Ground Appraisal Report

Main Avenue, Kirklees

Client:	Strata Homes and Thirteen Group
Document Type:	Report
Document No.:	1152-GEO-GAR-001
Revision:	001
Date:	2024/08/20

Version History

This report has been prepared by Apex Consulting Engineers with reasonable skill, care and diligence, within the best practice and guidance current at the time of issue, within the scope of works which have been agreed with the client.

This report is confidential to the client and Apex Consulting Engineers accepts no responsibility whatsoever to third parties to whom this report, or any part thereof is presented, unless this is formally agreed in writing by a Director of Apex Consulting Engineers before any reliance is made. Any such party relies upon the information at their own risk. Apex Consulting Engineers disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

The report is written in the context of the development proposals submitted to Apex by the Client as part of the appointment. Any changes to the development proposals may necessitate significant revisions to this report.

The report (including appendices) should be read in its entirety. Apex cannot be held responsible for any sections of this report being taken out of context. This includes information submitted separately via download link (i.e. full copies of environmental search data from Envirocheck) which are not included as part of the main PDF due to their file size.

Intrusive investigation only allows observation and assessment of ground across a small portion of the total site area. Therefore, it is possible that significant features may not have been encountered during the investigation, despite appropriate design and planning. Apex cannot accept for conditions not revealed by the exploratory holes. Any interpretation of strata between or below exploratory holes is for guidance only and Apex hold no responsibility as to its accuracy.

It should be noted that groundwater levels are susceptible to seasonal and other variations; this should be borne in mind when considering observations/measurements associated with groundwater contained in this Report.

Apex reserve the right to amend this Report in the light of further information that may become available.

Revision	Date	Notes	Prepared by	Checked by	Approved by
000	2024/06/28	First Issue	M Thompson	W Ballance	M Thompson
001	2024/08/20	Updated with gas monitoring results and assessment.	M Simmons	M Thompson	M Thompson

EXECUTIVE SUMMARY

Category	Comments
Site location	South Cowersley, Huddersfield Postcode: HD4 5US NGR: 411039, 415158
Description	The site is an irregular shape and c. 2.28 hectares in size. The site slopes from south-west to north at gradients of between c. 1 in 3.5 to 1 in 12. Much of the site is vacant land. Lots of the land is heavily overgrown with footpaths, walls and fences crisscrossing the site. Mature trees are present in clusters throughout.
Proposed Development	Development of 45no. traditional low-rise residential dwellings with associated POS, gardens, roads and sewers.
History	Most of the site has remained undeveloped. Buildings (Jubilee Property) occupied the northeastern corner of the site until 1960; this area is now overgrown with some garages present. Historical records from 1938 indicate the presence of a well linked to the Jubilee Property.
Environmental Setting	The sites bedrock is part of a Secondary A – Aquifer. The site is not in a source protection zone. Two landfills are present within 250m. The site lies beyond the Coal Authority's defined coalfields.
Ground conditions	The site is underlain by a veneer of topsoil and localised made ground, with residual soils below varying between medium to high strength clay and gravel. Bedrock was encountered across the site, typically shallower and Sandstone in the north, with mudstone in the south. Depths to bedrock range between 0.6m and 4.0m. Groundwater is present at depths of c. 1m in the north, becoming deeper (up to c. 5m) further south in the topographically higher areas.
Contamination	The majority of the site is underlain by Topsoil overlying natural ground where the Topsoil is classified as suitable for re-use in gardens/landscaped areas. In the north-east, the Topsoil/Made Ground Topsoil should be screened to remove undesirable materials. Further trial pitting is recommended once this area is accessible to further assess asbestos risks. Topsoil/Made Ground Topsoil from this area should be stripped and stockpiled separately to the rest of the site and any ACMs hand-picked. Following this, and subject further sampling for asbestos, this material should be suitable for re-use in areas of POS. Topsoil from within the car park area should be stripped and stockpiled separately and is not considered suitable for re-use without further sampling. Hardcore within the car park should be stripped and placed beneath hardstanding due to the organic contaminants detected. A watching brief should be in place when excavating within the vicinity of REL's TP07 where a "solvent odour" was noted.
Hazardous gas	Plots in the far north will require basic radon protection measures; elsewhere, radon measures are not needed. Monitoring was completed over 6 visits between 29th May 2024 and 19th August 2024. Results of monitoring visits indicate the site should be designated CS2. A gas protection score of 3.5 is required, this is recommended to be achieved through the installation of a sub floor dispersion layer and gas membrane.
Foundations & earthworks	The sloping nature of the site will necessitate earthworks to provide level development platforms, together with retaining walls and possible underbuild & tanking. Production of an Earthworks Specification is recommended.
Drainage	Given the results of in-situ testing and the presence of shallow groundwater, use of soakaways is not considered feasible; alternative SUDs options should be considered.
Highways	Natural soils should provide CBR values of at least 3%; this should be verified via plate bearing tests along the proposed highway routes at formal level. Where made ground/localized soft material is encountered, this should

Category	Comments
	be removed to a maximum of 2m, and replaced with suitable aggregate, placed to an engineered specification.
Further works	The following additional works are recommended in light of this investigation: • Additional trial pitting in the north-east once this area is cleared of vegetation and garages to assess the extent of asbestos contamination. • Production of a Remediation Strategy. • Production of a Foundation Schedule. • Production of an Earthworks Specification.

Contents

1. INTRODUCTION

1.1 Background & proposed development

This report has been prepared for Strata Homes and Thirteen Group.

It is understood that proposals include development of residential housing. A Viability Layout (drawing ref. 22-CL1-SEGA-MAK-01-VL, dated 20th July 2022) has been provided by Strata and is included in Appendix B. It shows 45no. traditional low-rise semi-detached/detached houses with gardens, POS, adoptable roads and sewers.

1.2 Previous reports

Apex have been provided with copies of the following reports relating to this site:

- *Phase I Geo-Environmental Risk Assessment, Land to the East of Main Avenue, Cowlersley, Huddersfield* (ref. 220322.2) issued to Thirteen Group in May 2022 by Roberts Environmental Limited (REL).
- *Phase II Geo-Environmental Site Investigation and Risk Assessment, Land to the East of Main Avenue, Cowlersley, Huddersfield* (ref. 22022.1) issued to Thirteen Group in May 2022 by Roberts Environmental Limited (REL).

It is understood that Strata Homes has reliance on these reports and therefore the scope of works agreed is intended to supplement existing data.

A review of the work previously carried out is included in Section 5, and relevant data has been included in this report where appropriate in Section 6 onwards.

The purpose of this report is to enable an assessment of ground-related contamination and geotechnical risks associated with Strata Homes' proposed development at Main Avenue, Kirklees.

1.3 Scope of works

In summary, the agreed scope of works included:

- Desk Study (including a site walkover, review of environmental setting assessment of site history, review of third-party findings)
- Ground investigation (Trial pitting & rotary open-hole drilling)
- Laboratory analysis (Geotechnical & chemical testing)
- Interpretation of findings and recommendations in relation to foundations, infrastructure, remediation requirements

1.4 Sources of information

This report includes findings from a number of external sources including Landmark Information Group, British Geological Survey, 3rd party reports as well as our own local knowledge and experience.

1.5 Report limitations

The Foreword to this report and the appended guidance notes on Apex's procedures and definitions (Appendix A) should be read in conjunction with the main text.

Existing 3rd party reports and information provided by others has been referred to in good faith as being accurate. Apex do not accept any liability for inaccuracies in third party information.

2. LOCATION AND DESCRIPTION

2.1 Site location

A location plan is included as Drawing 001 in Appendix B. The site is situated on the land north-east of Main Avenue, Cowlersley in Kirklees.

2.2 Site description

An engineer from Apex visited site on the 27th October 2023 to undertake a walkover survey.

General

The site is an irregularly shaped piece of land, with some areas separated by damaged fencing and stone walls. It is bordered by a steep ascending slope to the south and residential housing and streets to the east, northeast, and west. Residential housing, Woodside Primary School and associated playing fields are to the north-west.

Notable features

There is a small (c. 650m^2), hardcore-surfaced area within the site boundary just off Main Avenue, access to which is prevented by a series of concrete blocks. This looks to have been used as a car park.

The site features small footpaths, metal wire fences, and dry-stone walls crossing various sections. Residential housing is primarily separated from the site by wooden panel fencing, while the school and its associated playing fields are segregated by green palisade fencing.

A series of garages are located along Jubilee Lane, running roughly south-west to north-east through the north-east corner of the site.

The site is used frequently by dog walkers and local residents for recreation. Small areas of fly-tipping were noted along with evidence of bonfires.

Topography

The entire site generally slopes downwards in a northeasterly direction. Based on the topographic survey provided, the highest point on site is 164.5mAOD in the south-west, and the lowest point is c. 145mAOD in the north-east. Slopes gradients range from c. 1 in 3.5 in the south to c. 1 in 12 in the north.

Vegetation

The northeastern corner of the site is heavily vegetated with shrubs, bushes, and some trees reaching heights of up to c.10m. Throughout the rest of the site, particularly bordering the school playing fields and the steeper slope to the south, there are sporadically located trees and bushes including mature trees up to c. 15m in height.

A selection of photographs are presented below:

Photo 1 – Site, off Main Avenue, looking southeast.

Photo 2 – Site, facing east, from small surfaced area just off Main Avenue.

Photo 3 – Heavily vegetated area in the northeastern corner.

Photo 4 – Access path onto site from the east.

Photo 5 – Residential housing, beyond the eastern extent of the site.

Photo 6 – Fly-tipped rubbish near the entrance of Main Avenue.

Site details are summarised in the table overeaf.

CATEGORY	DETAILS
Location	Land to the East of Main Avenue, Cowersley.
NGR	Easting: 411039 Northing: 415158
Nearest postcode	HD4 5US
Area and shape	The site is an irregular shape and 2.28 hectares in size.
Current use	Much of the site is vacant land. Lots of the land is heavily overgrown with footpaths crisscrossing the site.
Surrounding land	**North, East & West –** Continued residential housing. Primary school directly to the north. **South –** An ascending slope.
Known constraints	The site slopes downwards towards the northeastern corner.

3. ENVIRONMENTAL CONTEXT

3.1 General

Information pertinent to the site's environmental setting has been reviewed from environmental search information within the Roberts Environmental report, and various online sources (see Section 1.4), most notably with respect to: mining, radon gas, geology, groundwater & surface water quality, landfills and flooding.

Key findings are summarised below:

CATEGORY	DETAILS
Geology	Made ground – None recorded Drift – None recorded Solid – The site is underlain by the Millstone Grit (sandstone, mudstone & siltstone). Huddersfield White Rock (sandstone) is mapped immediately north.
Mining	The site lies beyond the Coal Authority's defined coalfields. No cavities are recorded within a 250m radius of the site. One BGS mineral site known as Crossland Hill Quarry (ceased opencast sandstone), located 170m southeast of the site is present within a 250m radius of the site.
Radon	A site specific radon report has been obtained by Apex; this shows that plots in the far north will lie within an area where 3-5% of properties are above the action level for radon, and will require **basic measures.** Elsewhere, no radon protection is required.
Groundwater	**Aquifers** – The sites bedrock is part of a Secondary A – Aquifer, high vulnerability. The site is within a Source Protection Zone. **Nearest abstraction** – There are 5no. active surface water abstractions within 1000m. The nearest (555m west) is used for process water and boiler feed. No discharge consents within 500m.
Surface water	**Nearest watercourse** – 138m northeast, an unnamed surface water feature. **Nearest discharge consent** – the nearest is 557m north, a sewage discharge operated by Yorkshire Water Services Ltd flowing into a freshwater stream/river. **Nearest abstraction** – There are 5no. active surface water abstractions within 1000m. The nearest is 555m west, used for process water and boiler feed. No pollution incidents are recorded which are of significance to the site.
Landfill	2No. historical mapped landfills are recorded within a 250m radius: • 220m west – The Folly, inert, commercial, household and liquid sludge waste deposit.

	• 242m east – Quarry Road; no further information known.
Flooding	The site lies in **Flood Zone 1**. A Flood Risk Assessment is required as the site is larger than 1Ha in size. **Groundwater flooding** – limited risk along the northern boundary. **Surface water flooding** – the site is at low to medium risk. Potential flooding from a 1 in 100-year flood event is shown generally following the public footpath in the north and center of the site.
Unexploded ordnance (UXO)	Based on a review of Zetica's online Risk Maps utility, the site is considered to be at low risk from UXO.

3.2 BGS Geoindex historical borehole logs

BGS Geoindex (Onshore) has a record of historical borehole logs of projects previously completed across the UK. Results from previous ground investigation local to this proposed site are recorded in the table below:

BH Reference	Distance & Direction from Site	Depth to base of strata (m)				
		Subsoil	Clay & flag rock	Boulder	Gravel	Rossendale Formation
SE11NW371 (BH1)	75m south	~1.80	~13.40	~14.60	~16.20	> 57.00
		Subsoil	Flag rock	Rossendale Formation		
SE11NW371 (BH2)	75m south	~1.50	~5.20	> 76.50		

4. SITE HISTORY

4.1 General

Historical OS maps provide a record of key changes at the site and surrounding areas over the past c. 150 years, dating back to 1892. It should be noted that not all changes will be shown on the plans, so some previous historical features may exist for which there is no record.

4.2 Map review

Key extracts from the historical plans are shown below, along with a description of features identified.

A summary of the key changes on/close to the site is given the table below:

DATE	ON-SITE FEATURES	OFF-SITE FEATURES
1892	The site is mainly part of **open fields** (likely agricultural) with a field boundary running north south through the eastern region. In the northeastern corner is a group of **buildings** labeled Jubilee (probably residential).	Directly adjacent and extending in all directions are more open fields (likely agricultural). 'Long Wood' is noted c. 125m to the south with a **large quarry** (Crosland Hill Quarry) beyond, labelled as 'disused'; the northern boundary of the quarry is c. 200m south-east of the site. Cowlersley/Common End village is shown to the northwest, with an **"Old quarry"** labeled on maps on the far side of the village c. 200m northeast.
1906	No significant changes.	Crosland Hill Quarry shown just beyond Long Wood c. 170m to the south.
1938	A **well** is shown on site associated with the buildings.	Expansion of Cowlersley Village with Main Avenue shown immediately south-west, "club" north-west and terrace housing north.
1960	No significant changes.	Quarry to the south labeled as disused.
1961	Buildings labeled Jubilee are no longer shown. In their place, a road (same place as Jubilee Lane) crosses the north-east with small structures (likely garages). Four additional small structures shown in the east. Additional field boundaries now cross the map.	Residential housing now directly borders the site to the west, northwest and northeast. A small lane borders the site to the east northeast.
1975	No significant changes.	Cowersley County Junior Infants School borders the site to the north and northwest.
1987		Crosland Hill Quarry now largely replaced by a factory.
1993-95		Housing shown immediately east.
2022	No significant changes.	

5. REVIEW OF THIRD-PARTY REPORTS

5.1 Introduction

Apex have been provided with copies of the following third-party reports relating to this site (for ease, each report is given a numerical reference):

1) *Phase I Geo-Environmental Risk Assessment, Land to the East of Main Avenue, Cowlersley, Huddersfield* (ref. 220322.2) issued to Thirteen Group in May 2022 by Roberts Environmental Limited (REL).
2) *Phase II Geo-Environmental Site Investigation and Risk Assessment, Land to the East of Main Avenue, Cowlersley, Huddersfield* (ref. 22022.1) issued to Thirteen Group in May 2022 by Roberts Environmental Limited (REL).

Key points from each of the above, pertinent to the site's current proposed development, are discussed below. Where appropriate, third-party findings have been included within the following sections of this report.

5.2 Report 1 - Phase 1 Desk Study Summary

The findings of Report 1 and the environmental searches contained therein have been incorporated into Sections 3 and 4 of this report. Notable differences between Report 1 and the site as it is currently, are discussed below:

Ground gas & radon – At the time of writing of Report 1, the site was within an area where <1% of homes are estimated to be at or above the action level. Since issue, radon maps for the UK have been updated.

A site-specific radon report has been obtained from BGS by Apex (see Appendix C). This shows plots which lie in the far north to require basic radon measures (lying in an area where between 3-5% of properties are above the action level for radon), but no radon measures required elsewhere.

5.3 Phase 2 Intrusive Site Investigation Summary

Sccope

Roberts Environmental Limited's (REL) investigation is summarised below:

- 6No. boreholes advanced using windowless sampling techniques to a maximum depth of 4.00m.
- 11No. mechanically-excavated trial pits to a maximum depth of 4.50m.
- 2No. hand-excavated trial pits, completed to the east of the site to a maximum depth of 0.40m.
- 3No. monitoring well installations (within WS01, WS04 & WS06).

Laboratory testing included:

- Contamination analysis on 12No. samples including metals/metalloids, asbestos, polycyclic aromatic hydrocarbons (PAHs), total petroleum hydrocarbons (TPHs) and 2 samples for leachate testing.

- Geotechnical analysis on 16no. samples including 4no. water content, 3no. particle size density (PSDs), 1no. liquid and plastic limits and 16n0. pH & water-soluble sulphates (SO_4).

5.4 Ground conditions

To aid with conceptualisation of the site, Apex have categorised the strata encountered by RELs based on ground conditions noted in our recent ground investigation; the ground conditions encountered by RELs are summarised below; and are discussed in more detail in Section 8.

Natural

- **TOPSOIL:** Encountered in WS01-06, HP01-02, TP01-11 from ground level to a maximum depth of 0.60m typically comprising a firm dark brown sandy clay, occasionally organic.
- **RESIDUAL SOILS (Weathered Bedrock):** Encountered in WS01-06 & TP01-11 between 0.20m and 2.10m. This stratum was typically encountered as either a yellow clayey sand with sandstone cobbles and boulders or as a stiff orange, brown sandy clay.
- **BEDROCK:** Encountered in WS01, WS04, TP03, TP05, TP09 & TP10 from 0.90m to depths greater than 4.50m.

Groundwater

No groundwater strikes were encountered during the investigation.

Groundwater monitoring wells were installed in WS01, WS04, and WS06. Post-fieldwork monitoring identified standing water at depths between 0.54m & 1.10m.

Obstructions

No obstructions were encountered during the investigation.

A drain running east to west was encountered in TP07.

Contamination

A “solvent odour” was noted in TP07 at c. 1m. No other visual/olfactory evidence of organic contamination was noted by REL.

REL use screening values for a residential setting with home-grown produce. Following screening of samples against these, they note:

- 9 exceedances of dibenz(a,h)anthracene in Topsoil

- 1 exceedance of dibenz(a,h)anthracene in Residual Soils*
- 3 exceedances of benzo(a)pyrene in Topsoil
- 1 exceedance of benzo(a)pyrene in Residual Soils*
- 3 exceedances of benzo(b)fluoranthene in Topsoil
- 1 exceedance of benzo(b)fluoranthene in Residual Soils*

** the exceedances in this stratum were all in TP07 1.0-1.2m, where **a "solvent odour"** was also noted in the trial pit log.*

5.5 Gas

REL undertook a gas monitoring regime of 6 visits over 3 months. The report was written and issued when 3 visits had been completed. The results are summarised in the table below:

Exploratory Hole	Peak CO_2 (% V/V)	Peak CH_4 (% V/V)	Minimum O_2 (% V/V)	Maximum Gas Emission Rate (l/hr)	Atmospheric Pressure Range (mbars)	Groundwater Depth Range (mbgl)
WS01	9.40	0.00	12.40	0.00	986 – 1002	0.54 – 0.65
WS04	0.90	0.00	16.20	0.00	986 – 1001	0.73 – 1.20
WS06	4.10	0.00	16.30	0.00	987 - 1002	0.49 – 0.50

The final three visits have not been reported by Roberts Environmental. The gas monitoring programme is incomplete.

5.6 Geotechnical Assessment

During RELs investigation Standard Penetration Testing, Hand Shear Vanes and Concrete Classification Testing was undertaken; as summarised below.

Standard Penetration Testing

SPTs were conducted at regular 1m intervals by REL during their drilling works. Results are summarised below:

Granular material:

Stratum	Depth (m)	N Value Range	Corresponding Density/ Rock Strength
Sand	1.00 – 1.45	13 - 17	Medium dense
Sandstone	1.00 – 1.45	50	Very weak
Sandstone	2.00 – 2.45	50	Very weak

Cohesive material:

Stratum	Depth	N Value	Corresponding Strength/ Rock Strength
Clay	1.00 – 1.45	9	Low
Clay shale	2.00 – 2.45	11	Low
Clay shale	3.00 – 3.45	32	High
Mudstone	4.0 – 4.45	50	Very weak

Hand Shear Vanes

HSVs were conducted on natural clays through the boreholes. Results are summarised below:

Stratum	Depth	Modified HSV Result Range (kN/m²)	Corresponding Strength/ Rock Strength
Clay	0.60 - 1.00	98 – 108	Medium
Clay	1.00 – 1.50	100 -104	Medium
Clay shale	2.00 – 2.50	112 – 116	High
Clay shale	3.00 – 3.50	118 - 120	High

Concrete Classification

REL indicate the site can be given a concrete Design Class of DS-1 and ACEC class of AC-2z for foundations and buried concrete in contact with either topsoil or weathered bedrock deposits.

5.7 Foundations

Roberts Environmental Ltd have suggested conventional shallow strip or pad foundations are suitable for the proposed development on this site.

Foundations should be located within the residual soils, weathered sandstone, or weathered mudstone at shallow depths, with a minimum depth of 0.60m in granular residual soils or 1.00m in cohesive residual soil deposits to accommodate soil volume changes.

They suggest the maximum allowable bearing pressure for residual soils is 100kN/m^2, which may increase to 200kN/m^2 when encountering more competent strata like bedrock. And to avoid differential settlements, REL note the importance not to straddle between different stratum types (e.g., sand/sandstone and clay/mudstone) for each residential dwelling.

5.8 Apex Comments

The Robert Environmental report provides a useful indication of ground conditions on site. However, there are a few shortcomings of the report:

- The gas monitoring programme had been left incomplete and unsuitable with regard UK guidance (only 3 monitoring wells were installed & only visits completed). Additional monitoring well installations are required with a minimum of 6 visits over a 3-month monitoring period.
- The recommendations in relation to the identified PAH contamination within the topsoil and TP07 are very brief. REL's report suggests either: excavation of impacted soil; or, placement beneath 600mm clean soil cover. At this stage, the significance of the PAH contamination is not clear. It is not considered feasible to treat the locations where PAH contamination was identified as hotspots, and wholesale excavation of topsoil from the site should be avoided. Additional sampling and risk assessment is required.
- The logs within REL's report are not clear in relation to the boundary between shrinkable soils (clay) and underlying mudstone/shale bedrock.

The logs often show a legend suggesting in-situ bedrock has been encountered, but this is contradicted by the description of “firm/stiff/hard” which indicates the presence of cohesive/clay soil. In addition, despite the weathered bedrock often being logged as mudstone recovered as gravel, hand vanes have been undertaken at significant depths within the trial pits. It is not clear how these were undertaken as such material would not be able to be testing using a hand vane.

- Only one sample of clay has been scheduled for shrinkability analysis (Atterberg Limits testing) by REL. This is not sufficient to determine the volume change potential of the soil.

6. CONCEPTUAL SITE MODEL

6.1 Introduction & planning

With respect to ground conditions and pollution, National Planning Policy Framework (NPPF 2021) Section 183 states that planning policies should ensure that:

a) a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation);

b) after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the environmental protection act 1990; and

c) adequate site investigation information, prepared by a competent person, is available to inform these assessments.

6.2 Contamination risks

A conceptual site model has been prepared based on all the information reviewed. A visual version is included in Appendix B as Drawing 003. Key sources, pathways and receptors are summarised below:

SOURCE	PATHWAY	SEVERITY	PROBAB-ILITY	RISK RATING	REMARKS
RECEPTOR: Human health (End-users, site workers)					
Made Ground beneath the site (inorganics, organics, asbestos)	Dermal contact, volatilisation, direct & indirect ingestion, inhalation of dust, inhalation of vapours.	Moderate	Very Low	Low	No significant industrial development is shown and no made ground was encountered by REL. The only exceptions are a collection of former buildings in the north-east, a car park in the far west and small structures in the east. In addition, the site is frequently used by locals. Localised deposits of made ground may be present, and should be sampled.
Spillage of contaminants associated with past use (organics)	Volatilisation, inhalation, dermal contact, ingestion, inhalation of dust.	Moderate	Very low	Low	No discreet sources of potential organic contamination have been identified. However, a “solvent odour” was noted by REL and PAH contamination was

SOURCE	PATHWAY	SEVERITY	PROBAB-ILITY	RISK RATING	REMARKS
	Leaching, lateral migration of mobile contaminants	Moderate	Very low	Low	encountered in this location. PAH contamination was also noted in a number of topsoil samples by REL, possibly associated with use of the site by locals for bonfires and recreation. Further sampling and risk assessment is recommended.
RECEPTOR: Groundwater (Secondary A – Aquifer)					
Made Ground beneath the site (inorganics, organics) and spillage of contaminants associated with past use.	Lateral & vertical migration	Moderate	Very low	Low	The site bedrock forms part of a Secondary A – Aquifer. Given the site's predominantly greenfield nature, risks to the underlying aquifer are considered low, but additional sampling across the site is recommended to confirm this.
RECEPTOR: Buildings					
Made Ground beneath the site (inorganics, organics) and spillage of contaminants associated with past use.	Volatilisation, inhalation of vapours	Low	Very low	Very low to low	No significant sources of volatile contaminants have been identified at this stage; this should be confirmed as part of the ground investigation.
Radon	Migration of hazardous gas	Moderate	Moderate	Moderate	Basic radon protection measures are required in the north.
Backfilled quarries & landfills		Low	Low	Low	Backfilled features, including two recorded landfills, are present within the vicinity of the site. Initial monitoring by REL suggests a low risk to site from ground gas, but installation of additional wells and further monitoring is required.

The proposed change in use to residential and the potential for ground contamination warrants an intrusive ground contamination assessment, in accordance with the requirements of the NPPF.

6.3 Geotechnical risks

The conceptual site model has also been used to inform potential geotechnical risks, as outlined below:

ISSUE	REMARKS
Drift deposits	No drift deposits are recorded on site.
Bedrock – Rossendale Formation & Huddersfield White Rock	Bedrock is anticipated from shallow depths and should be investigated regarding its weathering profile.
Tree influence	Across the site are trees and hedgerows which will necessitate deepening of foundations where clay is present. Additional coverage across the site is recommended to confirm the lateral distribution and depths of clays, and additional testing should be undertaken to confirm the volume change potential of such material.
Sulphate attack	The sulphate character of the material beneath the site, that may come into contact with the foundations, should be investigated in order to ascertain what grade of concrete is required.
Topography	The site slopes from south-west to north-east, with gradients reaching up to 1 in 3.5. Significant earthworks are likely to be needed to create level development platforms, along with the use of retaining features and possible underbuild & tanking.

6.4 Proposed ground investigation

A ground investigation is required in order to resolve uncertainties highlighted by the conceptual site model. Specifically, the investigation should enable:

- Assessment of the nature, thickness and lateral distribution of made ground.
- Contamination risk assessment via inspection and sampling of additional samples of topsoil and any made ground.
- Installation of additional monitoring wells and further assessment of the risks of hazardous gas via monitoring visits.
- Assessment of the geotechnical properties of the natural soils in order to inform foundation design; most notably, the lateral extents and depth of shrinkable soils, along with assessment of volume change potential.
- Assessment of soil/bedrock infiltration rates and depths to groundwater to inform drainage design.

7. GROUND INVESTIGATION

Following completion of the desk study phase, a ground investigation was undertaken on 16th May 2024. All works were supervised by a suitably experienced Geo-Environmental Engineer from Apex.

7.1 Fieldwork

Fieldwork undertaken is summarised in the table below:

Technique	Depths	Remarks/justification
12No. Mechanically excavated trial pits	Up to 3m.	Provide a detailed view of shallow strata. Enable sampling for contamination & geotechnical testing.
3no. soakaway tests	To between 1.0m and 1.8m.	Within TPs 104 ,108 and 112
6No. Rotary open-hole boreholes & installation of monitoring wells	Advanced to c. 6m.	Completed to allow the installation of gas & groundwater monitoring wells to c. 6m.

Post-fieldwork monitoring programme is now underway.

8. GROUND CONDITIONS

For a full record of the ground conditions encountered in each exploratory hole, please refer to the ground investigation data in Appendix E.

The typical ground types encountered are described below:

8.1 Made ground

Made ground was encountered in the north-east (TPs 101 and 106) and the far west (TP112) and generally comprised the following strata:

- **MADE GROUND TOPSOIL:** Encountered in TPs 101 and 106 to 0.2m in the north-east comprising topsoil with anthropogenic materials including glass, pottery, clay piping, brick, crip packets. One fragment of suspected asbestos cement sheeting was found in TP101 and was sampled for analysis.
- **REWORKED SANDSTONE:** Encountered in TP101 to 1.2m above a foul drainage run (not shown on utility survey). Material comprised sandy GRAVEL AND COBBLE of sandstone in a random orientation.
- **HARDCORE SURFACING:** Encountered in TP112 in the car park in the far west to 0.2m as black sandy angular fine to medium GRAVEL of clinker and mixed lithologies AND COBBLE of suspected limestone.

8.2 Natural ground

Natural ground typically comprised the following sequence:

- **TOPSOIL:** Encountered in all TPs except TPs 101, 106 and 112 noted above. Varied between a clayey SAND and sandy CLAY with rootlets, often with gravel of sandstone. In a number of locations, the upper section of soil just below the turf was noted to be black and peaty. Depths ranged from 0.2m to 0.35m.

- **COHESIVE RESIDUAL SOILS:** Encountered in the majority of locations beneath the topsoil comprising firm (medium strength) to stiff (high strength) CLAY with varying proportion of gravel and cobble. Towards the south, minor constituents (gravel and cobble) were typically mudstone/mudstone lithorelicts, and in the north, they were typically sandstone. Locally soft in TP103. Depth to base ranged from 0.55m and 2.0m.
- **GRANULAR RESIDUAL SOILS:** Typically encountered beneath Cohsive Residual Soils or immediately beneath the topsoil, this material comprised sandy GRAVEL/COBBLE and was often clayey. Lithology varied from predominantly mudstone in the south and sandstone in the north as per the Cohesive Residual Soils. Depth to base ranged from 0.9m and 2.7m.
- **SANDSTONE BEDROCK:** Encountered in TPs 102, 104, 110 112 at respective depths of 1.4m, 1.5m 2.4m and 1.8m as moderately strong thinly bedded SANDSTONE. Unable to excavate with a JCB.
- **SILSTONE BEDROCK:** Encountered in TP 111 at 1.5m at 1.5m as very week thinly bedded SILSTONE. Unable to excavate with a JCB.
- **COAL:** An unnamed coal seam was encountered from 2.7m in TP107 to >3.0m.

Review of Apex's logs in comparison to REL's shows a stark contrast in the amount of clay encountered. REL's logs suggest that, where the site is underlain by sandstone bedrock, the Residual Soils above are all granular (non-shrinkable); however, weathered sandstone was found to comprise clay in numerous locations advanced by Apex. Clay was also noted by both Apex and REL as weathered mudstone. It should also be noted that the clay in a number of locations advanced by Apex was found to be "soft".

The bedrock strata in the south generally comprises mudstone/stilstone bedrock, interpreted as Millstone Grit. In the north, the predominant rock type is sandstone, which could indicate that the boundary between the Millstone Grit and the Huddersfield White Rock (sandstone) is further south than BGS maps suggest.

8.3 Evidence of contamination

No visual/olfactory evidence of organic contamination was noted by Apex.

A single fragment of suspected asbestos-cement-sheeting was noted in TP101 in the north-east. A sample was taken and scheduled for asbestos ID analysis (see Section 11).

8.4 Stability, groundwater and obstructions

Obstructions

No significant obstructions were noted by Apex during the ground investigation.

Groundwater

Water strikes were recorded in 4no. locations at depths between 0.40m and 3.30m. Details of groundwater strikes are recorded in the table overleaf.

Exp Hole.	Strike Depth (m)	Stratum & remarks
TP104	1.0m	Seepage in SANDSTONE bedrock.
TP105	0.9m	Gravel of mudstone noted to be wet, with wetting & softening of clay below.
TP111	1.5m	SILTSTONE noted to be wet.
TP112	1.9m	Seepage in SANDSTONE bedrock.

Groundwater depths within PHs 101 to 106 were recorded on six occasions between the 29th May and 19th August 2024 as part of the ground gas monitoring program; results are summarised below:

BH	Response zone	Strata	Depth to groundwater range (mbgl)
PH101	3.0m to 6.0m	Sandstone	2.00 – 2.52
PH102	3.0m to 6.0m	Sandstone	3.04 – 3.57
PH103	3.0m to 6.0m	Sandstone	1.30 – 2.49
PH104	3.0m to 6.0m	Mudstone/Sandstone	1.36 – 1.60
PH105	3.0m to 6.0m	Mudstone/Sandstone	4.75 – 5.00
PH106	3.0m to 6.0m	Sandstone	0.95 – 1.63

The above indicates that groundwater is generally shallower in lower-lying areas of the site towards the north, becoming deeper further south (uphill).

