1534099	MBH04	None Supplied	11.00	Brown loam and clay with gravel.
1534100	MBH05	None Supplied	3.00	Brown loam and clay with gravel and vegetation.
1534101	MBH05	None Supplied	8.40	Brown clay with gravel.
1534102	MBH05	None Supplied	13.50	Brown clay with gravel.

Analytical Report Number : 20-14223

Project / Site name: Billet Road, Romford Parcel C

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Total Sulphate in soil as %	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total Sulphur in soil as %	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Environmental Science

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	26/05/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

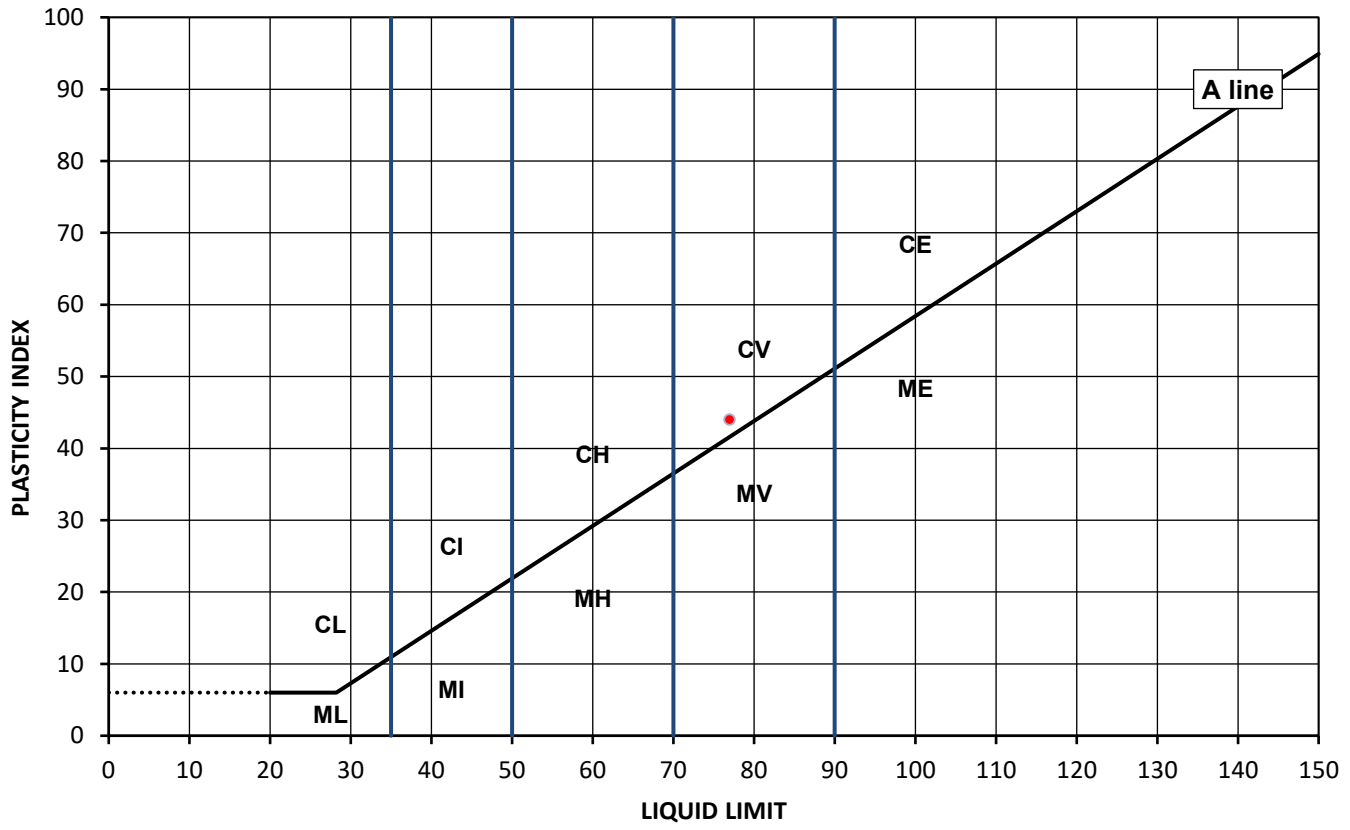
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1534109	Depth Top [m]:	7.00
Hole No.:	MBH02	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	B
Soil Description:	Greyish brown CLAY		

Sample Preparation: Tested in natural condition

As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425µm BS Test Sieve
29	77	33	44	100



Legend, based on BS 5930:2015 Code of practice for site investigations

		Plasticity		Liquid Limit
C	Clay	L	Low	below 35
M	Silt	I	Medium	35 to 50
		H	High	50 to 70
		V	Very high	70 to 90
		E	Extremely high	exceeding 90
	Organic	O	append to classification for organic material (eg CHO)	

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 232.9

TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Environmental Science

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	27/05/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

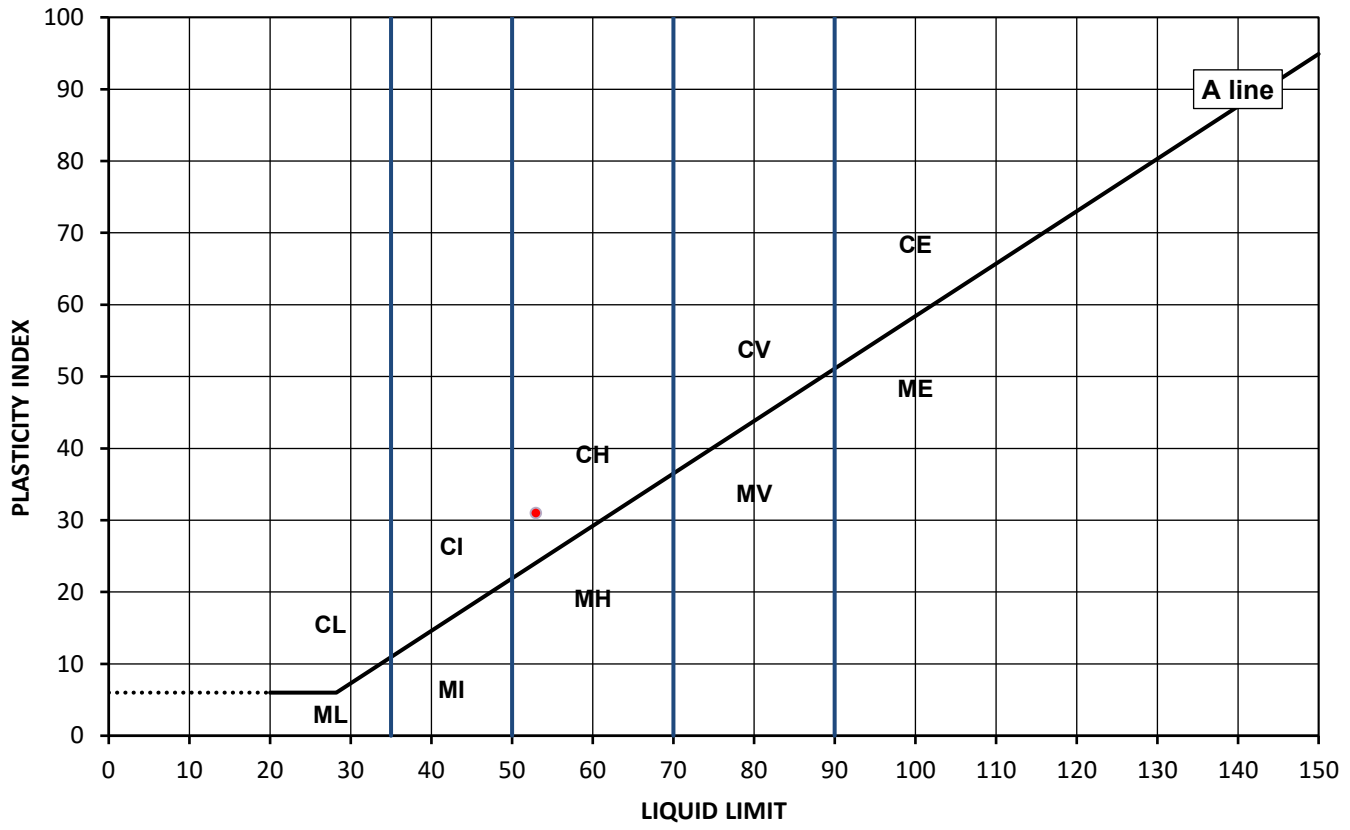
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1534113	Depth Top [m]:	0.50
Hole No.:	MBH03	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Soil Description:	Brown slightly gravelly slightly sandy CLAY		

Sample Preparation: Tested after washing to remove >425um

As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425µm BS Test Sieve
11	53	22	31	73



Legend, based on BS 5930:2015 Code of practice for site investigations

		Plasticity		Liquid Limit
C	Clay	L	Low	below 35
M	Silt	I	Medium	35 to 50
		H	High	50 to 70
		V	Very high	70 to 90
		E	Extremely high	exceeding 90
	Organic	O	append to classification for organic material (eg CHO)	

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 232.9

TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Environmental Science

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	27/05/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

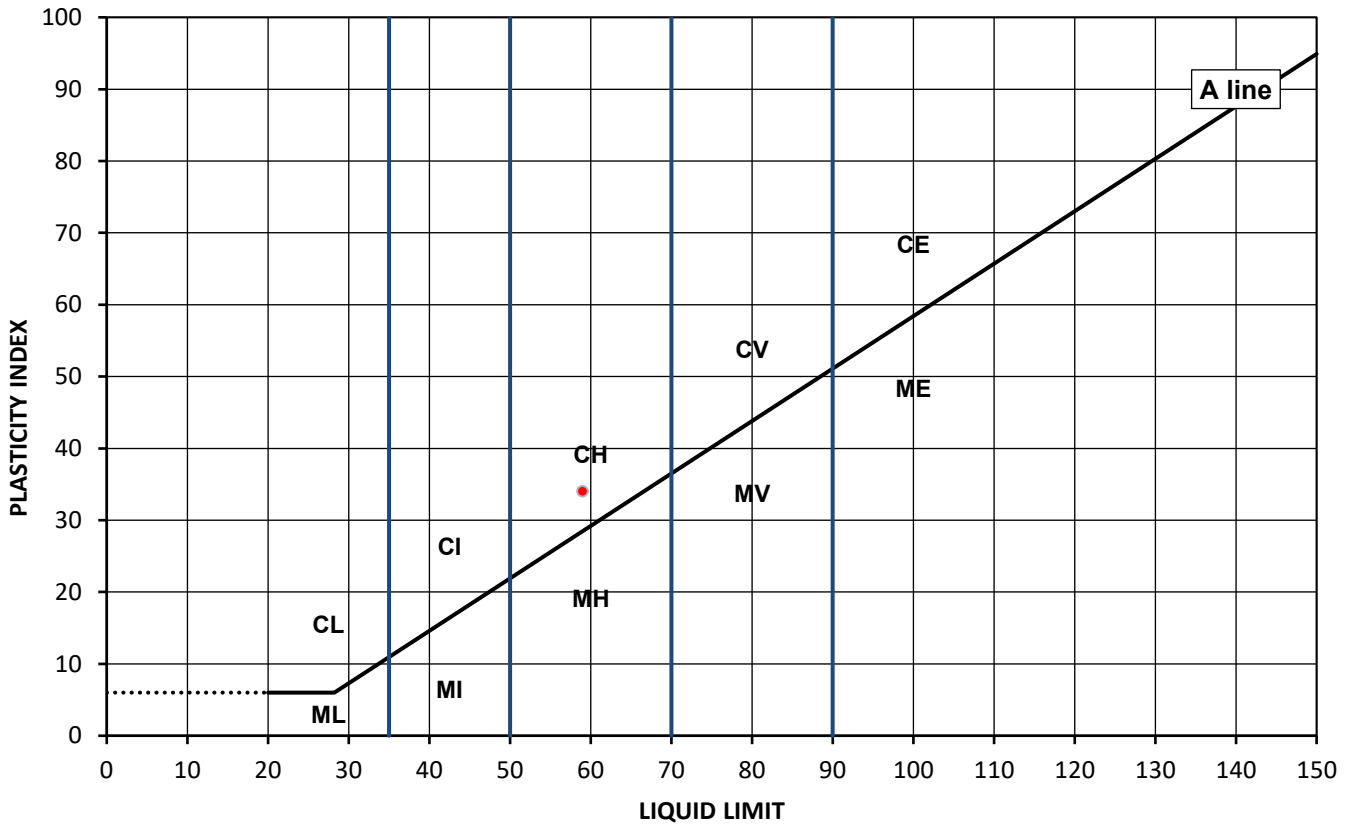
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1534114	Depth Top [m]:	2.20
Hole No.:	MBH03	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	B
Soil Description:	Grey mottled brown slightly sandy CLAY		

Sample Preparation: Tested in natural condition

As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425µm BS Test Sieve
21	59	25	34	100



Legend, based on BS 5930:2015 Code of practice for site investigations

		Plasticity		Liquid Limit
C	Clay	L	Low	below 35
M	Silt	I	Medium	35 to 50
		H	High	50 to 70
		V	Very high	70 to 90
		E	Extremely high	exceeding 90
	Organic	O	append to classification for organic material (eg CHO)	

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 232.9

TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Environmental Science

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

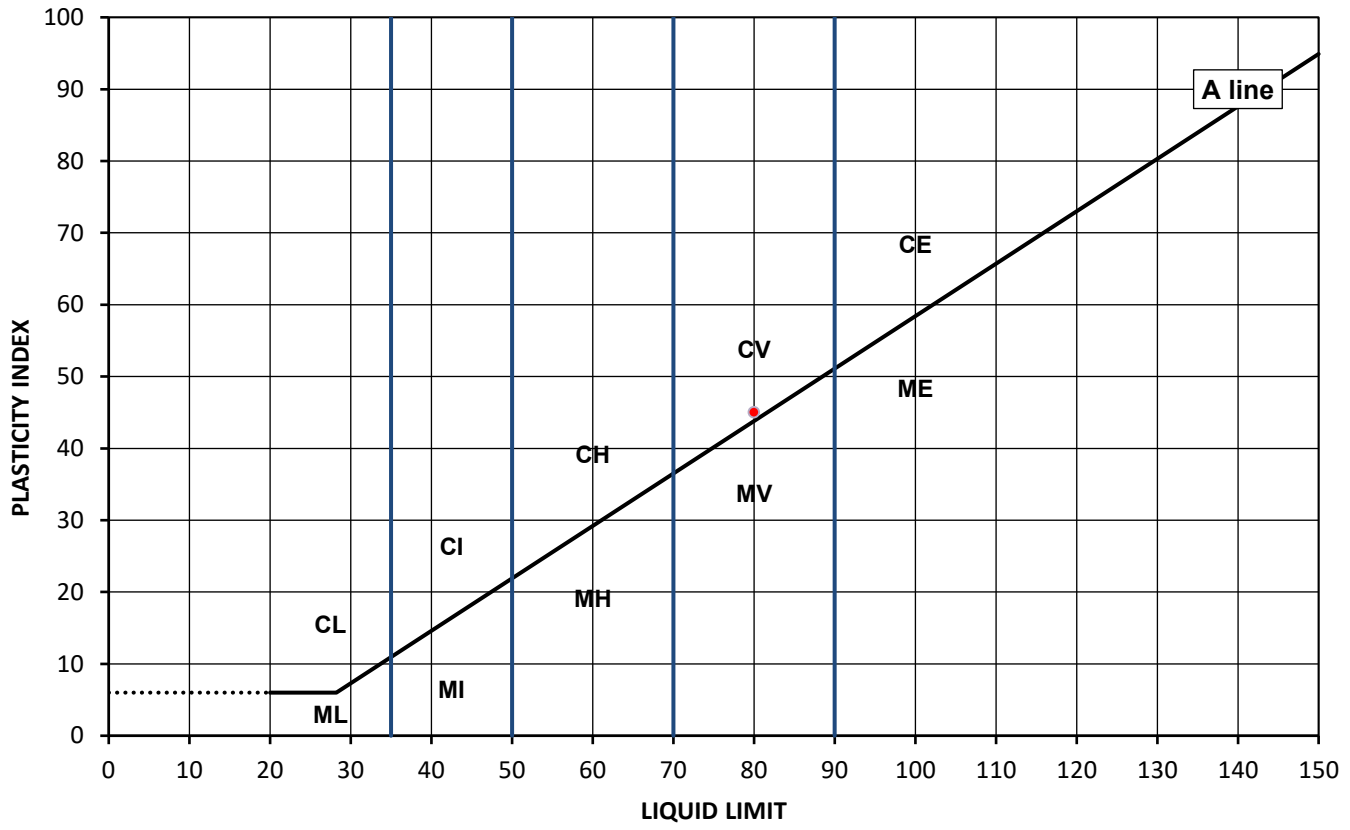
Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	27/05/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1534115	Depth Top [m]:	3.50
Hole No.:	MBH03	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Soil Description:	Brownish grey slightly gravelly CLAY		
Sample Preparation:	Tested after >425um removed by hand		

As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425µm BS Test Sieve
31	80	35	45	98



Legend, based on BS 5930:2015 Code of practice for site investigations

		Plasticity		Liquid Limit
C	Clay	L	Low	below 35
M	Silt	I	Medium	35 to 50
		H	High	50 to 70
		V	Very high	70 to 90
		E	Extremely high	exceeding 90
	Organic	O	append to classification for organic material (eg CHO)	

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 232.9

TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Environmental Science

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	01/06/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

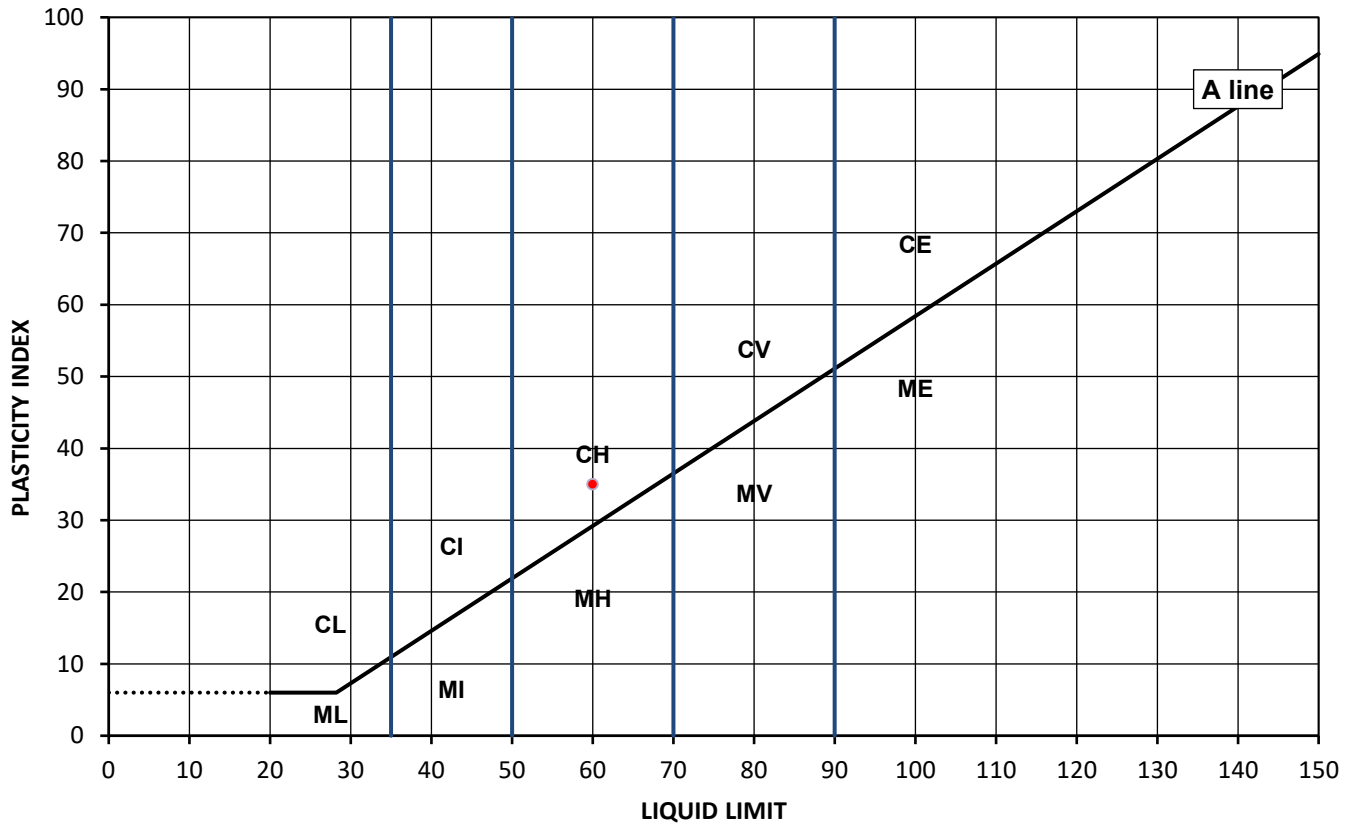
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1534120	Depth Top [m]:	1.00
Hole No.:	MBH04	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Soil Description:	Grey slightly gravelly CLAY		

Sample Preparation: Tested after washing to remove >425um

As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425µm BS Test Sieve
19	60	25	35	89



Legend, based on BS 5930:2015 Code of practice for site investigations

		Plasticity		Liquid Limit
C	Clay	L	Low	below 35
M	Silt	I	Medium	35 to 50
		H	High	50 to 70
		V	Very high	70 to 90
		E	Extremely high	exceeding 90
	Organic	O	append to classification for organic material (eg CHO)	

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 232.9

TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Environmental Science

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	01/06/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

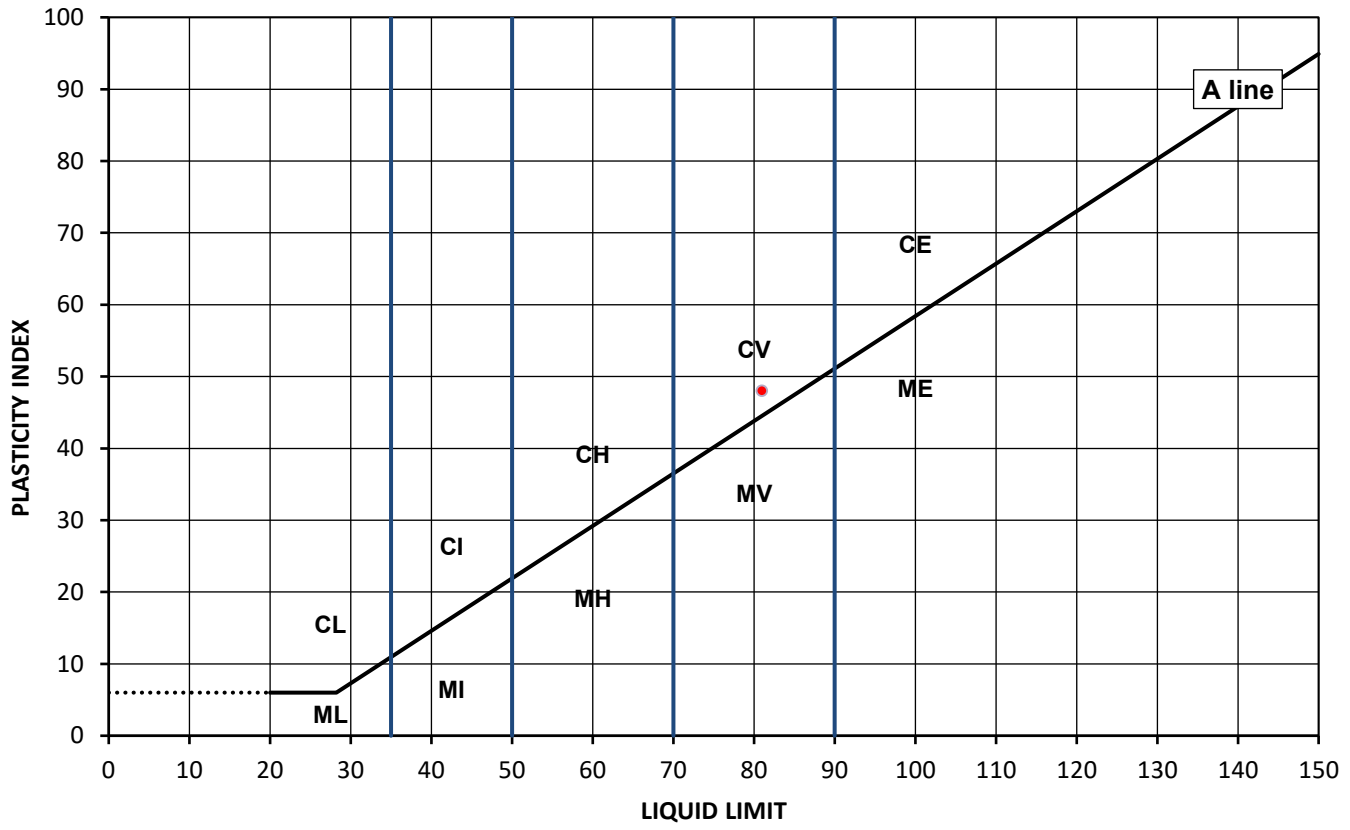
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1534122	Depth Top [m]:	3.00
Hole No.:	MBH04	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Soil Description:	Greyish brown CLAY		

Sample Preparation: Tested in natural condition

As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425µm BS Test Sieve
35	81	33	48	100



Legend, based on BS 5930:2015 Code of practice for site investigations

		Plasticity		Liquid Limit
C	Clay	L	Low	below 35
M	Silt	I	Medium	35 to 50
		H	High	50 to 70
		V	Very high	70 to 90
		E	Extremely high	exceeding 90
	Organic	O	append to classification for organic material (eg CHO)	

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 232.9

TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Environmental Science

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	02/06/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

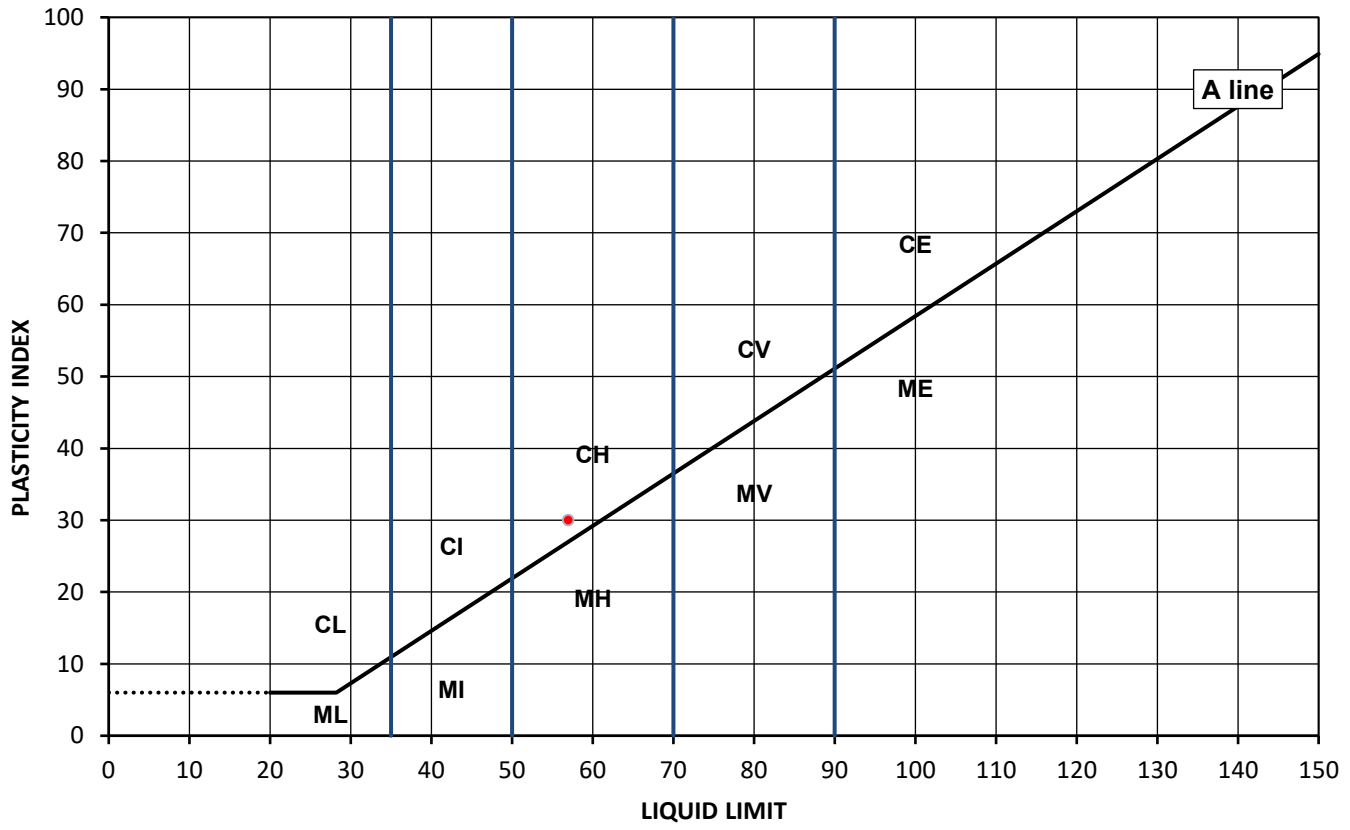
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1534126	Depth Top [m]:	1.00
Hole No.:	MBH05	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	B
Soil Description:	Greyish brown gravelly slightly sandy CLAY		

Sample Preparation: Tested after washing to remove >425um

As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425µm BS Test Sieve
27	57	27	30	72



Legend, based on BS 5930:2015 Code of practice for site investigations

		Plasticity		Liquid Limit
C	Clay	L	Low	below 35
M	Silt	I	Medium	35 to 50
		H	High	50 to 70
		V	Very high	70 to 90
		E	Extremely high	exceeding 90
	Organic	O	append to classification for organic material (eg CHO)	

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 232.9

TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Environmental Science

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	02/06/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

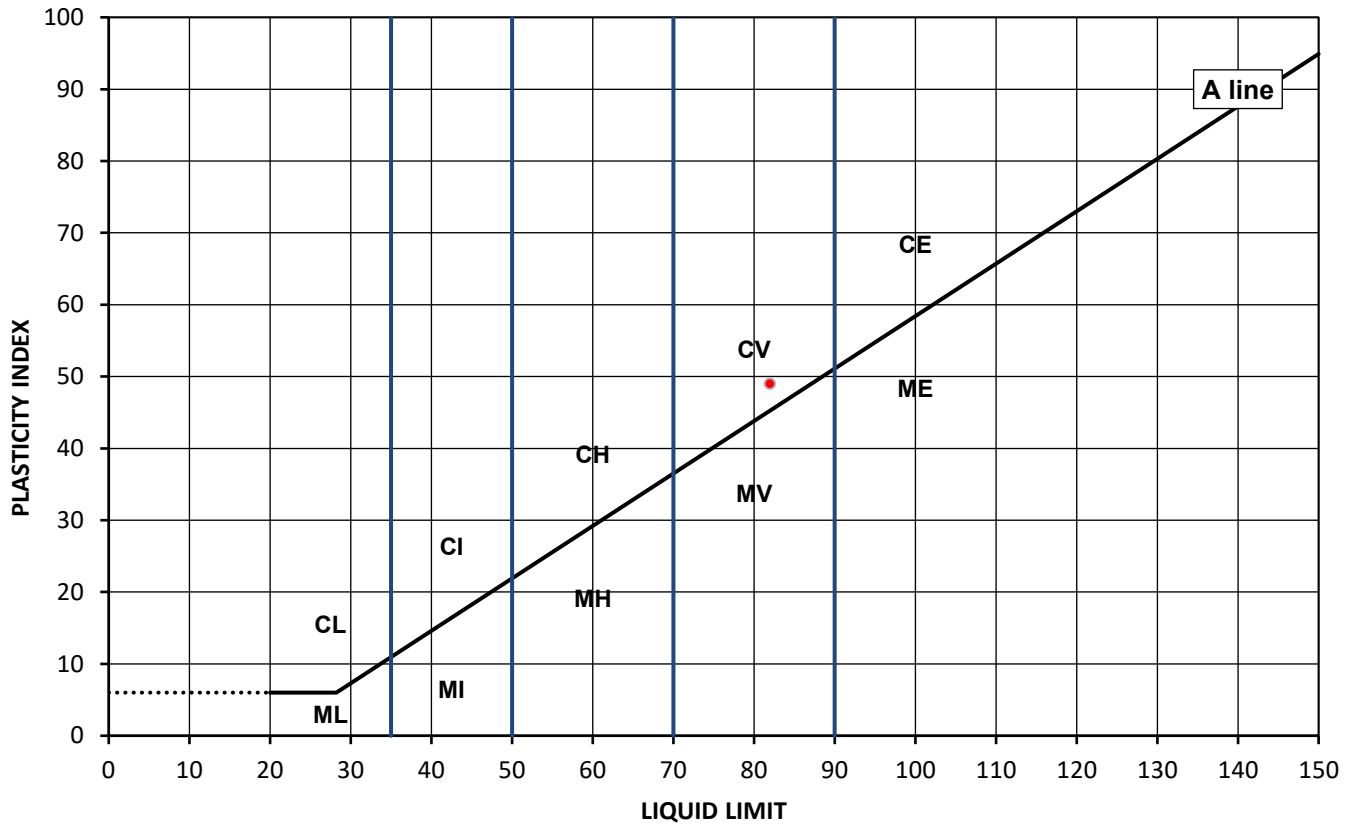
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1534127	Depth Top [m]:	4.00
Hole No.:	MBH05	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	B
Soil Description:	Greyish brown CLAY		