Stability

Stability of excavations was generally good.

9. SOAKAWAY TESTING

Soakaway testing was completed in line with BRE 365[1] in TPs104, 08 and 112.

Copies of the test results are included in Appendix H and are summarised below:

TP	TEST	STRATA	RESULT (m/s)	REMARKS
TP104	1	0.52m – 1.00m (Cohesive Residual Soil, Granular Residual Soil and Sandstone Bedrock)	N/A	Test remained static, unable to calculate infiltration rate.
TP108	1	1.50m – 1.80m (Granular Residual Soil)	1.47×10^{-5}	
TP112	1	1.70m – 1.90m (Cohesive Residual Soil, Granular	N/A	Test remained static, unable to calculate infiltration rate.

[1] BRE Digest 365 – Soakaway Design (1991)

TP	TEST	STRATA	RESULT (m/s)	REMARKS
		Residual Soil and Sandstone Bedrock)		

In accordance with CIRIA Guidance[2], soakaways should be designed such that their base is >1m above groundwater level. Groundwater monitoring results to date (see Section 8.4) shows the presence of groundwater as shallow as 0.95m.

Given the above, and the lack of infiltration in TPs 104 and 112, soakaways are not considered a suitable means of water disposal this site.

10. GEOTEHNICAL TESTING (LABORATORY TESTS)

Samples taken during the investigation have been delivered to a UKAS accredited laboratory and scheduled for the following geotechnical tests:

Material	No. samples	Analysis scheduled
Cohesive Residual Soil	8	Moisture content Plasticity index – 4 point liquid limit
	6	BRE Suite A
	4	Compaction tests (2.5kg hammer)
Granular Residual Soil	2	BRE Suite A Compaction tests (2.5kg hammer)
Coal	1	BRE Suite A

A full copy of the results, as received from the laboratory, is included in Appendix F.

10.1 pH & soluble sulphate

In accordance with BRE SD1[3] and the site's conceptual model, samples were analysed for pH, water-soluble sulphate.

Results are summarised below and take into account equivalent chloride, nitrate and magnesium values where appropriate.

Material	pH design value	Soluble sulphate design value (mg/l)*
Coal	5.3	24.7
Residual Soil/bedrock	4.7	142.3

* includes equivalent nitrate, chloride and magnesium where appropriate

Ground beneath this site is not considered likely to contain significant amounts of pyrite. In addition, it is unlikely to be 'disturbed' such that significant oxidation of any sulphide would occur. Therefore, assessment of total potential sulphate has not been carried out.

[2] CIRIA C753 – The SUDS Manual (2015)
[3] BRE Special Digest 1 Concrete in aggressive ground 2005

The site is considered to be greenfield with a mobile groundwater regime.

Based on the above, sub-surface concrete should be designed assuming a Design Sulphate class of DS-1 and Aggressive Chemical Environment of Concrete of AC-2z.

10.2 Atterberg limits

Results of Atterberg limit testing is summarised by stratum in the table below:

Material	Moisture content	Modified plasticity indices
Cohesive Residual Soils	18.3 – 43.7 (ave. 29.4)	14.8 – 32.0 (ave. 22.0)

Plasticity indices have been modified in accordance with NHBC Chapter 4.2[4].

Based on the above, the Cohesive Residual Soils should be classed as medium shrinkability (aka. volume change potential).

10.3 Compaction tests

Compaction tests were performed on 4 samples of Cohesive Residual Soils and 2 samples of Granular Residual Soils, to assess the suitability of these materials for use as engineered fill. The tests scheduled used a 2.5kg hammer.

Laboratory compaction tests are only appropriate if at least 90% of the material passes the 37.5mm sieve; and/or at least 70% of the material passes the 20mm sieve.

Results are summarised below:

Material	Sample	% retained on sieves		Remarks
		37.5mm	20mm	
Cohesive Residual Soils	TP102 0.9m	0	4	Suitable for compaction analysis.
	TP109 0.9m	0	0	
	TP110 0.6m	0	3	
	TP111 1.1m	0	0	
Granular Residual Soils	TP107 2.3m	0	1	
	TP110 1.6m	2	4	

Material	Sample	MDD (Mg/m³)	OMC (%)	Allowable MC for 95% MDD & 0-5% air voids	In-situ moisture content (%)
Cohesive Residual Soils	TP102 0.9m	1.78	16.0	18.4 – 20.2	20*
	TP109 0.9m	1.69	20.0	21.6 – 23.8	25*
	TP110 0.6m	1.75	16.0	18.0 – 20.4	21*

[4] NHBC Standards 2023

Material	Sample	MDD (Mg/m³)	OMC (%)	Allowable MC for 95% MDD & 0-5% air voids	In-situ moisture content (%)
	TP111 1.1m	1.75	17.0	18.8 – 20.8	22*
Granular Residual Soils	TP107 2.3m	2.06	9.1	10.4 – 11.6	11
	TP110 1.6m	1.64	22.0	23.4 – 26.0	24

** Results shown are "as received" within each bulk sample. However, the average moisture content for the disturbed samples across the site (see Section 10.2) is 29%, but ranges from 18.3% to 43.7%.*

Based on the above, the Cohesive Residual Soils look to be suitable for compaction, but may require drying prior to use. Drying of this material may be possible on site should earthworks be undertaken in summer (drier & hotter) months via excavation and spreading of material.

The Granular Residual Soils also appear suitable for compaction. However, it should be noted that the proportion of coarser constituents (gravel and cobble) typically increases with depth in this stratum.

Where site-won materials are to be used as engineered fill on site, field trials should be undertaken to confirm suitability for re-use.

11. CHEMICAL TESTING (CONTAMINANTS)

11.1 Conceptual site model

As discussed in Section 4, the majority of the site is essentially greenfield, with the only notable development/features on site being:

- Jubilee property in the north-east (replaced with domestic garages)
- Domestic garages in the north-east (still present)
- Small structures in the east (now demolished)
- Area of hardcore surfacing in the west thought to be a former car park (still present)

Made Ground Topsoil (topsoil with a significant amount of anthropogenic material) was encountered in the north-east, along with Re-Worked Sandstone. Hardcore surfacing was encountered in the far west.

Samples of Topsoil, Made Ground Topsoil and Made Ground were scheduled for analysis, as summarised in the table below.

Material	No. samples	Analysis scheduled
Hardcore Surfacing	1	pH & metals TOC Speciated PAH Banded TPH Asbestos ID

Material	No. samples	Analysis scheduled
Made Ground Topsoil	2	pH & metals Asbestos ID TOC Banded TPH
	3	Speciated PAH
Re-worked Sandstone	1	pH & metals TOC Speciated PAH Banded TPH Asbestos ID
Topsoil	3	pH & metals Asbestos ID
	5	TOC
	8	Speciated PAH

The first phase of contamination risk assessment comprises screening against threshold values. Apex utilise the LQM/CIEJH S4ULs (publication number S4UL3828) along with C4SLs where relevant (see Appendix A for more details on Apex's approach to contamination risk assessment).

The proposed development comprises traditional low rise residential housing with gardens. Therefore, the screening criteria utilised assume a residential end-use with home-grown produce (RwHP).

The testing scheduled was intended to supplement the data contained within REL's report. To aid with risk assessment, REL's results have been incorporated into this Section from this point onwards.

For organic compounds, account has been taken of the TOC content of each strata; SOM values used have been determined from laboratory testing and are summarised below:

Stratum	Range of TOC (%)	Average TOC (%)	TOC used	Remarks
Hardcore Surfacing	5.7	N/A	3.0	Only one sample available for testing.
Re-worked Sandstone	1.2	N/A	0.6	Conservative approach used due to lack of samples tested.
Made Ground Topsoil	3.0 – 4.3	3.7	3.0	
Topsoil	3.0 – 9.2	5.7	3.0	
Granular Residual Soil	0.85	N/A	0.6	Conservative approach used due to lack of samples tested.

11.2 Summary of contamination

After screening against the relevant values (see Section 11.1 above), the following exceedances of threshold values have been identified; samples from REL's investigation are shown in orange.

Contaminant	BH/TP	Depth (m)	Material	Result	Screening value (mg/kg unless stated)
Benzo(a)pyrene	TP112	0.1	Hardcore Surfacing	5.5	3.0
	TP101	0.1	Made Ground Topsoil	7.3	
	TP101A	0.1		7.4	
	TP10	**0.2-0.3**	**Topsoil**	**3.2**	
	TP11	**0.1-0.3**		**6.7**	
	HP01	**0.2-0.3**		**4.5**	
	TP07	**1.0-1.2**	**Granular Residual Soil**	**6.5**	2.2
Benzo(b)fluoranthene	TP112	0.1	Hardcore Surfacing	8.8	3.7
	TP101	0.1	Made Ground Topsoil	9.0	
	TP101A	0.1		9.0	
	TP10	**0.2-0.3**	**Topsoil**	**5.0**	
	TP11	**0.1-0.3**		**7.5**	
	HP01	**0.2-0.3**		**5.3**	
	TP07	**1.0-1.2**	**Granular Residual Soil**	**8.7**	2.6
Dibenz(a,h)anthrancene	TP101	0.1	Made ground Topsoil	0.92	0.3
	TP101A	0.1		1.00	
	TP109	0.05	**Topsoil**	0.35	
	TP03	**0.2-0.3**		**0.50**	
	TP04	**0.1-0.2**		**0.57**	
	TP07	**0.2-0.3**		**0.31**	
	TP08	**0.1-0.2**		**1.30**	
	TP10	**0.2-0.3**		**1.80**	
	TP11	**0.1-0.3**		**1.10**	
	WS06	**0.4-0.5**		**0.78**	

Contaminant	BH/TP	Depth (m)	Material	Result	Screening value (mg/kg unless stated)
	HP01	0.2-0.3		1.20	
	HP02	0.2-0.3		0.90	
	TP07	1.0-1.2	Granular Residual Soil	1.80	0.24
TPH C10-21 (DRO)	TP112	0.1	Hardcore Surfacing	1,200	380
TPH C21-35 (LRO)				9,300	1,700
Asbestos	TP101	0.05	Fragment of ACM within Made Ground Topsoil	Detected	Non-detected

Results are discussed in more detail below.

11.3 Inorganic contaminants

None of the samples tested for inorganic parameters yielded results above the screening values used.

No further assessment is required.

11.4 Total Petroleum Hydrocarbons (TPH)

Banded TPH was scheduled on samples across the site as an initial 'screen' for any areas of potential TPH contamination.

TPH above screening values for DRO and LRO were detected in a sample of the Hardcore Surfacing in TP112 0.1m. This material was noted to contain clinker and limestone, and was black – likely broken up, weakly cemented macadam/road planings. It is likely that the TPHs identified are a result of residual hydrocarbon-based coating on the aggregate.

11.5 PAHs

Topsoil/Made Ground Topsoil

Elevated concentrations of PAHs (benzo(a)pyrene, benzo(b)fluoranthene and Dibenz(a,h)anthracene were detected in samples of Made Ground Topsoil and Topsoil across the site.

Review of the exploratory hole locations and logs where exceedances were noted in the Topsoil/Made Ground Topsoil has revealed the follow key points:

- A significant amount of the locations are in the north-east, within, or close to the area of dense vegetation, garages and the former Jubilee Property.
- Within Apex's investigation, the elevated concentrations of PAHs were encountered in TPs 101 & 101A in Made Ground Topsoil in the north-east, along with one sample of Topsoil from TP109 close to a trodden footpath in the west.

- Whilst still mainly in the north-east, REL's investigation also shows elevated concentrations in the south-east and west.
- REL's report contains a hole location plan superimposed onto the site layout (not current site features). Once their hole locations are imposed onto a topographic survey, their TP11 is shown as lying within the hardcore-surfaced car park in the far west, but the log suggests Topsoil was encountered and sampled. The sample from the "topsoil" in TP11 shows elevated concentrations of PAHs.
- REL and Apex noted the evidence of localised bonfires on site. The bonfires were not targeted by Apex, but may have been by REL, though this is not explicitly stated in their report if so.

Based on the desk study information, the only potential source of PAH contamination identified is use of the site by nearby residents for recreation and occasional bonfires. The sporadic occurrence of PAHs are likely a result of localised fires across the site and close to the former Jubilee Property (now garages) where concentrations may also have been influenced by localised use of fuels and/or burning of wood.

Further assessment of risks associated with Topsoil & Made Ground Topsoil, along with recommendations for re-use, is discussed in Section 14.1.

Re-worked Sandstone

The reason for the elevated concentrations of PAHs identified in REL's TP109 (where a "solvent odour" was noted) is not clear; no source has been identified within this area in the desk study.

The PAHs identified are all relatively immobile and do not indicate the presence of volatile contaminants. At the depths identified, they are not considered to pose a significant risk to human health nor controlled waters based on the leachability testing carried out by REL on the same sample.

A watching brief is recommended when excavating any materials within this area to ensure the concentrations identified are not indicative of a nearby hotspot of fuel/solvent-based contamination.

Hardcore Surfacing

In addition, elevated concentrations of benzo(a)pyrene and benzo(b)fluoranthene were found in the same sample of Hardcore Surfacing as the elevated TPH concentrations discussed above; likely associated with the same residual hydrocarbon-based coating on the aggregate discussed in Section 11.4.

Remediation recommendations in relation to Hardcore Surfacing are discussed further in Section 14.

11.6 Asbestos

No asbestos fibres were detected in any of the soil samples screened as part of Apex's and REL's investigation.

However, a fragment of suspected ACM was scheduled for screening, found in Apex's TP101 at 0.05m. Testing confirmed this was a fragment of asbestos-containing cement.

No other such materials were noted in any of the other trial pits/boreholes by Apex and REL.

Remediation recommendations in relation to asbestos are discussed further in Section 14.

12. HAZARDOUS GAS

12.1 General

Given the presence of two landfills and one backfilled quarry within a 250m radius of the site area (see Section 3), the site is considered to be potentially at risk from hazardous gas. Based on their distance from site and size, in accordance with BS8576[5] and CIRIA C665[6], risks associated with hazardous gas are considered very low.

Three of six planned monitoring visits were recorded by Roberts Environmental at the time of writing in May 2022 however, finalised results are not provided to Apex.

In accordance with BS8485[7], the proposed development is classified as a Type A building.

12.2 Investigation

As part of the ground investigation, monitoring wells were installed within 6 boreholes by Apex.

Six monitoring visits were carried out between 29th May 2024 and 19th August 2024 using a GFM430 infrared gas analyser.

On-site measurements of atmospheric pressure ranged from 986mb to 995mb.

The atmospheric pressure trend in the 48 hours prior to each monitoring visit was also recorded; the trends were as follows:

- Visit 1 – Fluctuating
- Visit 2 – Rising
- Visit 3 – Rising

[5] Guidance on investigations for ground gas (2013)
[6] Assessing the risks posed by hazardous ground gases to buildings (2007)
[7] Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings (2019).

- Visit 4 – Falling
- Visit 5 – Falling
- Visit 6 – Fluctuating

Results are summarised below:

EXP HOLE.	RESPONSE ZONES (m)	HIGHEST READINGS			O_2 Low (% vol)	STRATUM
		Peak CH_4 (% vol)	Peak CO_2 (% vol)	Steady flow (lt/hr)		
PH101	3.0m to 6.0m	0.0	1.2	3.2	19.4	Pennine Lower Coal Measures
PH102		0.0	4.1	3.3	1.7	
PH103		0.0	0.8	3.9	20.0	
PH104		0.0	0.7	0.0	19.4	
PH105		0.0	4.3	0.0	7.70	
PH106*		0.0	0.7	3.1	19.5	

*Only three visits were recorded due to 3rd party vandalism of the installation between visits 3 & 4.

Minimum oxygen readings ranged from 1.7% to 20.0%vol. Whilst not shown in the table, where significantly low O_2 values (<10%vol) were recorded, Hydrogen Sulphide (H_2S) and Carbon Monoxide (CO) were monitored with no instances exceeding the limit of detection (< 0.1ppm).

In relation to the potential for gas flow gas, the conceptual model shows similar conditions across much of the site with ground conditions comprising residual soils overlying mudstone/sandstone bedrock, where gas flow could occur. Therefore, in calculating Gas Screening Values, the maximum steady flow across the site of 3.9lt/hr (PH103) has been assumed across the site area to model the worst case, along with the maximum (peak) CO_2 reading of 4.3%vol. The Gas Screening Value for CO_2 is **0.1677**.

No Gas Screening Value for CH_4 has been calculated as none was recorded across the 6 visits.

Assuming worst case scenarios of the highest concentrations in any borehole the Gas Screening Value for CO_2 falls into Characteristic Situation (CS) 2 (Low Hazard Potential).

12.3 Protection Measures

Assuming a gas characterization score of CS2 and a Type A building, a gas protection score of 3.5 is required.

In accordance with BS 8485-2015+A1:2019, the score should be achieved by a combination of two or more of the following:

- Structural barrier of the floor slab or basement slab and walls
- Ventilation measures
- Gas resistant membrane

Floor slab

Where plots are suitable under the conditions listed in Section 17 and have been designed with a ground-bearing floor slab a score 0.5 will be achieved should the slab have mesh reinforcement; however, this will not be applicable to all plots (i.e. where suspended floors are required). Therefore, it is recommended that gas protection is achieved via sub-floor ventilation and installation of a membrane.

Ventilation Measures

Most plots are likely to employ a suspended floor slab, likely pre-cast block and beam where which a sub-floor void of at least 250mm is required.

In accordance with BS 8485-2015+A1:2019, a score of 1.5 with a passive sub floor dispersal layer where a clear void with air bricks placed along the building edges allow for natural dispersion.

Membrane

In accordance with BS 8485-2015+A1:2019, a score of 2.0 can be assumed for the membrane providing the membrane is:

- sufficiently impervious (in material and sealing sheets/around penetrations) to prevent significant passage of CO_2/CH_4
- durable enough to remain serviceable for anticipated lifetime of the building
- sufficiently strong to withstand the installation process and service stresses
- complete barrier to entry of gas after installation
- verified in accordance with CIRIA C735[8].

12.4 Radon

A site specific radon report has been obtained by Apex (see Appendix C) which shows the far north to lie within an area where between 3-5% of properties are above the action level for radon. In this area, basic radon protection measures are required.

BRE guidance[9] states that basic radon protection measures comprise the following:

- Membrane within floor construction (minimum 1,200 gauge)
- Link of membrane into the DPC in the building walls
- Cavity trays to be used within walls to link the DPC to the radon membrane
- Joints within the membrane and service penetrations are to be sealed

[8] Assessing the risks posed by hazardous ground gases to buildings (2007)
[9] BR211 Radon – Guidance on protective measures for new buildings (2015)

BRE guidance also recommends inspection of the membrane during installation to ensure the above requirements are met.

However, it should be noted that the protection measures required, outlined in Section 12.3, will also provide protection against radon risks.

13. REVISED CONCEPTUAL SITE MODEL

13.1 General

The ground investigation and laboratory analysis has enabled revision of the conceptual site model; a revised version is presented as Drawing 007 in Appendix B.

13.2 Geotechnical

The exploratory hole logs and geotechnical testing shows the site to be underlain by a veneer of topsoil and localised made ground, with residual soils below varying between medium to high strength clay and gravel. Bedrock was encountered across the site, typically shallower and Sandstone in the north, with mudstone in the south. Depths to bedrock range between 0.6m and 4.0m.

13.3 Contamination

No investigation was undertaken in the footprint of Jubilee Lane in the north-east as this is still used by residents. Trial pits in the north-east were limited due to the presence of dense vegetation and service runs.

PAH contamination has been identified in the Made Ground Topsoil and Topsoil, mainly within the north-west, but also in localised areas in the south-east and west.

PAH contamination has been identified in the far west within the Hardcore Surfacing.

A fragment of asbestos-cement was encountered in the Made Ground Topsoil in the north-east.

The site has been classified as Characteristic Situation with regard to gas risks; all plots require gas protection measures. Such measures will mitigate risks associated with radon for plots in the north, which lie in an area where basic radon protection measures are required.

14. CONTAMINATION ASSESSMENT & REMEDIATION OPTIONS

14.1 Asbestos

Asbestos fibres were not identified in any of the samples screened. However, one fragment of asbestos sheeting was identified in TP101 in the Made Ground Topsoil in the north-east.

Any suspected ACMs encountered during site works should be hand-picked by a specialist contractor and double-bagged awaiting disposal. Any such material will be classified as hazardous waste.

The demolition/remediation contractors will need to submit a method statement and risk assessment regarding mitigation of asbestos risks. As a minimum, this should ensure that soils are kept damp during site works and that all personnel have appropriate PPE.

Human-health risks to end-users can be mitigated through isolation of the asbestos-containing soils.

It is recommended that additional trial pitting is carried out in the north-east once access is available following clearance of the garages and vegetation, to check for the presence of additional fragments of ACMs in this area.

14.2 Topsoil & Made Ground Topsoil

Data review

After reviewing the land use history, it was clear this site could reasonably be divided into 3 zones to assess topsoil quality. These zones, shown on drawing 006 are:

- Car park area
- Main site
- Former Jubilee Property and garages

In some cases, it is important to undertake statistical assessment of data sets to consider the reliability and assess the confidence that the data represents the actual range of concentrations for a given sample population; and to consider the true mean. The mean of a data set is then considered against the selected screening value. Statistical assessment must be applied to specific sample populations, for topsoil the sample populations considered are the three zone areas. This approach is consistent with the latest UK guidance[10].

Statistical assessment has been undertaken for benzo(a)pyrene in topsoil to support the risk assessment and consider suitability for reuse in each zone. This detailed assessment was required for benzo(a)pyrene only, as it was not initially evident that concentrations would be acceptable for reuse on a residential development.

The table below sets out the calculated statistical parameters for each zone:

Determinant	B(a)P (car park)	B(a)P (main site)	B(a)P (Jubilee & garages)
No. samples	2	19	5
Mean	6.1	1.4	3.5

[10] CL:AIRE publication Comparing Soil Contamination Data with a Critical Concentration, published 2020

Determinant	B(a)P (car park)	B(a)P (main site)	B(a)P (Jubilee & garages)
Standard Deviation	0.84	1.70	3.55
Sampling Error	0.6	0.39	1.59
T value	12.71	2.10	2.77
Upper Confidence Level of the mean (95%)	13.7	2.3	7.9
Lower Confidence Level of the mean (5%)	5.5	1.0	1.9
True mean	N/A*	Between 1.0 and 2.3	Between 1.9 and 7.9

* insufficient samples available for reliable assessment

The statistical approach and calculation of the upper and lower confidence levels around the calculated mean adopts sampling error approach, which accounts for uncertainty in small sample populations.

However, insufficient data is available in the Car Park zone and the upper confidence limit is purely a reflection of the T value used to calculate the sampling error. Any topsoil in the Car Park zone must be stockpiled separately and resampled prior to consideration of reuse, alternatively topsoil and subsoil from the Car Park zone could be placed under hardstanding.

Apex Consulting adopt the S4UL screening values for all inorganic parameters and many organic parameters; the S4UL screening values are accepted as peer reviewed and reliable screening values.

However, the S4UL values for PAH are based on a toxicity equivalent factor, an approach that weights the toxicity of the less toxic PAH compounds as fractions of the toxicity of the most toxic; usually Benzo(a)pyrene. However this approach assumes that the PAH compounds all act on the same target organ, which is not the case.

The S4ULs were calculated prior to Defra's C4SL project and subsequent Public Health England statement indicating that the use of TEFs when assessing PAHs was not considered appropriate, instead Public Health England endorsed the surrogate marker approach.

PAH assessment adopting a surrogate marker

The surrogate marker approach recognises that PAHs target different organs, but that these always exist in a mixture and rarely in isolation. Therefore, understanding the impact of one prominent chemical within the mixture will assess the significance of exposure the entire mixture. The appropriateness of this approach was assessed in the Culp et al study that considered toxicity of PAH mixtures in coal tars, considering specifically the concentration of benzo(a)pyrene.

Providing the source of PAHs on a site, based on the ratio between specific compounds and benzo(a)pyrene, lie within +/- order of magnitude of the Culp et al source, consideration of risk can be considered by comparison of the benzo(a)pyrene mean and the C4SL surrogate marker screening value for benzo(a)pyrene.

The PAH profile on site has been checked and ratios lie within an order of magnitude of the Culp et al study.

The table below considers the calculated benzo(a)pyrene mean and the upper confidence level against the C4SL residential with gardens and residential open space screening values, as the two land use areas in the development scheme.

Zone	Mean & UCL	Residential with garden (5mg/kg)	Residential POS (10mg/kg)
No. samples	6.1 & 13.7	No	No
Mean	1.4 & 2.3	Yes	Yes
Standard Deviation	3.5 & 7.9	*No	Yes

Where both the upper confidence limit and the mean lie below the adopted screening value the topsoil can be considered suitable for that intended land use. Where the mean lies below the screening value, but the upper confidence level lies above the screening value further assessment is required to determine suitability for reuse.

Suitability for re-use

Topsoil from the Car Park zone must be stockpiled separately and resampled prior to consideration of reuse.

Topsoil from the Main Area is clean naturally occurring and can be reused in garden areas and areas of POS. Surplus topsoil from the main area could be reused on another development, moved via direct transfer under the Definition of Waste Code of Practice (DoW:CoP).

Topsoil/Made Ground Topsoil from Jubilee Garage zone is suitable for reuse in areas of POS but is not suitable, without further assessment, for reuse in garden areas. Comments in Section 14.1 should also be borne in mind with regard to asbestos (i.e. additional trial pitting once the vegetation is cleared to further assess risks of ACMs within this area).

14.3 Re-worked Sandstone

A watching brief (by a Geoenvironmental Engineer) should be in place when excavating natural soils in the vicinity of REL's TP07 to ensure that no source of PAH is present.

14.4 Hardcore Surfacing

The Hardcore Surfacing in the west (former car park) should be stripped and stockpiled separately to other materials. It is recommended that this material be

placed beneath areas of proposed hardstanding to isolate contaminants from end-users.

14.5 Summary of remediation options

After review of all data, appropriate remediation options are summarised in the table below; reference should also be made to Drawing 006.

Material	Contaminant	Receptor	Remediation options
Topsoil/ Made Ground Topsoil (Car Park Area)	PAHs	Human health	Careful stripping and segregation of material is required. Further sampling of topsoil could be undertaken of the material in this zone to assess suitability for re-use.
Topsoil/ Made Ground Topsoil (former Jubilee Property & garages)	PAHs and asbestos		Additional trial pitting recommended in this area once cleared. During earthworks, any suspected ACMs to be hand picked for disposal from site, then additional sampling of materials where ACMs were identified for asbestos ID analysis. Depending on the results of the additional trial pitting, this material may be suitable for re-use in areas of POS once screened and hand-picked.
Topsoil (main site)	Localised PAHs	Human health	After review of data, this material is considered suitable for re-use in gardens and POS.
Hardcore Surfacing	PAHs	Human health	Careful stripping and segregation of material, then placement beneath areas of proposed hardstanding.
Off-site quarries	Hazardous gas	Human health, buildings	See Section 12.

When placing contaminated material beneath hardstanding/clean cover, consideration should be given to the likelihood of future disturbance. Therefore, placement above service runs should be avoided; this may necessitate the use of 'clean corridors'.

Stripping and management of Topsoil/Made Ground Topsoil should be done under supervision of a qualified Geoenvironmental Engineer.

In addition to the above, excavations within the vicinity of REL TP07 should be under the watching brief of a qualified Geoenvironmental Engineer.

A Remediation Strategy will be required and should be sent to the Local Planning Authority for their approval.

Contractors involved in site works whose staff are likely to come into contact with contaminants identified will need to detail appropriate mitigation measures in their risk assessments and method statements.

14.6 Contingency

It should be noted that the nature of ground investigation is such that, even after a thorough investigation, only a limited amount of the ground is actually uncovered. Therefore, areas of as yet unidentified contamination may be present.

During site preparatory works, if evidence of any unrecorded contamination is encountered (for example, odours, staining, oily sheens, ACMs etc), works should cease, and additional advice should be sought from Apex.

15. WASTE AND MATERIALS MANAGEMENT

15.1 Materials Management Plan

The earthworks and development will involve re-use of made ground and the reuse of clean naturally occurring soils. The need to ensure suitable segregation and good material and stockpile management will be essential to avoid contamination of suitable soils with unsuitable soils. A Materials Management Plan (MMP) should be prepared prior to any works commencing on site and this should be reviewed by an independent Qualified Person (QP).

As well as detailing material management procedures, the MMP should include details of the volume of soils to be reused; how these will be used; and a tracking and material reuse validation plan. The MMP should also include a contingency plan for managing unexcepted contamination and unavoidable spillages in programme.

This report has identified sub-populations of made ground which have different chemical characteristics (see Sections 8 & 11) which may be classed as differing waste types.

It is essential that groundworkers involved in the excavation and handling of materials are adequately briefed on the importance good materials management and a plan, clearly showing the contents of each stockpile should be available in the site office. It is recommended that soil and material management be included as part of the site induction.

Any natural soils excavated as part of site preparatory works (i.e. below the basement, for drainage etc) should also be kept separate from all other strata.

15.2 Waste classification

Assessment of any material proposed for off-site disposal should be undertaken in accordance with WM3[11]. At the heart of this guidance is the need to accurately characterise sub-populations of waste via appropriate sampling (ideally when stockpiled). Waste classification should never be determined on the basis of individual sample test results.

[11] Technical Guidance WM3 – Guidance on the classification and assessment of waste – Environment Agency (2015)

Waste Acceptance Criteria (WAC) testing should only be required where material is likely to be disposed of in an inert or hazardous landfill. Waste codes cannot be allocated based on WAC test data, a WAC test is solely for the purpose of informing the landfill on the leaching potential.

Asbestos

In accordance with WM3, any soils which contain visible fragments of potentially asbestos-containing materials will be regarded as hazardous waste (if the fragments contain >0.1% asbestos), unless all such fragments can be removed by hand-picking prior to disposal. Such material has been identified in the north-east, where further trial pitting and sampling is recommended once access is available.

In addition, soils which contain >0.1% asbestos will be regarded as hazardous waste. No free fibres have been identified to date; this should be confirmed during the recommended additional trial pitting in the north-east.

Conclusion

Contractors involved in the removal of waste from site should assess the data within this report (and REL's) in order to make their own assessment with respect to appropriate waste codes and disposal routes.

16. FOUNDATIONS

16.1 General

Based on the ground conditions encountered, traditional shallow foundations (strip/trench-fill) will offer the most suitable foundation solution for low rise residential dwellings at this site.

Given the sloping nature of the site, there will be a requirement for some earthworks to create level development platforms.

Foundations will need to extend through any made ground and fill placed as part of proposed earthworks and into natural soils below of adequate bearing capacity. Once levels are finalised, this information should be provided to Apex such that any significant changes to the recommendations outlined below can be determined.

16.1 Shallow spread foundations

At this stage, proposed loadings are unknown.

Given the topography of the site and anticipated earthworks, there will be a need for retaining walls, and possible underbuild and tanking. Bearing capacities and foundation recommendations discussed below are for low-rise residential housing only; site-specific design of retaining features should be carried out; Apex can provide this service if required.

Preliminary bearing capacities are given in the table below and have been calculated in general accordance with EC7[12] requirements. For this preliminary assessment, vertical actions are considered, and the following limit states have been accounted for:

- Bearing failure
- Excessive settlements

Foundation	Stratum	Minimum depth	Allowable bearing capacity	Maximum allowable load
0.6m wide strip	Cohesive Residual Soils	0.9m	133kN/m^2	80kN/m run
	Granular Residual Soils	0.6m	173kN/m^2	104kN/m run
	Bedrock	0.6m	250kN/m^2	120kN/m run

Notes
1) The capacities given above have been calculated using Design Approach 1 in EC7
2) A design undrained shear strength value of 55kPa has been assumed for the Cohesive Residual Soils.
3) A design angle of shear resistance value of 32° has been assumed for the Granular Residual Soils.
4) The capacities and loadings given above assume minimum foundation depths of 0.9m in Cohesive Residual Soils and 0.6m in Granular Residual Soils/bedrock.
5) Settlements of greater than 1 in 400 (i.e. 25mm across a 10m foundation length) should not occur providing the above loadings are not exceeded.
6) All foundations should be at >0.45m depth due to potential frost susceptibility (in accordance with NHBC standards).
7) Foundations should be taken to a depth below a 45° line drawn up from the base of any nearby excavations (eg, for drainage etc).
8) Foundations should be deepened where impacted by tree influence in accordance with NHBC Standards Chapter 4.2.
9) Deepened foundations should be stepped in accordance with NHBC Standards Chapter 4.3.
10) Heave precautions are required for foundations within the influence of trees and have a required foundation depth of >1.5m in accordance with NHBC Standards Chapter 4.2.