Sample Preparation: Tested in natural condition

As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425µm BS Test Sieve
35	82	33	49	100



Legend, based on BS 5930:2015 Code of practice for site investigations

		Plasticity		Liquid Limit
C	Clay	L	Low	below 35
M	Silt	I	Medium	35 to 50
		H	High	50 to 70
		V	Very high	70 to 90
		E	Extremely high	exceeding 90
	Organic	O	append to classification for organic material (eg CHO)	

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 232.9

TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Environmental Science

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	02/06/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

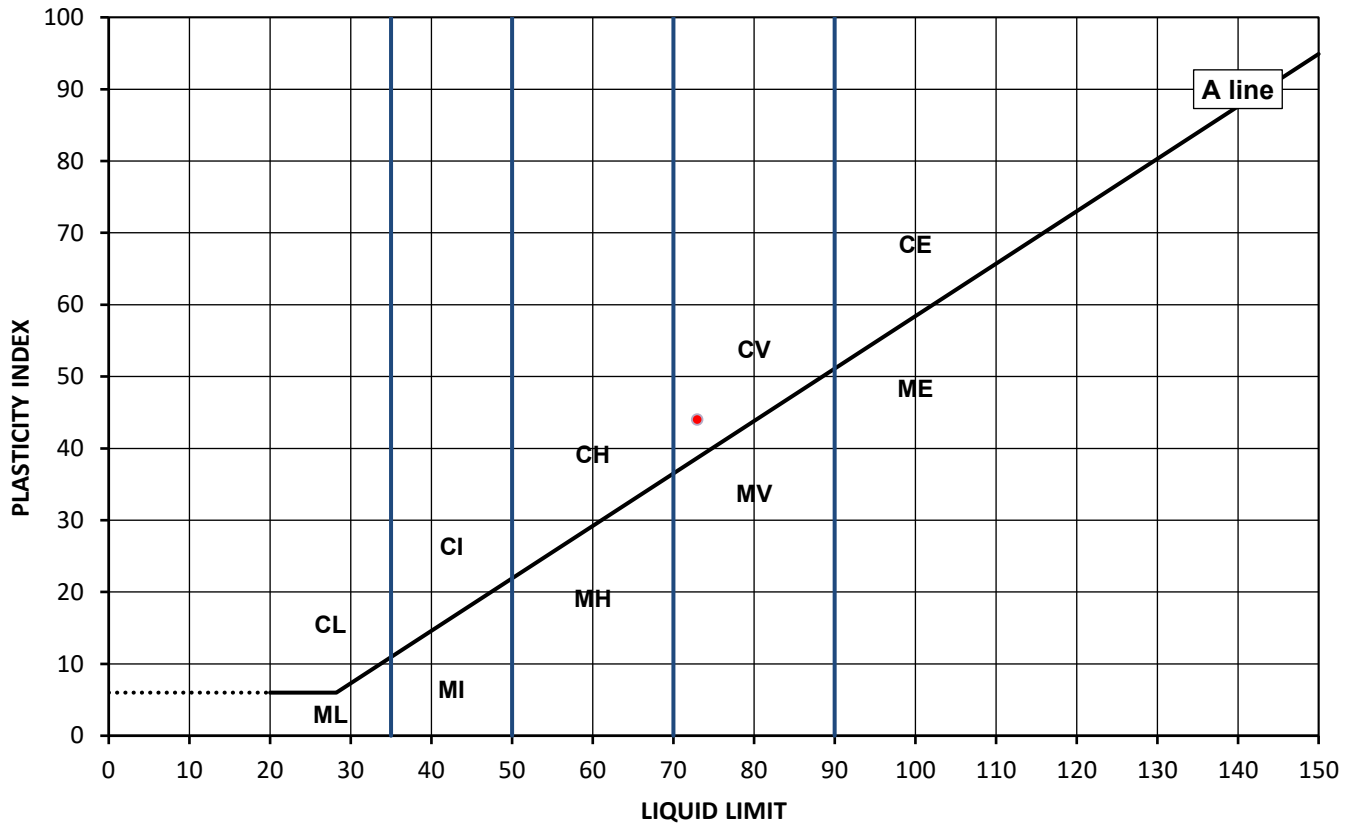
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1534129	Depth Top [m]:	5.40
Hole No.:	MBH05	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	B
Soil Description:	Greyish brown CLAY		

Sample Preparation: Tested in natural condition

As Received Moisture Content [%]	Liquid Limit [%]	Plastic Limit [%]	Plasticity Index [%]	% Passing 425µm BS Test Sieve
28	73	29	44	100



Legend, based on BS 5930:2015 Code of practice for site investigations

		Plasticity		Liquid Limit
C	Clay	L	Low	below 35
M	Silt	I	Medium	35 to 50
		H	High	50 to 70
		V	Very high	70 to 90
		E	Extremely high	exceeding 90
	Organic	O	append to classification for organic material (eg CHO)	

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 232.9

SUMMARY REPORT

Summary of Classification Test Results

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Tested in Accordance with:

MC by BS 1377-2: 1990: Clause 3.2; WC by BS EN 17892-1: 2014; Atterberg by BS 1377-2: 1990: Clause 4.3, Clause 4.4 and 5; PD by BS 1377-2: 1990: Clause 8.2

Client: Merebrook

Client Address: Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ

Contact: Darren Ettritch

Site Address: Billet Road, Romford Parcel C

Client Reference: 21912S
Job Number: 20-14227
Date Sampled: 26/05 - 02/06/2020
Date Received: 04/06/2020
Date Tested: 23/06/2020
Sampled By: CAH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	MC	WC	Atterberg				Density			Total Porosity#		
		Reference	Depth Top m	Depth Base m	Type			%	%	% Passing 425um %	LL %	PL %	PI %	bulk Mg/m3	dry Mg/m3	PD Mg/m3	%		
1534109	MBH02	Not Given	7.00	Not Given	B	Greyish brown CLAY	Atterberg 1 Point	29		100	77	33	44						
1534113	MBH03	Not Given	0.50	Not Given	D	Brown slightly gravelly slightly sandy CLAY	Atterberg 1 Point	11		73	53	22	31						
1534114	MBH03	Not Given	2.20	Not Given	B	Grey mottled brown slightly sandy CLAY	Atterberg 1 Point	21		100	59	25	34						
1534115	MBH03	Not Given	3.50	Not Given	D	Brownish grey slightly gravelly CLAY	Atterberg 1 Point	31		98	80	35	45						
1534120	MBH04	Not Given	1.00	Not Given	D	Grey slightly gravelly CLAY	Atterberg 1 Point	19		89	60	25	35						
1534122	MBH04	Not Given	3.00	Not Given	D	Greyish brown CLAY	Atterberg 1 Point	35		100	81	33	48						
1534126	MBH05	Not Given	1.00	Not Given	B	Greyish brown gravelly slightly sandy CLAY	Atterberg 1 Point	27		72	57	27	30						
1534127	MBH05	Not Given	4.00	Not Given	B	Greyish brown CLAY	Atterberg 1 Point	35		100	82	33	49						
1534129	MBH05	Not Given	5.40	Not Given	B	Greyish brown CLAY	Atterberg 1 Point	28		100	73	29	44						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 234.11

TEST CERTIFICATE

Particle Size Distribution

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

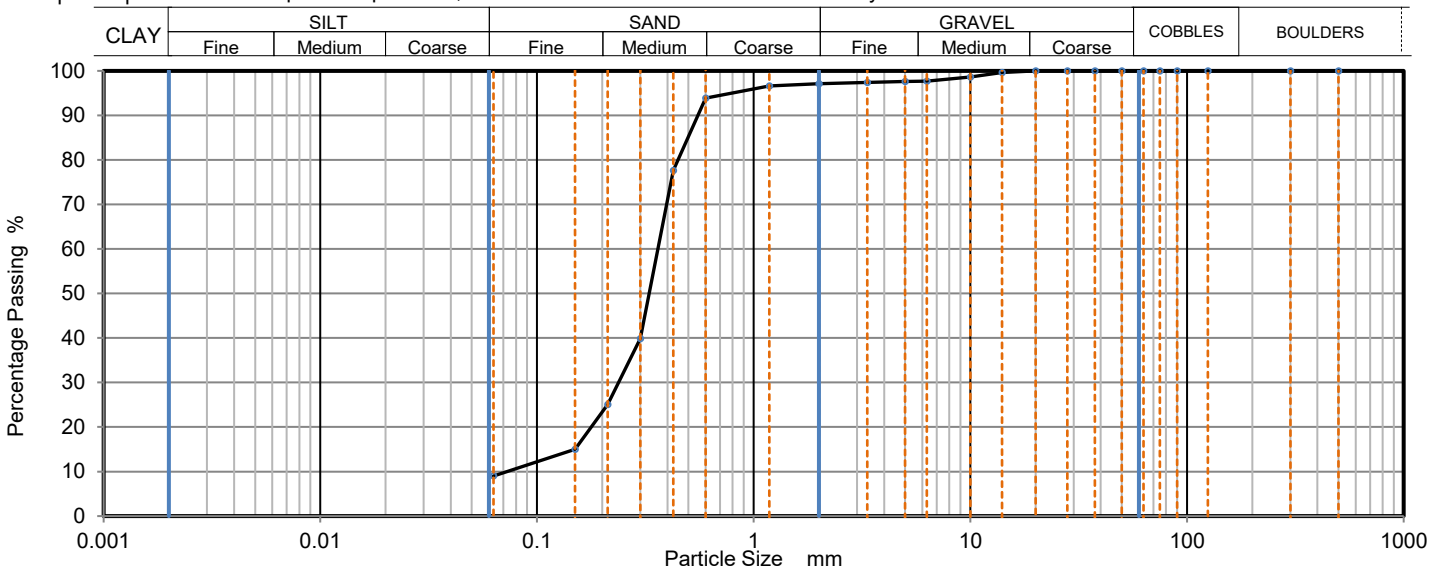
Environmental Science

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	26/05/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1534107	Depth Top [m]:	2.00
Hole No.:	MBH02	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	B
Sample Description:	Brown slightly gravelly slightly clayey SAND		
Sample Preparation:	Sample was quartered, oven dried at 106.5 °C and broken down by hand.		



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	99		
6.3	98		
5	98		
3.35	97		
2	97		
1.18	97		
0.6	94		
0.425	78		
0.3	40		
0.212	25		
0.15	15		
0.063	10		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	2.90
Sand	87.60
Fines <0.063mm	9.50

Grading Analysis		
D100	mm	20
D60	mm	0.361
D30	mm	0.238
D10	mm	0.0683
Uniformity Coefficient		5.3
Curvature Coefficient		2.3

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 100.18

TEST CERTIFICATE

Particle Size Distribution

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

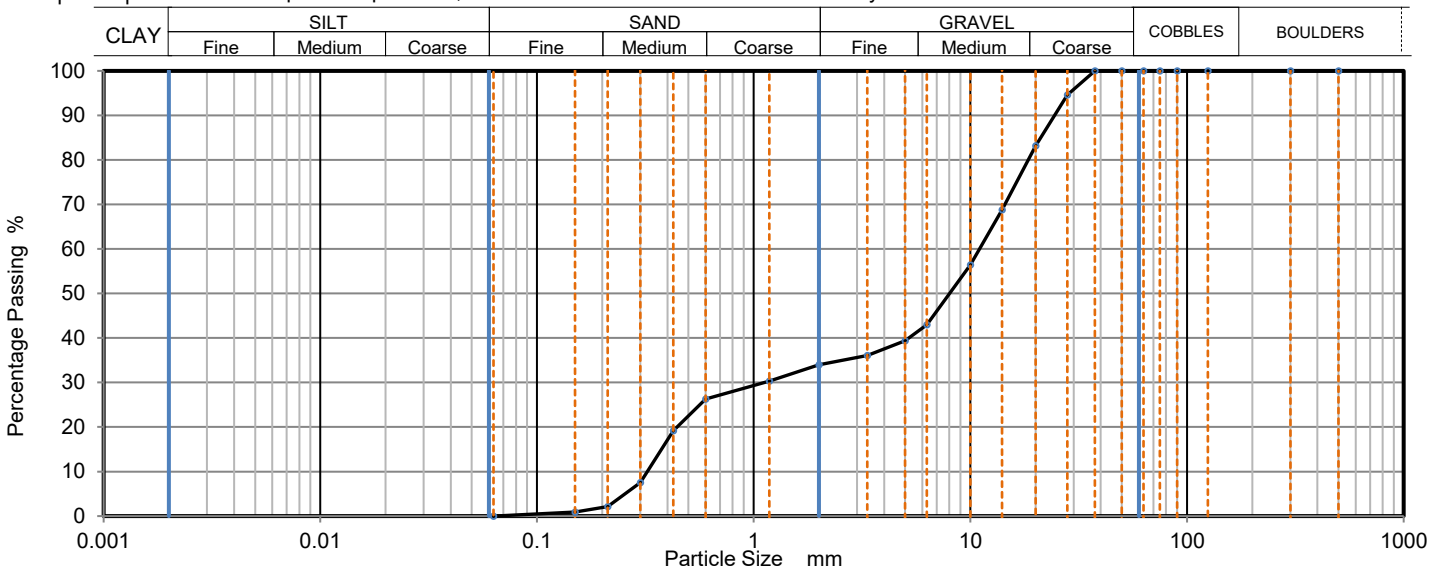
Environmental Science

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	26/05/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1534108	Depth Top [m]:	4.50
Hole No.:	MBH02	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	B
Sample Description:	Yellowish brown very sandy GRAVEL		
Sample Preparation:	Sample was quartered, oven dried at 106.1 °C and broken down by hand.		



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	95		
20	83		
14	69		
10	56		
6.3	43		
5	39		
3.35	36		
2	34		
1.18	30		
0.6	26		
0.425	19		
0.3	8		
0.212	2		
0.15	1		
0.063	1		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	66.00
Sand	33.40
Fines <0.063mm	0.60

Grading Analysis		
D100	mm	37.5
D60	mm	11
D30	mm	1.13
D10	mm	0.323
Uniformity Coefficient		34
Curvature Coefficient		0.36

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 100.18

TEST CERTIFICATE

Unconsolidated Undrained

Triaxial Compression

Tested in Accordance with:
BS 1377-7: 1990: Clause 8

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Environmental Science

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	01/06/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	24/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

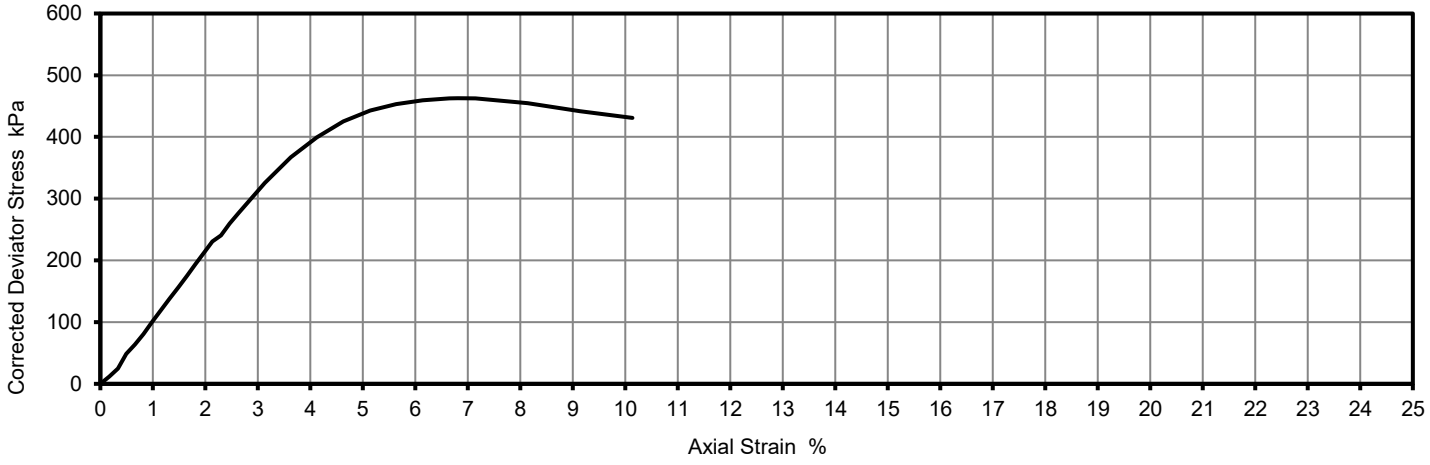
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

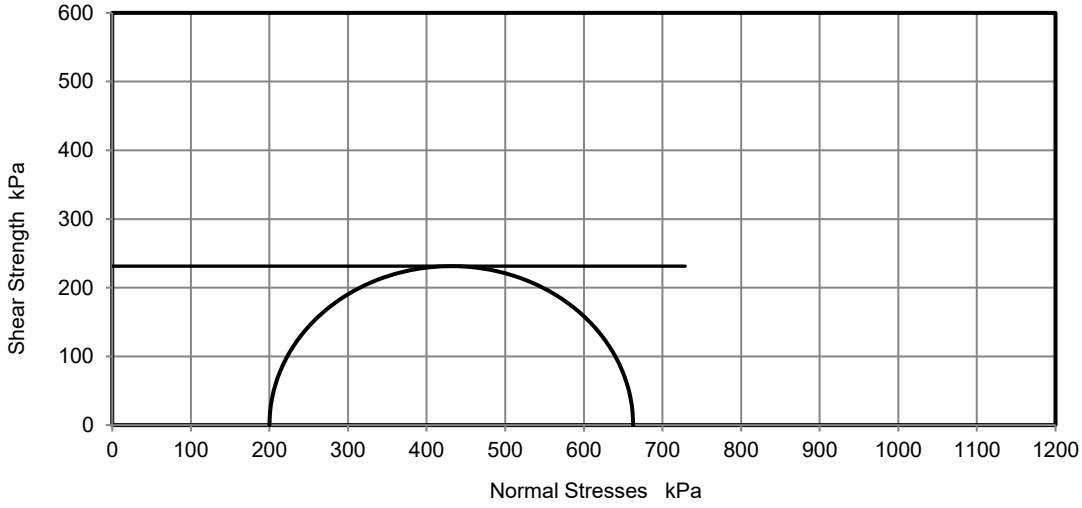
Laboratory Reference:	1534125	Depth Top [m]:	10.00
Hole No.:	MBH04	Depth Base [m]:	10.40
Sample Reference:	Not Given	Sample Type:	U
Sample Description:	Greyish brown CLAY		

Test Number	1		Rate of Strain	2.00	%/min	
Length	75.68	mm	Cell Pressure	200	kPa	
Diameter	37.54	mm	Axial Strain at failure	6.8	%	
Bulk Density	1.98	Mg/m3	Deviator Stress, (σ1 - σ3)f	463	kPa	
Moisture Content	26	%	Undrained Shear Strength, cu	231	kPa	½(σ1 - σ3)f
Dry Density	1.57	Mg/m3	Mode of Failure	Brittle		
Membrane Correction	1.09	kPa	Membrane thickness	0.24	mm	

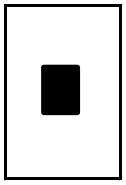
Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Note: Deviator stress corrected for area change and membrane effects. Mohr circles and their interpretation is not covered by BS1377. This is provided for information only.

Remarks: Sample is 38mm diameter - tested as a single stage.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 184.11

TEST CERTIFICATE

Unconsolidated Undrained Triaxial Compression

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	26/05/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

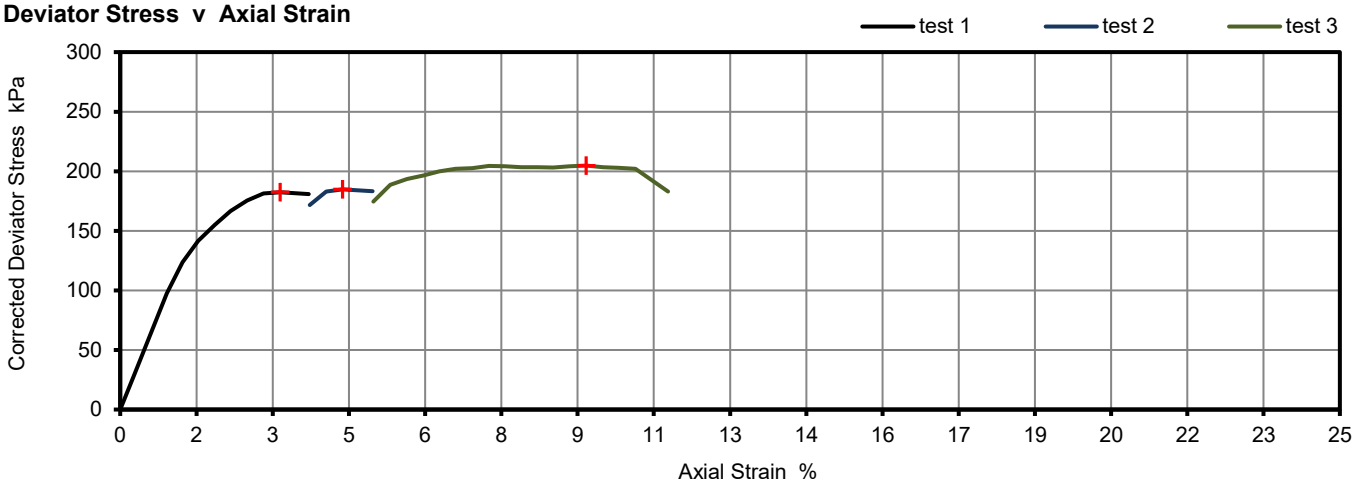
Test Results:

Laboratory Reference:	1534110	Depth Top [m]:	7.50
Hole No.:	MBH02	Depth Base [m]:	7.95
Sample Reference:	Not Given	Sample Type:	U
Sample Description:	Greyish brown CLAY		

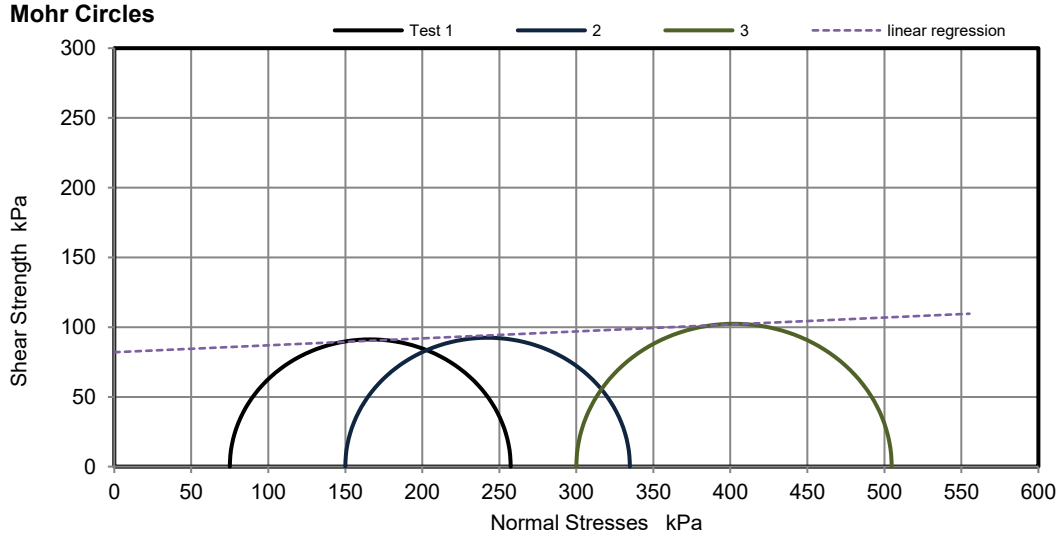
Length	197.16	mm
Diameter	103.26	mm
Bulk Density	2.00	Mg/m3
Moisture Content	28	%
Dry Density	1.56	Mg/m3
Membrane thickness	0.28	mm

Rate of Strain	2.00			%/min
Stage Number	1	2	3	
Cell Pressure	75	150	300	kPa
Axial Strain at failure	3.3	4.6	9.6	%
Deviator Stress, (σ1 - σ3)f	182	185	205	kPa
Shear strength, cu	91	92	102	kPa
Mode of failure	Brittle			
Membrane Correction	0.24	0.34	0.58	kPa

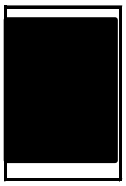
Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression
ϕu 2.8 °
cu 82 kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 75kPa=59N, 150kPa=97N, 300kPa=177N.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 186.11

TEST CERTIFICATE

Unconsolidated Undrained Triaxial Compression

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	26/05/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

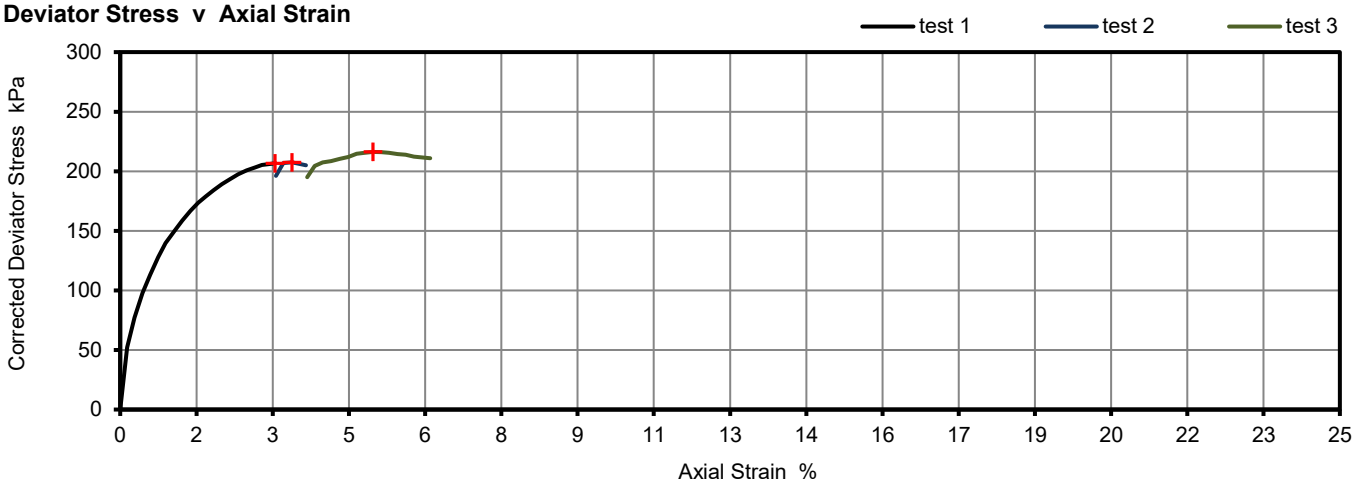
Test Results:

Laboratory Reference:	1534111	Depth Top [m]:	10.50
Hole No.:	MBH02	Depth Base [m]:	10.9
Sample Reference:	Not Given	Sample Type:	U
Sample Description:	Greyish brown CLAY		

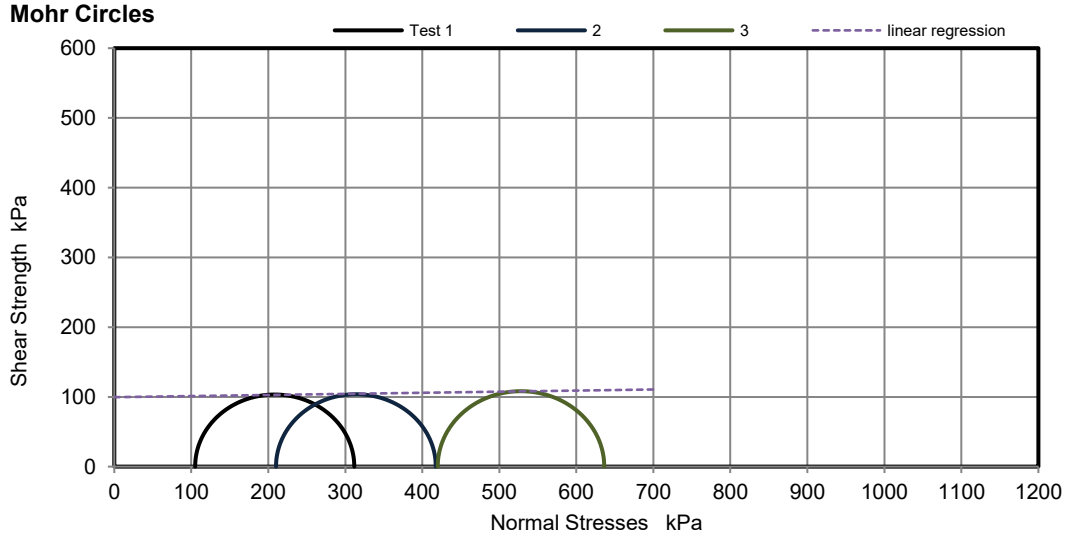
Length	199.87	mm
Diameter	102.95	mm
Bulk Density	1.97	Mg/m3
Moisture Content	31	%
Dry Density	1.51	Mg/m3
Membrane thickness	0.23	mm

Rate of Strain	2.00			%/min
Stage Number	1	2	3	
Cell Pressure	105	210	420	kPa
Axial Strain at failure	3.2	3.5	5.2	%
Deviator Stress, (σ1 - σ3)f	207	207	216	kPa
Shear strength, cu	103	104	108	kPa
Mode of failure	Brittle			
Membrane Correction	0.19	0.22	0.32	kPa

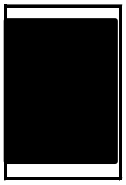
Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression

ϕu	0.9	°
cu	100	kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 105kPa=54N, 210kPa=99N, 420kPa=197N.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 186.11

TEST CERTIFICATE

Unconsolidated Undrained Triaxial Compression

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Environmental Science

Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	26/05/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	24/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

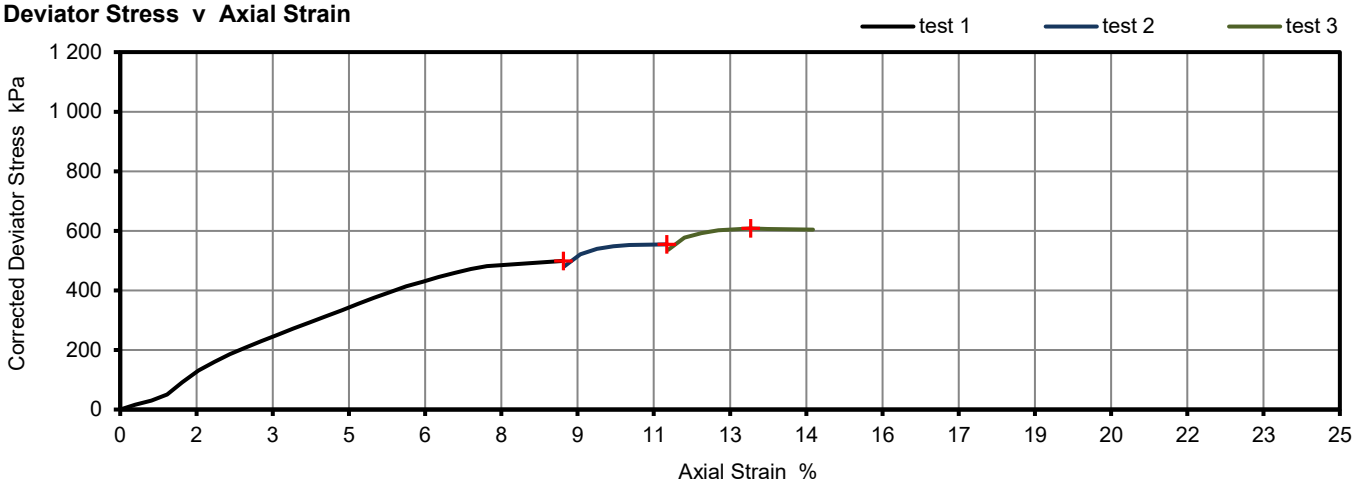
Test Results:

Laboratory Reference:	1534112	Depth Top [m]:	16.50
Hole No.:	MBH02	Depth Base [m]:	16.85
Sample Reference:	Not Given	Sample Type:	U
Sample Description:	Greyish brown CLAY		