It is recommended that foundations are cast as soon as possible following excavation in order to minimise the risk of disturbance (softening/loosening) at formation level. Alternatively, base of footings could be blinded with a layer of lean-mix concrete.

Where lateral variation in ground conditions is identified within foundation excavations, reinforcement is recommended to help mitigate the risks of differential settlement, and foundations should not span cohesive and granular strata.

16.2 Tree influence

Trees/hedgerows are present along site/field boundaries, with sporadic trees throughout the site. Their influence is likely to affect a significant proportion of the proposed plots.

The majority of this site is underlain by shrinkable soils to depths of between 0.55m and 3.1m; these materials are of Medium Volume Change Potential, and

[12] Eurocode 7 : Geotechnical design BS EN 1997-1:2004+A1:2013 (February 2009)

therefore a minimum foundation depth of 0.9m is required. This should be taken from original or finished ground level, whichever is the lower.

Where proposed buildings are within the influence of trees and are underlain by shrinkable soils, deepening of foundations will be required in accordance with NHBC Standards Chapter 4.2. Given the current layout proposals, tree influence is likely to affect all proposed structures.

On this site, the shrinkable soils are often underlain by non-shrinkable strata (Granular Residual Soils and bedrock). Therefore, where Granular Residual Soils or bedrock are encountered at depths shallower than the depth specified due to tree influence, foundations can be cast within the non-shrinkable stratum, which need only be penetrated by the foundation thickness.

Where trees/hedgerows are removed within a building's footprint, foundation depths will likely be >2.5m. Where shrinkable soils are present to >2.5m, this could result in a piled foundation solution. However, on this site, the maximum depth of shrinkable strata encountered to date is 2.0m, so the requirement for piles is considered unlikely.

In TPs 105, 102 and 110, the Cohesive and Granular Residual Soils are interbedded, with the former being encountered be latter. Where granular soils are present within the influence of trees, foundations may be able to be cast within these strata, subject to the following conditions:

- Consistent ground conditions across the plot
- Sufficient depths of granular deposits In accordance with NHBC Chapter 4.2:
    - the depth of the granular material must be >75% of the depth required for cohesive soils for the same plot; and,
    - must be present below the foundation to a depth equal to, or greater than, the foundation thickness

Given the impact that tree influence will have on foundation depths at this site, a tree survey should be carried out at an early stage, followed by a detailed Foundation Schedule.

16.3 Sub-surface concrete

A discussed in Section 10.1, sub-surface concrete should be designed assuming a Design Sulphate class of DS-1 and Aggressive Chemical Environment of Concrete of AC-2z.

Designated mixes should be specified by the structural engineer taking into account soil chemistry long with other structural considerations.

17. FLOOR SLABS

Ground bearing floors are not to be considered suitable for the site as gas protection scores will not be sufficient if employed.

Suspended floor slabs will be required with a void below; options include:

- Pre-cast block & beam: minimum 250mm void^
- Suspended timber floor: minimum 250mm void^
- Slab cast on compressible void former: minimum 100mm void*

NOTES

^ - void dimension measured from underside of beam/joist to ground level; includes 150mm ventilation allowance

* - dimension given is the remaining void **after collapse** of the void former; thickness of void former to be confirmed with manufacturer.

The void present underneath the suspended floor slab should be suitably ventilated in order to be compliant with gas protection measures, see Section 12.3.

18. PREPARATORY WORKS & CONSTRUCTION ISSUES

18.1 Excavations

Bedrock is present at shallow depth beneath the site, especially in the north where shallow sandstone was encountered. This will necessitate significant breaking out of any deep excavations required in this area (for example, for drainage).

Groundwater should be anticipated within excavations of greater than c. 1m in the north which may necessitate significant pumping to allow suitable working conditions.

18.2 Re-grading

Given the sloping nature of the site, regrading will be required to provide level development platforms.

Proposed levels should take into account the need for any retaining walls, underbuild and tanking, as well as keeping highways at acceptable gradients.

An earthworks specification should be written once proposed levels are finalised.

18.3 Highways

At this stage, in-situ testing (plate loads, CBRs) have not been carried out. Based on the ground conditions encountered, the medium to high strength clays are expected to provide a CBR value of at least 3% based on published guidance[13].

However, lower values may be encountered where made ground and soft clays are present. Where such materials are encountered at formation level, it should be excavated to reach competent strata below, or up to a maximum of 2.0m (whichever is the shallower) from formation or the deepest sewer invert. Backfill

[13] Interim Advice Note 73/06 Revision 1 (2009), Chapter 5. Characterisation of Materials Design Guidance for Road Pavement Foundations - Draft HD25

should then be undertaken using a suitable aggregate, placed to an engineering specification.

Predicted CBR values should be verified through in-situ testing at formation level along the proposed route if highways at c. 25m intervals.

18.4 Drainage and new water supplies

Based on the ground conditions encountered, the depths to groundwater and the results of the in-sit testing, soakaways will not provide a suitable means of water disposal at this site. Alternative SUDs should be considered.

Alternative methods of surface water disposal should be explored (in line with the hierarchy defined within the Planning Practice Guidance):

- Attenuated discharge to a surface water body;
- To a public surface water sewer;
- To a highway drain, or other private drainage system; or
- To a combined sewer where there are absolutely no other options, and only where agreed in advance with the relevant sewage undertaker.

Where new water mains are to be laid, given the greenfield nature of the site, use of standard polyethylene pipes is likely to be acceptable. However, this should be confirmed by Yorkshire Water.

Should water mains be laid in made ground, UKWIR testing will be required in order to confirm pipe construction materials, as detailed in UKWIR report 10/WM/03/21[14].

18.5 Existing services

Underground sewers run across the site in the north; electricity and water services are shown in the north-east and north-west.

Consultation is required with service providers in order to ascertain any restrictions or easements required, along with feasibility of diversion (where required).

18.6 Well

According to historical maps, a ‘well’ was present associated with the Jubilee Property in the north-east. No further information is known regarding the depth, diameter or use of the well.

This area should be investigated as part of the pre-development earthworks. Should a well be present, it should be decommissioned in line with the Environment Agency’s Good Practice Guide[15]. This should include:

[14] Guidance for the selection of water supply pipes to be used in brownfield sites – UK Water Industry Research (2011)
[15] Good practice for decommissioning redundant boreholes and wells – Environment Agency (2012)

- Backfilling with clean material (to mimic permeability of existing geology where possible)
- Use of cement, concrete or bentonite grout in upper most 2m
- Placement of a concrete or cement cap; diameter to be at least 1m greater than the width of the well. Top of the cap should be at least 1m below formation level (i.e. current ground level)

19. CONCLUSIONS AND RECOMMENDATIONS

19.1 Background & proposed development

The site lies in Cowersley, Huddersfield and comprises a series of grassed fields with intermittent trees. Dense vegetation is present in the north-east, along with garages of adjacent houses and a former car park in the west.

The site slopes from south-west to north at gradients of between c. 1 in 3.5 to 1 in 12.

The development will include of 45no. traditional low-rise residential dwellings with associated POS, gardens, roads and sewers.

19.2 Ground conditions

The site is underlain by a veneer of topsoil and localised made ground, with residual soils below varying between medium to high strength clay and gravel. Bedrock was encountered across the site, typically shallower and Sandstone in the north, with mudstone in the south. Depths to bedrock range between 0.6m and 4.0m.

Groundwater is present at depths of c. 1m in the north, becoming deeper (up to c. 5m) further south in the topographically higher areas. The shallow depth to groundwater may necessitate significant pumping to allow suitable working conditions for excavations in the north.

19.3 Contamination and remediation

The majority of the site is underlain by Topsoil overlying natural ground where the Topsoil is classified as suitable for re-use in gardens/landscaped areas.

In the north-east (area of the former Jubilee Property and garages), the Topsoil/Made Ground Topsoil should be screened to remove undesirable materials. One fragment of ACM was found in this area, further trial pitting is recommended once this area is accessible to further assess asbestos risks. Topsoil/Made Ground Topsoil from this area should be stripped and stockpiled separately to the rest of the site and any ACMs hand-picked. Following this, and further sampling, this material should be suitable for re-use in areas of POS.

Topsoil from within the car park area should be stripped and stockpiled separately and is not considered suitable for re-use without further sampling.

A watching brief should be in place when excavating within the vicinity of REL's TP07 where a "solvent odour" was noted.

Hardcore within the car park should be stripped and placed beneath hardstanding due to the organic contaminants detected.

19.4 Hazardous gas

The site is considered to be at risk of hazardous gas due to the preence of two landfills and a disused backfilled quarry within 250m of the site.

Monitoring was completed over 6 visits between the 19th May 2024 and 19th August 2024.

The site has been classified as Characteristic Situation 2 and as a building type A. Therefore, a gas protection score of at least 3.5 should be achieved during construction; this will likely be achieved by a combination of a passive sub floor dispersion layer and installation of a gas membrane.

Such measures will mitigate risks associated with radon for plots in the north, which lie in an area where basic radon protection measures are required.

19.5 Foundations & earthworks

The sloping nature of the site will necessitate earthworks to provide level development platforms, together with retaining walls and possible underbuild & tanking.

Compaction testing carried out on samples of Cohesive Residual Soil suggests this material may be suitable for use as Engineered Fill, subject to some drying on site and confirmatory lab tests and field trials. Provision of an Earthworks Specification is recommended which should include details on suitable materials for use as fill, together with compaction requirements and any verification requirements.

Traditional strip/trench fill foundations are considered the most suitable foundation option for the proposed dwellings. Foundations will need to extend through any made ground and fill placed as part of the anticipated earthworks into natural strata below.

Tree influence will need to be factored into foundation depths where clay is present within the zone of influence of trees. This is likely to affect a significant number of plots; a foundation schedule should be produced at an early stage to gauge abnormal foundation costs.

19.6 Drainage

Given the results of in-situ testing and the presence of shallow groundwater, use of soakaways is not considered feasible; alternative SUDs options should be considered.

19.7 Highways

Materials used could be sourced on site, such as crushed demolition rubble or existing limestone sub-base. Where used, such materials should be subjected to confirmatory lab testing (compaction and particle size distribution tests) along with in-situ testing (plate load tests).

Natural soils should provide CBR values of at least 3%; this should be verified via plate bearing tests along the proposed highway routes at formation level.

Where made ground or localised soft material is encountered, this should be removed to a maximum of 2m, and replaced with suitable aggregate, placed to an engineered specification.

19.8 Well

A well is noted on historical plans associated with the former Jubilee Property in the north-east. During earthworks, efforts should be made to locate the well. Where located, the well should be decommissioned in line with the Environment Agency Guidance.

19.9 Flooding

The site lies in Flood Zone 1; a Flood Risk Assessment is required.

19.10 Further works

The following additional works are recommended in light of this investigation:

- Additional trial pitting in the north-east once this area is cleared of vegetation and garages to assess the extent of asbestos contamination.
- Production of a Remediation Strategy.
- Production of a Foundation Schedule.
- Production of an Earthworks Specification.

Apex Consulting Engineers

Unit 3 Acres Hill Business Park
Acres Hill Lane
Sheffield
S9 4LR

0114 241 9360

Appendix A – General Notes

Guidance Note A – Preliminary Ground Appraisal (Desk Study)

1. INTRODUCTION

Information sources typically utilised as part of Apex's Preliminary Ground Appraisal (Desk Study) are presented below, along with details on the various issues assessed as part of this phase of investigation.

2. SOURCES OF INFORMATION

The following resources are used to form a conceptual site model and thereby enable identification of risks (both geotechnical and contamination) which may require further assessment as part of an intrusive phase of investigation. Where additional resources have been used, these are referred to in the report's main text.

British Geological Survey

Resources used include:

- BGS' online 'Geology of Britain' viewer
- Online borehole scans
- Mapping sheets (1:50,000 and 1:10,000 scale)
- Geological memoirs to accompany mapping sheets

The above are used to inform the conceptual site model with regards to anticipated ground conditions (including the presence of made ground, drift deposits and bedrock). In addition, BGS resources help inform of likely risks of ground movement associated with mining (e.g., coal, ironstone, sandstone, quarrying etc), and subsidence (e.g., soluble rocks such as limestone and gypsum).

Coal Authority

Resources include:

- Interactive map viewer – this provides an initial 'screen' as to likely mining risks as it determines whether or not the site lies in a Development High Risk Area, a Development Low Risk Area, or lies beyond the CA's defined coalfields.
- Consultant's Mining Report – this includes information on any likely shallow coal mining; recorded mining beneath the site; presence of mine entries, coal outcrops, opencasts which could affect surface stability, and future planned mining. Where issues are highlighted, these are discussed in further detail in the main report's text.
- Additional resources such as abandonment plans, mine entry datasheets and subsidence reports etc might be reviewed on a site-by-site basis.

The above, combined with other resources outlined in this guide, is used to inform risks associated with mining including the likelihood of shallow mine workings

which could cause subsidence, presence of deep made ground (e.g. opencasts) and risks associated with hazardous gas generation.

Landmark Information Group – "Envirocheck" report

This includes information from a wide range of sources, but most notably the Environment Agency, Local Authorities and BGS. Key information reviewed by Apex as part of the Desk Study phase includes:

- Historical OS plans. These typically date back to the mid-19th Century and are reviewed in order to assess past land use which in turn informs the conceptual site model in terms of geotechnical risk and contamination risk. These may also be used to inform risks of unexploded ordnance (UXO) for example, if the site is within an urban setting and/or has past military use.
- Location of landfills, most notably those within 250m of the site to inform risks of gas migration and possible leaching of contaminants.
- Aquifer designations of the underlying geological strata (split between superficial (drift) deposits and bedrock) and categorised as one of the following:
    - Principal Aquifers – typically with high water storage capacity (karstic or intergranular). Major water supply and/or river base flow support.
    - Secondary Aquifers:
        - Secondary A – support water supply at a regional scale
        - Secondary B – limited storage of water supply
        - Secondary Undifferentiated – variable nature of rock type means it cannot be identified solely as A or B.
    - Unproductive strata: little/no permeability; insignificant in terms of water supply/supporting base flow to rivers.
- Presence of Groundwater Source Protection Zones: maps within the Envirocheck report show areas designated as SPZ 1, 2 or 3 based on proximity to groundwater source (e.g. abstraction boreholes, wells, springs etc). Where no shading is shown on the Envirocheck maps, no SPZ is present. Where present, SPZs are discussed in the main text in more detail.
- Nearby surface waters (hydrology) including:
    - Distance and direction to the nearest surface waters
    - Quality of the surface water
- Flood risks including:
    - Flood Zones 1, 2 and 3 associated with flooding from Rivers and Sea, including any areas benefitting from flood defences (see definitions below).
        - Flood Zone 1 – land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding
        - Flood Zone 2 – land assessed as having between a 1 in 100 and 1 in 1,000 annual probability of river flooding (1% – 0.1%), or between a 1 in 200 and 1 in 1,000 annual probability of sea flooding (0.5% – 0.1%) in any year.
        - Flood Zone 3 – land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%), or a 1 in 200 or

greater annual probability of flooding from the sea (>0.5%) in any year.
    - Potential for Groundwater Flooding, split into areas where there is:
        - No shading (no/minimal risk)
        - Limited potential for groundwater flooding to occur
        - Potential for groundwater flooding of property situated below ground level
        - Potential for groundwater flooding to occur at surface
- For groundwater and surface water:
    - Licensed abstractions which could affect/be affected by the site
    - Records of pollution incidents
    - Licensed discharge consents

In addition to the above, the Envirocheck report is screened to look for any additional information pertinent to ground contamination. The 'checklist' of key information used in our assessment is given here: https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm/lcrm-stage-1-risk-assessment1

Zetica's online Risk Maps

This online resource, combined with review of historical plans, is used to help determine whether or not is likely to be at risk from UXO. Where risks are identified, Apex recommend further assessment by a UXO specialist.

Site walkover

As part of a desk study, Apex typically carry out a site walkover. Features which are looked out for include:

- Evidence of contamination/sources of contamination (eg, fuel tanks, machinery storage, staining, spillage etc)
- Mining risks highlighted in the desk study (eg,location of shafts, quarry highwalls)
- Nature of buildings on site (including: evidence of damage, presence of potential ACM, current use)
- Topography (eg, presence of retaining walls, steep slopes, evidence of movement)
- Surface waters (eg, field drains, ditches, springs, evidence of contamination within them)
- Current land use

In addition to the above, on operational sites, Apex will conduct interviews with site users/staff where possible to gain more insight into the former and current processes taking place (including details of waste generated, location of key features such as fuel tanks, materials storage etc).

[1] Land Contamination Risk Management (8th October 2020)

3. CONCEPTUAL SITE MODEL

The above information sources enable formulation of the Conceptual Site Model (CSM). This forms the basis of the contamination risk assessment by using the Source-Pathway-Receptor principal: identification of contamination sources, identification of receptors (most notably human health, waters and vegetation) and pathways between the two. This model is used in the context of each site's proposed development in to assess whether a significant risk exists, and therefore if further assessment (intrusive investigation) is warranted.

As well as contamination risks, the CSM is also used to identify any geotechnical risks which might affect the proposed development (for example, presence of obstructions, deep made ground, mining issues).

Where further assessment is required, the CSM is used as a basis to design the ground investigation.

Guidance Note B – Fieldwork

1. UK GUIDANCE

Ground investigation fieldwork undertaken by Apex Consult (SY) Ltd is done so in general accordance with UK guidance. Most notably, in planning and carrying out ground investigation fieldwork, the following documents are referred to: BS5930:2015[1]; BS10175[2]; LCRM[3], BS8004[4], BS1377-9[5].

2. GROUND INVESTIGATION DESIGN

Locations

Locations of exploratory holes are selected after formulation of the site's conceptual site model, which looks at geotechnical and contamination risks. Positions of exploratory holes are selected in order to resolve uncertainties highlighted by the conceptual model (for example, checking for obstructions associated with a former builder or to enable sampling close to a former fuel tank, etc). In addition, hole locations are selected to gain a general view of the strata across the site to enable refinement of the conceptual site model.

On site, positions may be altered due to access constraints or risks posed by service runs. Further exploratory holes might be advanced to enable delineation of features such as grossly contaminated soils, poor ground, etc.

Techniques

The following techniques are typically utilised depending on ground conditions and site constraints:

- Trial pitting – used wherever possible as this allows better quality representative sampling and a more thorough inspection of the ground (stability, ease of excavations, etc) than techniques such as windowless sampling. Limited to around 3-4m depth or presence of bedrock. Hand shear vane tests are carried out in cohesive soils throughout trial pitting to enable assessment of undrained shear strength.
- Windowless sampling – typically used where access constraints prevent trial pitting and/or to enable installation of monitoring wells to up to c. 5m depth. Limited to around 3-4m depth or presence of bedrock. Where appropriate, standard penetration tests (SPTs) might be carried out in granular soils. Whilst hand-vane tests can be carried out, they are considered less reliable than those within trial pits due to the disturbance caused during drilling.
- Cable percussion boreholes – Used where geotechnical parameters and detailed inspection of ground conditions are required from depths greater than can be reached with trial pitting/window sampling techniques. SPTs

[1] Code of practice for ground investigations (2015+A1:2020)
[2] Investigation of potentially contaminated sites – code of practice (2011 + A2:2017)
[3] Land Contamination Risk Management (8th October 2020)
[4] Code of practice for foundations (2015+A1:2020)
[5] Methods of test for soils for civil engineering purposes. In-situ tests (1990)

are typically undertaken at c. 1m intervals to allow assessment of the density of granular soils and/or estimation of undrained shear strength of cohesive soils. Within cohesive soils, SPTs are usually alternated with collection of UT100 samples (undisturbed samples). Depending on ground conditions, use of dynamic sampling or rotary drilling with a casing system (for example, Odex/Duplex drilling) gives similar results, but might be considered more appropriate. This is discussed with the drilling contractor prior to fieldwork.

- Rotary open-hole drilling – typically used in coal mining investigations to look at the depth and thickness of underlying coal seams (and/or evidence of mineworking's). Generally, at least 3 holes are taken to c. 30m depth below rockhead in all coal mining investigations, with additional boreholes drilled to the depths of the targeted coal seams.
- Rotary core drilling – this is utilised where detailed information (fracture spacing, RQD TCR values) is needed from bedrock, usually for pile design. Rotary coring also enables recovery of rock samples for strength tests such as point load index and unconfined compressive strength (UCS).

During drilling, installations to monitor for hazardous gas and/or groundwater might be installed as per the Engineer's instructions.

Other ground investigation techniques (such as hand-excavated inspection pits, CPTs, etc) might be utilised on certain sites depending on ground conditions and redevelopment proposals.

3. SAMPLING

Usually, at least one sample is taken from each stratum encountered in each exploratory hole, with particular attention paid to made ground deposits within the uppermost 1m. Unless stated otherwise, samples taken are representative of the stratum encountered at a given depth. In trial pitting, this involves taking samples from around the side walls of the entire trial pit (where possible) and not from a specific point. Where a 'spot' sample is required (for example, a sample of lens of ash & clinker or oily fill), this is clearly denoted on the sample by an "*****" and in the Engineer's notebook.

Samples are collected in containers appropriate for their proposed analysis, as dictated by laboratory requirements. Typically, this means that the following containers are needed for soils:

- For chemical analysis: 50ml glass jar, 500ml glass jar, and 500ml plastic tub
- For geotechnical analysis on disturbed samples: 500ml plastic tub, and bulk bags

Once collected, all samples scheduled for chemical analysis are stored in cool boxes at c. 4°C. Samples scheduled for asbestos ID are 'double bagged' (i.e., plastic tubs stored within a plastic bulk bag).

If groundwater sampling is required, typically 2 x 1 litre glass bottled, and 2 x 50ml glass vials will be collected from each sample point. However, specific instructions regarding containers will be discussed with the laboratory.

4. ENGINEERING SUPERVISION & LOGGING

During fieldwork, full time engineering supervision is required. The Engineer logs the ground conditions in general accordance with BS 5930 including observations on groundwater, stability, ease of excavation, and any visual/olfactory evidence of organic contamination.

Guidance Note C – Contamination Testing & Assessment

1. CONCEPTUAL SITE MODEL

The conceptual site model, combined with fieldwork findings, is used to determine the locations and depths of samples scheduled for chemical analysis. Samples taken from points of interest (i.e., potential sources of contamination, as determined during the desk study phase and/or by visual and olfactory evidence on site) are scheduled for analysis as well as samples from across the site to enable characterisation of ground types encountered.

The analysis suite is determined by a review of the history of both the site and surrounding area as well as current features. Reference is also made to relevant DETR Industry Profiles.

Typically, all soil samples are scheduled for the following analysis as a broad screen, with additional site-specific contaminants tested for as and when required based on the conceptual model:

- pH & metals
- Asbestos ID (with quantification if evidence of asbestos is detected)
- Water soluble sulphate
- Total organic carbon
- Speciated polycyclic aromatic hydrocarbons
- Petroleum hydrocarbons (brownfield only, unless a clear source is shown on greenfield sites) with speciation where appropriate

Where significant risks to controlled waters are identified, leachability analysis may also be scheduled as well as analysis of water samples (ground/surface). Additional assessment may be required.

Details of laboratory analysis techniques and limits of detection are included within the laboratory results.

2. ASSESSMENT CRITERIA

To assess whether a plausible pollutant linkage exists between a contaminant source and a site receptor, Apex initially screen results against generic assessment criteria as part of a generic quantitative risk assessment. The criteria used are the LQM/CIEH "Suitable 4 Use Levels" (S4UL)[1], publication number S4UL3828 and Category 4 Screening Values (C4SLs). This approach is in line with LCRM[2]. Screening values used for a variety of end-uses are shown at the end of this guidance note.

Where criteria other than S4ULs or C4SLs have been used, this is stated in the report's main text.

[1] The LQM/CIEH S4Uls for Human Health Risk Assessment (2015)

[2] Land Contamination Risk Management (8th October 2020)

2.1 LQM/CIEH Suitable 4 Use Levels (S4UL)

The S4ULs are *"intended for use in assessing the potential risks posed to human health by contaminants in soil and as transparently-derived and cautious 'trigger values' above which further assessment of the risks or remedial actions may be needed."*

The S4ULs are based on a principal of minimal or tolerable risk in line with SR2[3] and are therefore considered suitable as assessment criteria under the planning regime.

The S4ULs are derived using CLEA software; the S4UL for each contaminant is the concentration of the contaminant in soil at which the predicted average daily exposure equals the Health Criteria Value[1].

The S4ULs assume a sandy loam as per Environment Agency guidance[3]. For organic contaminants, soil organic matter (derived from TOC testing) is also considered in order to apply the correct screening value for each contaminant.

In assessing contamination risks by comparing site-derived values with the S4ULs, it should be noted that:

- Non-exceedance of a relevant S4UL indicates that soil contaminant levels are such as not to compromise human health[1]
- Exceedance of a S4UL does not necessarily mean there is a significant possibility of significant harm, nor that remediation is needed under the planning regime[1]
- Exceedance should however warrant further discussion, assessment, and possibly additional investigation, following this, the need for remediation should then be considered

2.2 Category 4 Screening Values (C4SL)

Category 4 Screening Values were published by Defra in 2014 as part of SP1010[4]. C4SLs are available for six contaminants (arsenic, benzene, benzo[a]pyrene, cadmium, chromium VI, and lead). These values were based on a 'low level of toxicological concern' (LLTC) rather than minimal or tolerable level of risk as advocated by the Environment Agency in SR2[3].

In the absence of S4ULs, namely for lead, C4SLs have been adopted by Apex as initial screening criteria. This approach is generally accepted by regulators.

2.3 TPH assessment

When assessing TPH results, a 3-step approach is adopted by Apex, in accordance with Environment Agency guidance[5]. This involves:

---

[3] Human health toxicological assessment of contaminants in soil (1st January 2009)
[4] Development of Category 4 Screening Values (C4SLs) for Assessment of Land Affected by Contamination
[5] Environment Agency document P5-080/TR3 - The UK approach for evaluating human health risks from petroleum hydrocarbons in soils (June 2003)

Step 1 – assessment of indicator compounds. Results of laboratory testing for the indicator compounds given in Table 4.1 of P5-080/TR3[5] are compared to the appropriate screening values (see above).

Step 2 – assessment of individual fractions. Where indicator compounds are present, results for the individual TPH fractions are assessed against their respective screening values.

Step 3 – assessment of cumulative effects

This is done using the following equation:

$$HI = \sum_{F_i=1}^{16} HQ\ F_i = \frac{Measured\ concentration\ F_i\ (mg\ kg^{-1})}{SGV\ F_i\ (mg\ kg^{-1})}$$

where HI = Hazard Index
HQ = Hazard Quotient
F_i = Fraction $_i$
SGV = Soil Guideline Value

In the event of exceedances of screening value at Stages 1 or 2, no further assessment is needed.

In stead of speciated TPH, banded TPH may be scheduled as an initial 'screen' for potential TPH contamination. This splits the results into 3 bandings: gasoline-range, diesel range, and lubricating range organics (GRO, DRO and LRO). When assessing results of banded TPH analysis, the most stringent S4UL screening value for individual TPH bandings is used from within the GRO, DRO and LRO ranges. This is considered to be a conservative approach, and where exceedances are recorded, additional analysis (speciated TPH) may be scheduled to enable further risk assessment.

2.4 Asbestos

There is no published screening value below which asbestos within soil is deemed as 'safe'. This is because, even at trace amounts (<0.001%) potentially respirable fibres may be present within soils which could cause harm to human health. However, CL:AIRE guidance[6] suggests that release of asbestos fibres from the ground is unlikely to result in airborne concentrations equivalent to those which could be released when working with asbestos-containing building materials (insulation, AIB, coatings etc). This assumes that the asbestos-containing soils are not being subjected to highly energetic processes (e.g. crushing & screening).

When assessing site investigation data, any sample where asbestos fibres are detected requires further assessment to fully understand risks.

Quantification is scheduled on samples where asbestos is identified. This looks at the amount of asbestos with a sample as a percentage of the soil mass, also gives details on the type of asbestos and its nature within the sample (e.g. a fragment of ACM, loose fibres, debris etc).

After quantification, a risk assessment is carried out based on the number of samples yielding a positive ID, the strata where asbestos was identified, the

[6] Interpretation for Managing and Working with Asbestos in Soil and Construction and Demolition Materials – Control of Asbestos Regulations, CL:AIRE (2012).

nature of the asbestos, any proposed earthworks and the final development layout.

3. ADDITIONAL ASSESSMENT

In the event of exceedances during the initial screen, a number of options might be used to further assess the hazard posed by contaminants in soils:

3.1 Statistical assessment

Additional assessment using various statistical techniques where appropriate. It should be borne in mind that statistical methods should only be used where a sufficient number of samples are available from each ground type (typically six as a minimum). In addition, statistics should only be used in conjunction with appropriate averaging areas. These may be certain material types, site sub-areas based on past use, spillage of contaminants etc. Where averaging areas and statistics are used, further detail is given in the report text.

3.2 Detailed quantitative risk assessment (dQRA)

Additional assessment might be undertaken to determine whether a risk actually exists. For example, this may involve re-visiting input parameters in the CLEA model and deriving site-specific screening values or use of bio-accessibility testing.

3.3 Additional investigation

Where areas of contamination are encountered, particularly those thought to be attributed to a ‘hotspot’ (i.e., a spillage or leakage of contamination) additional sampling and analysis might be recommended to delineate areas of soil affected.

3.4 Remediation

Where the above procedures highlight an unacceptable risk, remediation options will be advocated. This might involve removal of the source, or breakage of the pathway(s).

Guidance Note D – Geotechnical Testing & Assessment

The following geotechnical analysis is commonly undertaken by Apex. All testing is done in accordance with the specified methods outlined in 1377:1990.

Any additional testing not listed below and/or deviations from set procedures will be stated in the report's main text.

1. UNDRAINED, UNCONSOLIDATED TRIXIAL TESTING

The above is frequently scheduled on undisturbed samples (ideally UT100s) as a method of assessing undrained shear strength of cohesive soils in the worst-case scenario (i.e. during loading, where excess pore pressure has not dissipated, meaning effective strength is at its lowest).

Where possible, tests are scheduled on a single 100mm diameter specimen as opposed to 3no. 38mm diameter sub-specimens to minimise the risk of sample disturbance.

Samples are typically scheduled for analysis at a confining pressure roughly equal to overburden pressure.

2. OEDOMETER (CONSOLIDATION) TESTS

This testing is undertaken to enable assessment of consolidation settlement in clays for a given load. This is usually done for cohesive soils other than those which are over-consolidated and/or where significant ground surcharge is anticipated.

Samples are scheduled to include 4 loading pressures and one unloading pressure. In accordance with BS1377, the initial pressure is determined by the soil's origin and strength and where possible, the scale of pressures should include at least one which is equal to (or greater than) the likely maximum pressure to be imposed on the soil.

The results are used to give typical coefficient of volume compressibility (m_v) values for ground types across a range of depths. This is used in settlement calculations and might be used by others in pile design for example.

3. ATTERBERG LIMITS

Atterberg Limits testing is carried out on samples of cohesive soils to help determine minimum foundation depths including the impact of any tree influence, requirements for heave precaution etc.

The test involves determination of the Liquid and Plastic Limits of cohesive soils using the rolling thread test cone penetrometer method.

Results received are modified by Apex in line with BRE Special Digest 240[1] and NHBC Chapter 4.2[2] in order to determine a soil's volume change potential (aka. shrinkability). Data is typically grouped into ground types and average shrinkability values are used for each type. However, where a significant number of samples of yield results in a higher shrinkability category to that of the average, the ground type is conservatively assigned the higher shrinkability category.

This may also be used in conjunction with Particle Size Distribution tests (PSDs) to determine whether a particular soil/sample should be classed as potentially shrinkable or not. This is done by looking at the 'fines' content (%< 63µm) form the PSD test along with the modified plasticity indices. Where the soil contains <35% fines and/or has a modified PI value of <10%, it can be regarded as non-shrinkable (in accordance with NHBC Chapter 4.2).

4. Sulphate and pH

Samples are scheduled for pH and water-soluble sulphate analysis in order to determine the Aggressive Chemical Environment for Concrete (ACEC) classification along with the Design Sulphate (DS) class in accordance with the requirements of BRE SD1[3].

Where groundwater samples are available, sulphate results from groundwater may be used in addition to soil results.

On all sites, pH and water-soluble sulphate analysis in scheduled on each ground type. On brownfield sites, testing for nitrate and chloride is also undertaken. These are converted to equivalent sulphate values (NO_3 x 0.77 and Cl x 1.35) and are added to the water-soluble sulphate results for each sample.

Where sulphate readings are >3,000mg/l, magnesium concentrations are also considered.

Where there is a risk of pyrite (iron sulphide) within the ground (as identified by the desk study), total sulphur and total sulphate may also be scheduled in order to determine the "total potential sulphate (TPS)". However, the risks to concrete associated with pyrite need only be considered where ground is 'disturbed'. Examples include colliery spoil or cut slopes. For a typical shallow foundation within in-situ natural soils, pyrite should not present a significant risk.

Results are used to determine the highest water-soluble sulphate (or TPS where risks of pyrite need to be considered) and lowest pH for each soil type. Where >10 samples for each soil type are available, the mean of the highest/lowest 20% of values for water-soluble sulphate/pH are used respectively.

The results from the above are used to determine the ACEC and DS classes for static and mobile groundwater using Tables C1 (for greenfield sites) and C2 (for brownfield sites) of BRE SD1. Where flowing groundwater is identified (eg springs), additional consideration of carbon dioxide may be required.

---

[1] Low-rise buildings on shrinkable soils (1993)
[2] Building Near trees - NHBC Standards (2021)
[3] Concrete in aggressive ground - third edition (2005)

Guidance Note E – Hazardous Gas

1. RADON

Radon is a naturally occurring radioactive gas formed by underlying uranium and radium containing bedrock. Where radon is able to migrate into buildings, it can pose a risk to human health.

An Action Level for radon has been determined by Public Health England (PHE) as an annual average concentration in the home of 200 Bqm^{-3}. A Target Level of 100 Bqm^{-3} was also determined for preventative action in new homes and as a remedial target in existing homes.

To assess radon risk, Apex refer to the PHE website which splits the UK into 1km grid squares. Each square is given a "maximum radon potential", which corresponds to the percentage of homes in that grid square estimated to be above the radon Action Level. The categories are: <1%, 1-3%, 3-5%, 5-10%, 10-30% and >30%.

Radon protection measures are detailed in BRE Report BR211[1] which refers to 'Basic' and 'Full' measures. Building Regulations requires measures in radon affected areas as follows:

- **Basic** – in areas with a maximum radon potential of >3%, but less than 10%
- **Full –** in areas with a maximum radon potential of >10%

It should be noted however that PHE's advice is to include basic measures in all homes where the maximum radon potential is >1%.

The Action and Target levels should also be applied to schools and non-residential structures where occupancy is greater than 2,000 hours per year.

Where this is a significant radon risk, Apex may also use higher-resolution radon risk maps from BGS to determine areas of higher/lower risks within a given 1km grid square.

2. OTHER GASSES

Hazardous gasses pose a potential risk of explosion, asphyxiation or poisoning in new structures.

Conceptual site model

Gas risks are considered by Apex as part of the conceptual site model (see Note A – Preliminary Ground Appraisal). Potential sources may include landfills (most notably those within 250m); backfilled historical features (e.g. ponds, quarries, clay pits, railway cuttings); spillages of volatile contaminants; naturally occurring geological deposits (e.g. coal, peat, limestone); mineworkings; significant depths of made ground.

[1] Radon: guidance on protection measures for new buildings – BRE Report 211 (2015)

The main hazardous gasses generated by degradation of materials (such as in the case of landfills, backfilled features, organic-deposits and made ground) are carbon dioxide and methane, along with depleted oxygen. These pose a risk of asphyxiation and potential explosion where they accumulate within buildings. Mineworkings also pose a significant risk of methane and carbon monoxide generation.

As part of the conceptual site model, migration pathways for hazardous gasses are assessed. These may include natural fissures, cavities, fractures, fault lines and movement along any permeable strata. Man-made features such as service runs, shafts and tunnels may also create preferential migration pathways. Low permeability layers (e.g. clay) and groundwater levels may also influence gas flow.

Investigation

Depending on the level of risk, as determined by the conceptual site model (see above), an intrusive gas investigation may be required.

Where this is the case, gas monitoring wells are placed across the investigation area. Wells are located to target the potential gas source, and their response zones are carefully installed within specific strata to enable robust assessment of gas risk. UK Guidance including BS8576[2] and CIRIA C665[3] is referred to help determine the number of wells and monitoring frequency.

Monitoring typically involves measurement of:

- Peak and steady gas flow
- Peak and steady carbon dioxide and methane concentrations
- Minimum oxygen concentration
- Groundwater level and base of well

Where groundwater levels are above the well response zone, wells are bailed and re-monitored within the same visit. Concentrations of hydrogen sulphide, carbon monoxide and volatiles (using a photo-ionisation detector) may also be monitored on some sites.

At least one monitoring visit (ideally more) should be undertaken during, or immediately after, periods of falling atmospheric pressure, as well as during periods of low pressure (<1000mb).

Interpretation

Results are used to calculate a gas screening value (GSV):

GSV = gas concentration (%) / 100 x flow rate (ltr/hr)

Typically, GSVs are determined using the maximum recorded steady concentration of a given gas in any borehole and the maximum recorded flow rate in any borehole. However, on some sites it may be deemed appropriate to zone the site based on gas risk, and/or to use peak readings. This is discussed on site-specific basis within the final Gas Risk Assessment.

---

[2] Guidance on investigations for ground gas - British Standards (2013)

[3] Assessing the risks posed by hazardous ground gases to buildings - CIRIA (2007)

Guidance on the level of protection required based on GSVs and typical maximum readings throughout monitoring are given in Wilson & Card[4]; CIRIA C665 and BS8576.

Monitoring results, combined with the guidance above are used to determine appropriate gas protection measures for the proposed structures. As part of this assessment, other factors such as the required foundations and floor slabs (as determined by the geotechnical site constraints) are considered to ensure a feasible solution is recommended.

[4] Reliability and Risk in Gas Protection Design – Wilson SA and Card GB (1999)

Appendix B – Drawings

Project

MAIN AVE, KIRKLEES

Title

001 - SITE LOCATION PLAN

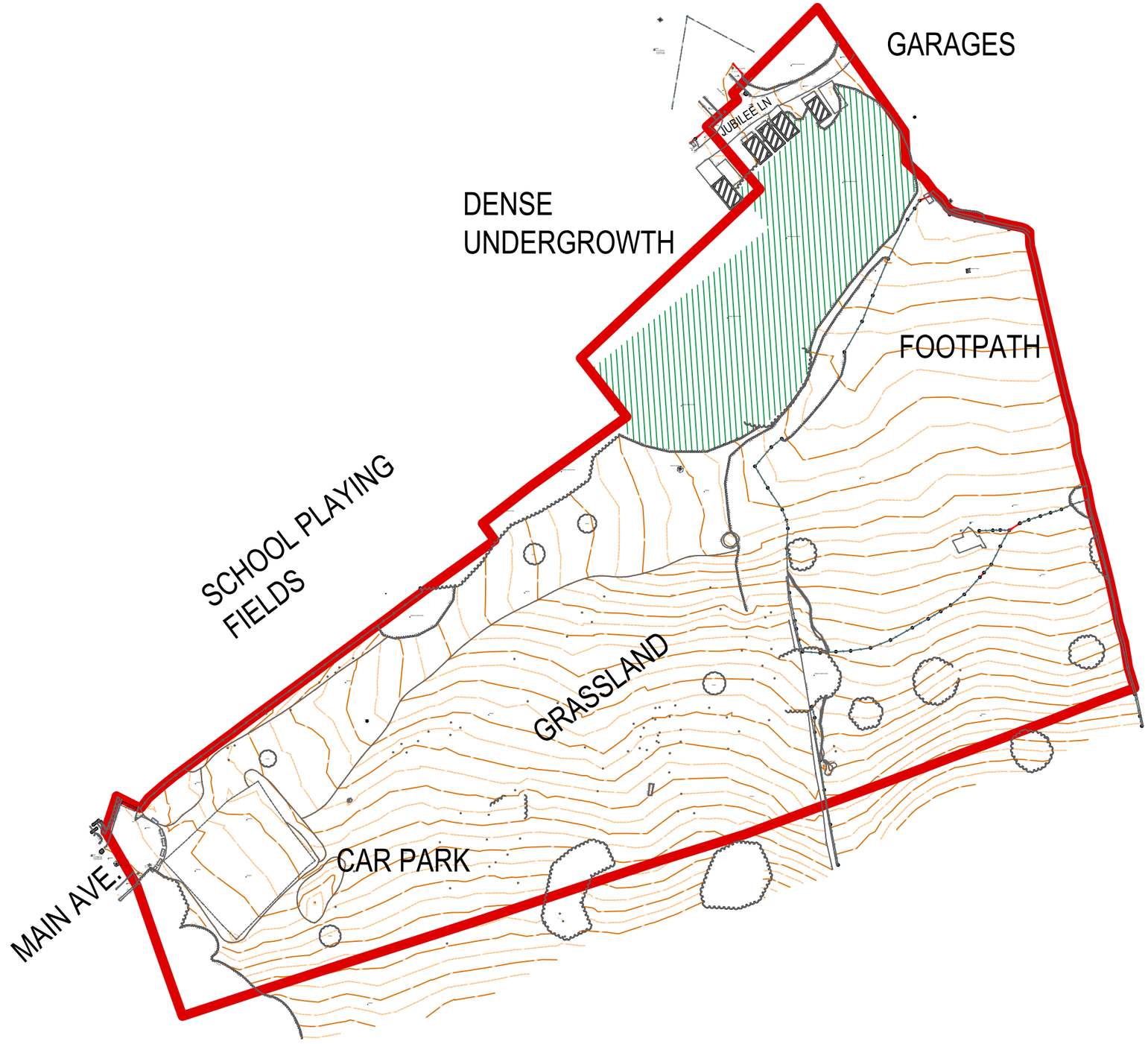
Job No.

1152

A4

APEX CONSULTING ENGINEERS

www.apexconsulting.co.uk | 0114 241 9360

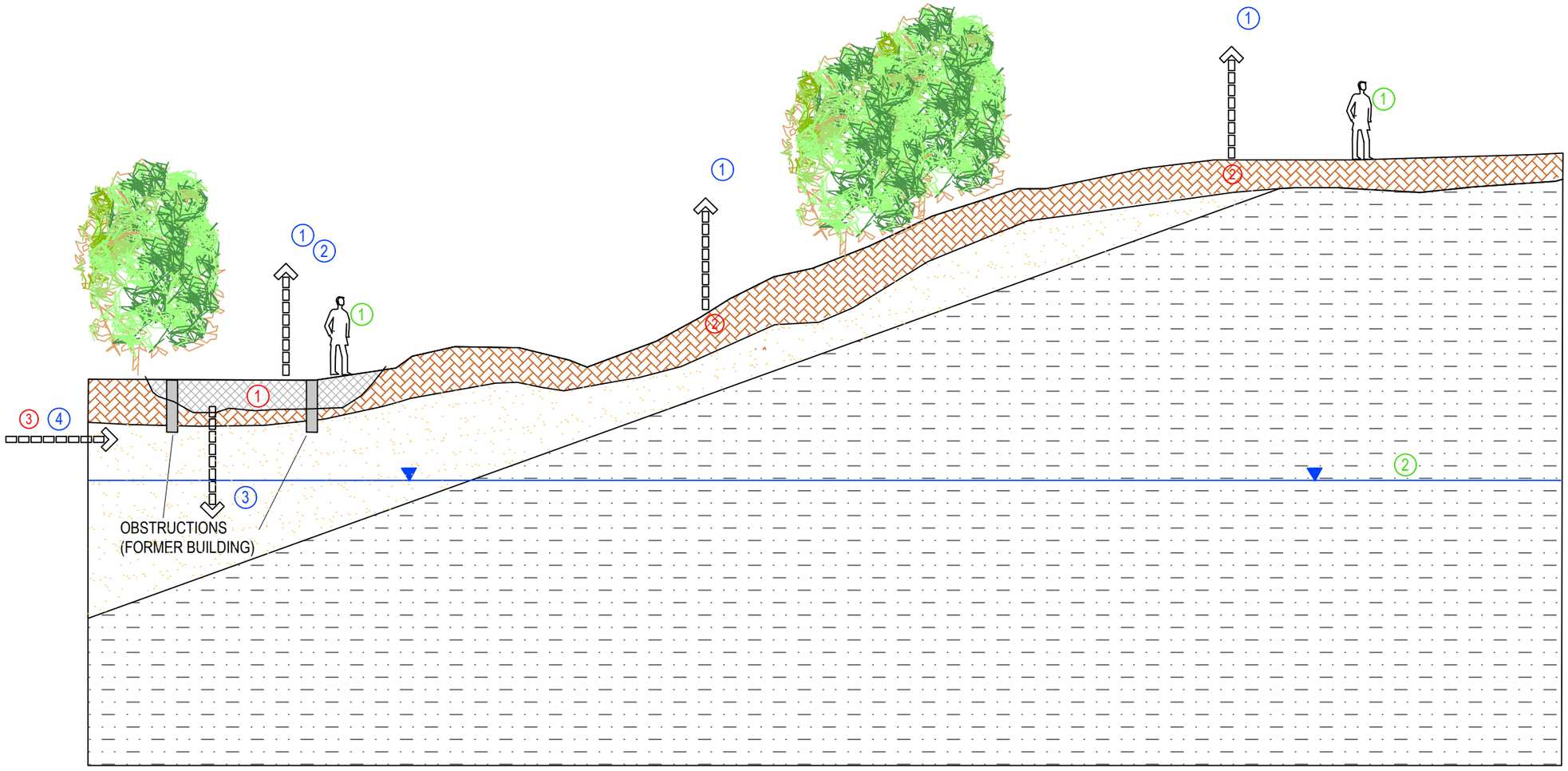


NORTH

APPROX. SITE BOUNDARY

Client: STRATA HOMES	Project: MAIN AVENUE, KIRKLEES	Scale: 1:1,000 @ A3
		Date: JUNE 2024
	Title: 002 - SITE FEATURES	
A3		

APEX CONSULTING ENGINEERS
www.apexconsulting.co.uk | 0114 241 9360



GROUND TYPES	SOURCES	PATHWAYS	RECEPTORS
MADE GROUND	① MADE GROUND	① DERMAL CONTACT, INGESTION, INHALATION OF DUST	① HUMAN HEALTH
TOPSOIL	② TOPSOIL (PAHs)	② VOLATILISATION	② GROUNDWATER
HUDDERSFIELD WHITE ROCK SANDSTONE	③ OFF-SITE BACKFILLED QUARRIES	③ LEACHING	
COAL MEASURES MUDSTONE		④ GAS MIGRATION	

Client
STRATA HOMES

Project
MAIN AVENUE, KIRKLEES

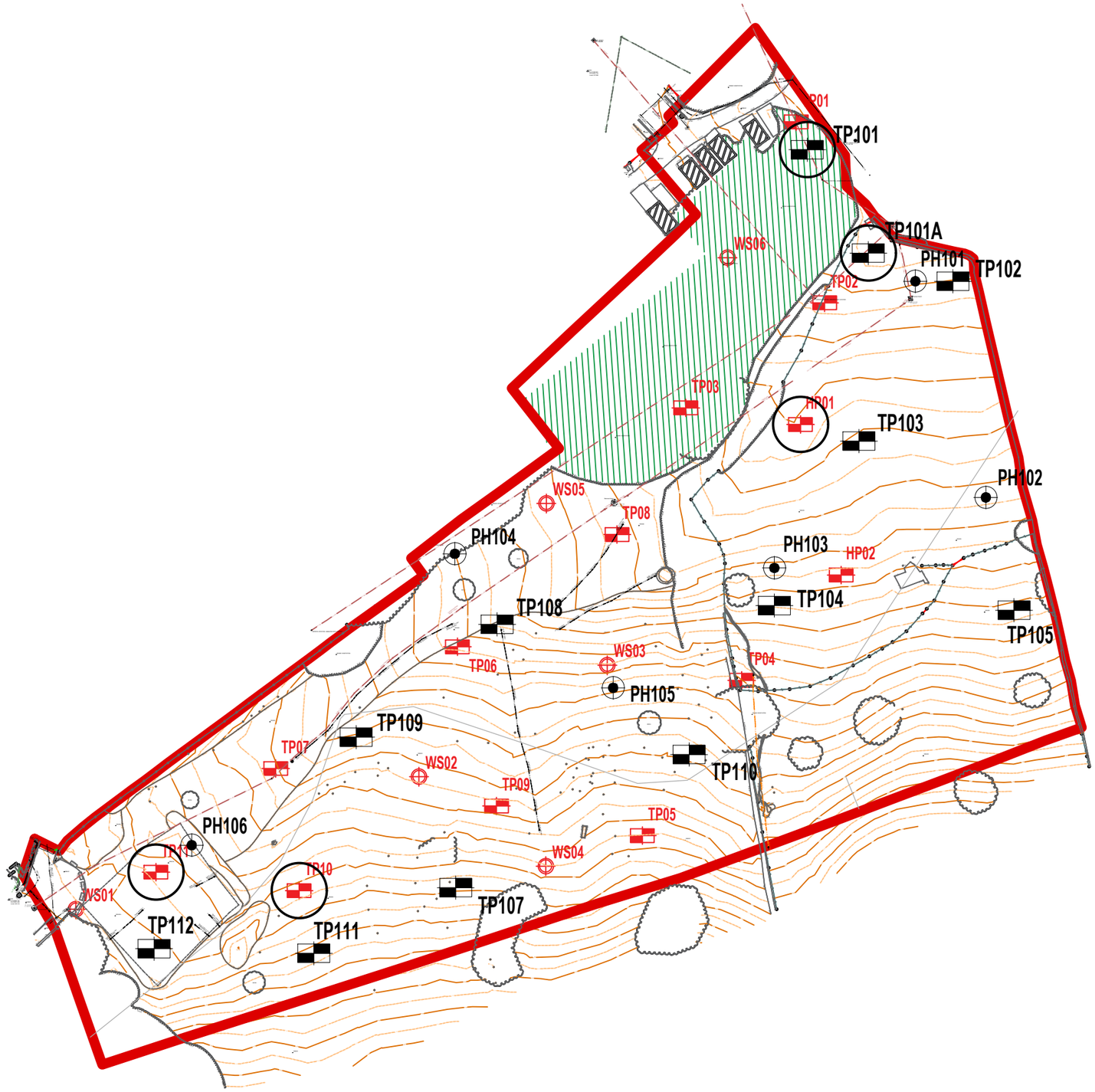
Scale
NTS

Date
JUNE 2024

Title
003 - PRELIMINARY CONCEPTUAL SITE MODEL

A3

APEX CONSULTING ENGINEERS
www.apexconsulting.co.uk | 0114 241 9360



NORTH

ROBERTS ENVIRONMENTAL - 2022

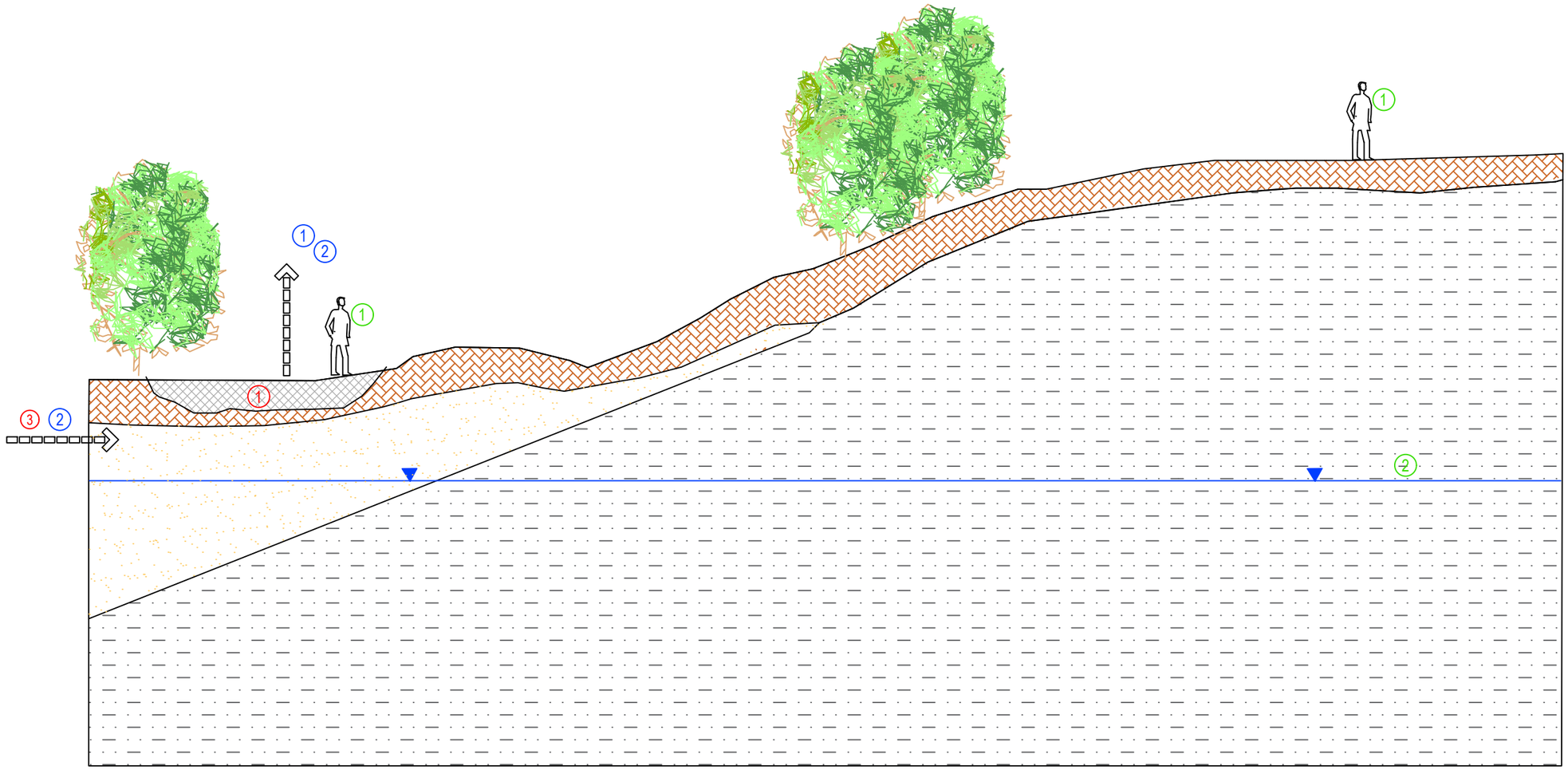
- TRIAL PIT LOCATION
- WINDOW SAMPLE LOCATION

APEX - MAY 2024

- TRIAL PIT LOCATION
- PROBEHOLE LOCATION
- APPROX. SITE BOUNDARY

Client: STRATA HOMES	Project: MAIN AVENUE, KIRKLEES	Scale: 1:1000 @ A3
		Date: MAY 2024
	Title: 004 - EXP HOLE LOCATIONS	
A3		

APEX CONSULTING ENGINEERS
www.apexconsulting.co.uk | 0114 241 9360



GROUND TYPES	SOURCES	PATHWAYS	RECEPTORS
MADE GROUND (JUBILEE PROPERTY & CAR PARK) TOPSOIL HUDDERSFIELD WHITE ROCK SANDSTONE COAL MEASURES MUDSTONE	① MADE GROUND (ASBESTOS - JUBILEE/ GARAGES AND PAHs - CAR PARK) ② OFF-SITE BACKFILLED QUARRIES	① DERMAL CONTACT, INGESTION, INHALATION OF DUST ② GAS MIGRATION	① HUMAN HEALTH ② GROUNDWATER

Client
STRATA HOMES

Project
MAIN AVENUE, KIRKLEES

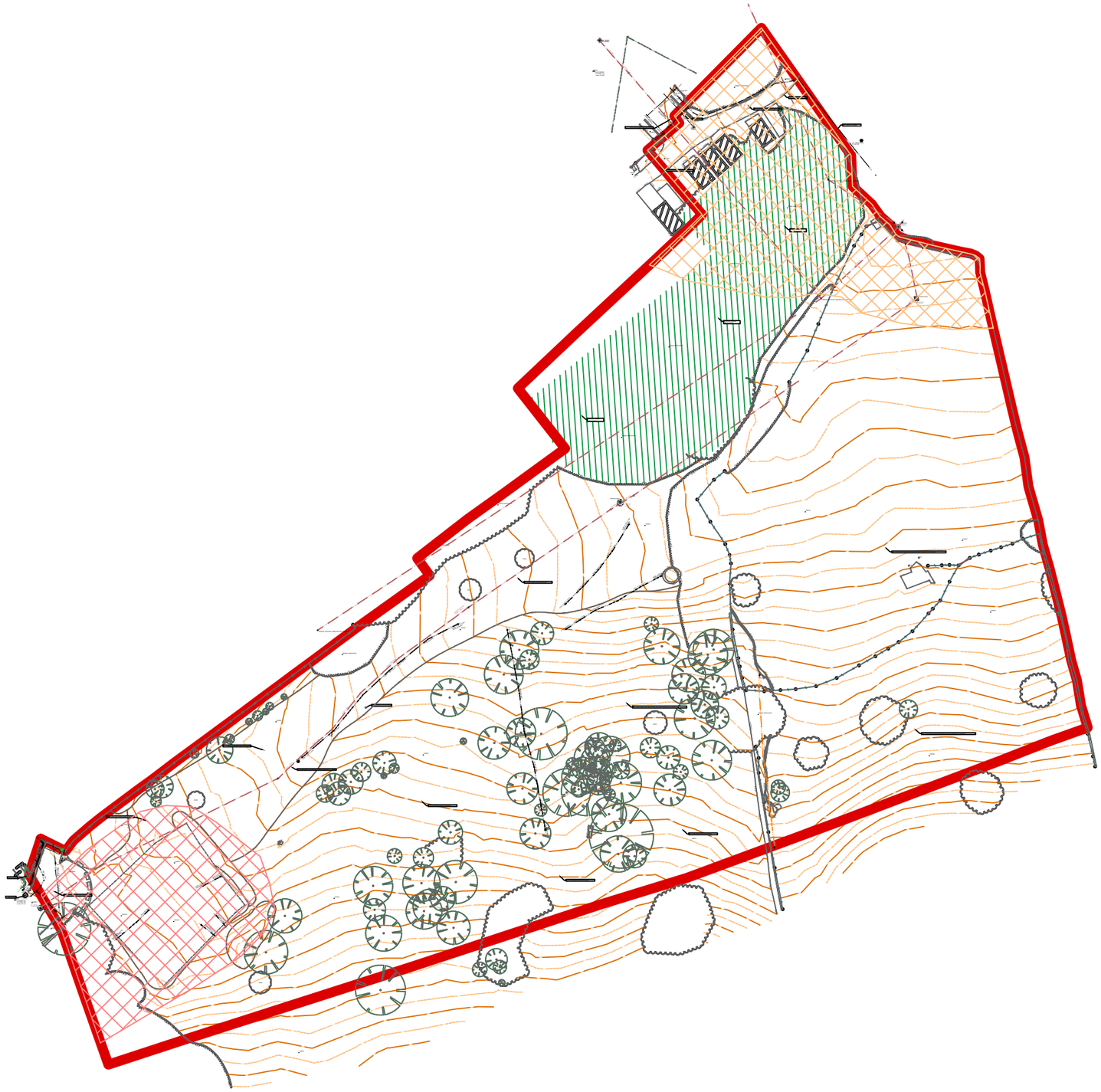
Scale
NTS

Date
JUNE 2024

Title
005 - REVISED CONCEPTUAL SITE MODEL

A3

APEX CONSULTING ENGINEERS
www.apexconsulting.co.uk | 0114 241 9360



NORTH

CAR PARK AREA

JUBILEE PROPERTY & GARAGES AREA

Client	Project	Scale
STRATA HOMES	MAIN AVENUE, KIRKLEES	1:1000 @ A3
		Date
		JUNE 2024
	Title	
	006 - TOPSOIL ZONING PLAN	
A3		

APEX CONSULTING ENGINEERS
www.apexconsulting.co.uk | 0114 241 9360

Appendix C – Search Extracts

GeoReports

British Geological Survey

Matthew Thompson
Apex Consulting Engineers
Unit 3
Acres Hill Business Park
Sheffield
S9 4LR

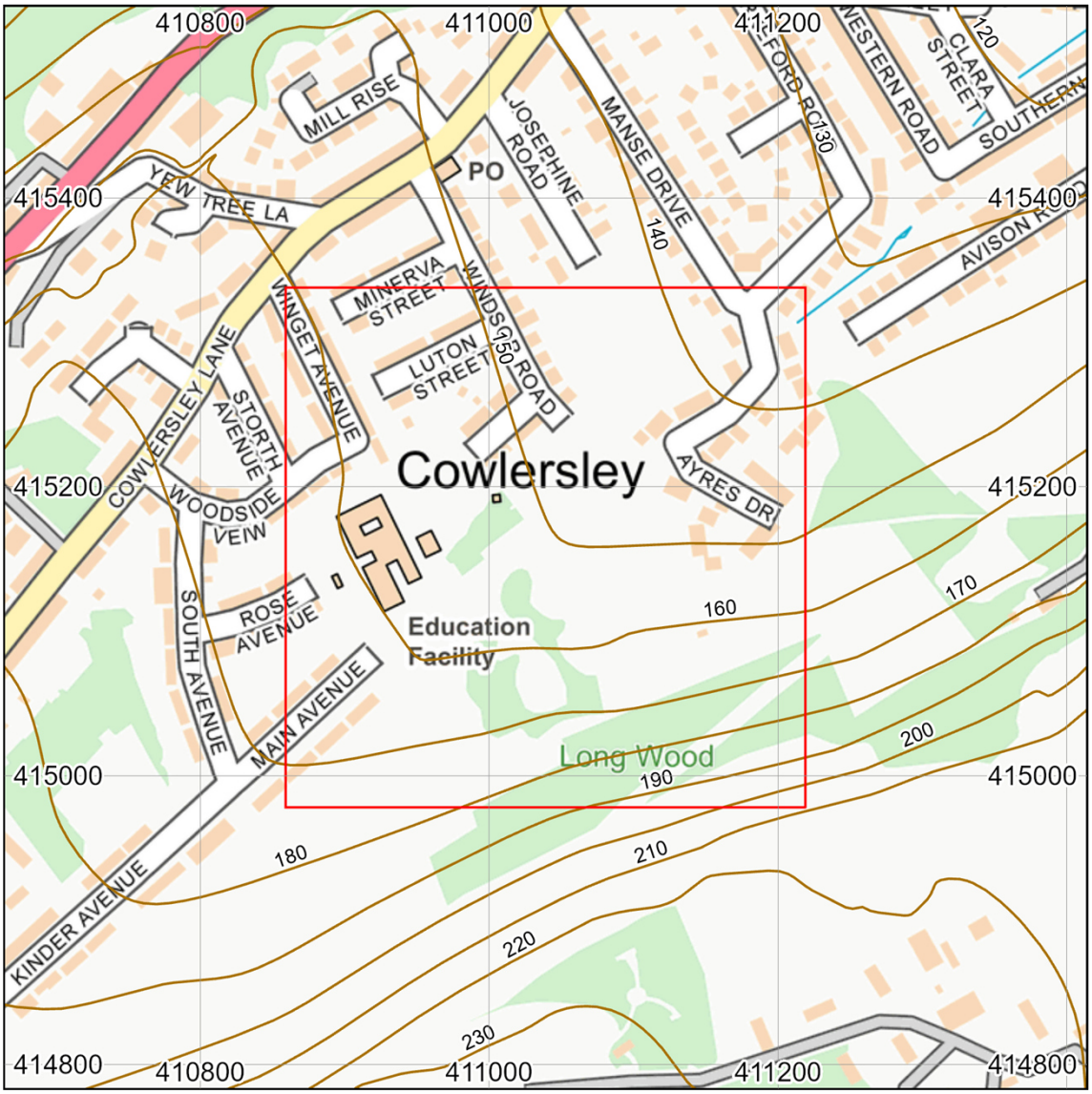
Radon Report

Advisory report on the requirement for radon protective measures in new buildings, conversions and extensions to existing buildings. The report also indicates whether a site is located within a radon Affected Area

Report Id: ***BGS_339640/55998***

Client reference: Farm Road and Main Ave

Search location



Contains OS data © Crown Copyright and database right 2024. OS OpenMap Local: Scale: 1:5 000 (1cm = 50 m)
Search location indicated in red

This report describes a site located at National Grid Reference 411039, 415158. Note that for sites of irregular shape, this point may lie outside the site boundary. Where the client has submitted a site plan the assessment will be based on the area given.

Radon Report: UK

When extensions are made to existing buildings in high radon areas, or new buildings are constructed in these areas, the Building Regulations for England, Wales, Scotland and Northern Ireland require that protective measures are taken against radon entering the building.

This report provides information on whether radon protective measures are required. Depending on the probability of buildings having high radon levels, the Regulations may require either:

1. No protective measures
2. Basic protective measures
3. Full protective measures

This is an advisory report on the requirement for radon protective measures in new buildings, conversions and extensions. The report also indicates whether a site is located within a radon Affected Area

Requirement for radon protective measures

The determination below follows advice in *BR211 Radon: Guidance on protective measures for new buildings (2023 edition), which also provides guidance on what to do if the* result *indicates that protective measures are required.*

Is the property in an area where radon protective measures are required for new buildings or extensions to existing ones as described in publication BR211 (2023 edition) Radon: Guidance on protective measures for new buildings?