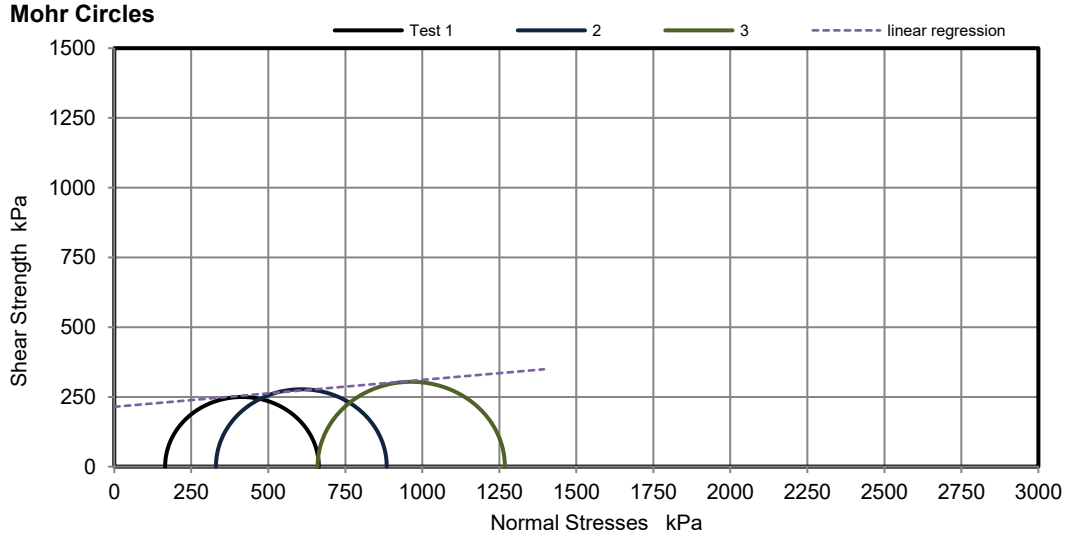
Length	197.74	mm
Diameter	103.68	mm
Bulk Density	2.01	Mg/m3
Moisture Content	25	%
Dry Density	1.61	Mg/m3
Membrane thickness	0.29	mm

Rate of Strain	2.00			%/min
Stage Number	1	2	3	
Cell Pressure	165	330	660	kPa
Axial Strain at failure	9.1	11.2	12.9	%
Deviator Stress, (σ1 - σ3)f	499	555	608	kPa
Shear strength, cu	250	277	304	kPa
Mode of failure	Compound			
Membrane Correction	0.58	0.68	0.76	kPa

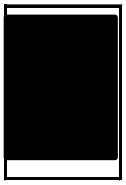
Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression

ϕu	5.5	°
cu	214	kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 165kPa=82N, 330kPa=172N, 660kPa=340N.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 186.11

TEST CERTIFICATE

Unconsolidated Undrained Triaxial Compression

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Environmental Science

Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	27/05/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

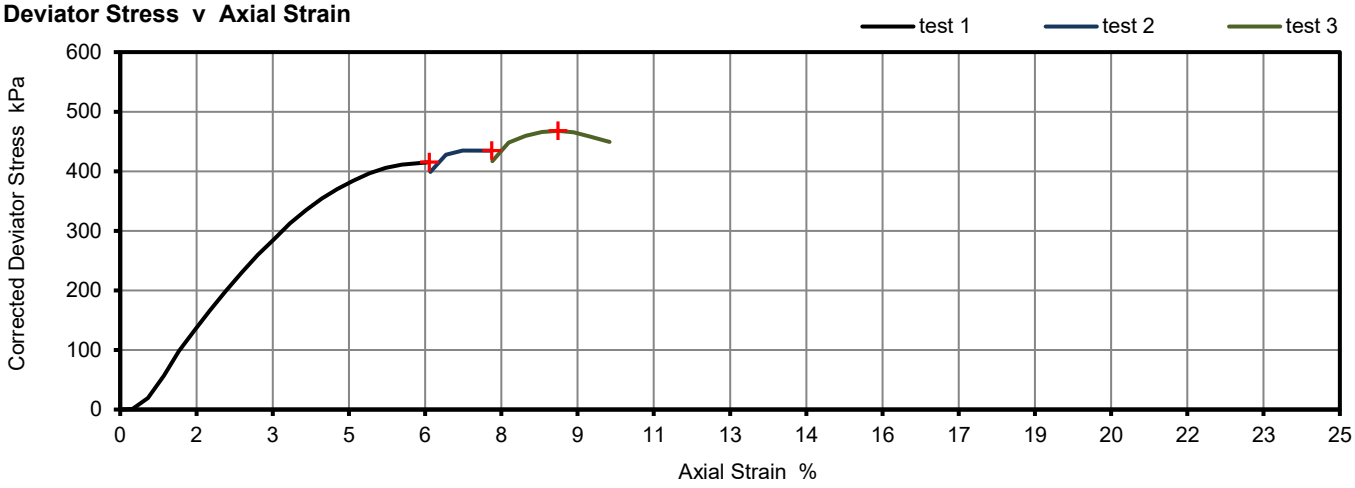
Test Results:

Laboratory Reference:	1534116	Depth Top [m]:	9.50
Hole No.:	MBH03	Depth Base [m]:	9.9
Sample Reference:	Not Given	Sample Type:	U
Sample Description:	Greyish brown CLAY		

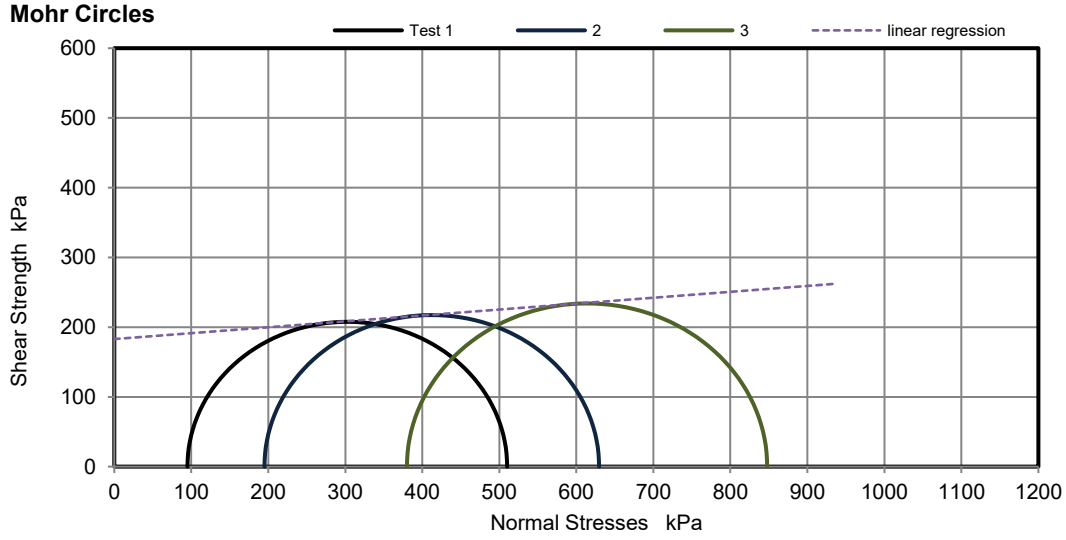
Length	202.27	mm
Diameter	102.90	mm
Bulk Density	2.04	Mg/m3
Moisture Content	24	%
Dry Density	1.65	Mg/m3
Membrane thickness	0.22	mm

Rate of Strain	1.98			%/min
Stage Number	1	2	3	
Cell Pressure	95	195	380	kPa
Axial Strain at failure	6.3	7.6	9.0	%
Deviator Stress, (σ1 - σ3)f	415	435	468	kPa
Shear strength, cu	208	217	234	kPa
Mode of failure	Compound			
Membrane Correction	0.35	0.39	0.44	kPa

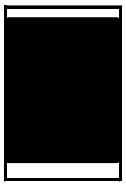
Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression

ϕu	4.8	°
cu	183	kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 95kPa=48N, 190kPa=77N, 380kPa=156N.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 186.11

TEST CERTIFICATE

Unconsolidated Undrained Triaxial Compression

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Environmental Science

Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	27/05/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

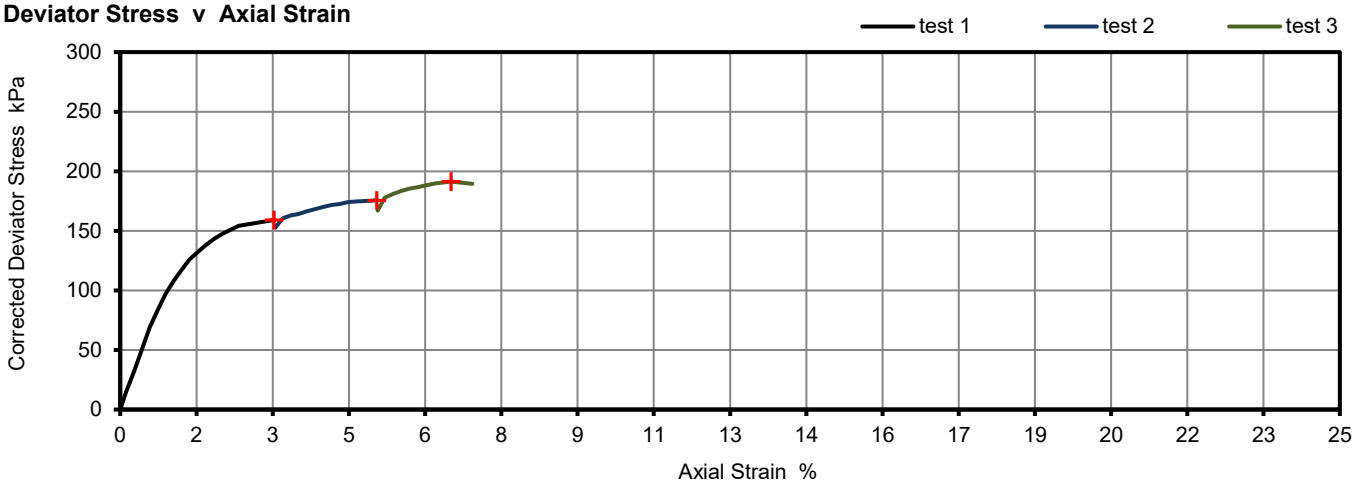
Test Results:

Laboratory Reference:	1534117	Depth Top [m]:	6.50
Hole No.:	MBH03	Depth Base [m]:	6.9
Sample Reference:	Not Given	Sample Type:	U
Sample Description:	Greyish brown CLAY		

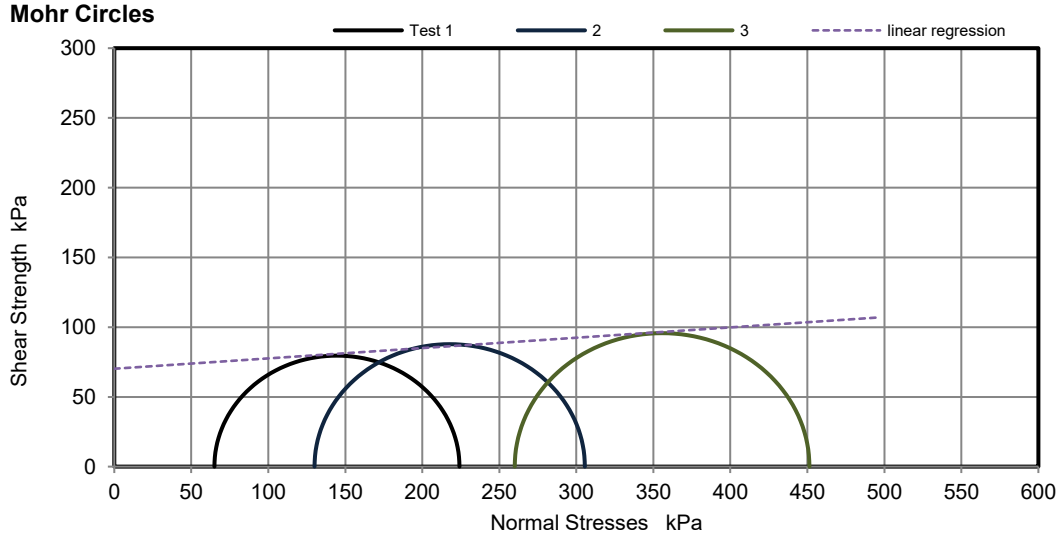
Length	198.42	mm
Diameter	102.93	mm
Bulk Density	1.95	Mg/m3
Moisture Content	31	%
Dry Density	1.49	Mg/m3
Membrane thickness	0.28	mm

Rate of Strain	2.00			%/min
Stage Number	1	2	3	
Cell Pressure	65	130	260	kPa
Axial Strain at failure	3.2	5.3	6.8	%
Deviator Stress, (σ1 - σ3)f	159	176	191	kPa
Shear strength, cu	80	88	96	kPa
Mode of failure	Compound			
Membrane Correction	0.23	0.40	0.46	kPa

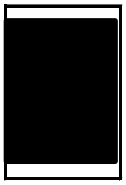
Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression

ϕu	4.2	°
cu	70	kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 65kPa=41N, 130kPa=63N, 260kPa=113N.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 186.11

TEST CERTIFICATE

Unconsolidated Undrained Triaxial Compression

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	27/05/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

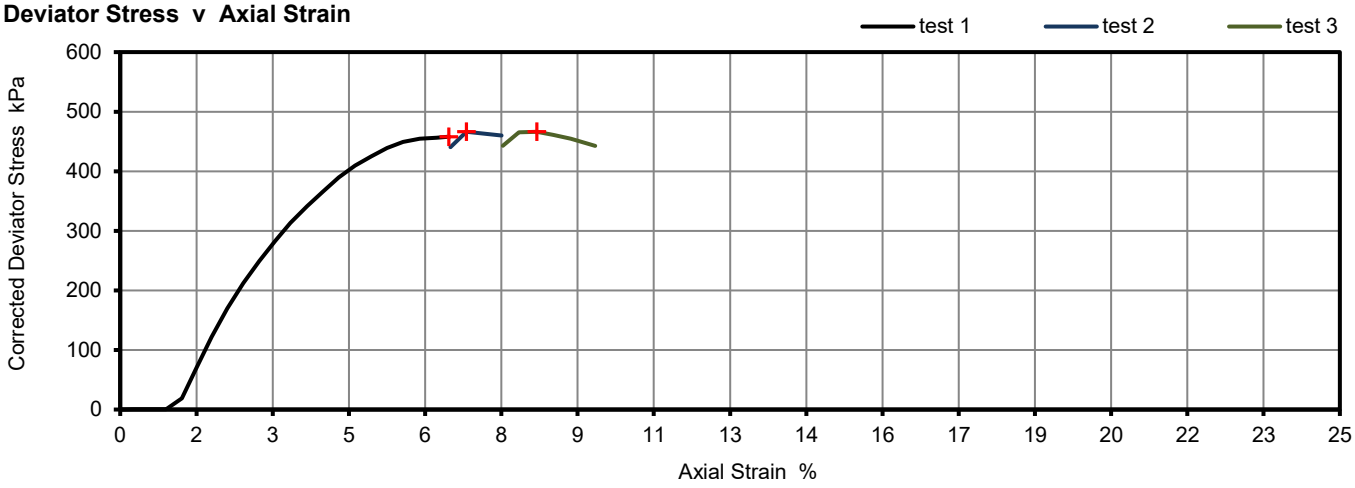
Test Results:

Laboratory Reference:	1534118	Depth Top [m]:	12.50
Hole No.:	MBH03	Depth Base [m]:	12.95
Sample Reference:	Not Given	Sample Type:	U
Sample Description:	Greyish brown CLAY		

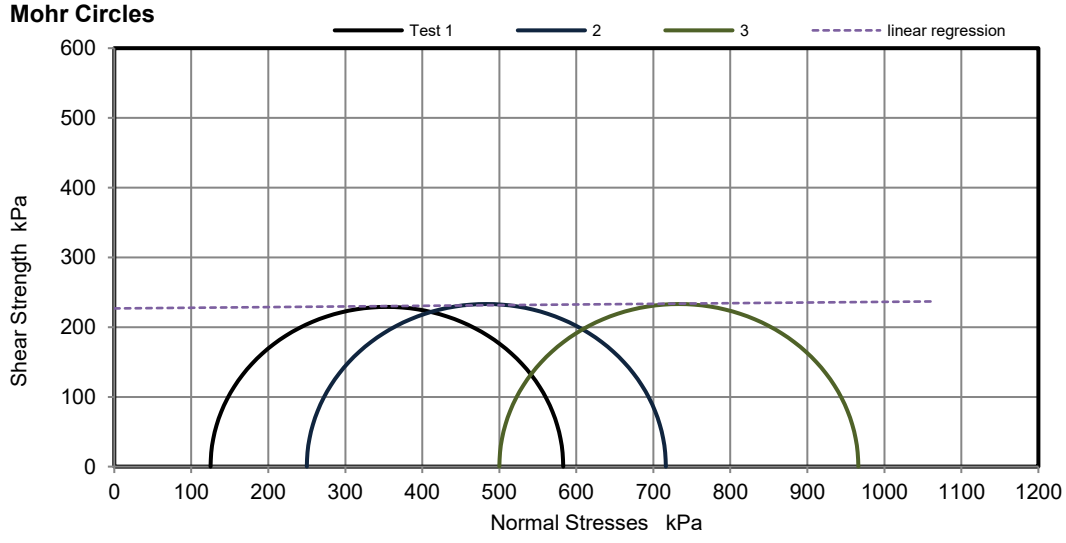
Length	192.79	mm
Diameter	102.86	mm
Bulk Density	2.04	Mg/m3
Moisture Content	26	%
Dry Density	1.62	Mg/m3
Membrane thickness	0.25	mm