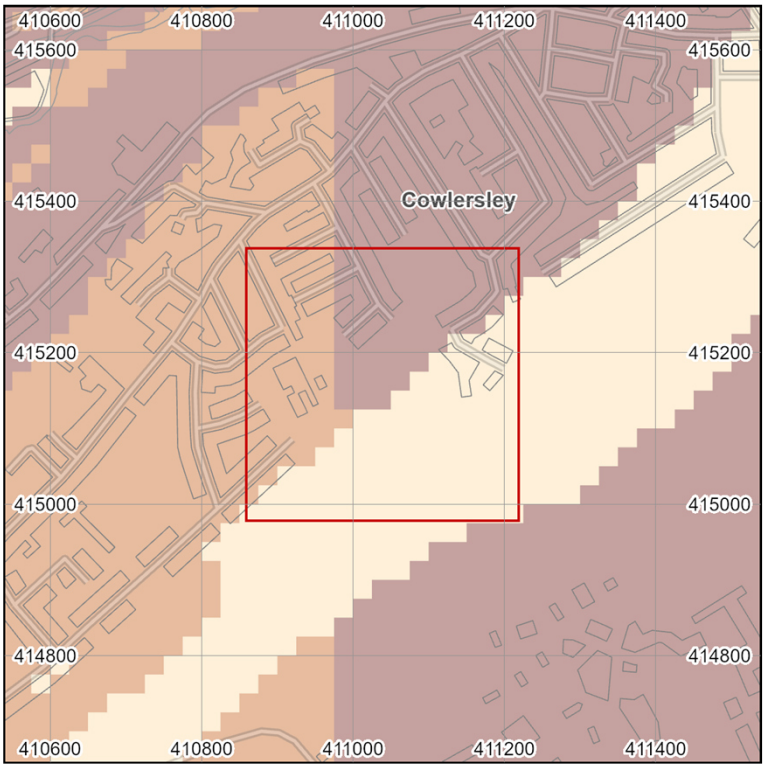
BASIC RADON PROTECTIVE MEASURES ARE REQUIRED FOR THE REPORT AREA.

More details of the protective measures required are available in *BR211 Radon: Guidance on protective measures for new buildings (2023 Edition)*.

Whether or not the radon level in a building is above or below the radon Action Level can only be established by having the building tested. The UKHSA provides a radon testing service which can be accessed at www.ukradon.org or by telephone (01235 822622).

If you require further information or guidance, you should contact your local authority building control officer or approved inspector.

Radon Affected Area



	% Homes estimated to be at or above the action level
	0-1%
	1-3%
	3-5%
	5-10%
	10-30%
	30-100%

Contains OS data © Crown Copyright and database right 2024
Scale: 1:10 000 (1cm = 100 m)
Search area indicated in red

Is the property in a radon Affected Area as defined by the UK Health Security Agency (UKHSA) and if so what percentage of homes are estimated to be at or above the Action Level? YES

Additional Information

THE PROPERTY IS IN A RADON AFFECTED AREA WHERE 3 TO 5% OF HOMES ARE ESTIMATED TO BE AT OR ABOVE THE ACTION LEVEL.

The UKHSA recommends a radon 'Action Level' of 200 Becquerels per cubic metre of air (Bq m^{-3}) for the annual average of the radon gas concentration in a home. Where 1% or more of homes are estimated to be at or above the Action Level the area should be regarded as a radon Affected Area.

This report informs you whether the property is in a radon Affected Area and the percentage of homes that are estimated to be at or above the radon Action Level at this location. Being in an Affected Area does not necessarily mean there is a high radon level within the property; the only way to determine the radon level is to carry out a radon measurement.

The UKHSA advises that radon gas should be measured in all properties within radon Affected Areas and that homes with radon levels at or above the Action Level (200 Bq m^{-3}) should be remediated. Householders with levels between the Target Level (100 Bq m^{-3}) and Action Level should seriously consider reducing their radon level, especially if they are at greater risk, such as if they are current or ex smokers. Whether or not a home is in fact above or below the Action Level or Target Level can only be established by having the building tested. The UKHSA provides a validated radon testing service which can be accessed at www.ukradon.org.

The information in this report provides an answer to one of the standard legal enquiries on house purchase in England and Wales, known as Law Society CON29 Enquiries of the Local Authority (2016); 3.14 Radon Gas: Do records indicate that the property is in a “Radon Affected Area” as identified by the UKHSA. The data can also be used to advise house buyers and sellers in Scotland and Northern Ireland.

If you are buying a new build property in a Radon Affected Area, you should ask the builder whether radon protective measures were incorporated in the construction of the property.

If you are buying a currently occupied property in a radon Affected Area, you should ask the present owner whether radon levels have been measured in the property. If they have, ask whether the results were at or above the radon Action Level and if so, whether remedial measures were installed, radon levels were re-tested, and if the results of re-testing confirmed the effectiveness of the measures.

Further information on radon is available from the UKHSA at www.ukradon.org.

What is radon?

Radon is a naturally occurring radioactive gas, which is produced by the radioactive decay of radium which, in turn, is derived from the radioactive decay of uranium. Uranium is found in small quantities in all soils and rocks, although the amount varies from place to place. Radon released from rocks and soils is quickly diluted in the atmosphere. Concentrations in the open air are normally very low and do not present a hazard. Radon that enters enclosed spaces such as some buildings (particularly basements), caves, mines, and tunnels may reach high concentrations in some circumstances. The construction method and degree of ventilation will influence radon levels in individual buildings. A person's exposure to radon will also vary according to how particular buildings and spaces are used.

Inhalation of the radioactive decay products of radon gas increases the chance of developing lung cancer. If individuals are exposed to high concentrations for significant periods of time, there may be cause for concern. In order to limit the risk to individuals, the Government has adopted an Action Level for radon in homes of 200 becquerels per cubic metre (Bq m^{-3}). The Government advises householders that, where the radon level is at or above the Action Level, measures should be taken to reduce the concentration.

Radon in workplaces

The Ionising Radiation Regulations 2017 require employers to take action when radon is present above a defined level in the workplace. Advice may be obtained from your local Health and Safety Executive Area Office or the Environmental Health Department of your local authority. The BRE publishes a guide (BR293)**: Radon in the workplace.** BRE publications may be obtained from the BRE Bookshop, Tel: 01923 664262, email: bookshop@bre.co.uk website: www.brebookshop.com

Contact Details

Keyworth Office
British Geological Survey
Environmental Science Centre
Nicker Hill
Keyworth
Nottingham
NG12 5GG
Tel: 0115 9363100
Email: enquiries@bgs.ac.uk

Wallingford Office
British Geological Survey
Maclean Building
Wallingford
Oxford
OX10 8BB
Email: enquiries@bgs.ac.uk

Edinburgh Office
British Geological Survey
Lyell Centre
Research Avenue South
Edinburgh
EH14 4AP
Tel: 0131 6671000
Email: enquiry@bgs.ac.uk

Terms and Conditions

General Terms & Conditions

This Report is supplied in accordance with the GeoReports Terms & Conditions available on the BGS website at https://shop.bgs.ac.uk/georeports and also available from the BGS Enquiry Service at the above address.

Important notes about this Report

- The data, information and related records supplied in this Report by BGS can only be indicative and should not be taken as a substitute for specialist interpretations, professional advice and/or detailed site investigations. You must seek professional advice before making technical interpretations on the basis of the materials provided.
- Geological observations and interpretations are made according to the prevailing understanding of the subject at the time. The quality of such observations and interpretations may be affected by the availability of new data, by subsequent advances in knowledge, improved methods of interpretation, and better access to sampling locations.
- Raw data may have been transcribed from analogue to digital format, or may have been acquired by means of automated measuring techniques. Although such processes are subjected to quality control to ensure reliability where possible, some raw data may have been processed without human intervention and may in consequence contain undetected errors.
- Detail, which is clearly defined and accurately depicted on large-scale maps, may be lost when small-scale maps are derived from them.
- Although samples and records are maintained with all reasonable care, there may be some deterioration in the long term.
- The most appropriate techniques for copying original records are used, but there may be some loss of detail and dimensional distortion when such records are copied.
- Data may be compiled from the disparate sources of information at BGS's disposal, including material donated to BGS by third parties, and may not originally have been subject to any verification or other quality control process.
- Data, information and related records, which have been donated to BGS, have been produced for a specific purpose, and that may affect the type and completeness of the data recorded and any interpretation. The nature and purpose of data collection, and the age of the resultant material may render it unsuitable for certain applications/uses. You must verify the suitability of the material for your intended usage.
- If a report or other output is produced for you on the basis of data you have provided to BGS, or your own data input into a BGS system, please do not rely on it as a source of information about other areas or geological features, as the report may omit important details.
- The topography shown on any map extracts is based on the latest OS mapping and is not necessarily the same as that used in the original compilation of the BGS geological map, and to which the geological linework available at that time was fitted.
- Note that for some sites, the latest available records may be historical in nature, and while every effort is made to place the analysis in a modern geological context, it is possible in some cases that the detailed geology at a site may differ from that described.

Report issued by
BGS Enquiry Service

Envirocheck® Report:

Datasheet

Order Details:

Order Number:
293555057_1_1

Customer Reference:
220322

National Grid Reference:
411030, 415140

Slice:
A

Site Area (Ha):
2.28

Search Buffer (m):
1000

Site Details:

Main Avenue
HUDDERSFIELD
HD4 5US

Client Details:

Mr J Roberts
Roberts Environmental Ltd
1 Croft Stairs
Newcastle Upon Tyne
NE1 2HG

Contents

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.
For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.
In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

Copyright Notice

Natural England Copyright Notice

Scottish Natural Heritage Copyright

Ove Arup Copyright Notice

Stantec Copyright Notice

Radon Potential dataset Copyright Notice

Natural Resources Wales Copyright Notice

Report Version v53.0

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 2				39
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls	pg 12			1	6
Integrated Pollution Prevention And Control	pg 13				6
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 14			1	7
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 15		Yes		
Pollution Incidents to Controlled Waters	pg 16			7	44
Prosecutions Relating to Authorised Processes	pg 24				1
Registered Radioactive Substances					
River Quality	pg 24			2	2
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 25			1	3
Water Abstractions	pg 25			1	16 (*55)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 43	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 44	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones	pg 44				1
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 44		5	9	49

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites	pg 52		1		1
Historical Landfill Sites	pg 52		2	2	3
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)	pg 53				3
Licensed Waste Management Facilities (Locations)	pg 54			1	6
Local Authority Landfill Coverage	pg 55	1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 55		1	7	21
Potentially Infilled Land (Water)	pg 57			1	8
Registered Landfill Sites	pg 58		1	1	5
Registered Waste Transfer Sites	pg 61				1
Registered Waste Treatment or Disposal Sites	pg 61			1	
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)	pg 62				1
Explosive Sites	pg 62				1
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 63	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 63	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 66		1	21	47
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 78	Yes	Yes	n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 78	Yes	Yes	n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 78		Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 78	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 79		Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 79	Yes	Yes	n/a	n/a
Radon Potential - Radon Affected Areas	pg 79	Yes	n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 80		2	13	168
Fuel Station Entries	pg 96			1	4
Points of Interest - Commercial Services	pg 96			2	78
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 103			12	89
Points of Interest - Public Infrastructure	pg 111			9	30
Points of Interest - Recreational and Environmental	pg 115		2		8
Gas Pipelines					
Underground Electrical Cables					

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland					
Areas of Adopted Green Belt	pg 116	1			
Areas of Unadopted Green Belt	pg 116	1			
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (N)	0	1	411027 415150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	119	1	411200 415300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	138	1	410800 415000
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	159	1	411027 414900
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	163	1	411150 414950
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (S)	195	1	411000 414850
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	195	1	410800 414900
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (E)	214	1	411350 415100
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (E)	224	1	411350 415050
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (S)	244	1	410950 414800
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	260	1	411300 415400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14SW (E)	263	1	411400 415144
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	265	1	410750 414850
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14SW (E)	314	1	411450 415150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (SW)	336	1	410700 414800
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SE (N)	384	1	411100 415650
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SW (N)	398	1	410850 415600
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SW (N)	400	1	410950 415650
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A7NE (SW)	407	1	410650 414750
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SW (N)	418	1	410900 415650
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SW (NW)	424	1	410700 415500
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (SW)	434	1	410750 414650

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SW (NW)	460	1	410750 415600
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A7NE (SW)	477	1	410600 414700
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12NE (W)	477	1	410450 415200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A18SE (N)	482	1	411027 415750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A17SE (NW)	495	1	410650 415550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A18SW (NW)	495	1	410700 415600
1	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: East Cowick Sewage Pumping Station, Dowsons Lane, East Cowick, Goole, Dn14 9et Authority: Environment Agency, North East Region Catchment Area: Calder Reference: S/Cb/51 Permit Version: 2 Effective Date: 2nd July 1993 Issued Date: 2nd July 1993 Revocation Date: 24th January 1995 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Varies With Outlet **Status: Revised by Notice, at direction of Secretary of State (Section 37(2))** Positional Accuracy: Located by supplier to within 10m	A18SW (N)	557	2	410850 415780
1	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: East Cowick Sewage Pumping Station, Dowsons Lane, East Cowick, Goole, Dn14 9et Authority: Environment Agency, North East Region Catchment Area: Calder Reference: S/Cb/51 Permit Version: 1 Effective Date: 27th May 1963 Issued Date: 27th May 1963 Revocation Date: 1st July 1993 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Varies With Outlet **Status: Transferred from Rivers (Prevention of Pollution) Act 1951-1961** Positional Accuracy: Located by supplier to within 10m	A18SW (N)	557	2	410850 415780
2	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: East Cowick Sewage Pumping Station, Dowsons Lane, East Cowick, Goole, Dn14 9et Authority: Environment Agency, North East Region Catchment Area: Calder Reference: S/Cb/51 Permit Version: 3 Effective Date: 25th January 1995 Issued Date: 25th January 1995 Revocation Date: 5th March 1995 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Varies With Outlet **Status: Revised by Notice, at direction of Secretary of State (Section 37(2))** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	591	2	411510 415660

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: Sewerage Network - Sewers - Water Company Location: Darnall Road Cso, Darnall Road, Sheffield, S9 5ah Authority: Environment Agency, North East Region Catchment Area: Calder Reference: S/Cb/51 Permit Version: 4 Effective Date: 6th March 1995 Issued Date: 25th January 1995 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Varies With Outlet **Status: Revised by Notice, at direction of Secretary of State (Section 37(2))** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	591	2	411510 415660
2	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: East Cowick Sewage Pumping Station, Dowsons Lane, East Cowick, Goole, Dn14 9et Authority: Environment Agency, North East Region Catchment Area: Calder Reference: S/Cb/51 Permit Version: 2 Effective Date: 2nd July 1993 Issued Date: 2nd July 1993 Revocation Date: 24th January 1995 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Varies With Outlet **Status: Revised by Notice, at direction of Secretary of State (Section 37(2))** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	591	2	411510 415660
2	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: East Cowick Sewage Pumping Station, Dowsons Lane, East Cowick, Goole, Dn14 9et Authority: Environment Agency, North East Region Catchment Area: Calder Reference: S/Cb/51 Permit Version: 1 Effective Date: 27th May 1963 Issued Date: 27th May 1963 Revocation Date: 1st July 1993 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Varies With Outlet **Status: Transferred from Rivers (Prevention of Pollution) Act 1951-1961** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	591	2	411510 415660
2	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Pickford Street Cso Pickford Street, Milnsbridge, Huddersfield, West Yorkshire Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra8768 Permit Version: 2 Effective Date: 24th March 2010 Issued Date: 24th March 2010 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Tributary Of The River Colne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	597	2	411500 415680

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Pickford Street Cso Pickford Street, Milnsbridge, Huddersfield, West Yorkshire Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra8768 Permit Version: 1 Effective Date: 1st April 2005 Issued Date: 11th March 2005 Revocation Date: 23rd March 2010 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Tributary Of The River Colne **Status:** **New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	597	2	411500 415680
3	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Ramsden Mill Cso Off Ramsden Mill Lane, Golcar, Huddersfield, West Yorkshire, Hd7 4eh Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra7463 Permit Version: 2 Effective Date: 31st March 2018 Issued Date: 19th March 2018 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Colne **Status:** **Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A12NE (NW)	654	2	410362 415442
3	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Ramsden Mill Cso Off Ramsden Mill Lane, Golcar, Huddersfield, West Yorkshire, Hd7 4eh Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra7463 Permit Version: 1 Effective Date: 26th October 1998 Issued Date: 26th October 1998 Revocation Date: 30th March 2018 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Colne **Status:** **New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A12NE (NW)	654	2	410360 415440
4	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Fernlea Grove Cso Fernlea Grove Picinic Area, Golcar, Huddersfield, West Yorkshire, Hd7 4hf Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra7519 Permit Version: 2 Effective Date: 20th November 2017 Issued Date: 20th November 2017 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Colne **Status:** **Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A12SW (W)	731	2	410183 415131

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Fernlea Grove Cso Fernlea Grove Picnic Area, Golcar, Huddersfield, West Yorkshire, Hd7 4hf Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra7519 Permit Version: 2 Effective Date: 20th November 2017 Issued Date: 20th November 2017 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Colne **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A12SW (W)	731	2	410183 415131
4	**Discharge Consents** Operator: YORKSHIRE WATER SERVICES LTD Property Type: Sewerage Network - Sewers Location: GOLCAR PICNIC AREA, OFF FERNLEA GROVE, GOLCAR, NR HUDDERSFIELD, WEST YORKSHIRE Authority: Environment Agency, North East Region Catchment Area: Calder Reference: WRA7519 Permit Version: Not Supplied Effective Date: Not Supplied Issued Date: 5th July 1999 Revocation Date: Not Supplied Discharge Type: Sewage Effluent Discharge-Storm Effluent Discharge Environment: Not Supplied Receiving Water: RIVER COLNE **Status: Not Supplied** Positional Accuracy: Located by supplier to within 10m	A12SW (W)	734	2	410180 415130
4	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Fernlea Grove Cso Fernlea Grove Picnic Area, Golcar, Huddersfield, West Yorkshire, Hd7 4hf Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra7519 Permit Version: 1 Effective Date: 5th July 1999 Issued Date: 5th July 1999 Revocation Date: 19th November 2017 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Colne **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A12SW (W)	734	2	410180 415130
5	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Morley Lane Cso, Morley Lane (Opp No 9), Huddersfield, West Yorkshire, Hd3 4nr Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra8588 Permit Version: 1 Effective Date: 18th March 2005 Issued Date: 18th March 2005 Revocation Date: 27th August 2020 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Colne **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	802	2	411520 415930

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
6	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Milns Shaw Lane No 2 Cso Shaw Lane, Milnsbridge, Huddersfield, West Yorkshire, Hd3 4ne Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra8765 Permit Version: 2 Effective Date: 24th March 2010 Issued Date: 24th March 2010 Revocation Date: 8th August 2019 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Tributary Of The River Colne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	804	2	411670 415800
6	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Milns Shaw Lane No 2 Cso Shaw Lane, Milnsbridge, Huddersfield, West Yorkshire, Hd3 4ne Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra8765 Permit Version: 1 Effective Date: 1st April 2005 Issued Date: 11th March 2005 Revocation Date: 23rd March 2010 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Tributary Of The River Colne **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	804	2	411670 415800
6	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: East Cowick Sewage Pumping Station, Dowsons Lane, East Cowick, Goole, Dn14 9et Authority: Environment Agency, North East Region Catchment Area: Calder Reference: S/Cb/51 Permit Version: 3 Effective Date: 25th January 1995 Issued Date: 25th January 1995 Revocation Date: 5th March 1995 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Varies With Outlet **Status: Revised by Notice, at direction of Secretary of State (Section 37(2))** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	804	2	411670 415800
6	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: Sewerage Network - Sewers - Water Company Location: Darnall Road Cso, Darnall Road, Sheffield, S9 5ah Authority: Environment Agency, North East Region Catchment Area: Calder Reference: S/Cb/51 Permit Version: 4 Effective Date: 6th March 1995 Issued Date: 25th January 1995 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Varies With Outlet **Status: Revised by Notice, at direction of Secretary of State (Section 37(2))** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	804	2	411670 415800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
6	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: East Cowick Sewage Pumping Station, Dowsons Lane, East Cowick, Goole, Dn14 9et Authority: Environment Agency, North East Region Catchment Area: Calder Reference: S/Cb/51 Permit Version: 2 Effective Date: 2nd July 1993 Issued Date: 2nd July 1993 Revocation Date: 24th January 1995 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Varies With Outlet **Status: Revised by Notice, at direction of Secretary of State (Section 37(2))** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	804	2	411670 415800
6	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: East Cowick Sewage Pumping Station, Dowsons Lane, East Cowick, Goole, Dn14 9et Authority: Environment Agency, North East Region Catchment Area: Calder Reference: S/Cb/51 Permit Version: 1 Effective Date: 27th May 1963 Issued Date: 27th May 1963 Revocation Date: 1st July 1993 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Varies With Outlet **Status: Transferred from Rivers (Prevention of Pollution) Act 1951-1961** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	804	2	411670 415800
6	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Milns Shaw Lane No 2 Cso Shaw Lane, Milnsbridge, Huddersfield, West Yorkshire, Hd3 4ne Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra8765 Permit Version: 3 Effective Date: 9th August 2019 Issued Date: 9th August 2019 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Tributary Of The River Colne **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	818	2	411682 415808
7	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Morley Lane Cso, Morley Lane (Opp No 9), Huddersfield, West Yorkshire, Hd3 4nr Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra8588 Permit Version: 2 Effective Date: 28th August 2020 Issued Date: 28th August 2020 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Colne **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	809	2	411528 415933

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Scar Lane Cso, Scar Lane (Opp No 4), Huddersfield, West Yorkshire, Hd3 4pe Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra8780 Permit Version: 2 Effective Date: 24th March 2010 Issued Date: 24th March 2010 Revocation Date: 27th August 2020 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Colne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	857	2	411560 415970
7	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Scar Lane Cso, Scar Lane (Opp No 4), Huddersfield, West Yorkshire, Hd3 4pe Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra8780 Permit Version: 1 Effective Date: 21st March 2005 Issued Date: 21st March 2005 Revocation Date: 23rd March 2010 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Colne **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	857	2	411560 415970
8	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Scar Lane Cso, Scar Lane (Opp No 4), Huddersfield, West Yorkshire, Hd3 4pe Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra8780 Permit Version: 3 Effective Date: 28th August 2020 Issued Date: 28th August 2020 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Colne **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	860	2	411557 415975
8	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: East Cowick Sewage Pumping Station, Dowsons Lane, East Cowick, Goole, Dn14 9et Authority: Environment Agency, North East Region Catchment Area: Calder Reference: S/Cb/51 Permit Version: 3 Effective Date: 25th January 1995 Issued Date: 25th January 1995 Revocation Date: 5th March 1995 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Varies With Outlet **Status: Revised by Notice, at direction of Secretary of State (Section 37(2))** Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	893	2	411550 416020

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
8	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: Sewerage Network - Sewers - Water Company Location: Darnall Road Cso, Darnall Road, Sheffield, S9 5ah Authority: Environment Agency, North East Region Catchment Area: Calder Reference: S/Cb/51 Permit Version: 4 Effective Date: 6th March 1995 Issued Date: 25th January 1995 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Varies With Outlet **Status: Revised by Notice, at direction of Secretary of State (Section 37(2))** Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	893	2	411550 416020
8	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: East Cowick Sewage Pumping Station, Dowsons Lane, East Cowick, Goole, Dn14 9et Authority: Environment Agency, North East Region Catchment Area: Calder Reference: S/Cb/51 Permit Version: 2 Effective Date: 2nd July 1993 Issued Date: 2nd July 1993 Revocation Date: 24th January 1995 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Varies With Outlet **Status: Revised by Notice, at direction of Secretary of State (Section 37(2))** Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	893	2	411550 416020
8	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: East Cowick Sewage Pumping Station, Dowsons Lane, East Cowick, Goole, Dn14 9et Authority: Environment Agency, North East Region Catchment Area: Calder Reference: S/Cb/51 Permit Version: 1 Effective Date: 27th May 1963 Issued Date: 27th May 1963 Revocation Date: 1st July 1993 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Varies With Outlet **Status: Transferred from Rivers (Prevention of Pollution) Act 1951-1961** Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	893	2	411550 416020
9	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: East Cowick Sewage Pumping Station, Dowsons Lane, East Cowick, Goole, Dn14 9et Authority: Environment Agency, North East Region Catchment Area: Calder Reference: S/Cb/51 Permit Version: 3 Effective Date: 25th January 1995 Issued Date: 25th January 1995 Revocation Date: 5th March 1995 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Varies With Outlet **Status: Revised by Notice, at direction of Secretary of State (Section 37(2))** Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	949	2	411660 416010

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
9	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: Sewerage Network - Sewers - Water Company Location: Darnall Road Cso, Darnall Road, Sheffield, S9 5ah Authority: Environment Agency, North East Region Catchment Area: Calder Reference: S/Cb/51 Permit Version: 4 Effective Date: 6th March 1995 Issued Date: 25th January 1995 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Varies With Outlet **Status: Revised by Notice, at direction of Secretary of State (Section 37(2))** Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	949	2	411660 416010
9	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: East Cowick Sewage Pumping Station, Dowsons Lane, East Cowick, Goole, Dn14 9et Authority: Environment Agency, North East Region Catchment Area: Calder Reference: S/Cb/51 Permit Version: 2 Effective Date: 2nd July 1993 Issued Date: 2nd July 1993 Revocation Date: 24th January 1995 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Varies With Outlet **Status: Revised by Notice, at direction of Secretary of State (Section 37(2))** Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	949	2	411660 416010
9	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: East Cowick Sewage Pumping Station, Dowsons Lane, East Cowick, Goole, Dn14 9et Authority: Environment Agency, North East Region Catchment Area: Calder Reference: S/Cb/51 Permit Version: 1 Effective Date: 27th May 1963 Issued Date: 27th May 1963 Revocation Date: 1st July 1993 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Varies With Outlet **Status: Transferred from Rivers (Prevention of Pollution) Act 1951-1961** Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	949	2	411660 416010
10	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: Sewage Disposal Works Location: Old Sewage Works, Golcar, HUDDERSFIELD, West Yorkshire Authority: Environment Agency, North East Region Catchment Area: Aire And Calder Navigation Reference: WADC1208 Permit Version: Not Supplied Effective Date: Not Supplied Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Storm sewage overflow discharge Discharge Environment: Freshwater Stream/River Receiving Water: Colne **Status: Not Supplied** Positional Accuracy: Located by supplier to within 100m	A11NE (W)	952	2	409970 415220

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
11	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Titanic Mills Cso Rear Of Gordon Terrace, Linthwaite, Huddersfield, West Yorkshire, Hd7 5qt Authority: Environment Agency, North East Region Catchment Area: Not Supplied Reference: Eprtp3829ga Permit Version: 1 Effective Date: 22nd March 2016 Issued Date: 22nd March 2016 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Colne **Status: New issued under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A11SE (W)	986	2	409947 414890
12	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Milnsbridge (Market Street) Cso Market Street, Milnsbridge, Huddersfield, West Yorkshire, Hd3 4jy Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra8766 Permit Version: 2 Effective Date: 24th March 2010 Issued Date: 24th March 2010 Revocation Date: 8th August 2019 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Longwood Brook **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	992	2	411540 416140
12	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Milnsbridge (Market Street) Cso Market Street, Milnsbridge, Huddersfield, West Yorkshire, Hd3 4jy Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra8766 Permit Version: 1 Effective Date: 1st April 2005 Issued Date: 11th March 2005 Revocation Date: 23rd March 2010 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Longwood Brook **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	992	2	411540 416140
12	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Milnsbridge (Market Street) Cso Market Street, Milnsbridge, Huddersfield, West Yorkshire, Hd3 4jy Authority: Environment Agency, North East Region Catchment Area: Calder Reference: Wra8766 Permit Version: 3 Effective Date: 9th August 2019 Issued Date: 9th August 2019 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Longwood Brook **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A19NW (NE)	998	2	411548 416143

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
13	**Integrated Pollution Controls** Name: Croda International Plc Location: Colne Vale Works, Colne Vale Road, Milnesbridge, HUDDERSFIELD, West Yorkshire, HD3 4NX Authority: Environment Agency, North East Region Permit Reference: AO0776 Dated: 4th November 1994 Process Type: IPC application for process that was regulated by HMIP for air releases under previous legislation Description: 4.5 A (C) Inorganic Chemical processes within the Chemical Industry **Status: Authorisation superseded by a substantial or non substantial variation** Positional Accuracy: Manually positioned to the road within the address or location	A18SE (N)	490	2	411175 415746
14	**Integrated Pollution Controls** Name: Croda Colours Ltd (Dissolved) Location: P O Box A33;Colne Vale Works, Colne Vale Road, Milnesbridge, HUDDERSFIELD, West Yorkshire, HD3 4NX Authority: Environment Agency, North East Region Permit Reference: AO7061 Dated: 10th October 1994 Process Type: IPC minor (non-substantial) variation to previous variation Description: 4.2 A (C) Manufacture and use of Organic Chemicals within the Chemical Industry **Status: Authorisation superseded by a substantial or non substantial variation** Positional Accuracy: Manually positioned to the road within the address or location	A18SE (N)	539	2	411266 415769
14	**Integrated Pollution Controls** Name: Croda Colours Ltd (Dissolved) Location: Colne Vale Works, Colne Vale Road, HUDDERSFIELD, West Yorkshire, HD3 4NX Authority: Environment Agency, North East Region Permit Reference: BG9161 Dated: 15th September 1999 Process Type: IPC minor (non-substantial) variation to previous variation Description: 4.2 A (C) Manufacture and use of Organic Chemicals within the Chemical Industry **Status: Authorisation certificate surrendered by operator** Positional Accuracy: Manually positioned to the road within the address or location	A18SE (N)	544	2	411266 415774
14	**Integrated Pollution Controls** Name: Croda Colours Ltd (Dissolved) Location: P O Box A33;Colne Vale Works, Colne Vale Road, Milnesbridge, HUDDERSFIELD, West Yorkshire, HD3 4NX Authority: Environment Agency, North East Region Permit Reference: AY4292 Dated: 27th May 1997 Process Type: IPC minor (non-substantial) variation to previous variation Description: 4.2 A (C) Manufacture and use of Organic Chemicals within the Chemical Industry **Status: Authorisation superseded by a substantial or non substantial variation** Positional Accuracy: Manually positioned to the road within the address or location	A18SE (N)	545	2	411271 415774
14	**Integrated Pollution Controls** Name: Croda Colours Ltd (Dissolved) Location: P O Box A33;Colne Vale Works, Colne Vale Road, Milnesbridge, HUDDERSFIELD, West Yorkshire, HD3 4NX Authority: Environment Agency, North East Region Permit Reference: BD9246 Dated: 24th November 1998 Process Type: IPC minor (non-substantial) variation to previous variation Description: 4.2 A (C) Manufacture and use of Organic Chemicals within the Chemical Industry **Status: Authorisation superseded by a substantial or non substantial variation** Positional Accuracy: Manually positioned to the road within the address or location	A18SE (N)	550	2	411271 415779
14	**Integrated Pollution Controls** Name: Croda Colours Ltd (Dissolved) Location: Colne Vale Works, Colne Vale Road, HUDDERSFIELD, West Yorkshire, HD3 4NX Authority: Environment Agency, North East Region Permit Reference: AK6900 Dated: 31st January 1994 Process Type: IPC new application Description: 4.2 A (C) Manufacture and use of Organic Chemicals within the Chemical Industry **Status: Authorisation superseded by a substantial or non substantial variation** Positional Accuracy: Manually positioned to the road within the address or location	A18SE (N)	559	2	411276 415787

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
14	**Integrated Pollution Controls** Name: Croda International Plc Location: Croda Colours Ltd, Colne Vale Road, HUDDERSFIELD, West Yorkshire, DN14 9AA Authority: Environment Agency, North East Region Permit Reference: BC9526 Dated: 24th November 1998 Process Type: IPC minor (non-substantial) variation to previous variation Description: 4.5 A (C) Inorganic Chemical processes within the Chemical Industry **Status:** **Authorisation certificate surrendered by operator** Positional Accuracy: Manually positioned to the road within the address or location	A18SE (NE)	575	2	411297 415795
15	**Integrated Pollution Prevention And Control** Name: Nofoss Fuels Limited Location: Biodiesel Plant, Linthwaite, Unit 4 Quarry Works, Spurn Point,Manchester Road,Linthwaite, HUDDERSFIELD, West Yorkshire, HD7 5RF Authority: Environment Agency, North East Region Permit Reference: GP3831LR Original Permit Ref: Gp3831lr Effective Date: 23rd April 2007 **Status:** **Revoked** Application Type: Application App. Sub Type: New Positional Accuracy: Manually positioned to the road within the address or location Activity Code: 4.1 A(1) (A) (II) Activity Description: Organic Chemicals; Oxygen Containing Compounds Eg Alcohols Primary Activity: Y Activity Code: 0.0 Associated Process Activity Description: Associated Process Primary Activity: N	A12SW (W)	690	2	410229 414993
16	**Integrated Pollution Prevention And Control** Name: Johnsons Wellfield Quarries Limited Location: Wellfield Quarry, ,Blackmoorfoot Road, Crosland Hill,, Huddersfield, West Yorkshire, HD4 7AB Authority: Environment Agency, North East Region Permit Reference: YP3538XT Original Permit Ref: Lp3336sg Effective Date: 7th February 2008 **Status:** **Superseded By Variation** Application Type: Variation App. Sub Type: Minor Positional Accuracy: Automatically positioned to the address Activity Code: 5.2 A(1) (B) Activity Description: Waste Landfilling; Any Other Landfill To Which The 2002 Landfill Regulations Apply Primary Activity: N Activity Code: 5.2 A(1) (A) Activity Description: Waste Landfilling; Greater Than 10 T/D With Capacity Greater Than 25,000T Excluding Inert Waste Primary Activity: Y	A9NE (SE)	824	2	411797 414628
16	**Integrated Pollution Prevention And Control** Name: Johnsons Wellfield Quarries Limited Location: Wellfield Quarry, ,Blackmoorfoot Road, Crosland Hill,, Huddersfield, West Yorkshire, HD4 7AB Authority: Environment Agency, North East Region Permit Reference: QP3337UV Original Permit Ref: Lp3336sg Effective Date: 10th October 2007 **Status:** **Superseded By Variation** Application Type: Variation App. Sub Type: Minor Positional Accuracy: Automatically positioned to the address Activity Code: 5.2 A(1) (A) Activity Description: Waste Landfilling; Greater Than 10 T/D With Capacity Greater Than 25,000T Excluding Inert Waste Primary Activity: Y Activity Code: 5.2 A(1) (B) Activity Description: Waste Landfilling; Any Other Landfill To Which The 2002 Landfill Regulations Apply Primary Activity: N	A9NE (SE)	824	2	411797 414628

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
16	**Integrated Pollution Prevention And Control** Name: Johnsons Wellfield Quarries Limited Location: Wellfield Quarry, ,Blackmoorfoot Road, Crosland Hill,, Huddersfield, West Yorkshire, HD4 7AB Authority: Environment Agency, North East Region Permit Reference: ZP3938UE Original Permit Ref: Lp3336sg Effective Date: 17th August 2007 **Status:** **Superseded By Variation** Application Type: Variation App. Sub Type: Standard Positional Accuracy: Automatically positioned to the address Activity Code: 5.2 A(1) (B) Activity Description: Waste Landfilling; Any Other Landfill To Which The 2002 Landfill Regulations Apply Primary Activity: N Activity Code: 5.2 A(1) (A) Activity Description: Waste Landfilling; Greater Than 10 T/D With Capacity Greater Than 25,000T Excluding Inert Waste Primary Activity: Y	A9NE (SE)	824	2	411797 414628
16	**Integrated Pollution Prevention And Control** Name: Johnsons Wellfield Quarries Limited Location: Wellfield Quarry, ,Blackmoorfoot Road, Crosland Hill,, Huddersfield, West Yorkshire, HD4 7AB Authority: Environment Agency, North East Region Permit Reference: Lp3336sg Original Permit Ref: Lp3336sg Effective Date: 9th June 2006 **Status:** **Superseded By Variation** Application Type: Application App. Sub Type: New Positional Accuracy: Automatically positioned to the address Activity Code: 5.2 A(1) (B) Activity Description: Waste Landfilling; Any Other Landfill To Which The 2002 Landfill Regulations Apply Primary Activity: Y	A9NE (SE)	824	2	411797 414628
16	**Integrated Pollution Prevention And Control** Name: Johnsons Wellfield Quarries Limited Location: Wellfield Quarry, Blackmoorfoot Road,Crosland Hill,, Huddersfield, West Yorkshire, HD4 7AB Authority: Environment Agency, North East Region Permit Reference: VP3131XK Original Permit Ref: Lp3336sg Effective Date: 31st March 2008 **Status:** **Revoked** Application Type: Variation App. Sub Type: Minor Positional Accuracy: Automatically positioned to the address Activity Code: 5.2 A(1) (B) Activity Description: Waste Landfilling; Any Other Landfill To Which The 2002 Landfill Regulations Apply Primary Activity: N Activity Code: 5.2 A(1) (A) Activity Description: Waste Landfilling; Greater Than 10 T/D With Capacity Greater Than 25,000T Excluding Inert Waste Primary Activity: Y	A9NE (SE)	833	2	411822 414647
17	**Local Authority Pollution Prevention and Controls** Name: Co-Operative Group Location: COLNE VALLEY SERVICE STATION, 819 Manchester Road, HUDDERSFIELD, West Yorkshire, HD4 5SX Authority: Kirklees Metropolitan Borough Council, Environmental Health Department Permit Reference: PPC W 108 Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG1/14 Petrol filling station **Status:** **Permitted** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	491	3	411449 415577
18	**Local Authority Pollution Prevention and Controls** Name: J S Bamforth & Co Ltd Location: Top Vale Works, Colne Vale Road, Milnsbridge, Huddersfield, HD3 4NY Authority: Kirklees Metropolitan Borough Council, Environmental Health Department Permit Reference: Epa W 138 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG3/16 Mobile screening and crushing processes **Status:** **Not Supplied** Positional Accuracy: Manually positioned to the road within the address or location	A18SE (N)	552	3	411272 415781

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
18	**Local Authority Pollution Prevention and Controls** Name: Croda International Plc Location: PO Box A33, Colne Vale Road, HUDDERSFIELD, HD3 4NX Authority: Kirklees Metropolitan Borough Council, Environmental Health Department Permit Reference: AB5865 Dated: 13th November 1991 Process Type: Application under SI 318, 1989 The Control of Industrial Air Pollution (Registration of Works) Regulations 1989 Description: Processes registered under S. 9 of the Alkali Act 1906 and S. 5 of the Health & Safety at Work Act 1974 **Status: Authorisation revoked** Positional Accuracy: Manually positioned to the road within the address or location	A18SE (N)	555	3	411273 415783
19	**Local Authority Pollution Prevention and Controls** Name: Trojan Plastics Ltd Location: Ramsden Mills, Brittania Road, Milnsbridge, Huddersfield, HD3 4QG Authority: Kirklees Metropolitan Borough Council, Environmental Health Department Permit Reference: PPC W 131 Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG4/2 Processes for the manufacture of fibre reinforced plastics **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A12NE (NW)	616	3	410410 415447
20	**Local Authority Pollution Prevention and Controls** Name: Scar Lane Motors Filling Station Location: Scar Lane Motors Filling Station, Scar Lane, Huddersfield, West Yorkshire, HD3 4QA Authority: Kirklees Metropolitan Borough Council, Environmental Health Department Permit Reference: PPC W 125 Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG1/14 Petrol filling station **Status: Permitted** Positional Accuracy: Automatically positioned to the address	A18NW (N)	740	3	410823 415966
21	**Local Authority Pollution Prevention and Controls** Name: Johnson Wellfield Quarries Location: Crosland Hill, HUDDERSFIELD, West Yorkshire, HD4 7AB Authority: Kirklees Metropolitan Borough Council, Environmental Health Department Permit Reference: Ppc W 35 Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG3/8 Quarry processes including roadstone plants and the size reduction of bricks, tiles and concrete **Status: Permitted** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	772	3	411726 414623
22	**Local Authority Pollution Prevention and Controls** Name: Decorative Panels Components Ltd Location: Spring Garden Mills, Radcliffe Street, Milnsbridge, Huddersfield Authority: Kirklees Metropolitan Borough Council, Environmental Health Department Permit Reference: Epa W 112 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: Other Industries: Timber Processes **Status: Not Supplied** Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	773	3	411658 415767
23	**Local Authority Pollution Prevention and Controls** Name: Merlin Fuels Ltd Location: 45 Scar Lane, MILNSBRIDGE, HUDDERSFIELD, West Yorkshire, HD3 4QH Authority: Kirklees Metropolitan Borough Council, Environmental Health Department Permit Reference: Epa W 127 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station **Status: Not Supplied** Positional Accuracy: Manually positioned to the address or location	A19NW (N)	785	3	411374 415991
	Nearest Surface Water Feature	A13NE (NE)	138	-	411213 415314

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
24	**Pollution Incidents to Controlled Waters** Property Type: Miscellaneous Premises: Unknown Location: Huddersfld/Source Colne Afu Authority: Environment Agency, North East Region Pollutant: Unknown Note: Not Supplied Incident Date: 14th December 1992 Incident Reference: 139435 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18SW (N)	433	2	411000 415695
24	**Pollution Incidents to Controlled Waters** Property Type: Industrial Premises Location: Brdge A642/Bridge Newsome Road Colne 08 Authority: Environment Agency, North East Region Pollutant: Unknown Note: Not Supplied Incident Date: 22nd March 1990 Incident Reference: 108972 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A18SW (N)	438	2	411000 415700
25	**Pollution Incidents to Controlled Waters** Property Type: Miscellaneous Premises: Unknown Location: Mouth/Huddersfld Colne Afl Authority: Environment Agency, North East Region Pollutant: Unknown Note: Not Supplied Incident Date: 7th December 1992 Incident Reference: 139273 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A18SE (NE)	486	2	411300 415695
25	**Pollution Incidents to Controlled Waters** Property Type: Miscellaneous Premises: Unknown Location: Mouth/Huddersfld Colne Afl Authority: Environment Agency, North East Region Pollutant: Unknown Note: Not Supplied Incident Date: 15th December 1992 Incident Reference: 139437 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A18SE (NE)	489	2	411305 415695
25	**Pollution Incidents to Controlled Waters** Property Type: Miscellaneous Premises: Unknown Location: Mouth/Huddersfld Colne Afl Authority: Environment Agency, North East Region Pollutant: Unknown Note: Not Supplied Incident Date: 7th December 1992 Incident Reference: 139274 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A18SE (NE)	491	2	411300 415700
25	**Pollution Incidents to Controlled Waters** Property Type: Miscellaneous Premises: Unknown Location: Mouth/Huddersfld Colne Afl Authority: Environment Agency, North East Region Pollutant: Unknown Note: Not Supplied Incident Date: 7th December 1992 Incident Reference: 139271 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A18SE (NE)	493	2	411305 415700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
25	**Pollution Incidents to Controlled Waters** Property Type: Miscellaneous Premises: Unknown Location: Huddersfld/Source Colne Afu Authority: Environment Agency, North East Region Pollutant: Unknown Note: Not Supplied Incident Date: 7th December 1992 Incident Reference: 139277 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A18SE (NE)	497	2	411305 415705
26	**Pollution Incidents to Controlled Waters** Property Type: Domestic/Residential Location: Aire Mouth/Gargrave Aire Afl Authority: Environment Agency, North East Region Pollutant: Sewage - Septic Tank Effluent Note: Not Supplied Incident Date: 20th March 1991 Incident Reference: 120806 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A8NE (S)	509	2	411200 414600
27	**Pollution Incidents to Controlled Waters** Property Type: Industrial Premises Location: Mouth/Huddersfld Colne Afl Authority: Environment Agency, North East Region Pollutant: Oils - Diesel (Including Agricultural) Note: Not Supplied Incident Date: 4th December 1989 Incident Reference: 105859 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18SE (N)	528	2	411100 415795
28	**Pollution Incidents to Controlled Waters** Property Type: Textile industry Location: Milnsbridge, HUDDERSFIELD Authority: Environment Agency, North East Region Pollutant: Rubbish Note: No Fish Killed Incident Date: 28th December 1996 Incident Reference: SL970040 Catchment Area: Calder Tributaries Receiving Water: Canal Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18SW (N)	537	2	411000 415800
29	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Foul Sewer Location: Huddersfield Narrow Canal Authority: Environment Agency, North East Region Pollutant: Unknown Sewage Note: Not Supplied Incident Date: 7th June 1992 Incident Reference: 133743 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18SE (N)	544	2	411200 415795
29	**Pollution Incidents to Controlled Waters** Property Type: Other General Premises Location: Huddersfield Narrow Canal Authority: Environment Agency, North East Region Pollutant: Miscellaneous - Other Note: Fish Killed: No Information Incident Date: 13th May 1995 Incident Reference: SL950587 Catchment Area: Huddesfield Narrow Canal Receiving Water: Canal Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18SE (N)	545	2	411205 415795

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
29	**Pollution Incidents to Controlled Waters** Property Type: Industrial Premises Location: Huddersfield Narrow Canal Authority: Environment Agency, North East Region Pollutant: Not Given Note: Not Supplied Incident Date: 7th November 1994 Incident Reference: 153462 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 1 - Major Incident Positional Accuracy: Located by supplier to within 100m	A18SE (N)	548	2	411200 415800
29	**Pollution Incidents to Controlled Waters** Property Type: Other General Premises Location: Colne Afu Authority: Environment Agency, North East Region Pollutant: Unknown Note: Fish Killed: No Information; Colne Incident Date: 22nd May 1995 Incident Reference: SL950610 Catchment Area: Calder Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18SE (N)	550	2	411205 415800
30	**Pollution Incidents to Controlled Waters** Property Type: Industrial Premises Location: CHAPEL HILL Authority: Environment Agency, North East Region Pollutant: Oils - Diesel (Including Agricultural) Note: Not Supplied Incident Date: 21st February 1989 Incident Reference: 8614 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	581	2	410500 415500
31	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Foul Sewer Location: Mouth/Huddersfld Colne Afl Authority: Environment Agency, North East Region Pollutant: Unknown Sewage Note: Not Supplied Incident Date: 26th June 1994 Incident Reference: 152524 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	627	2	411400 415800
32	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Foul Sewer Location: Mouth/Huddersfld Colne Afl Authority: Environment Agency, North East Region Pollutant: Unknown Sewage Note: Not Supplied Incident Date: 28th April 1993 Incident Reference: 143757 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18NE (N)	633	2	411100 415900
33	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Foul Sewer Location: Huddersfld/Source Colne Afu Authority: Environment Agency, North East Region Pollutant: Sewage - Storm Overflow Note: Not Supplied Incident Date: 18th June 1993 Incident Reference: 145411 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18NE (N)	646	2	411200 415900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
34	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Storm Overflow Location: River Colne, MILNSBRIDGE Authority: Environment Agency, North East Region Pollutant: Sewage - Storm Overflow Note: Watercourse :River Colne; From Bradley Weir To River Calder Incident Date: Not Supplied Incident Reference: SL980158 Catchment Area: Calder Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	682	2	411500 415795
34	**Pollution Incidents to Controlled Waters** Property Type: Other General Premises Location: Huddersfield Narrow Canal Authority: Environment Agency, North East Region Pollutant: Unknown Note: Fish Killed: No Information Incident Date: 18th May 1995 Incident Reference: SL950084 Catchment Area: Huddesfield Narrow Canal Receiving Water: Canal Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	685	2	411505 415795
34	**Pollution Incidents to Controlled Waters** Property Type: Other General Premises Location: Huddersfield Narrow Canal Authority: Environment Agency, North East Region Pollutant: Miscellaneous - No Visible Pollution/Nothing Found Note: Not Supplied Incident Date: 3rd June 1992 Incident Reference: 133666 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	686	2	411500 415800
35	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Sewage Treatment Works Location: LINTHWAITE Authority: Environment Agency, North East Region Pollutant: Other Sewage Note: Fish Killed: No Information; Colne Afl Incident Date: 29th May 1995 Incident Reference: SL950625 Catchment Area: Calder Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17SW (NW)	737	2	410300 415500
36	**Pollution Incidents to Controlled Waters** Property Type: Other General Premises Location: Mouth/Huddersfld Colne Afl Authority: Environment Agency, North East Region Pollutant: Rubbish Note: Not Supplied Incident Date: 28th March 1994 Incident Reference: 150405 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	762	2	411500 415895
36	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Storm Overflow Location: River Colne, Rear Of Kwik Save, MILNSBRIDGE Authority: Environment Agency, North East Region Pollutant: Sewage - Storm Overflow Note: Watercourse :River Colne; From Hoyle House Brook To Longwood Beck Incident Date: Not Supplied Incident Reference: SL980450 Catchment Area: Calder Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Unknown	A19NW (NE)	764	2	411505 415895

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
36	**Pollution Incidents to Controlled Waters** Property Type: Industrial Premises Location: Mouth/Huddersfld Colne Afl Authority: Environment Agency, North East Region Pollutant: Metalliferous Note: Not Supplied Incident Date: 9th November 1994 Incident Reference: 153493 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	766	2	411500 415900
36	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Storm Overflow Location: Morley Street, MILNSBRIDGE Authority: Environment Agency, North East Region Pollutant: Sewage - Storm Overflow Note: River Colne; No Fish Killed Incident Date: 29th May 1998 Incident Reference: SL980502 Catchment Area: Calder Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	767	2	411495 415905
36	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Storm Overflow Location: Rear Of Kwik Save, River Colne, MILNSBRIDGE Authority: Environment Agency, North East Region Pollutant: Sewage - Storm Overflow Note: Watercourse :River Colne; From Longwood Beck To River Holme Incident Date: 21st February 1998 Incident Reference: SL980103 Catchment Area: Calder Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	769	2	411505 415900
36	**Pollution Incidents to Controlled Waters** Property Type: Miscellaneous Premises: Unknown Location: Huddersfld/Source Colne Afu Authority: Environment Agency, North East Region Pollutant: Unknown Note: Not Supplied Incident Date: 29th March 1990 Incident Reference: 109055 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	770	2	411500 415905
36	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Sewage Treatment Works Location: Colne Afu Authority: Environment Agency, North East Region Pollutant: Other Sewage Note: Fish Killed: No Information; Colne Afu Incident Date: 29th June 1995 Incident Reference: SL950703 Catchment Area: Calder Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	773	2	411505 415905
37	**Pollution Incidents to Controlled Waters** Property Type: Miscellaneous Premises: Unknown Location: Huddersfld/Source Colne Afu Authority: Environment Agency, North East Region Pollutant: Unknown Note: Not Supplied Incident Date: 29th March 1990 Incident Reference: 109061 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17NE (NW)	783	2	410600 415895

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
37	**Pollution Incidents to Controlled Waters** Property Type: Miscellaneous Premises: Unknown Location: Huddersfld/Source Colne Afu Authority: Environment Agency, North East Region Pollutant: Unknown Note: Not Supplied Incident Date: 29th March 1990 Incident Reference: 109058 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17NE (NW)	787	2	410600 415900
38	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Foul Sewer Location: Huddersfld/Source Colne Afu Authority: Environment Agency, North East Region Pollutant: Unknown Note: Not Supplied Incident Date: 22nd January 1990 Incident Reference: 107035 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A12SW (W)	813	2	410100 415100
39	**Pollution Incidents to Controlled Waters** Property Type: Other General Premises Location: Colne Afu Authority: Environment Agency, North East Region Pollutant: Unknown Note: Fish Killed: No Information; Colne Afu Incident Date: 4th July 1995 Incident Reference: SL950719 Catchment Area: Calder Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	822	2	411700 415795
39	**Pollution Incidents to Controlled Waters** Property Type: Other General Premises Location: Mouth/Huddersfld Colne Afl Authority: Environment Agency, North East Region Pollutant: Oils - Cutting Oils Note: Not Supplied Incident Date: 9th November 1994 Incident Reference: 153492 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	826	2	411700 415800
40	**Pollution Incidents to Controlled Waters** Property Type: Miscellaneous Premises: Unknown Location: Mouth/Huddersfld Colne Afl Authority: Environment Agency, North East Region Pollutant: Chemicals - Detergents/Surfactant Note: Not Supplied Incident Date: 20th April 1991 Incident Reference: 121643 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	823	2	411600 415895
40	**Pollution Incidents to Controlled Waters** Property Type: Food industry Location: COLNE Authority: Environment Agency, North East Region Pollutant: Unknown Note: Fish Killed: No Information; Colne Incident Date: 3rd January 1995 Incident Reference: SL950182 Catchment Area: Calder Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	826	2	411600 415900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
40	**Pollution Incidents to Controlled Waters** Property Type: Miscellaneous Premises: Unknown Location: Mouth/Huddersfld Colne Afl Authority: Environment Agency, North East Region Pollutant: Unknown Note: Not Supplied Incident Date: 29th March 1990 Incident Reference: 109057 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	826	2	411605 415895
41	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Storm Overflow Location: River Colne, MILNSBRIDGE Authority: Environment Agency, North East Region Pollutant: Sewage - Storm Overflow Note: Watercourse :River Colne; From Hoyle House Brook To Longwood Beck Incident Date: Not Supplied Incident Reference: SL980347 Catchment Area: Calder Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	835	2	411550 415950
41	**Pollution Incidents to Controlled Waters** Property Type: Fire Water Location: River Colne Authority: Environment Agency, North East Region Pollutant: Chemicals - Paints / Dyes Note: River Colne; No Fish Killed Incident Date: 17th July 1998 Incident Reference: SL980623 Catchment Area: Calder Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	865	2	411600 415950
42	**Pollution Incidents to Controlled Waters** Property Type: Industrial: Other Location: Milnsbridge, HUDDERSFIELD Authority: Environment Agency, North East Region Pollutant: Rubbish Note: Watercourse :River Colne; From Longwood Beck To River Holme Incident Date: Not Supplied Incident Reference: SL980125 Catchment Area: Calder Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	850	2	411500 416000
43	**Pollution Incidents to Controlled Waters** Property Type: Industrial Premises Location: Huddersfld/Source Colne Afu Authority: Environment Agency, North East Region Pollutant: Industrial Effluent Note: Not Supplied Incident Date: 10th April 1990 Incident Reference: 109487 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	890	2	411700 415895
43	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Foul Sewer Location: Huddersfld/Source Colne Afu Authority: Environment Agency, North East Region Pollutant: Sewage - Storm Overflow Note: Not Supplied Incident Date: 18th May 1992 Incident Reference: 133226 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A19NE (NE)	894	2	411705 415895

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
43	**Pollution Incidents to Controlled Waters** Property Type: Industrial Premises Location: Brdge A642/Bridge Newsome Road Colne 08 Authority: Environment Agency, North East Region Pollutant: Not Given Note: Not Supplied Incident Date: 19th April 1989 Incident Reference: 8946 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	894	2	411700 415900
44	**Pollution Incidents to Controlled Waters** Property Type: Miscellaneous Premises: Unknown Location: Mouth/Huddersfld Colne Afl Authority: Environment Agency, North East Region Pollutant: Oils - Unknown Note: Not Supplied Incident Date: 23rd October 1990 Incident Reference: 116051 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A19SE (NE)	900	2	411800 415800
45	**Pollution Incidents to Controlled Waters** Property Type: Other General Premises Location: Huddersfld/Source Colne Afu Authority: Environment Agency, North East Region Pollutant: Miscellaneous - Natural Note: Not Supplied Incident Date: 19th June 1991 Incident Reference: 123614 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	905	2	411600 416000
46	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Linthwaite, HUDDERSFIELD Authority: Environment Agency, North East Region Pollutant: Chemicals - Detergents/Surfactant Note: Pollution Found; Fish Killed: No Information Incident Date: Not Supplied Incident Reference: SL961271 Catchment Area: Calder Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Unknown	A11SE (W)	912	2	410001 415101
47	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Foul Sewer Location: Huddersfield Narrow Canal Authority: Environment Agency, North East Region Pollutant: Other Sewage Note: Fish Killed: No Information Incident Date: 22nd February 1995 Incident Reference: SL950287 Catchment Area: Huddesfield Narrow Canal Receiving Water: Canal Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A11NE (W)	919	2	410001 415196
47	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Foul Sewer Location: Huddersfield Narrow Canal Authority: Environment Agency, North East Region Pollutant: Unknown Sewage Note: Not Supplied Incident Date: 22nd April 1991 Incident Reference: 121742 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A11NE (W)	919	2	410001 415201

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
48	**Pollution Incidents to Controlled Waters** Property Type: Other General Premises Location: Colne Afl Authority: Environment Agency, North East Region Pollutant: Unknown Note: Fish Killed: No Information; Colne Incident Date: 23rd May 1995 Incident Reference: SL950615 Catchment Area: Calder Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19SE (E)	929	2	412000 415500
49	**Pollution Incidents to Controlled Waters** Property Type: Fire Water Location: Location Description Not Avaliable, MILNSBRIDGE Authority: Environment Agency, North East Region Pollutant: Unknown Sewage Note: Watercourse :River Colne; From Longwood Beck To River Holme; 11-200 Fish Killed Incident Date: Not Supplied Incident Reference: SL980423 Catchment Area: Calder Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A17NE (NW)	955	2	410400 415950
50	**Pollution Incidents to Controlled Waters** Property Type: Industrial Premises Location: Huddersfld/Source Colne Afu Authority: Environment Agency, North East Region Pollutant: Industrial Effluent Note: Not Supplied Incident Date: 16th July 1990 Incident Reference: 112682 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NE (NE)	967	2	411800 415900
51	**Prosecutions Relating to Authorised Processes** Location: Ramsden Mills, Britannia Road, Milnsbridge, Huddersfield, HD3 Prosecution Text: Failure to comply with packaging waste regulations Prosecution Act: Pro97 Hearing Date: 28th February 2006 Verdict: Guilty Fine: 1500 Costs: 542 Positional Accuracy: Manually positioned within the geographical locality	A17SE (NW)	606	2	410499 415539
	River Quality Name: River_Colne GQA Grade: River Quality B Reach: Hoyle_House_Brook_Longwood_Bec Estimated Distance (km): 2.7 Flow Rate: Flow less than 1.25 cumecs Flow Type: River Year: 2000	A18SW (N)	373	2	410930 415620
	River Quality Name: Huddersfield_Narrow_Canal GQA Grade: River Quality B Reach: Standedge_Tunnel_Milnsbridg Estimated Distance (km): 11.5 Flow Rate: Flow greater than 80 cumecs Flow Type: Canal Year: 2000	A18SW (N)	479	2	410837 415695
	River Quality Name: Longwood_Beck GQA Grade: River Quality B Reach: Longwood_River_Coln Estimated Distance (km): 1.1 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A18NE (N)	810	2	411195 416068

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	River Quality Name: River_Colne GQA Grade: River Quality B Reach: Longwood_Beck_River_Holm Estimated Distance (km): 3.1 Flow Rate: Flow less than 1.25 cumecs Flow Type: River Year: 2000	A19NW (NE)	855	2	411637 415905
52	**Substantiated Pollution Incident Register** Authority: Environment Agency - North East Region, Yorkshire Area Incident Date: 30th September 2005 Incident Reference: 350213 Water Impact: Category 2 - Significant Incident Air Impact: Category 4 - No Impact Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 100m Pollutant: Inert Materials And Wastes: Soils And Clay	A19SW (NE)	478	2	411500 415500
53	**Substantiated Pollution Incident Register** Authority: Environment Agency - North East Region, Yorkshire Area Incident Date: 4th November 2008 Incident Reference: 632789 Water Impact: Category 4 - No Impact Air Impact: Category 4 - No Impact Land Impact: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 10m Pollutant: Specific Waste Materials: Vehicles And Vehicle Parts	A18SW (N)	506	2	410895 415743
54	**Substantiated Pollution Incident Register** Authority: Environment Agency - North East Region, Yorkshire Area Incident Date: 18th September 2001 Incident Reference: 31456 Water Impact: Category 4 - No Impact Air Impact: Category 2 - Significant Incident Land Impact: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 10m Pollutant: Specific Waste Materials: Tyres	A18SW (N)	557	2	410803 415757
55	**Substantiated Pollution Incident Register** Authority: Environment Agency - North East Region, Yorkshire Area Incident Date: 10th July 2003 Incident Reference: 172576 Water Impact: Category 4 - No Impact Air Impact: Category 4 - No Impact Land Impact: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 10m Pollutant: General Biodegradable : Other	A11NE (W)	942	2	409985 415250
56	**Water Abstractions** Operator: British Waterways Board; Licence Number: 2/27/11/145 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, North East Region Abstraction: General Industrial Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): 0 Yearly Rate (m3): 18184 Details: Licence Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A18SE (N)	433	2	411100 415700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
57	**Water Abstractions** Operator: Colne Vale Dye & Chemical Company Ltd Licence Number: 2/27/11/009 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, North East Region Abstraction: General Industrial Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): 45 Yearly Rate (m3): 11365 Details: Millstone Grit Licence Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A18SE (N)	533	2	411100 415800
58	**Water Abstractions** Operator: Hartford Holdings Ltd Licence Number: 2/27/11/006 Permit Version: 100 Location: River Colne Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: Process Water Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 146 Yearly Rate (m3): 30117 Details: Ramsden Mills, Linthwaite, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th March 1989 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A12NE (W)	555	2	410400 415300
58	**Water Abstractions** Operator: Hartford Holdings Ltd Licence Number: 2/27/11/006 Permit Version: 100 Location: River Colne Authority: Environment Agency, North East Region Abstraction: Textiles & Leather: Boiler Feed Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Ramsden Mills, Linthwaite, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th March 1989 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A12NE (W)	555	2	410400 415300
59	**Water Abstractions** Operator: Canal And River Trust Licence Number: Ne/027/0011/021 Permit Version: 2 Location: Britannia Bridge, Holme Mills, Huddersfield Authority: Environment Agency, North East Region Abstraction: Navigation: Supply to a Canal for Throughflow Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 March Authorised End: 30 September Permit Start Date: 15th October 2021 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	561	2	410621 415613