Rate of Strain	2.00			%/min
Stage Number	1	2	3	
Cell Pressure	125	250	500	kPa
Axial Strain at failure	6.7	7.1	8.5	%
Deviator Stress, (σ1 - σ3)f	458	466	466	kPa
Shear strength, cu	229	233	233	kPa
Mode of failure	Brittle			
Membrane Correction	0.41	0.43	0.48	kPa

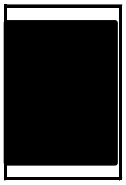
Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression

ϕu	0.5	°
cu	227	kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 125kPa=83N, 250kPa=141N, 500kPa=269N.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 186.11

TEST CERTIFICATE

Unconsolidated Undrained Triaxial Compression

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	27/05/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

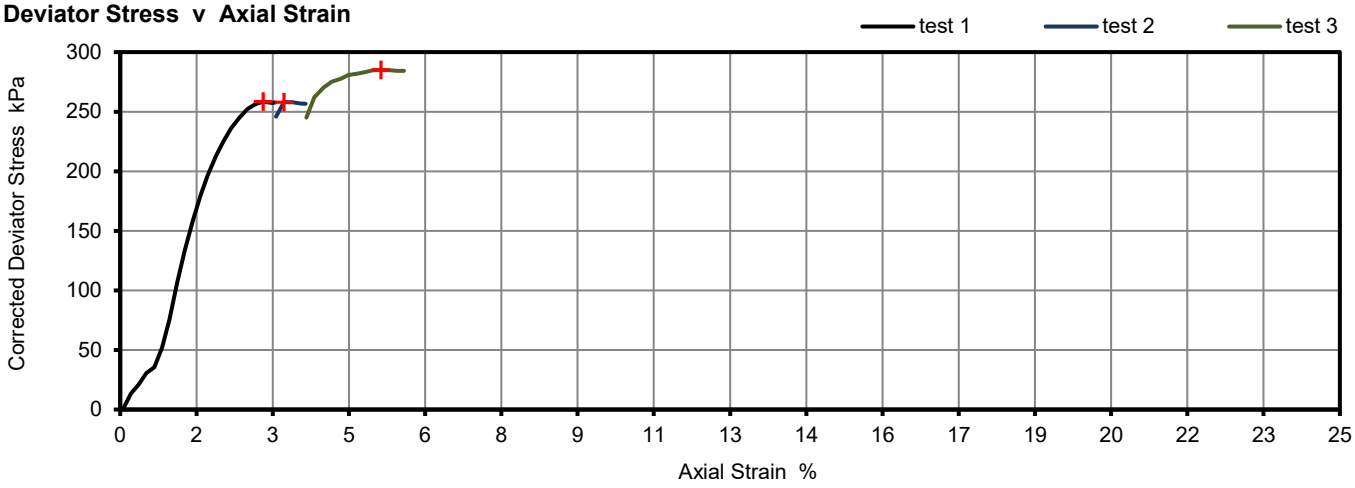
Test Results:

Laboratory Reference:	1534119	Depth Top [m]:	18.50
Hole No.:	MBH03	Depth Base [m]:	18.9
Sample Reference:	Not Given	Sample Type:	U
Sample Description:	Greyish brown CLAY		

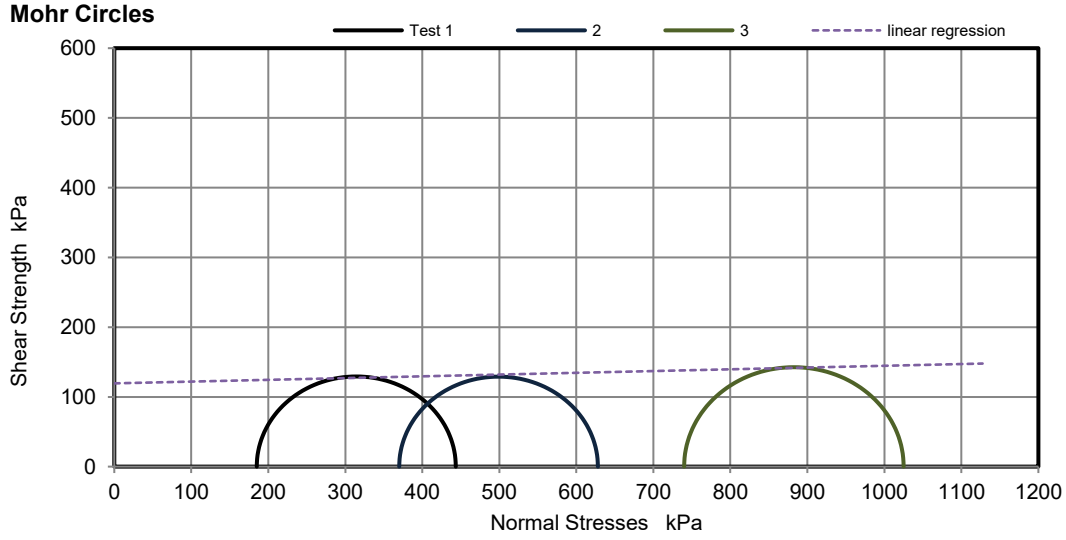
Length	202.87	mm
Diameter	102.81	mm
Bulk Density	1.96	Mg/m3
Moisture Content	28	%
Dry Density	1.53	Mg/m3
Membrane thickness	0.25	mm

Rate of Strain	1.97			%/min
Stage Number	1	2	3	
Cell Pressure	185	370	740	kPa
Axial Strain at failure	2.9	3.4	5.3	%
Deviator Stress, (σ1 - σ3)f	258	258	285	kPa
Shear strength, cu	129	129	143	kPa
Mode of failure	Compound			
Membrane Correction	0.20	0.22	0.36	kPa

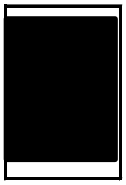
Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression

ϕu	1.4	°
cu	119	kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 50kPa=49N, 100kPa=72N, 200kPa=117N.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 186.11

TEST CERTIFICATE

Unconsolidated Undrained Triaxial Compression

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	01/06/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	24/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

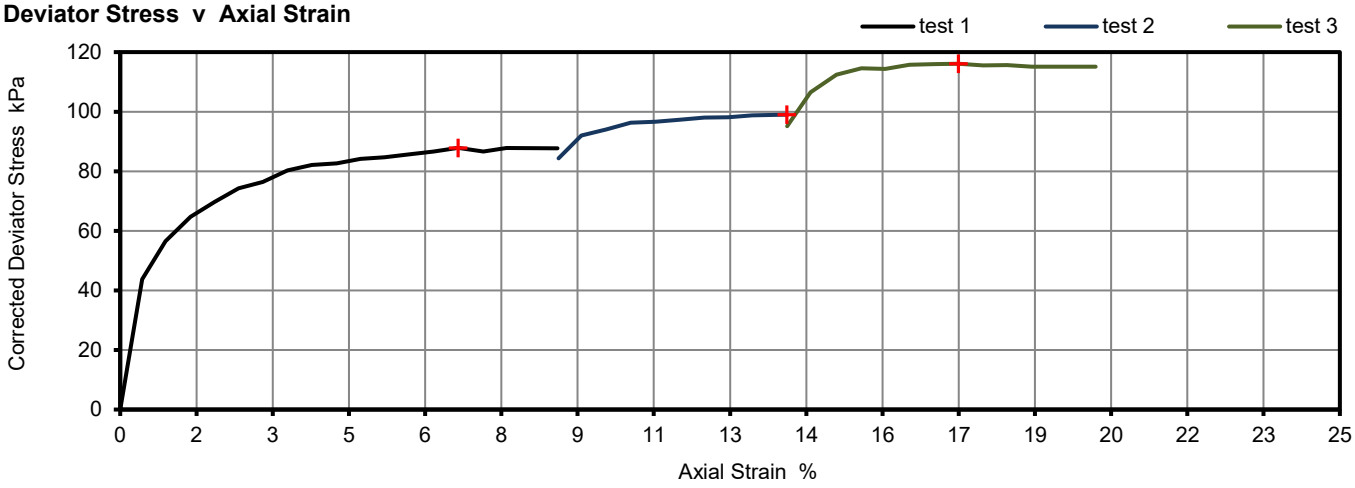
Test Results:

Laboratory Reference:	1534121	Depth Top [m]:	2.00
Hole No.:	MBH04	Depth Base [m]:	2.3
Sample Reference:	Not Given	Sample Type:	U
Sample Description:	Yellowish brown to grey CLAY		

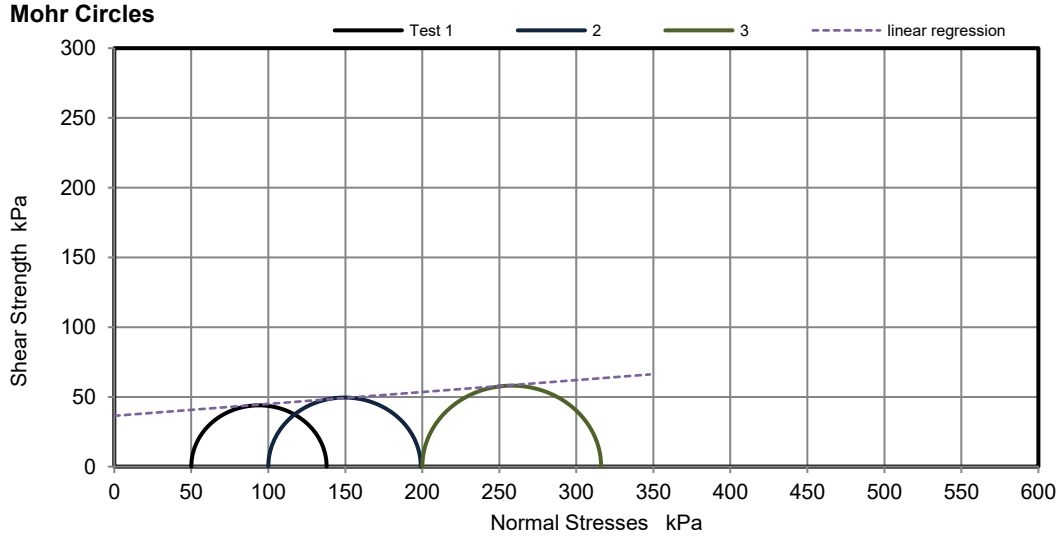
Length	136.79	mm
Diameter	69.53	mm
Bulk Density	1.89	Mg/m3
Moisture Content	37	%
Dry Density	1.38	Mg/m3
Membrane thickness	0.26	mm

Rate of Strain	2.00			%/min
Stage Number	1	2	3	
Cell Pressure	50	100	200	kPa
Axial Strain at failure	6.9	13.7	17.2	%
Deviator Stress, (σ1 - σ3)f	88	99	116	kPa
Shear strength, cu	44	49	58	kPa
Mode of failure	Compound			
Membrane Correction	0.65	1.05	1.27	kPa

Deviator Stress v Axial Strain



Mohr Circles



Position within sample

Linear Regression

ϕu	4.9	°
cu	36	kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 50kPa=49N, 100kPa=72N, 200kPa=117N.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 186.11

TEST CERTIFICATE

Unconsolidated Undrained Triaxial Compression

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	01/06/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

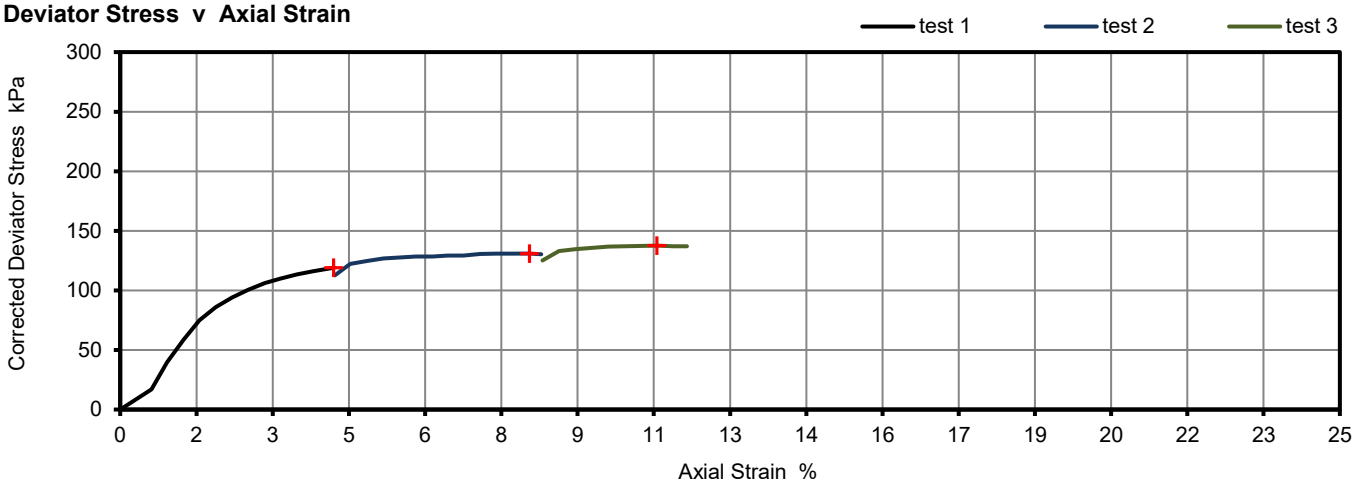
Test Results:

Laboratory Reference:	1534123	Depth Top [m]:	4.00
Hole No.:	MBH04	Depth Base [m]:	4.4
Sample Reference:	Not Given	Sample Type:	U
Sample Description:	Greyish brown CLAY		

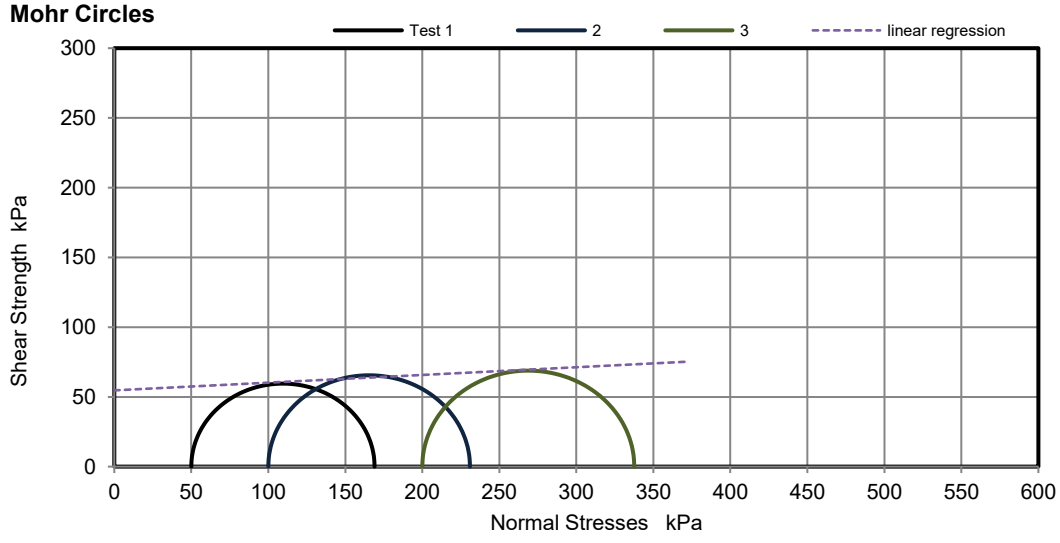
Length	196.87	mm
Diameter	102.68	mm
Bulk Density	1.93	Mg/m3
Moisture Content	33	%
Dry Density	1.45	Mg/m3
Membrane thickness	0.26	mm

Rate of Strain	2.00			%/min
Stage Number	1	2	3	
Cell Pressure	50	100	200	kPa
Axial Strain at failure	4.4	8.4	11.0	%
Deviator Stress, (σ1 - σ3)f	119	131	138	kPa
Shear strength, cu	59	65	69	kPa
Mode of failure	Compound			
Membrane Correction	0.30	0.50	0.60	kPa

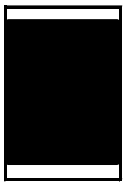
Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression

ϕu	3.2	°
cu	55	kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 50kPa=42N, 100kPa=68N, 200kPa=121N.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 186.11

TEST CERTIFICATE

Unconsolidated Undrained Triaxial Compression

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	01/06/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