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
59	**Water Abstractions** Operator: Canal And River Trust Licence Number: Ne/027/0011/021 Permit Version: 1 Location: Britannia Bridge, Holme Mills, Huddersfield Authority: Environment Agency, North East Region Abstraction: Navigation: Supply to a Canal for Throughflow Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 March Authorised End: 30 September Permit Start Date: 26th March 2021 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	561	2	410621 415613
60	**Water Abstractions** Operator: Hartford Holdings Ltd Licence Number: 2/27/11/042 Permit Version: 100 Location: River Colne - Linthwaite Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: Process Water Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 159 Yearly Rate (m3): 31820 Details: Ramsden Mill, Linthwaite, Nr. Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th May 1989 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A12SW (W)	713	2	410200 415100
61	**Water Abstractions** Operator: Johnsons Wellfield Quarries Ltd Licence Number: 2/27/10/124 Permit Version: 1 Location: Borehole- Millstone Grit - Wellfield Quarry Authority: Environment Agency, North East Region Abstraction: Mineral Products: Make-Up Or Top Up Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Johnsons Wellfield Quarry, Crosland Hill, Huddersfield, West Yorkshire Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 2nd January 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	747	2	411700 414630
62	**Water Abstractions** Operator: British Waterways Board; Licence Number: 2/27/11/141 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, North East Region Abstraction: General Industrial Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): 0 Yearly Rate (m3): 227 Details: Licence Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A19SW (NE)	753	2	411600 415800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
63	**Water Abstractions** Operator: Crosland Heath Golf Club Ltd Licence Number: Ne/027/0011/005 Permit Version: 1 Location: Borehole - Millstone Grit- Crosland Heath - Huddersfield Authority: Environment Agency, North East Region Abstraction: Golf Courses: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 1st November 2010 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A8SE (S)	764	2	411100 414300
63	**Water Abstractions** Operator: Crosland Heath Golf Club Ltd Licence Number: 2/27/10/122 Permit Version: 101 Location: Borehole - Millstone Grit- Crosland Heath - Huddersfield Authority: Environment Agency, North East Region Abstraction: Golf Courses: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Crosland Heath Golf Club, Crosland Heath, Huddersfield Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 2nd January 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8SE (S)	764	2	411100 414300
64	**Water Abstractions** Operator: Hinchcliffe & Haigh Licence Number: 2/27/11/105 Permit Version: 100 Location: Well - Millstone Grit - Linthwaite Authority: Environment Agency, North East Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 3 Yearly Rate (m3): 996 Details: Croft Farm,Church Lane,Linthwaite,Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 28th April 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A7SE (SW)	869	2	410450 414320
65	**Water Abstractions** Operator: Crosland Heath Golf Club Ltd Licence Number: 2/27/10/122 Permit Version: 100 Location: Borehole Authority: Environment Agency, North East Region Abstraction: Golf Courses: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 24 Yearly Rate (m3): 4000 Details: Crosland Heath Golf Club, Crosland Heath, Huddersfield Authorised Start: 01 April Authorised End: 31 October Permit Start Date: 27th November 1997 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8SE (S)	887	2	411200 414200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
65	**Water Abstractions** Operator: Crosland Heath Golf Club Ltd Licence Number: 2/27/11/170 Permit Version: Not Supplied Location: Crosland Heath Golf Club, Feks Stile Road, Crosland Hill, HUDDERSFIELD Authority: Environment Agency, North East Region Abstraction: Spray Irrigation Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): 24 Yearly Rate (m3): 2200 Details: Not Supplied Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A8SE (S)	887	2	411200 414200
66	**Water Abstractions** Operator: E Roberts Licence Number: 2/27/11/057 Permit Version: 100 Location: Springs Authority: Environment Agency, North East Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 1 Yearly Rate (m3): 170 Details: Royd House Farm, Linthwaite,K Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 27th January 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A7NW (SW)	899	2	410100 414700
67	**Water Abstractions** Operator: Yorkshire Wool Dyeing Co Ltd Licence Number: 2/27/11/036 Permit Version: 2 Location: River Colne - Milnsbridge Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 20th August 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A19NE (NE)	962	2	411717 415978
67	**Water Abstractions** Operator: Yorkshire Wool Dyeing Co Ltd Licence Number: 2/27/11/036(S) Permit Version: 100 Location: River Colne - Milnsbridge Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 274 Yearly Rate (m3): 68190 Details: George Street Mills, Milnsbridge, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st September 1998 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	967	2	411700 416000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Yorkshire Wool Dyeing Co Ltd Licence Number: 2/27/11/036(G) Permit Version: 100 Location: Borehole - Coal Measures - Milnsbridge Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: George Street Mills, Milnsbridge, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st September 1998 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A19NE (NE)	1035	2	411800 416000
	Water Abstractions Operator: Yorkshire Wool Dyeing Company Limited Licence Number: 2/27/11/036(G) Permit Version: 100 Location: Borehole - Coal Measures Milnsbridge Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: George Street Mills, Milnsbridge, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st September 1998 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A19NE (NE)	1035	2	411800 416000
	Water Abstractions Operator: Eddie & Bessie E Firth & Jacqueline M & John G Walker Licence Number: 2/27/11/169 Permit Version: 100 Location: Tributary Of Longwood Brook Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 350 Yearly Rate (m3): 20000 Details: Cliffe End Mills, Dale Street, Longwood, Huddersfield Authorised Start: 01 April Authorised End: 30 September Permit Start Date: 20th April 1990 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A24SW (N)	1084	2	411400 416300
	Water Abstractions Operator: Eddie & Bessie E Firth & Jacqueline M & John G Walker Licence Number: 2/27/11/169 Permit Version: 100 Location: Tributary Of Longwood Brook Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Cliffe End Mills, Dale Street, Longwood, Huddersfield Authorised Start: 01 October Authorised End: 31 March Permit Start Date: 20th April 1990 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A24SW (N)	1084	2	411400 416300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: John Gladstone (Dyers & Finishers) Ltd Licence Number: 2/27/11/037 Permit Version: 102 Location: Borehole - Millstone Grit - Milnsbridge Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Union Mills, Milnsbridge, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 11th October 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A20SW (NE)	1145	2	412100 415800
	Water Abstractions Operator: Ska Property Management Company Limited Licence Number: 2/27/11/037 Permit Version: 101 Location: Borehole - Millstone Grit - Milnsbridge Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Union Mills, Milnsbridge, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 28th February 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A20SW (NE)	1145	2	412100 415800
	Water Abstractions Operator: John Crowther & Sons (Milnsbridge) Ltd Licence Number: 2/27/11/037 Permit Version: 100 Location: Borehole Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 1296 Yearly Rate (m3): 454600 Details: Union Mills, Milnsbridge, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 20th January 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A20SW (NE)	1145	2	412100 415800
	Water Abstractions Operator: John Crowther & Sons (Milnsbridge) Ltd Licence Number: 2/27/11/038 Permit Version: 100 Location: Catchpit - Milnsbridge Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 273 Yearly Rate (m3): 90920 Details: Union Mills, Milnsbridge, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 20th January 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A20SW (NE)	1145	2	412100 415800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Mns Textiles Ltd Licence Number: Ne/027/0011/017 Permit Version: 1 Location: Borehole - Coal Measures - Tnayard Rd - Milnsbridge Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 28th July 2014 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A20NW (NE)	1150	2	412077 415847
	Water Abstractions Operator: John Gladstone (Dyers & Finishers) Ltd Licence Number: 2/27/11/038 Permit Version: 103 Location: Catchpit - Milnsbridge Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Union Mills, Milnsbridge, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 5th June 2003 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A20SW (NE)	1188	2	412200 415700
	Water Abstractions Operator: John Gladstone (Dyers And Finishers) Limited Licence Number: 2/27/11/038 Permit Version: 102 Location: Catchpit - Milnsbridge Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Union Mills, Milnsbridge, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 11th October 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A20SW (NE)	1188	2	412200 415700
	Water Abstractions Operator: Ska Property Management Company Limited Licence Number: 2/27/11/038 Permit Version: 101 Location: Catchpit - Milnsbridge Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Union Mills, Milnsbridge, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 28th February 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A20SW (NE)	1188	2	412200 415700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: British Waterways Board Licence Number: 2/27/11/144 Permit Version: 100 Location: Huddersfield Canal Authority: Environment Agency, North East Region Abstraction: Other Industrial/Commercial/Public Services: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 0 Yearly Rate (m3): 454600 Details: Premises Of J. Crowther & Son, Milnsbridge Ltd, Milnsbridge Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th March 1980 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A20NW (NE)	1199	2	412100 415900
	Water Abstractions Operator: British Waterways Board Licence Number: 2/27/11/144 Permit Version: 100 Location: Huddersfield Canal - Milnsbridge Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises Of J. Crowther & Son, Milnsbridge Ltd, Milnsbridge Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th March 1980 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A20NW (NE)	1199	2	412100 415900
	Water Abstractions Operator: James Dyson Ltd Licence Number: 2/27/11/045 Permit Version: 101 Location: Borehole - Millstone Grit - Linthwaite Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Hoyle Ing Dyeworks, Linthwaite, Nr. Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th January 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A6NE (SW)	1215	2	409800 414600
	Water Abstractions Operator: James Dyson Ltd Licence Number: 2/27/11/045 Permit Version: 100 Location: Borehole - Millstone Grit - Linthwaite Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 455 Yearly Rate (m3): 136400 Details: Hoyle Ing Dyeworks, Linthwaite, Nr. Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 12th September 1973 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A6NE (SW)	1215	2	409800 414600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Property Renaissance Ltd Licence Number: Ne/027/0011/007 Permit Version: 1 Location: Borehole-Millstone Grit-Titanic Mills-Linthwaite Authority: Environment Agency, North East Region Abstraction: Commercial Private Water Undertaking: Drinking; Cooking; Sanitary; Washing; (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Titanic Mills,Linthwaite,Huddersfield Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 21st February 2011 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A6NE (W)	1226	2	409740 414730
	Water Abstractions Operator: Lowry Homes Plc Licence Number: 2/27/11/191 Permit Version: 2 Location: Borehole-Millstone Grit-Titanic Mills-Linthwaite Authority: Environment Agency, North East Region Abstraction: Commercial Private Water Undertaking: Drinking; Cooking; Sanitary; Washing; (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Titanic Mills,Linthwaite,Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th February 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A6NE (W)	1226	2	409740 414730
	Water Abstractions Operator: Lowry Homes Plc Licence Number: 2/27/11/191 Permit Version: 1 Location: Borehole-Millstone Grit-Titanic Mills-Linthwaite Authority: Environment Agency, North East Region Abstraction: Commercial Private Water Undertaking: Drinking; Cooking; Sanitary; Washing; (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Titanic Mills,Linthwaite,Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 12th March 2005 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A6NE (W)	1226	2	409740 414730
	Water Abstractions Operator: Wooltex Uk Ltd Licence Number: Ne/027/0011/018 Permit Version: 3 Location: Borehole - Coal Measures - Woodland Mill Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 16th July 2019 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A23SE (N)	1227	2	411097 416494

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Wooltex Uk Ltd Licence Number: Ne/027/0011/018 Permit Version: 2 Location: Borehole - Coal Measures - Woodland Mill Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 13th November 2018 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A23SE (N)	1227	2	411097 416494
	Water Abstractions Operator: Wooltex Uk Ltd Licence Number: Ne/027/0011/018 Permit Version: 1 Location: Borehole - Coal Measures - Woodland Mill Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Not Supplied Authorised Start: 01 April Authorised End: 31 March Permit Start Date: 24th October 2017 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A23SE (N)	1227	2	411097 416494
	Water Abstractions Operator: Milnsbridge Dyeing Company Ltd; Fishpond Dyeworks; Milnsbridge; Huddersfield Licence Number: 2/27/11/044 Permit Version: Not Supplied Location: Fishpond Dyeworks, Milnsbridge, HUDDERSFIELD Authority: Environment Agency, North East Region Abstraction: General Industrial Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): 455 Yearly Rate (m3): 136380 Details: Millstone Grit Licence Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A20NW (NE)	1338	2	412200 416000
	Water Abstractions Operator: P W G Mickman Licence Number: 2/27/11/111 Permit Version: 100 Location: River Colne Authority: Environment Agency, North East Region Abstraction: Other Industrial/Commercial/Public Services: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 10 Yearly Rate (m3): 2273 Details: Westwood Mill, Linthwaite, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st January 1991 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A6NE (SW)	1346	2	409700 414500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: P W G Mickman Licence Number: 2/27/11/111 Permit Version: 100 Location: River Colne - Linthwaite Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Westwood Mill, Linthwaite, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st January 1991 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A6NE (SW)	1346	2	409700 414500
	Water Abstractions Operator: Property Renaissance Ltd Licence Number: 2/27/11/013(A) Permit Version: 1 Location: River Colne-Linthwaite Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Lowestwood Mills, Linthwaite, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A6NW (W)	1400	2	409600 414600
	Water Abstractions Operator: Colne Valley Spinning Co Ltd Licence Number: 2/27/11/013 Permit Version: 100 Location: River Colne-Linthwaite Authority: Environment Agency, North East Region Abstraction: Textiles & Leather: Drinking, Cooking, Sanitary, Washing, (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 50 Yearly Rate (m3): 10456 Details: Lowestwood Mills, Linthwaite, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 14th December 1965 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A6NW (W)	1400	2	409600 414600
	Water Abstractions Operator: Colne Valley Spinning Co Ltd Licence Number: 2/27/11/013 Permit Version: 100 Location: River Colne-Linthwaite Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Lowestwood Mills, Linthwaite, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 14th December 1965 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A6NW (W)	1400	2	409600 414600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: G Mallinson & Sons Ltd Licence Number: 2/27/11/128 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, North East Region Abstraction: General Industrial Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): 909 Yearly Rate (m3): 227300 Details: Millstone Grit Licence Lapsed Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A6SW (SW)	1525	2	409600 414300
	Water Abstractions Operator: G Mallinson & Sons Ltd Licence Number: 2/27/11/127 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, North East Region Abstraction: General Industrial Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): 909 Yearly Rate (m3): 227300 Details: Licence Lapsed Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A6SW (SW)	1527	2	409600 414295
	Water Abstractions Operator: Joseph Hoyle & Son Ltd Licence Number: 2/27/11/118 Permit Version: Not Supplied Location: Prospect Mills, Longwood, HUDDERSFIELD Authority: Environment Agency, North East Region Abstraction: General Industrial Abstraction Type: Not Supplied Source: Groundwater Daily Rate (m3): 2728 Yearly Rate (m3): 681900 Details: Status: Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A23NW (N)	1556	2	410800 416800
	Water Abstractions Operator: Colne Valley Spinning Co Ltd Licence Number: 2/27/11/013 Permit Version: 101 Location: Spring-Linthwaite-Huddersfield Authority: Environment Agency, North East Region Abstraction: Textiles & Leather: Drinking, Cooking, Sanitary, Washing, (Small Garden) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Lowestwood Mills, Linthwaite, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 16th July 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A6NW (W)	1561	2	409400 414700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Parkwood Mills Co Ltd Licence Number: 2/27/11/115 Permit Version: 101 Location: Clay Wood Brook/Oakscar Reservoir Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Parkwood Mills, Longwood, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 22nd April 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(N)	1764	2	410400 416900
	Water Abstractions Operator: Parkwood Mills Co Ltd Licence Number: 2/27/11/115 Permit Version: 100 Location: Clay Wood Brook/Oakscar Reservoir Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 1364 Yearly Rate (m3): 340950 Details: Parkwood Mills, Longwood, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 28th April 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(N)	1764	2	410400 416900
	Water Abstractions Operator: Parkwood Mills Co Ltd Licence Number: 2/27/11/123 Permit Version: 102 Location: Clay Wood Brook-Parkwood Road-Longwood Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Parkwood Mills, Longwood, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 30th August 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(N)	1801	2	410330 416910
	Water Abstractions Operator: Michael Wilson Restorations Licence Number: 2/27/11/111 Permit Version: 101 Location: River Colne-Westwood Mills-Linthwaite Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Westwood Mill,Linthwaite,Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th December 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(W)	1810	2	409200 414500

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: British Waterways Board Licence Number: 2/27/11/148 Permit Version: 100 Location: Huddersfield Canal Authority: Environment Agency, North East Region Abstraction: Machinery And Electronics: General Use (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 32 Yearly Rate (m3): 455 Details: Wm Arnold & Sons (Huddersfield) Limited, Birkhouse Boiler Works, Paddock, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th October 1979 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(NE)	1858	2	412800 416000
	Water Abstractions Operator: Parkwood Mills Co Ltd Licence Number: 2/27/11/123 Permit Version: 100 Location: Claywood Brook Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 455 Yearly Rate (m3): 118196 Details: Parkwood Mills, Longwood, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 26th May 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A21NE (NW)	1868	2	410000 416800
	Water Abstractions Operator: George Cock Ltd Licence Number: 2/27/11/016 Permit Version: 101 Location: Spring - Millstone Grit - Linthwaite Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Longfield Dyeworks, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 22nd May 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(SW)	1885	2	409250 414190
	Water Abstractions Operator: Hadenfayre Ltd Licence Number: 2/27/11/061 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, North East Region Abstraction: General Industrial Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): 909 Yearly Rate (m3): 227271 Details: Licence Lapsed Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(N)	1895	2	410300 417000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: N N Sheard Licence Number: 2/27/11/117 Permit Version: 100 Location: Spring - Longwood Authority: Environment Agency, North East Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 2 Yearly Rate (m3): 832 Details: Royles Head Farm,Longwood,Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 28th April 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(NW)	1898	2	410100 416900
	Water Abstractions Operator: George Cock Ltd Licence Number: 2/27/11/050 Permit Version: 101 Location: Borehole - Kinderscout Grit - Linthwaite Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Longfield Dyeworks, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 22nd May 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(SW)	1904	2	409260 414130
	Water Abstractions Operator: Park Valley Huddersfield Ltd Licence Number: 2/27/10/069 Permit Version: 105 Location: Boreholes X2 - Millstone Grit - Lockwood Authority: Environment Agency, North East Region Abstraction: Food And Drink: Water Bottling Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Park Valley Mills, Lockwood, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 23rd May 2018 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(E)	1905	2	412900 414400
	Water Abstractions Operator: Park Valley Huddersfield Ltd Licence Number: 2/27/10/069 Permit Version: 105 Location: Boreholes X2 - Millstone Grit - Lockwood Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Park Valley Mills, Lockwood, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 23rd May 2018 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(E)	1905	2	412900 414400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Holmfirth Dyers Ltd Licence Number: 2/27/10/069 Permit Version: 104 Location: Boreholes X2 - Millstone Grit - Lockwood Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Park Valley Mills, Lockwood, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 21st March 2011 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(E)	1905	2	412900 414400
	Water Abstractions Operator: Holmfirth Dyers Ltd Licence Number: 2/27/10/069 Permit Version: 104 Location: Boreholes X2 - Millstone Grit - Lockwood Authority: Environment Agency, North East Region Abstraction: Food And Drink: Water Bottling Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Park Valley Mills, Lockwood, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 21st March 2011 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(E)	1905	2	412900 414400
	Water Abstractions Operator: Paul Speak Business Centres Ltd Licence Number: 2/27/10/069 Permit Version: 103 Location: Boreholes X2 - Millstone Grit - Lockwood Authority: Environment Agency, North East Region Abstraction: Food And Drink: Water Bottling Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Park Valley Mills, Lockwood, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 27th May 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(E)	1905	2	412900 414400
	Water Abstractions Operator: Paul Speak Business Centres Ltd Licence Number: 2/27/10/069 Permit Version: 103 Location: Boreholes X2 - Millstone Grit - Lockwood Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Park Valley Mills, Lockwood, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 27th May 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(E)	1905	2	412900 414400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Parkland Holdings Ltd Licence Number: 2/27/10/069 Permit Version: 102 Location: Boreholes X2 - Millstone Grit - Lockwood Authority: Environment Agency, North East Region Abstraction: Food And Drink: Water Bottling Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Park Valley Mills, Lockwood, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 11th June 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(E)	1905	2	412900 414400
	Water Abstractions Operator: Parkland Holdings Ltd Licence Number: 2/27/10/069 Permit Version: 102 Location: Boreholes X2 - Millstone Grit - Lockwood Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Park Valley Mills, Lockwood, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 11th June 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(E)	1905	2	412900 414400
	Water Abstractions Operator: Parkland Fabrics Limited Licence Number: 2/27/10/069 Permit Version: 101 Location: Boreholes X2 - Millstone Grit - Lockwood Authority: Environment Agency, North East Region Abstraction: Food And Drink: Water Bottling Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 1818 Yearly Rate (m3): 454600 Details: Park Valley Mills, Lockwood, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th May 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(E)	1905	2	412900 414400
	Water Abstractions Operator: Parkland Fabrics Limited Licence Number: 2/27/10/069 Permit Version: 101 Location: Boreholes X2 - Millstone Grit - Lockwood Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Park Valley Mills, Lockwood, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th May 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(E)	1905	2	412900 414400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Imex Properties Ltd Licence Number: 2/27/11/079 Permit Version: Not Supplied Location: Black Rock Mills & Assoc Dwellings, Linthwaite, HUDDERSFIELD Authority: Environment Agency, North East Region Abstraction: Unclassified Combinations Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): 159 Yearly Rate (m3): 38641 Details: Not Supplied Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A1SW (SW)	1964	2	409600 413600
	Water Abstractions Operator: George Cock Ltd Licence Number: 2/27/11/016 Permit Version: 100 Location: Spring - Coal Measures - Water To Mill Dam Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 318 Yearly Rate (m3): 53325 Details: Longfield Dyeworks, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 20th January 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(SW)	1971	2	409200 414100
	Water Abstractions Operator: George Cock Ltd Licence Number: 2/27/11/050 Permit Version: 100 Location: Borehole Authority: Environment Agency, North East Region Abstraction: Textiles And Leather: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 318 Yearly Rate (m3): 53325 Details: Longfield Dyeworks, Huddersfield Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 20th January 1966 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(SW)	1971	2	409200 414100
	Groundwater Vulnerability Map Combined Classification: Secondary Bedrock Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Productive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: High Bedrock Flow: Well Connected Fractures Dilution: >550 mm/year Baseflow Index: >70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A13SW (W)	0	4	411000 415144

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Bedrock Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Productive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: High Bedrock Flow: Well Connected Fractures Dilution: >550 mm/year Baseflow Index: >70% Superficial Patchiness: <90% Superficial Thickness: 3-10m Superficial Recharge: No Data	A13SE (NW)	0	4	411027 415144
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13SE (NW)	0	4	411027 415144
	Superficial Aquifer Designations No Data Available				
68	**Source Protection Zones** Name: Not Supplied Source: Environment Agency, Head Office Reference: Not Supplied Type: Zone II (Outer Protection Zone): Either 25% of the source area or a 400 day travel time whichever is greater.	A6NE (W)	976	2	409977 414809
	Extreme Flooding from Rivers or Sea without Defences None				
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
69	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 92.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Aire and Calder Primacy: 1	A13NE (NE)	138	5	411213 415314
70	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 14.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Aire and Calder Primacy: 2	A13NE (NE)	228	5	411282 415372
71	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 14.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Aire and Calder Primacy: 1	A13NE (NE)	228	5	411282 415372

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
72	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Aire and Calder Primacy: 1	A13NE (NE)	241	5	411292 415381
73	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 75.3 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Aire and Calder Primacy: 1	A13NE (NE)	247	5	411294 415387
74	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 166.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Aire and Calder Primacy: 1	A13NE (NE)	320	5	411335 415450
75	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 318.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A18SW (N)	450	5	410833 415656
76	**OS Water Network Lines** Watercourse Form: Lock or flight of locks Watercourse Length: 23.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A18SE (N)	454	5	411086 415721
77	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 29.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A18SE (N)	456	5	411110 415722
78	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 12.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Aire and Calder Primacy: 1	A18SE (N)	460	5	411139 415722
79	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 469.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A18SE (N)	460	5	411139 415722
80	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 331.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Aire and Calder Primacy: 1	A19SW (NE)	480	5	411437 415574

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
81	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 978.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Colne Catchment Name: Aire and Calder Primacy: 1	A18SW (NW)	482	5	410737 415635
82	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 21.1 Watercourse Level: suspendedOrElevated Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A18SW (NW)	484	5	410784 415660
83	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 476.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A18SW (NW)	505	5	410769 415675
84	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 49.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Colne Catchment Name: Aire and Calder Primacy: 1	A17SE (NW)	518	5	410598 415525
85	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 372.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Colne Catchment Name: Aire and Calder Primacy: 1	A17SE (NW)	520	5	410591 415520
86	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 47.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Colne Catchment Name: Aire and Calder Primacy: 2	A17SE (NW)	520	5	410591 415520
87	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 299.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Colne Catchment Name: Aire and Calder Primacy: 1	A12NW (W)	659	5	410306 415347
88	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 39.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Aire and Calder Primacy: 2	A12NW (W)	660	5	410306 415347
89	**OS Water Network Lines** Watercourse Form: Transfer Watercourse Length: 50.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 2	A12NE (NW)	677	5	410352 415471

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
90	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 10.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A12NE (NW)	677	5	410352 415471
91	**OS Water Network Lines** Watercourse Form: Lock or flight of locks Watercourse Length: 24.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A12NW (NW)	679	5	410345 415463
92	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 10.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A12NW (NW)	683	5	410329 415444
93	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 82.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A12NW (W)	684	5	410323 415436
94	**OS Water Network Lines** Watercourse Form: Transfer Watercourse Length: 243.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Aire and Calder Primacy: 2	A12NW (W)	692	5	410267 415339
95	**OS Water Network Lines** Watercourse Form: Lock or flight of locks Watercourse Length: 25.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A12NW (W)	699	5	410273 415370
96	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 233.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A12NW (W)	703	5	410260 415349
97	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 181.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Colne Catchment Name: Aire and Calder Primacy: 1	A19NW (NE)	754	5	411474 415903
98	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 6.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A19SW (NE)	757	5	411578 415827

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
99	**OS Water Network Lines** Watercourse Form: Transfer Watercourse Length: 49.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 2	A19SW (NE)	757	5	411578 415827
100	**OS Water Network Lines** Watercourse Form: Lock or flight of locks Watercourse Length: 23.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A19SW (NE)	760	5	411585 415826
101	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Aire and Calder Primacy: 1	A19SE (NE)	761	5	411781 415586
102	**OS Water Network Lines** Watercourse Form: Transfer Watercourse Length: 22.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Aire and Calder Primacy: 2	A12SW (W)	764	5	410150 415134
103	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1064.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Colne Catchment Name: Aire and Calder Primacy: 1	A12SW (W)	764	5	410150 415134
104	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 14.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Aire and Calder Primacy: 1	A19SE (NE)	766	5	411787 415584
105	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 27.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A12SW (W)	770	5	410146 415156
106	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 11.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A19SW (NE)	775	5	411608 415824
107	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 52.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A19SW (NE)	783	5	411620 415823

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
108	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 205.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A12SW (W)	797	5	410118 415152
109	**OS Water Network Lines** Watercourse Form: Transfer Watercourse Length: 7.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Aire and Calder Primacy: 1	A12SW (W)	797	5	410118 415152
110	**OS Water Network Lines** Watercourse Form: Transfer Watercourse Length: 124.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Aire and Calder Primacy: 1	A12NW (W)	799	5	410117 415159
111	**OS Water Network Lines** Watercourse Form: Lock or flight of locks Watercourse Length: 23.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A19SW (NE)	817	5	411671 415818
112	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 65.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A19SW (NE)	833	5	411695 415816
113	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 8.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A19SE (NE)	873	5	411760 415806
114	**OS Water Network Lines** Watercourse Form: Transfer Watercourse Length: 56.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 2	A19SE (NE)	873	5	411760 415806
115	**OS Water Network Lines** Watercourse Form: Lock or flight of locks Watercourse Length: 23.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A19SE (NE)	878	5	411768 415805
116	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 9.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A19SE (NE)	893	5	411791 415800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
117	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 25.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A19SE (NE)	898	5	411800 415797
118	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 139.2 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Aire and Calder Primacy: 1	A11NE (W)	910	5	410007 415170
119	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 163.2 Watercourse Level: Underground Permanent: True Watercourse Name: Longwood Brook Catchment Name: Aire and Calder Primacy: 1	A19NW (NE)	913	5	411630 415988
120	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 67.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Colne Catchment Name: Aire and Calder Primacy: 1	A19NW (NE)	913	5	411630 415988
121	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 36.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Aire and Calder Primacy: 1	A19SE (NE)	919	5	411825 415799
122	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 194.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A19SE (NE)	919	5	411825 415799
123	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 37.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Colne Catchment Name: Aire and Calder Primacy: 2	A19NW (NE)	935	5	411696 415960
124	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 36.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Colne Catchment Name: Aire and Calder Primacy: 1	A19NE (NE)	940	5	411717 415948
125	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 348.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Colne Catchment Name: Aire and Calder Primacy: 1	A19NE (NE)	940	5	411717 415948

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
126	**OS Water Network Lines** Watercourse Form: Canal Watercourse Length: 13.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A11SE (W)	982	5	409931 415083
127	**OS Water Network Lines** Watercourse Form: Transfer Watercourse Length: 7.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 2	A11SE (W)	982	5	409931 415083
128	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 151.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Longwood Brook Catchment Name: Aire and Calder Primacy: 1	A19NW (NE)	986	5	411548 416129
129	**OS Water Network Lines** Watercourse Form: Transfer Watercourse Length: 5.1 Watercourse Level: Underground Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 2	A11SE (W)	989	5	409924 415084
130	**OS Water Network Lines** Watercourse Form: Lock or flight of locks Watercourse Length: 25.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 1	A11SE (W)	992	5	409921 415075
131	**OS Water Network Lines** Watercourse Form: Transfer Watercourse Length: 42.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Huddersfield Narrow Canal Catchment Name: Mersey Primacy: 2	A11SE (W)	993	5	409920 415081

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
132	**BGS Recorded Landfill Sites** Site Name: Quarry Road Location: Grosland Hill, HUDDERSFIELD, West Yorkshire Authority: British Geological Survey, National Geoscience Information Service Ground Water: No threat to ground water Surface Water: No threat to surface water Geology: N/A Positional Accuracy: Positioned by the supplier Boundary Accuracy: Moderate	A14SW (E)	241	-	411369 415056
133	**BGS Recorded Landfill Sites** Site Name: Johnsons Wellfield Quarries Location: Crossland Hl, HUDDERSFIELD, West Yorkshire Authority: British Geological Survey, National Geoscience Information Service Ground Water: Information not available Surface Water: Information not available Geology: N/A Positional Accuracy: Positioned by the supplier Boundary Accuracy: Derived	A9NW (SE)	806	-	411647 414497
134	**Historical Landfill Sites** Licence Holder: Eric Wimpenny and Son Limited Location: Cowersley Lane, Linthwaite, Huddersfield Name: The Folly Operator Location: 184a Cowlersley Lane, Huddersfield Boundary Accuracy: As Supplied Provider Reference: EAHLD04236 First Input Date: Not Supplied Last Input Date: Not Supplied Specified Waste Type: Deposited Waste included Inert, Commercial and Household Waste, and Liquid Sludge EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: Not Supplied Other Ref: 4700/0205, 723	A13NW (W)	220	2	410706 415161
135	**Historical Landfill Sites** Licence Holder: Not Supplied Location: Grosland Hill, Huddersfield, West Yorkshire Name: Quarry Road Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD31603 First Input Date: Not Supplied Last Input Date: Not Supplied Specified Waste Type: Not Supplied EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: 1332 Other Ref: Not Supplied	A14SW (E)	242	2	411370 415057
136	**Historical Landfill Sites** Licence Holder: Kirklees Metropolitan Borough Council Location: West Of Lock 12, Huddersfield Name: Land west of Lock 12 and to the south of Huddersfield Narrow Canal Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD04253 First Input Date: 30th November 1989 Last Input Date: 30th April 1993 Specified Waste Type: Deposited Waste included Inert and Industrial Waste, and Liquid Sludge EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 4700/0829 BGS Ref: Not Supplied Other Ref: 4700/0722	A18SW (N)	371	2	410953 415621

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
137	**Historical Landfill Sites** Licence Holder: Not Supplied Location: Deep Lane, Crosland Moor Name: Town Quarry Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD35050 First Input Date: 21st August 1967 Last Input Date: Not Supplied Specified Waste Type: Not Supplied EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: Not Supplied Other Ref: Not Supplied	A14NW (E)	484	2	411601 415263
138	**Historical Landfill Sites** Licence Holder: Standard Fireworks Location: Blackmoorfoot Road, Crosland Moor, Huddersfield Name: Quarry Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD04202 First Input Date: 31st December 1977 Last Input Date: 31st December 1988 Specified Waste Type: Deposited Waste included Inert and Commercial Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 4700/0775 BGS Ref: Not Supplied Other Ref: 4700/0129	A9NW (SE)	638	2	411460 414570
139	**Historical Landfill Sites** Licence Holder: Not Supplied Location: Crosland Hill Name: Hob Lane Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD35047 First Input Date: Not Supplied Last Input Date: Not Supplied Specified Waste Type: Not Supplied EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: Not Supplied Other Ref: Not Supplied	A14SE (E)	678	2	411805 415003
140	**Historical Landfill Sites** Licence Holder: Messrs Conroy and Booth Location: Cowersley Lane, Linthwaite, Huddersfield Name: Cowersley Lane Quarry Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD04182 First Input Date: 1st January 1969 Last Input Date: 31st December 1994 Specified Waste Type: Deposited Waste included Inert and Commercial Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 4700/0749 BGS Ref: Not Supplied Other Ref: 4700/0361	A7NW (SW)	735	2	410307 414656
141	**Licensed Waste Management Facilities (Landfill Boundaries)** Name: Wellfield Quarry Landfill Licence Number: 210059 Location: Wellfield Quarry, Blackmoorfoot Road, Crosland Hill, Huddersfield, West Yorkshire, HD4 7AB Licence Holder: Johnsons Wellfield Quarries Limited Authority: Environment Agency - North East Region, Yorkshire Area Site Category: Inert LF Max Input Rate: Not Supplied **Licence Status: Modified** Issued: 9th June 2006 Positional Accuracy: Positioned by the supplier Boundary Accuracy: As Supplied	A9NW (SE)	791	2	411615 414491