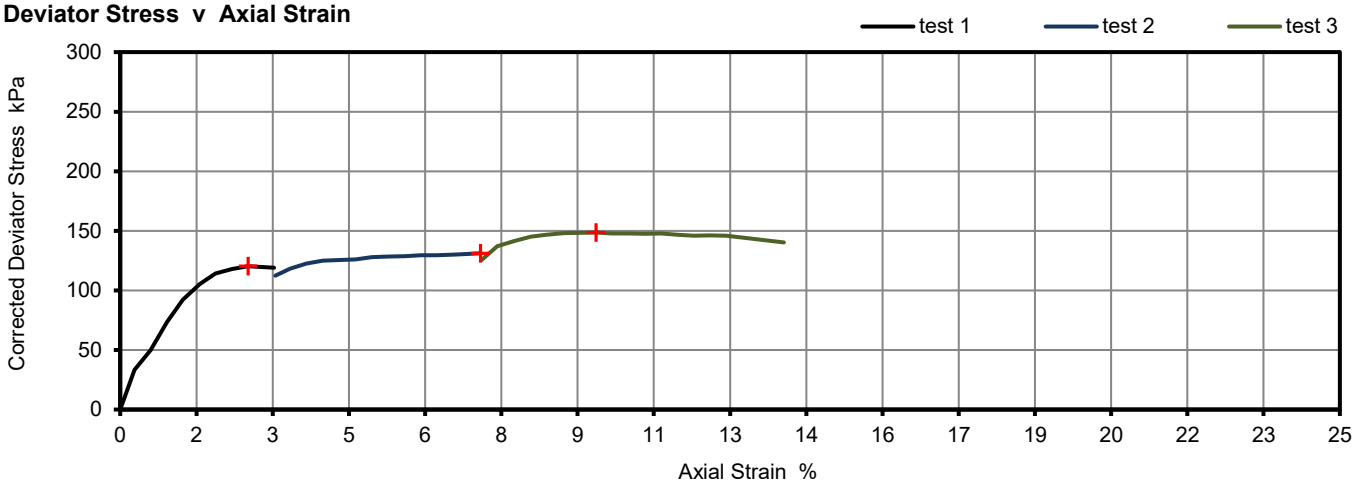
Test Results:

Laboratory Reference:	1534124	Depth Top [m]:	7.00
Hole No.:	MBH04	Depth Base [m]:	7.45
Sample Reference:	Not Given	Sample Type:	U
Sample Description:	Greyish brown CLAY		

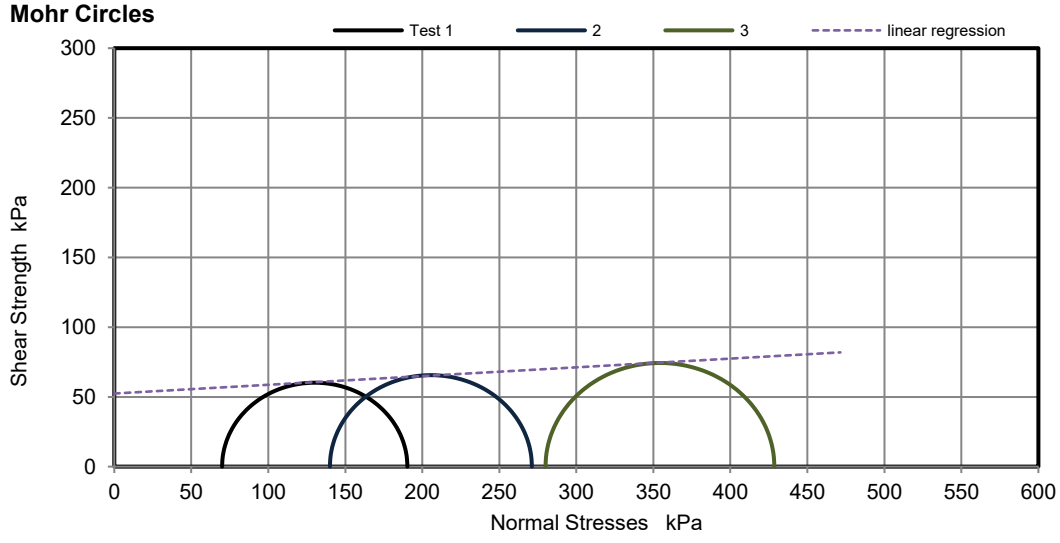
Length	192.81	mm
Diameter	103.00	mm
Bulk Density	1.93	Mg/m3
Moisture Content	33	%
Dry Density	1.45	Mg/m3
Membrane thickness	0.27	mm

Rate of Strain	2.00			%/min
Stage Number	1	2	3	
Cell Pressure	70	140	280	kPa
Axial Strain at failure	2.6	7.4	9.8	%
Deviator Stress, (σ1 - σ3)f	120	131	149	kPa
Shear strength, cu	60	66	74	kPa
Mode of failure	Brittle			
Membrane Correction	0.19	0.47	0.57	kPa

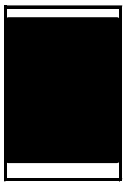
Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression

ϕu	3.6	°
cu	52	kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 70kPa=58N, 140kPa=96N, 280kPa=175N.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 186.11

TEST CERTIFICATE

Unconsolidated Undrained Triaxial Compression

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Environmental Science

Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	02/06/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

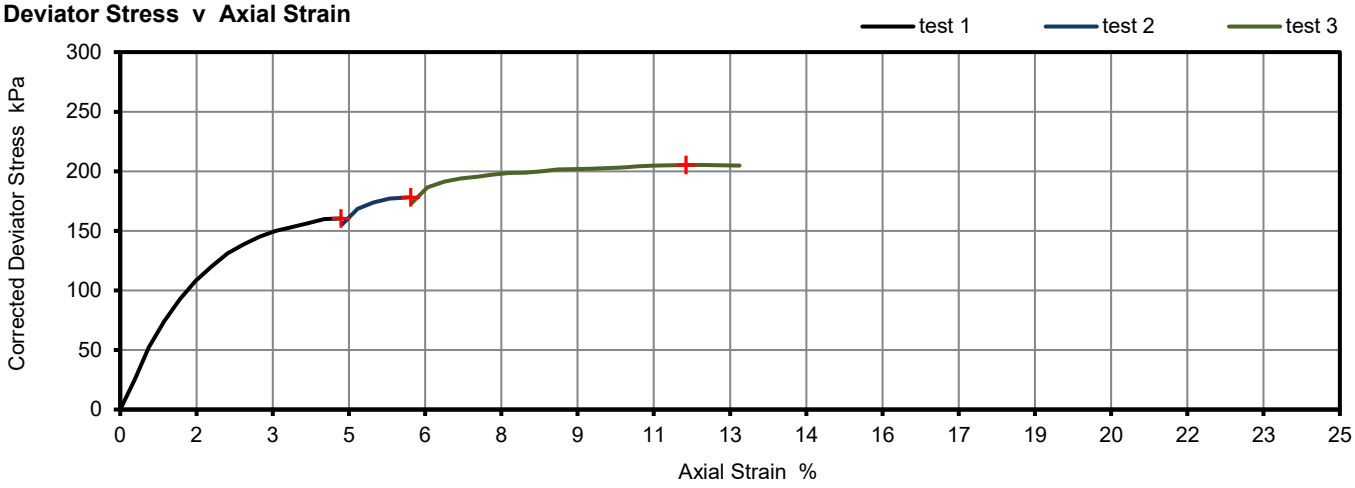
Test Results:

Laboratory Reference:	1534128	Depth Top [m]:	5.00
Hole No.:	MBH05	Depth Base [m]:	5.4
Sample Reference:	Not Given	Sample Type:	U
Sample Description:	Greyish brown CLAY		

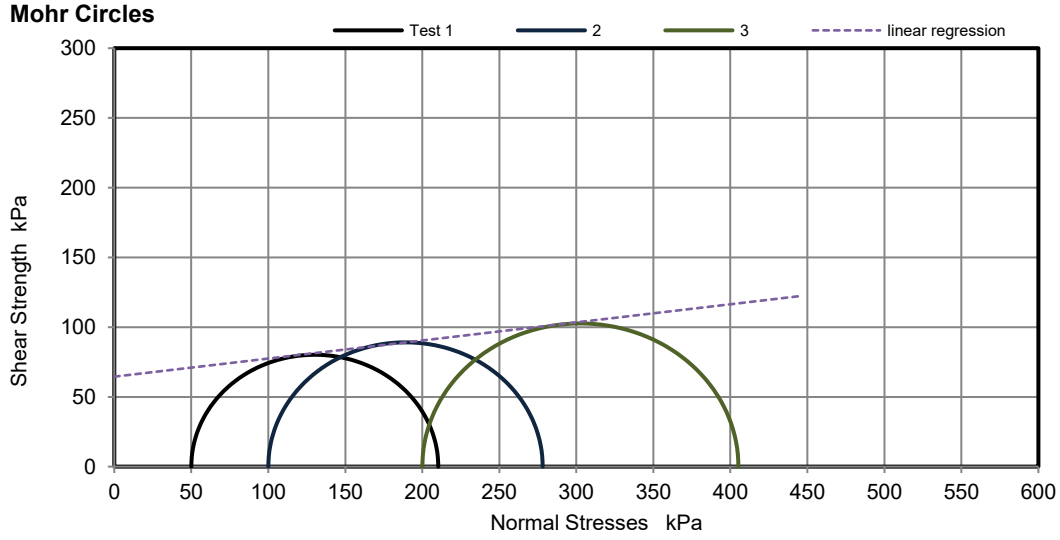
Length	202.35	mm
Diameter	103.07	mm
Bulk Density	1.95	Mg/m3
Moisture Content	29	%
Dry Density	1.51	Mg/m3
Membrane thickness	0.26	mm

Rate of Strain	1.98			%/min
Stage Number	1	2	3	
Cell Pressure	50	100	200	kPa
Axial Strain at failure	4.5	6.0	11.6	%
Deviator Stress, (σ1 - σ3)f	160	178	205	kPa
Shear strength, cu	80	89	103	kPa
Mode of failure	Compound			
Membrane Correction	0.31	0.40	0.63	kPa

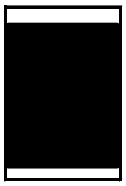
Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression

ϕu	7.4	°
cu	64	kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 50kPa=23N, 100kPa=52N, 200kPa=86N.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 186.11

TEST CERTIFICATE

Unconsolidated Undrained Triaxial Compression

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Environmental Science

Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	02/06/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

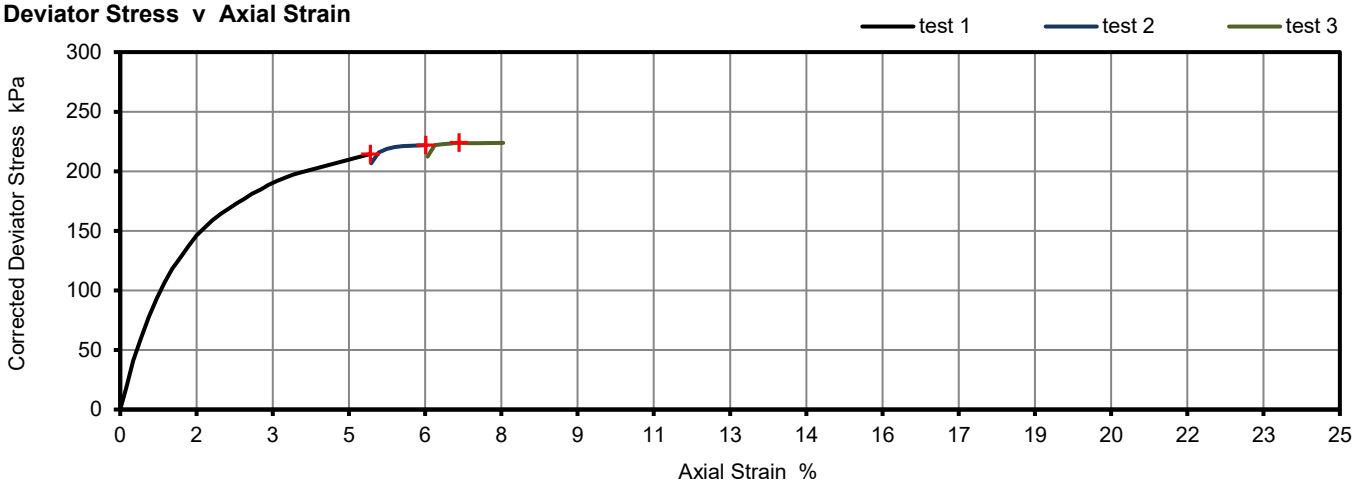
Test Results:

Laboratory Reference:	1534130	Depth Top [m]:	8.00
Hole No.:	MBH05	Depth Base [m]:	8.4
Sample Reference:	Not Given	Sample Type:	U
Sample Description:	Greyish brown CLAY		

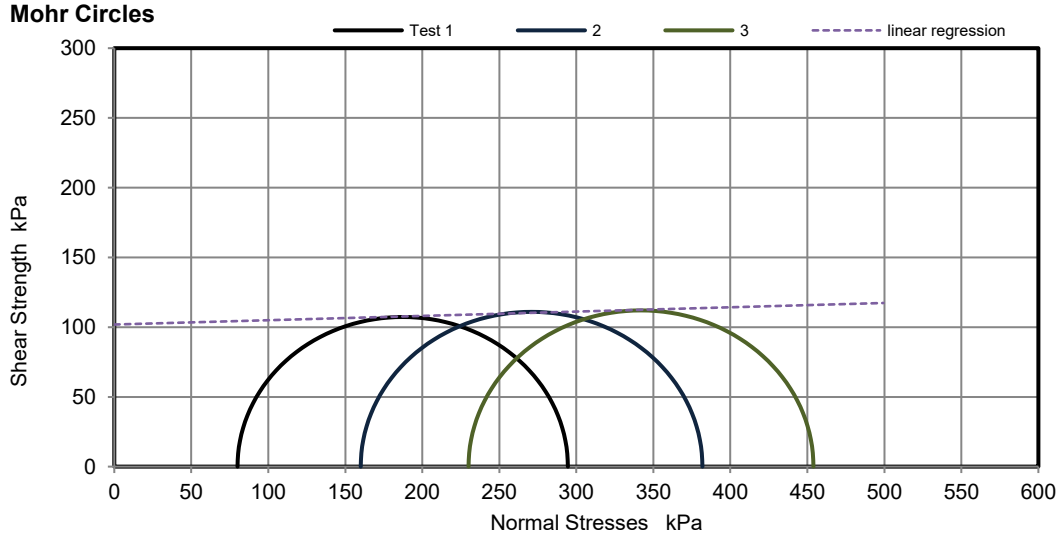
Length	200.61	mm
Diameter	102.62	mm
Bulk Density	1.97	Mg/m3
Moisture Content	29	%
Dry Density	1.52	Mg/m3
Membrane thickness	0.22	mm

Rate of Strain	1.99			%/min
Stage Number	1	2	3	
Cell Pressure	80	160	230	kPa
Axial Strain at failure	5.1	6.3	6.9	%
Deviator Stress, (σ1 - σ3)f	215	222	224	kPa
Shear strength, cu	107	111	112	kPa
Mode of failure	Brittle			
Membrane Correction	0.31	0.35	0.37	kPa

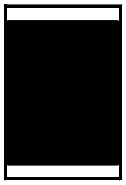
Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression

ϕu	1.8	°
cu	102	kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 80kPa=44N, 160kPa=67N, 320kPa=128N.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 186.11

TEST CERTIFICATE

Unconsolidated Undrained Triaxial Compression

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Tested in Accordance with: BS 1377-7: 1990: Clause 9

Client:	Merebrook	Client Reference:	21912S
Client Address:	Cromford Mills, Mill Lane, Cromford, Derbyshire, DE4 3RQ	Job Number:	20-14227
		Date Sampled:	02/06/2020
		Date Received:	04/06/2020
Contact:	Darren Ettritch	Date Tested:	23/06/2020
Site Address:	Billet Road, Romford Parcel C	Sampled By:	CAH

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

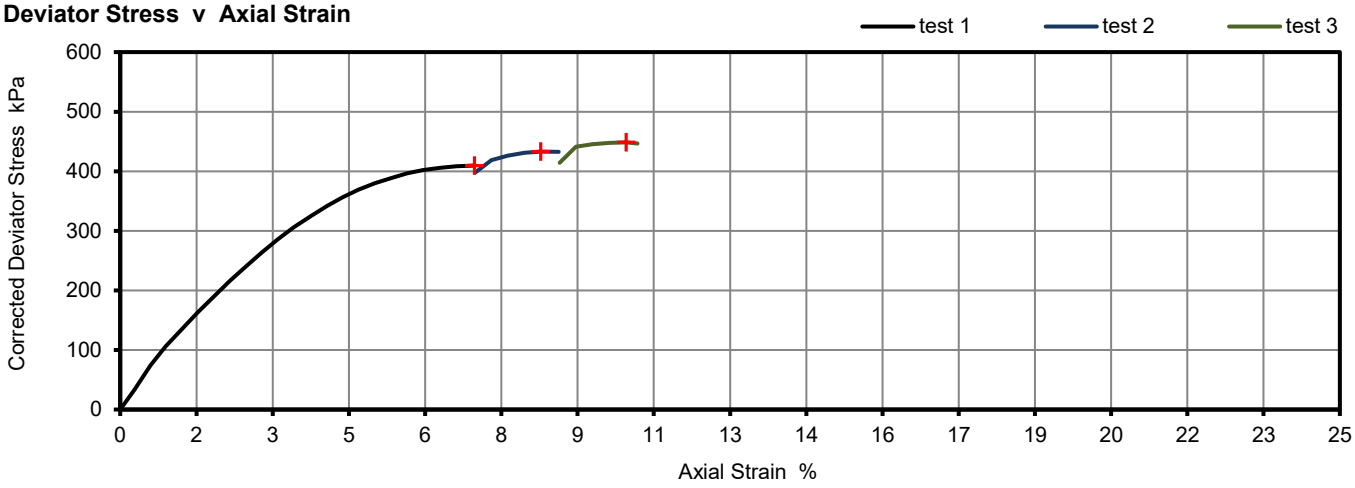
Test Results:

Laboratory Reference:	1534131	Depth Top [m]:	14.00
Hole No.:	MBH05	Depth Base [m]:	14.4
Sample Reference:	Not Given	Sample Type:	U
Sample Description:	Greyish brown CLAY		

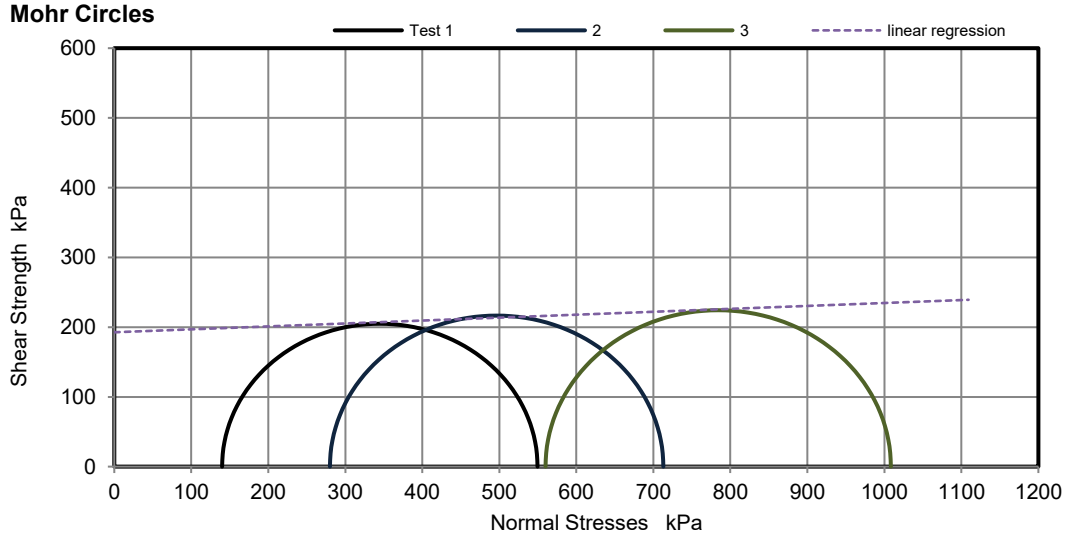
Length	196.27	mm
Diameter	102.86	mm
Bulk Density	2.04	Mg/m3
Moisture Content	24	%
Dry Density	1.64	Mg/m3
Membrane thickness	0.26	mm

Rate of Strain	2.00			%/min
Stage Number	1	2	3	
Cell Pressure	140	280	560	kPa
Axial Strain at failure	7.3	8.6	10.4	%
Deviator Stress, (σ1 - σ3)f	410	433	448	kPa
Shear strength, cu	205	216	224	kPa
Mode of failure	Compound			
Membrane Correction	0.45	0.51	0.58	kPa

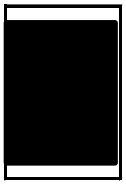
Deviator Stress v Axial Strain



Mohr Circles



Position within sample



Linear Regression

ϕu	2.4	°
cu	193	kPa

Note: Mohr circles and their interpretation is not covered by BS1377. These are provided for information only.

Remarks: Correction values: 140kPa=55N, 280kPa=113N, 560kPa=260N.

Signed:

Aleksandra Jurochnik
PL Technical Reviewer
for and on behalf of i2 Analytical Ltd

Date Reported: 26/06/2020

GF 186.11

APPENDIX 6 ▪ Groundwater Laboratory Certificates

Callum Harris
Merebrook
Cromford Mills
Mill Lane
Cromford
Derbyshire
DE4 3RQ

e:

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 20-12443

Project / Site name:	Billet Road	**Samples received on:**	04/06/2020
Your job number:	21912S	**Sample instructed/ Analysis started on:**	04/06/2020
Your order number:	20-2-FDO-LABS	**Analysis completed by:**	10/06/2020
Report Issue Number:	1	**Report issued on:**	10/06/2020
Samples Analysed:	2 water samples		

Signed: A. Czerwińska

Agnieszka Czerwińska

Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 20-12443

Project / Site name: Billet Road

Your Order No: 20-2-FDO-LABS

Lab Sample Number				1524683	1524684			
Sample Reference				MBH02	MBH03			
Sample Number				None Supplied	None Supplied			
Depth (m)				None Supplied	None Supplied			
Date Sampled				03/06/2020	03/06/2020			
Time Taken				None Supplied	None Supplied			
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH	pH Units	N/A	ISO 17025	6.9	7.4			
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10			
Sulphate as SO_4	µg/l	45	ISO 17025	95200	47200			
Sulphide	µg/l	5	NONE	< 5.0	< 5.0			
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	3.70	23.6			
Total Phenols								
Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10			
Speciated PAHs								
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01			
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01			
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	0.99			
Fluorene	µg/l	0.01	ISO 17025	< 0.01	0.28			
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01			
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01			
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01			
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01			
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01			
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01			
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01			
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01			
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01			
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01			
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01			
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01			
Total PAH								
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	1.27			
Heavy Metals / Metalloids								
Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.28	2.71			
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.14	< 0.02			
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0			
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2			
Copper (dissolved)	µg/l	0.5	ISO 17025	8.1	2.0			
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	0.4			
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05			
Nickel (dissolved)	µg/l	0.5	ISO 17025	30	6.8			
Selenium (dissolved)	µg/l	0.6	ISO 17025	1.6	4.4			
Zinc (dissolved)	µg/l	0.5	ISO 17025	8.6	9.6			

Analytical Report Number: 20-12443

Project / Site name: Billet Road

Your Order No: 20-2-FDO-LABS

Lab Sample Number				1524683	1524684			
Sample Reference				MBH02	MBH03			
Sample Number				None Supplied	None Supplied			
Depth (m)				None Supplied	None Supplied			
Date Sampled				03/06/2020	03/06/2020			
Time Taken				None Supplied	None Supplied			
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0			
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0			
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0			
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0			
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0			
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0			
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0	< 1.0			
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0			
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0			
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10			
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10			
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10			
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10			
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10			
TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0	< 1.0			
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0	< 1.0			
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0	< 1.0			
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10			
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10			
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10			
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10			
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	< 10			

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 20-12443

Project / Site name: Billet Road

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Monohydric phenols in water	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW, PrW.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Sulphide in water	Determination of sulphide in water by ion selective electrode.	In-house method	L029-PL	W	NONE
Total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Total organic carbon in water	Determination of dissolved organic carbon in water by TOC/DOC NDIR analyser. Accredited matrices: SW PW GW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

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Analytical Report Number : 20-13698

Project / Site name:	Billet Road	**Samples received on:**	11/06/2020
Your job number:	21912S	**Sample instructed/ Analysis started on:**	11/06/2020
Your order number:	20-2-FO-LABS	**Analysis completed by:**	18/06/2020
Report Issue Number:	1	**Report issued on:**	18/06/2020
Samples Analysed:	1 water sample		

Signed: Karolina Marek

Karolina Marek
PL Head of Reporting Team

For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 20-13698

Project / Site name: Billet Road

Your Order No: 20-2-FO-LABS

Lab Sample Number				1531330				
Sample Reference				MBH05				
Sample Number				None Supplied				
Depth (m)				None Supplied				
Date Sampled				10/06/2020				
Time Taken				None Supplied				
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH	pH Units	N/A	ISO 17025	7.1				
Total Cyanide	µg/l	10	ISO 17025	< 10				
Sulphate as SO_4	µg/l	45	ISO 17025	3820				
Sulphide	µg/l	5	NONE	< 5.0				
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	19.9				
Total Phenols								
Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10				
Speciated PAHs								
Naphthalene	µg/l	0.01	ISO 17025	0.66				
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01				
Acenaphthene	µg/l	0.01	ISO 17025	8.52				
Fluorene	µg/l	0.01	ISO 17025	5.09				
Phenanthrene	µg/l	0.01	ISO 17025	4.29				
Anthracene	µg/l	0.01	ISO 17025	0.62				
Fluoranthene	µg/l	0.01	ISO 17025	0.74				
Pyrene	µg/l	0.01	ISO 17025	0.48				
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01				
Chrysene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01				
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01				
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01				
Total PAH								
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	20.4				
Heavy Metals / Metalloids								
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.13				
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02				
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0				
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2				
Copper (dissolved)	µg/l	0.5	ISO 17025	0.7				
Lead (dissolved)	µg/l	0.2	ISO 17025	2.8				
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05				
Nickel (dissolved)	µg/l	0.5	ISO 17025	2.8				
Selenium (dissolved)	µg/l	0.6	ISO 17025	1.1				
Zinc (dissolved)	µg/l	0.5	ISO 17025	7.2				

Analytical Report Number: 20-13698

Project / Site name: Billet Road

Your Order No: 20-2-FO-LABS

Lab Sample Number				1531330				
Sample Reference				MBH05				
Sample Number				None Supplied				
Depth (m)				None Supplied				
Date Sampled				10/06/2020				
Time Taken				None Supplied				
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/l	1	ISO 17025	< 1.0				
Toluene	µg/l	1	ISO 17025	< 1.0				
Ethylbenzene	µg/l	1	ISO 17025	< 1.0				
p & m-xylene	µg/l	1	ISO 17025	< 1.0				
o-xylene	µg/l	1	ISO 17025	< 1.0				
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0				
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	110				
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	110				
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	50				
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	270				

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 20-13698

Project / Site name: Billet Road

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

APPENDIX 7

- Field Monitoring Records
- Groundwater Level Data
- Hazardous Soil Gas Data

GAS MONITORING RECORD ROUND 1

Location Reference	Time	Flow and Pressure Measurements				Gas Measurements						VOC Measurements		Dip Measurements		Comments
		Flow		Atmospheric Pressure	Differential Pressure	Methane	Methane LEL	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Hexane	PID	Depth to Water	Depth to Base	
		max	steady													
		l hr^{-1}		mb	Pa	%	%	%	%	ppm	ppm	%	ppm	m	m	
MWS03	09:30	0	0	1036	0	0	0	0	20.2	0	0	0.010	nr	1.50	2.50	Ground water - Brown opague, no sheen on surface.
MWS06	11:20	0	0	1034	0	0	0	0	20.6	0	0	0.010	nr	2.20	5.20	Ground water - Brown opague, no sheen on surface.
MWS07	10:45	0	0	1034	0	0	0	0	20.5	0	0	0.006	nr	2.00	3.85	Ground water - greenish grey translucent, black particles (up to 3 mm), no sheen on surface.
MBH01	09:53	0	0	1034	0	0	0	0	20.3	0	0	0.021	nr	1.60	2.90	Ground water - greenish grey translucent, black particles (up to 3 mm), no sheen on surface.
MBH02	-	-	-	-	-	-	-	-	-	-	nr	-	nr	-	-	Not installed.
MBH03	-	-	-	-	-	-	-	-	-	-	nr	-	nr	-	-	Not installed.
MBH05	-	-	-	-	-	-	-	-	-	-	nr	-	nr	-	-	Not installed.
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Weather:	Clear and sunny. Pressures over the past 24 hours have been unchanged.	nr = not recorded	**Gas Analyser**	**PID**	**Site:** Billet Road, Romford
		Model:	GFM 436	-	**Project Number:** 21912s
		Serial Number:	12228	-	**Monitored By:** Sam Mitchell
		Date of Last Calibration:	20/05/2019	-	**Date:** 28/05/2020

GAS MONITORING RECORD ROUND 2

Location Reference	Time	Flow and Pressure Measurements				Gas Measurements						VOC Measurements		Dip Measurements		Comments
		Flow		Atmospheric Pressure	Differential Pressure	Methane	Methane LEL	Carbon Dioxide	Oxygen	Carbon Monoxide	Hydrogen Sulphide	Hexane	PID	Depth to Water	Depth to Base	
		max	steady													
		l hr^{-1}		mb	Pa	%	%	%	%	ppm	ppm	%	ppm	m	m	
MWS03	10:45	0	0	1007	0	0	0	3.6	13.1	0	0	0.000	0	1.10	1.60	-
MWS06	11:00	0	0	1007	0	15.7	>>>	3.9	14.7	10	0	0.988	nr	2.25	3.05	-
MWS07	11:15	0	0	1007	0	41.8	>>>	3.5	0.2	10	0	2.186	nr	2.05	2.90	-
MBH01	10:30	0	0	1007	0	0	0	0.6	20.6	0	0	0.000	0	1.70	4.85	-
MBH02	09:00	0	0	1006	0	0	0	5.3	12.7	0	0	0.000	0	2.15	5.20	Fully purged and sampled. Water odourless murky brown.
MBH03	09:20	0	0	1008	0	0	0	0.1	20.9	0	0	0.000	0	1.20	3.30	Fully purged and sampled. Water odourless murky brown.
MBH05	-	-	-	-	-	-	-	-	-	-	nr	-	nr	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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Weather:	18 C, Cloudy, Breezy	nr = not recorded	Gas Analyser	PID	Site:	Billet Road, Romford
		Model:	GFM 436	Mini RAE 2000 (1)	Project Number:	21912s
		Serial Number:	12228	-	Monitored By:	Callum Harris
		Date of Last Calibration:	20/05/2019	-	Date:	03/06/2020

APPENDIX 8 ▪ Gas Risk Assessment

NHBC TRAFFIC LIGHT GAS CHARACTERISTIC SITUATION

SITE: Billet Road, Romford JOB NUMBER: 21912s 12/06/2020

Carbon Dioxide				Methane			
Maximum Gas Concentration	5.30	%	carbon dioxide concentration greater than 5% consider Amber 1	Maximum Gas Concentration	41.80	%	methane concentration greater than 20% consider Red
Maximum Measured Steady Flow	0.10	L hr^{-1}		Maximum Measured Peak Flow	0.10	L hr^{-1}	
Gas Screening Value	0.01	L hr^{-1}		Gas Screening Value	0.04	L hr^{-1}	
Characteristic Situation	Green			Characteristic Situation	Green		

if measured values are zero then resolution limit of instrument is used for calculation of GSV
worst case carbon dioxide or methane characteristic situation value defines overall characterstic situation for the site

NHBC Classification **Protection Measures**

Characteristic Situation	Carbon Dioxide		Methane		Identified Gas Regime		Protection Measures Required
	Typical Maximum Concentration (%v/v)	Gas Screening Value (L hr^{-1})	Typical Maximum Concentration (%v/v)	Gas Screening Value (L hr^{-1})			
Green						negligible	Ground gas protection measures are not required
Amber 1	5	0.78	1	0.16		low to intermediate	Low-level ground gas protection measures are required, using a membrane and ventilated sub-floor void that creates a permeability contrast to limit the ingress of gas into buildings. Gas protection measures are to be installed as prescribed in BRE 414. Ventilation of the sub-floor void should be designed to provide a minimum of one complete volume change per 24 hours
Amber 2	10	1.56	5	0.63		intermediate to high	High-level ground gas protection measures are required, creating a permeability contrast to prevent ingress of gas into buildings. Gas protection measures are to be installed as prescribed in BRE 414. Membranes used should always be fitted by a specialist contractor and should be fully certified (see Appendix E). As with Amber 1, ventilation of the sub-floor void should be designed to provide a minimum of one complete volume change per 24 hours.
Red	30	3.10	20	1.56		high	Standard residential housing is not normally acceptable without further Ground Gas Risk Assessment and/or possible remedial mitigation measures to reduce/remove the source of the ground gases. In certain circumstances, active protection methods could be applied, but only when there is a legal agreement assuring the management and maintenance of the system for the life of the property.

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