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
142	**Licensed Waste Management Facilities (Landfill Boundaries)** Name: Wellfield Quarry Landfill Licence Number: 210059 Location: Wellfield Quarry, Blackmoorfoot Road, Crosland Hill, Huddersfield, West Yorkshire, HD4 7AB Licence Holder: Johnsons Wellfield Quarries Limited Authority: Environment Agency - North East Region, Yorkshire Area Site Category: Inert LF Max Input Rate: Not Supplied **Licence Status: Modified** Issued: 9th June 2006 Positional Accuracy: Positioned by the supplier Boundary Accuracy: As Supplied	A9NE (SE)	815	2	411831 414692
143	**Licensed Waste Management Facilities (Landfill Boundaries)** Name: Wellfield Quarry Landfill Licence Number: 210059 Location: Wellfield Quarry, Blackmoorfoot Road, Crosland Hill, Huddersfield, West Yorkshire, HD4 7AB Licence Holder: Johnsons Wellfield Quarries Limited Authority: Environment Agency - North East Region, Yorkshire Area Site Category: Inert LF Max Input Rate: Not Supplied **Licence Status: Modified** Issued: 9th June 2006 Positional Accuracy: Positioned by the supplier Boundary Accuracy: As Supplied	A9SW (SE)	818	2	411555 414418
144	**Licensed Waste Management Facilities (Locations)** Licence Number: 61008 Location: Top Vale Works, Colne Vale Road, Milnsbridge, Huddersfield, West Yorkshire, HD3 4NW Operator Name: J S Bamforth Recycling Limited Operator Location: Not Supplied Authority: Environment Agency - North East Region, Yorkshire Area Site Category: Metal Recycling Sites (Mixed) **Licence Status: Part Suspended** Issued: 6th March 1991 Last Modified: 11th December 2006 Expires: Not Supplied Suspended: 16/03/2021 Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A18SE (N)	475	2	411097 415742
145	**Licensed Waste Management Facilities (Locations)** Licence Number: 101224 Location: Bottom Yard, Britannia Road, Milnsbridge, Huddersfield, West Yorkshire, HD3 4QG Operator Name: Christian Borg Operator Location: Not Supplied Authority: Environment Agency - North East Region, Yorkshire Area Site Category: Vehicle depollution facility **Licence Status: Transferred** Issued: 5th March 2010 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A18SW (N)	505	2	410920 415750
146	**Licensed Waste Management Facilities (Locations)** Licence Number: 65410 Location: Unit 1, Colne Vale Road, Milnsbridge, Huddersfield, West Yorkshire, HD3 4NY Operator Name: Mr Crispin James Operator Location: Not Supplied Authority: Environment Agency - North East Region, Yorkshire Area Site Category: End of Life Vehicles **Licence Status: Surrendered** Issued: 9th February 2005 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: 9th June 2006 IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 100m	A18SE (N)	533	2	411100 415800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
147	**Licensed Waste Management Facilities (Locations)** Licence Number: 65491 Location: 65 Britannia Road, Milnsbridge, Huddersfield, West Yorkshire, HD3 4QG Operator Name: Mallinson Recycling Ltd Operator Location: Not Supplied Authority: Environment Agency - North East Region, Yorkshire Area Site Category: Material Recycling Treatment Facilities **Licence Status: Issued** Issued: 7th September 2006 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A18SW (N)	538	2	410979 415798
148	**Licensed Waste Management Facilities (Locations)** Licence Number: 61054 Location: The Old Railway Sidings, Scar Lane, Milnesbridge, West Yorkshire Operator Name: I M (Contractors) Ltd Operator Location: Not Supplied Authority: Environment Agency - North East Region, Yorkshire Area Site Category: Household, Commercial And Industrial Transfer Stations **Licence Status: Surrendered** Issued: 19th December 1996 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: 5th March 2004 IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A18NE (N)	775	2	411189 416033
149	**Licensed Waste Management Facilities (Locations)** Licence Number: 60988 Location: Thewlis Lane, Crossland Hill, Huddersfield, West Yorkshire, HD4 7AB Operator Name: Johnsons Wellfield Quarries Limited Operator Location: Not Supplied Authority: Environment Agency - North East Region, Yorkshire Area Site Category: Landfills Taking Non-biodegradeable Wastes (Not Construction) **Licence Status: To PPC** Issued: 28th February 1978 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: LP3336SG Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	899	2	411856 414582
150	**Licensed Waste Management Facilities (Locations)** Licence Number: 61012 Location: Land/premises At, George Street, Milnsbridge, Huddersfield, West Yorkshire, HD3 4JD Operator Name: W H Robinson Ltd Operator Location: Not Supplied Authority: Environment Agency - North East Region, Yorkshire Area Site Category: Metal Recycling Sites (Mixed) **Licence Status: Expired** Issued: 7th July 1992 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A19NE (NE)	998	2	411732 416013
	Local Authority Landfill Coverage Name: Kirklees Metropolitan Borough Council - Has not been able to supply Landfill data		0	6	411027 415144
151	**Potentially Infilled Land (Non-Water)** Bearing Ref: S Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A13SE (S)	170	-	411115 414923
152	**Potentially Infilled Land (Non-Water)** Bearing Ref: N Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1987	A18SE (N)	286	-	411037 415553

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
153	**Potentially Infilled Land (Non-Water)** Bearing Ref: NW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1987	A13NW (NW)	306	-	410791 415426
154	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A8NE (SE)	355	-	411323 414818
155	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A9NW (SE)	409	-	411372 414786
156	**Potentially Infilled Land (Non-Water)** Bearing Ref: E Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A14SW (E)	413	-	411544 415049
157	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A9NW (SE)	472	-	411433 414754
158	**Potentially Infilled Land (Non-Water)** Bearing Ref: E Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1987	A14NW (E)	489	-	411619 415203
159	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A9NW (SE)	508	-	411396 414684
160	**Potentially Infilled Land (Non-Water)** Bearing Ref: E Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1987	A14NW (E)	545	-	411680 415175
161	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A9NW (SE)	565	-	411566 414753
162	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A9NW (SE)	573	-	411547 414720
163	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A9NW (SE)	591	-	411613 414770
164	**Potentially Infilled Land (Non-Water)** Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A12SW (W)	610	-	410329 414909
165	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A9NW (SE)	634	-	411565 414653
166	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A14SE (SE)	636	-	411715 414857
167	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A14SE (SE)	645	-	411724 414854
168	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A9NW (SE)	658	-	411474 414555

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
169	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A9SW (SE)	729	-	411479 414477
170	**Potentially Infilled Land (Non-Water)** Bearing Ref: E Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A14SE (E)	733	-	411813 414836
171	**Potentially Infilled Land (Non-Water)** Bearing Ref: E Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A14SE (E)	739	-	411861 414972
172	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A9NW (SE)	754	-	411668 414585
173	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A9SW (SE)	773	-	411496 414436
174	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A9SW (SE)	800	-	411424 414374
175	**Potentially Infilled Land (Non-Water)** Bearing Ref: NW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1987	A17SE (NW)	802	-	410429 415764
176	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A9NE (SE)	807	-	411830 414706
177	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A9SW (SE)	838	-	411587 414414
178	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1984	A9NE (SE)	873	-	411737 414487
179	**Potentially Infilled Land (Non-Water)** Bearing Ref: NW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1987	A17SW (NW)	942	-	410236 415749
180	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A18SW (N)	499	-	410835 415709
181	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A18SW (N)	501	-	410807 415695
182	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A18SW (N)	508	-	410896 415745
183	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A18NE (N)	602	-	411203 415855
184	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A19NW (NE)	724	-	411387 415918
185	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A19SW (NE)	779	-	411666 415768
186	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A11NE (W)	924	-	409999 415221

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
187	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1854	A19NE (NE)	947	-	411798 415873
188	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A19NE (NE)	983	-	411781 415944
189	**Registered Landfill Sites** Licence Holder: Eric Wimpenny & Son Ltd Licence Reference: 205 Site Location: The Folly, 184A Cowersley Lane, HUDDERSFIELD, West Yorkshire, HD4 5UT Licence Easting: Not Supplied Licence Northing: Not Supplied Operator Location: As Site Address Authority: Environment Agency - North East Region, Ridings Area Site Category: Landfill Max Input Rate: Undefined Waste Source Restrictions: No known restriction on source of waste Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 7th June 1979 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Positioned by the supplier Boundary Accuracy: Moderate Authorised Waste: Constr'N/Demol. Inert/Non-Combustible Excavated Natural Materials $ Prohibited Waste: Biodegradable/Putrescible Waste Poisonous, Noxious, Polluting Wastes	A13SW (W)	222	2	410702 415153
190	**Registered Landfill Sites** Licence Holder: Kirklees M.D.C. Licence Reference: 722 Site Location: West Of Lock 12, Huddersfield Narrow Canal, Huddersfield, West Yorkshire Licence Easting: 411000 Licence Northing: 415680 Operator Location: PO Box 95, Civic Centre, HUDDERSFIELD, West Yorkshire, HD1 2NA Authority: Environment Agency - North East Region, Ridings Area Site Category: Landfill Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st November 1989 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Silt Dredged From Canal Solid Subsoil/Soil Prohibited Waste: Liable To Cause Environmental Hazards Poisonous, Noxious, Polluting Wastes	A18SW (N)	418	2	411000 415680
191	**Registered Landfill Sites** Licence Holder: Standard Fireworks Ltd Licence Reference: 129 Site Location: Quarry At Blackmoorfoot Road, Crosland Moor, Huddersfield, West Yorkshire Licence Easting: 411500 Licence Northing: 414550 Operator Location: Standard House, Half Moon Street, Huddersfield, West Yorkshire Authority: Environment Agency - North East Region, Ridings Area Site Category: Landfill Max Input Rate: Undefined Waste Source Restrictions: No known restriction on source of waste Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 18th November 1977 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Constr'N/Demol. Inert/Non-Combustible Prohibited Waste: Poisonous, Noxious, Polluting Wastes	A9NW (SE)	677	2	411500 414550

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
192	**Registered Landfill Sites** Licence Holder: Conroy & Booth Ltd Licence Reference: 361 Site Location: Quarry At Cowlersley Lane, Linthwaite, Huddersfield, West Yorkshire Licence Easting: 410230 Licence Northing: 414600 Operator Location: Ryefield Estate, Scholes, Holmfirth, HUDDERSFIELD, West Yorkshire, HD7 1UQ Authority: Environment Agency - North East Region, Ridings Area Site Category: Landfill Max Input Rate: Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 7th April 1983 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Construction And Demolition Wastes Excavation Waste Max.Waste Permitted By Licence Prohibited Waste: Liable To Cause Environmental Hazards Poisonous, Noxious, Polluting Wastes Special Wastes (As In '96 Regs) Waste N.O.S.	A7NW (SW)	830	2	410230 414600
193	**Registered Landfill Sites** Licence Holder: Johnsons Wellfield Quarries Ltd Licence Reference: 49 Site Location: Wellfield Quarry, Crosland Hill, Huddersfield, West Yorkshire Licence Easting: 411800 Licence Northing: 414400 Operator Location: Crossland Hill, HUDDERSFIELD, West Yorkshire, HD4 7AB Authority: Environment Agency - North East Region, Ridings Area Site Category: Landfill Max Input Rate: Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Status: Operational as far as is knownOperational Dated: 1st April 1997 Preceded By Licence: 49 Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Breeze Blocks, Building Sand, Gravel, Tiles, Other Ceramic Matls, Slate Concrete Slurries Industrial Wastes Max.Waste Permitted By Licence Stone Cutting Slurries Uncontam. Earth/Excav'N Waste Uncontam.Brick,Stone,Solid Concrete, Prohibited Waste: Special Wastes (As In '96 Regs) W. Likely To Pollute Environment N.O.S W. With Pot'L Harm Human Health N.O.S Waste N.O.S.	A9SE (SE)	979	2	411800 414400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
193	**Registered Landfill Sites** Licence Holder: Johnsons Wellfield Quarries Ltd Licence Reference: 49 Site Location: Wellfield Quarry, Crosland Hill, Huddersfield, West Yorkshire Licence Easting: 411800 Licence Northing: 414400 Operator Location: Crossland Hill, HUDDERSFIELD, West Yorkshire, HD4 7AB Authority: Environment Agency - North East Region, Ridings Area Site Category: Landfill Max Input Rate: Large (Equal to or greater than 75,000 and less than 250,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Status: Record supersededSuperseded Dated: 1st October 1992 Preceded By Licence: 49 Superseded By Licence: 49 Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Concrete Slurries; Construction And Demolition Wastes; Excavation Waste; Industrial Wastes; Max.Waste Permitted By Licence-Stated; Stone Cutting Slurries Prohibited Waste: Biodegradable Waste; Poisonous, Noxious And Polluting N.O.S; Waste Forming Detrimental Leachate	A9SE (SE)	979	2	411800 414400
193	**Registered Landfill Sites** Licence Holder: Johnsons Wellfield Quarries Ltd Licence Reference: 49 Site Location: Wellfield Quarry, Crosland Hill, Huddersfield, West Yorkshire Licence Easting: 411800 Licence Northing: 414400 Operator Location: Crossland Hill, HUDDERSFIELD, West Yorkshire, HD4 7AB Authority: Environment Agency - North East Region, Ridings Area Site Category: Landfill Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Status: Record supersededSuperseded Dated: 28th February 1978 Preceded By Licence: Not Given Superseded By Licence: 49 Positional Accuracy: Manually positioned to the address or location Boundary Accuracy: Not Applicable Authorised Waste: Biological Effluent Sludge; Concrete Waste; Constr'N/Demol. Inert/Non-Haz/Non-Tox; Excavated Natural Materials $; Ind. Non-Haz. Inert, Non-Putresc.; Mineral Processing Wastes Prohibited Waste: Poisonous, Noxious, Polluting Wastes	A9SE (SE)	979	2	411800 414400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
194	**Registered Waste Transfer Sites** Licence Holder: I.M. (Contractors) Ltd Licence Reference: 1547 Site Location: The Old Railway Goods Yard, Scar Lane, Milnsbridge, Huddersfield, West Yorkshire Operator Location: The Barn, 27 Brook Lane, Golcar, HUDDERSFIELD, West Yorkshire, HD7 4JA Authority: Environment Agency - North East Region, Ridings Area Site Category: Transfer Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Licence Status: Operational as far as is knownOperational Dated: 1st December 1996 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the road within the address or location Boundary Quality: Not Supplied Authorised Waste: Breeze Blocks, Building Sand, Gravel, Tiles, Other Ceramic Matls, Slate Bulky Household Waste Canteen Waste Com. & Ind. Waste May Include Constr'N/Demolition Wastes Incl. Domestic Dustbin Waste Garden Waste General Skip Waste May Incl Max.Storage In Licence Max.Waste Permitted By Licence Office/Shop/Ind Prems.Waste Uncontam. Earth/Excav'N Waste Uncontam.Brick,Stone,Solid Concrete, Wood, Paper, Plastic Prohibited Waste: Liable To Cause Environmental Hazards Poisonous, Noxious, Polluting Wastes Spec.Waste (Epa'90:S62/1996 Regs) Waste N.O.S.	A18NE (N)	772	2	411190 416030
195	**Registered Waste Treatment or Disposal Sites** Licence Holder: J S Bamforth & Co Ltd Licence Reference: 843 Site Location: Top Vale Works, Colne Vale Road, Milnsbridge, HUDDERSFIELD, West Yorkshire, HD3 4NW Operator Location: As Site Address Authority: Environment Agency - North East Region, Ridings Area Site Category: Scrapyard Max Input Rate: Large (Equal to or greater than 75,000 and less than 250,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Licence Status: Operational as far as is knownOperational Dated: 1st March 1991 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Located by supplier to within 100m Boundary Quality: Not Supplied Authorised Waste: Batteries Cable/Wiring Capacitors/Transformers Copper,Brass,Tin,Gunmetal,Carbides, Ferrous Metal Scrap Household/Domestic Goods Lead, Zinc,Mercury,Silver,Aluminium, Max.Waste Permitted By Licence Non-Ferrous Metal Scrap Consisting Of Oil Old Cars Old Trailers Other Vehicles Stainless Steel,Alloy Steel Tyres Prohibited Waste: Liquid Waste N.O.S. Special Wastes (As In '96 Regs) N.O.S W. Likely To Pollute Environment N.O.S W. With Pot'L Harm Human Health N.O.S Waste N.O.S.	A18SE (N)	473	2	411100 415740

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
196	**Control of Major Accident Hazards Sites (COMAH)** Name: Black Cat Fireworks Limited Location: Standard Drive, Crosland Hill, Huddersfield, HD4 7AD Reference: Not Supplied Type: Upper Tier **Status: Active** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	531	7	411528 414762
197	**Explosive Sites** Name: Huddersfield/Black Cat Fireworks Limited Location: Standard Drive, Crosland Hill, Huddersfield, Hd4 7ad **Status: Active** Positional Accuracy: Manually positioned to the address or location	A9NW (SE)	531	7	411528 414762

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Millstone Grit Group [See Also Migr]	A13SE (NW)	0	1	411027 415144
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SE (NW)	0	1	411027 415144
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SW (NW)	0	1	411020 415154
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SE (S)	44	1	411027 415000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SE (SE)	216	1	411316 415000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13NW (NW)	344	1	410695 415375
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A14SW (E)	363	1	411500 415144

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A14NW (E)	365	1	411500 415163
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A18SW (NW)	412	1	410817 415595
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A18SE (N)	466	1	411027 415734
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A18SW (NW)	488	1	410727 415616
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A17SE (NW)	508	1	410591 415500
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A18SW (NW)	522	1	410720 415657

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A12NE (NW)	595	1	410429 415443
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 200 - 300 mg/kg Nickel Concentration: 15 - 30 mg/kg	A18NW (N)	735	1	411000 416000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A12SW (W)	752	1	410162 415125
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A19SE (NE)	783	1	411845 415500
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A12SW (W)	795	1	410120 415139
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A19NW (NE)	849	1	411699 415836

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 120 - 180 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A19NW (NE)	856	1	411512 416000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A14SE (E)	871	1	412000 415000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A12SW (W)	872	1	410045 415000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A11SE (W)	907	1	410010 415000
198	**BGS Recorded Mineral Sites** Site Name: Crosland Hill Quarry Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91318 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Millstone Grit Group Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13SE (SE)	171	1	411194 414960
199	**BGS Recorded Mineral Sites** Site Name: Crosland Hill Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 13877 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14SW (E)	267	1	411395 415050

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
200	**BGS Recorded Mineral Sites** Site Name: Long Wood Location: Crosland Moor, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91321 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8NW (S)	278	1	410949 414767
201	**BGS Recorded Mineral Sites** Site Name: Crosland Hill Location: Crosland Moor, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91322 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13SE (SE)	296	1	411298 414873
202	**BGS Recorded Mineral Sites** Site Name: Guy Edge Quarries Location: Linthwaite, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91310 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Huddersfield White Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A12NE (W)	301	1	410633 415197
203	**BGS Recorded Mineral Sites** Site Name: Crosland Hill Quarry Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 13874 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8NE (S)	313	1	411080 414765
204	**BGS Recorded Mineral Sites** Site Name: Yew Tree Lane Location: Linthwaite, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91309 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Huddersfield White Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13NW (NW)	316	1	410802 415447
205	**BGS Recorded Mineral Sites** Site Name: Common End Location: Linthwaite, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91307 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Huddersfield White Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A12NE (W)	328	1	410641 415273

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
206	**BGS Recorded Mineral Sites** Site Name: Cowlersley Location: Linthwaite, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91306 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Huddersfield White Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A18SW (N)	331	1	410871 415533
207	**BGS Recorded Mineral Sites** Site Name: Common End Location: Linthwaite, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91303 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Huddersfield White Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A13NW (NW)	336	1	410709 415365
208	**BGS Recorded Mineral Sites** Site Name: Crosland Hill Location: Crosland Moor, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91323 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8NE (SE)	345	1	411241 414791
209	**BGS Recorded Mineral Sites** Site Name: Idle Hill Quarries Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91344 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14SW (E)	378	1	411513 415079
210	**BGS Recorded Mineral Sites** Site Name: Guy Edge Location: Linthwaite, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91304 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Huddersfield White Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A12SE (W)	379	1	410536 415123
211	**BGS Recorded Mineral Sites** Site Name: Idle Hill Quarries Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91316 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14SW (E)	430	1	411567 415102

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
212	**BGS Recorded Mineral Sites** Site Name: Felks Stile Location: Crosland Moor, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91320 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8NW (S)	436	1	410860 414614
213	**BGS Recorded Mineral Sites** Site Name: Waterhouse Quarries Location: Crosland Moor, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91319 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8NE (SE)	438	1	411254 414696
214	**BGS Recorded Mineral Sites** Site Name: Waterhouse Quarries Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 13876 Type: Opencast **Status: Ceased** Operator: Wimpenny Stone Quarries Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	467	1	411385 414725
215	**BGS Recorded Mineral Sites** Site Name: Guy Edge Quarries Location: Linthwaite, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91311 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Huddersfield White Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A12SE (W)	477	1	410445 414996
216	**BGS Recorded Mineral Sites** Site Name: Idle Hill Quarries Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91315 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14SW (E)	477	1	411614 415129
217	**BGS Recorded Mineral Sites** Site Name: Waterhouse Quarries Location: Crosland Moor, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91324 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8NE (SE)	481	1	411339 414685

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
218	**BGS Recorded Mineral Sites** Site Name: Malley Hole Quarry Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 13872 Type: Opencast **Status: Ceased** Operator: Johnsons Wellfield Quarries Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14SW (E)	482	1	411615 415060
219	**BGS Recorded Mineral Sites** Site Name: Batty'S Plantation Location: Linthwaite, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 94119 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	497	1	410750 414581
220	**BGS Recorded Mineral Sites** Site Name: Idle Hill Quarries Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91314 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14NW (E)	504	1	411637 415184
221	**BGS Recorded Mineral Sites** Site Name: Dark Wood Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91313 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14NW (E)	513	1	411624 415294
222	**BGS Recorded Mineral Sites** Site Name: Crosland Moor Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91350 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	530	1	411502 414737
223	**BGS Recorded Mineral Sites** Site Name: Idle Hill Quarries Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91345 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14SW (E)	531	1	411668 415126

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
224	**BGS Recorded Mineral Sites** Site Name: Waterhouse Quarries Location: Crosland Moor, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91325 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	535	1	411409 414660
225	**BGS Recorded Mineral Sites** Site Name: Rye Croft Edge Quarries Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 13879 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8NW (SW)	556	1	410745 414520
226	**BGS Recorded Mineral Sites** Site Name: Hazel Grove Location: Linthwaite, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91305 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Huddersfield White Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A12SE (W)	566	1	410373 414916
227	**BGS Recorded Mineral Sites** Site Name: Tom Lane Quarry Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 13871 Type: Opencast **Status: Ceased** Operator: William Boothroyd & Sons Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14NE (E)	585	1	411720 415175
228	**BGS Recorded Mineral Sites** Site Name: Spinkwell Quarries Location: Crosland Moor, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91326 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	597	1	411526 414668
229	**BGS Recorded Mineral Sites** Site Name: California Quarries Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 13870 Type: Opencast **Status: Ceased** Operator: Crosland Moor Stone & Sand Co. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14NW (E)	603	1	411700 415365

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
230	**BGS Recorded Mineral Sites** Site Name: Tom Lane Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91361 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14NE (E)	611	1	411736 415240
231	**BGS Recorded Mineral Sites** Site Name: Manor House Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 11161 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	646	1	411655 414735
232	**BGS Recorded Mineral Sites** Site Name: Deep Lane Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91346 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14NE (E)	646	1	411733 415404
233	**BGS Recorded Mineral Sites** Site Name: Spinkwell Quarries Location: Crosland Moor, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91327 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	648	1	411592 414660
234	**BGS Recorded Mineral Sites** Site Name: Crosland Hall Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91343 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	667	1	411730 414815
235	**BGS Recorded Mineral Sites** Site Name: Rye Croft Edge Location: Linthwaite, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 94120 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8SW (SW)	678	1	410715 414402

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
236	**BGS Recorded Mineral Sites** Site Name: Hazel Grove Location: Linthwaite, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 94157 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Huddersfield White Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A7NW (SW)	678	1	410310 414770
237	**BGS Recorded Mineral Sites** Site Name: Ryecroft Edge Quarries Location: Hazel Grove, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91353 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A8SW (S)	683	1	410786 414377
238	**BGS Recorded Mineral Sites** Site Name: Chapel Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91347 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14SE (E)	693	1	411798 414913
239	**BGS Recorded Mineral Sites** Site Name: Spinkwell Quarries Location: Crosland Moor, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91328 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	700	1	411701 414706
240	**BGS Recorded Mineral Sites** Site Name: Crosland Hall Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91348 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14SE (E)	712	1	411797 414854
241	**BGS Recorded Mineral Sites** Site Name: Matlock House Quarry Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 11160 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	724	1	411525 414510

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
242	**BGS Recorded Mineral Sites** Site Name: Spinkwell Quarries Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 11162 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	729	1	411755 414735
243	**BGS Recorded Mineral Sites** Site Name: Scar Wood Location: Golcar, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91287 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Huddersfield White Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	739	1	410696 415906
244	**BGS Recorded Mineral Sites** Site Name: Hazel Grove Location: Linthwaite, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91308 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Huddersfield White Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A7NW (SW)	740	1	410275 414700
245	**BGS Recorded Mineral Sites** Site Name: Moorfield Quarry Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 11159 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9SW (SE)	749	1	411460 414445
246	**BGS Recorded Mineral Sites** Site Name: South Crosland Location: Crosland Moor, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91317 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	769	1	411692 414589
247	**BGS Recorded Mineral Sites** Site Name: Chapel Fields Quarry Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 13873 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14SE (E)	776	1	411900 414980

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
248	**BGS Recorded Mineral Sites** Site Name: Broad Oak Location: Linthwaite, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91312 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Huddersfield White Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A7NW (SW)	785	1	410250 414653
248	**BGS Recorded Mineral Sites** Site Name: Linthwaite Location: Linthwaite, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 9495 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Huddersfield White Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A7NW (SW)	826	1	410229 414608
249	**BGS Recorded Mineral Sites** Site Name: California Quarries Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 13868 Type: Opencast **Status: Ceased** Operator: Crosland Moor Stone & Sand Co. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14NE (E)	793	1	411870 415460
250	**BGS Recorded Mineral Sites** Site Name: Ryecroft Edge Quarries Location: Hazel Grove, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91354 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	804	1	410648 414292
250	**BGS Recorded Mineral Sites** Site Name: Rye Croft Edge Location: Linthwaite, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 94121 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	835	1	410623 414268
251	**BGS Recorded Mineral Sites** Site Name: Matlock House Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91352 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	808	1	411750 414594

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
252	**BGS Recorded Mineral Sites** Site Name: Moorfield Farm Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 109905 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9SW (SE)	816	1	411520 414401
253	**BGS Recorded Mineral Sites** Site Name: Matlock House Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91351 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	826	1	411726 414542
254	**BGS Recorded Mineral Sites** Site Name: Crosland Hill Quarry Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 13886 Type: Opencast **Status: Ceased** Operator: Wimpenny Stone Quarries Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	831	1	411870 414730
255	**BGS Recorded Mineral Sites** Site Name: Scar Wood Location: Golcar, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 9494 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Huddersfield White Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	839	1	410398 415784
256	**BGS Recorded Mineral Sites** Site Name: Moorfield Farm Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 109904 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9SW (SE)	849	1	411475 414342
257	**BGS Recorded Mineral Sites** Site Name: Wellfield Quarry Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 109906 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	858	1	411814 414594

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
258	**BGS Recorded Mineral Sites** Site Name: Ryecroft Edge Quarries Location: Hazel Grove, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 91355 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	885	1	410612 414219
259	**BGS Recorded Mineral Sites** Site Name: Linthwaite Location: Linthwaite, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 94156 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Huddersfield White Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A7NW (SW)	902	1	410190 414530
260	**BGS Recorded Mineral Sites** Site Name: Moorfield Quarry Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 11158 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9SW (SE)	903	1	411430 414265
261	**BGS Recorded Mineral Sites** Site Name: Wellfield Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 5764 Type: Opencast **Status: Ceased** Operator: Johnsons Wellfield Quarries Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	905	1	411795 414500
262	**BGS Recorded Mineral Sites** Site Name: California Quarries Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 13869 Type: Opencast **Status: Ceased** Operator: Crosland Moor Stone & Sand Co. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A19SE (E)	934	1	412000 415515
263	**BGS Recorded Mineral Sites** Site Name: Wellfield Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 94022 Type: Opencast **Status: Ceased** Operator: Johnsons Wellfield Quarries Ltd. Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A9SW (SE)	954	1	411670 414330

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
264	**BGS Recorded Mineral Sites** Site Name: Rye Croft Edge Quarries Location: Crosland Hill, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 13878 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Rough Rock Flags Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	974	1	410545 414150
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available				
	Coal Mining Affected Areas In an area that might not be affected by coal mining				
	Non Coal Mining Areas of Great Britain Risk: Rare Source: British Geological Survey, National Geoscience Information Service	A13SE (NW)	0	1	411027 415144
	Non Coal Mining Areas of Great Britain Risk: Rare Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	44	1	411027 415000
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (NW)	0	1	411027 415144
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	44	1	411027 415000
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (NW)	0	1	411027 415144
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	44	1	411027 415000
	Potential for Compressible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	164	1	411090 414926
	Potential for Compressible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	227	1	411359 415073
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (NW)	0	1	411027 415144
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	44	1	411027 415000
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (NW)	0	1	411020 415154
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (NW)	0	1	411027 415144
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	44	1	411027 415000
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	113	1	410827 415000
	Potential for Landslide Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	119	1	411161 415000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Landslide Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	121	1	411110 414967
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	159	1	411131 414946
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	164	1	411090 414926
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	181	1	411272 415000
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	197	1	410792 414904
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (NW)	0	1	411027 415144
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	44	1	411027 415000
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	164	1	411090 414926
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (E)	227	1	411359 415073
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (NW)	0	1	411020 415154
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (NW)	0	1	411027 415144
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	44	1	411027 415000
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	113	1	410827 415000
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	134	1	411037 414938
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	197	1	410792 414904
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	214	1	411316 415000
	Radon Potential - Radon Affected Areas Affected Area: The property is in an Intermediate probability radon area (1 to 3% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13SE (NW)	0	1	411027 415144
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	410975 415201
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13SE (NW)	0	1	411027 415144
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	0	1	410975 415201

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
265	**Contemporary Trade Directory Entries** Name: Eco Sea Clean Carpet Care Location: 30, Winget Avenue, Huddersfield, HD4 5UL Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NW (NW)	125	-	410884 415241
266	**Contemporary Trade Directory Entries** Name: Alan Thomas Location: Pymroyd, Huddersfield, West Yorkshire, HD4 5PB Classification: Cookers - Sales & Service **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SW (E)	246	-	411384 415121
267	**Contemporary Trade Directory Entries** Name: Converting Developments Ltd Location: 25, Yew Tree Lane, Huddersfield, West Yorkshire, HD4 5UY Classification: Carbon Products **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NW (NW)	304	-	410699 415308
268	**Contemporary Trade Directory Entries** Name: Tony Shaw Location: 49, Southern Road, Huddersfield, West Yorkshire, HD4 5TJ Classification: Washing Machines - Servicing & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	325	-	411359 415431
269	**Contemporary Trade Directory Entries** Name: C&N Logistics Ltd Location: Spurn Point,Manchester Road, Linthwaite, Huddersfield, West Yorkshire, HD7 5RF Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NW (NW)	346	-	410785 415472
269	**Contemporary Trade Directory Entries** Name: D M Textile Machinery Ltd Location: Manchester Road, Spurn Point, Linthwaite, HUDDERSFIELD, HD7 5RF Classification: Machinery - Industrial & Commercial **Status: Active** Positional Accuracy: Automatically positioned to the address	A13NW (NW)	374	-	410762 415488
270	**Contemporary Trade Directory Entries** Name: R A Stobbs Location: 933, Manchester Road, Huddersfield, HD4 5TA Classification: Printing Engineering Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (N)	348	-	411093 415615
271	**Contemporary Trade Directory Entries** Name: T C R Vehicle Contracts Ltd Location: Manchester Road, Huddersfield, West Yorkshire, HD4 5TB Classification: Garage Services **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A18SE (N)	387	-	411130 415650
271	**Contemporary Trade Directory Entries** Name: Town Tyres & Autocare Ltd Location: Manchester Road, Huddersfield, HD4 5TB Classification: Mot Testing Centres **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (N)	387	-	411130 415650
272	**Contemporary Trade Directory Entries** Name: R V Spivey & Sons Location: 1, Avison Road, Huddersfield, HD4 5TL Classification: Textile Manufacturing **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	433	-	411487 415439
273	**Contemporary Trade Directory Entries** Name: Keefe Ramsden Ltd Location: Morley La,Milnsbridge, Huddersfield, West Yorkshire, HD3 4NF Classification: Textile Manufacturing **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A18SE (NE)	447	-	411300 415650

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
274	**Contemporary Trade Directory Entries** Name: Texaco Filling Station Location: 819, Manchester Road, Huddersfield, HD4 5SX Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	491	-	411449 415577
274	**Contemporary Trade Directory Entries** Name: Colne Valley Service Station Location: 819, Manchester Road, Huddersfield, HD4 5SX Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	491	-	411449 415577
274	**Contemporary Trade Directory Entries** Name: Texaco Location: Milnsbridge Service Station, 819, Manchester Road, Huddersfield, HD4 5SX Classification: Petrol Filling Stations **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	498	-	411455 415581
274	**Contemporary Trade Directory Entries** Name: Co-Op Petrol Location: MILNSBRIDGE, HUDDERSFIELD, HD4 5SX Classification: Petrol Filling Stations **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	498	-	411455 415581
275	**Contemporary Trade Directory Entries** Name: Scope Location: Britannia Mills, Britannia Road, Huddersfield, HD3 4QG Classification: Office Furniture & Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	504	-	410851 415723
275	**Contemporary Trade Directory Entries** Name: Colne Valley Centre Location: Britannia Mills, Britannia Road, Huddersfield, West Yorkshire, HD3 4QG Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	504	-	410851 415723
275	**Contemporary Trade Directory Entries** Name: Bus Bodies Location: Britannia Mills, Britannia Road, Huddersfield, West Yorkshire, HD3 4QG Classification: Classic Car Specialists **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	504	-	410851 415723
275	**Contemporary Trade Directory Entries** Name: Britannia Coachworks Location: Unit 6c, Britannia Mills, Britannia Road, Huddersfield, HD3 4QG Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	504	-	410851 415723
275	**Contemporary Trade Directory Entries** Name: Britannia Mending Co Location: Britannia Mills, Britannia Road, Huddersfield, HD3 4QG Classification: Textile Manufacturing **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	504	-	410851 415723
275	**Contemporary Trade Directory Entries** Name: Armstrong Fabrication Location: Britannia Mills,Britannia Rd, Huddersfield, West Yorkshire, HD3 4QG Classification: Gate Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A18SW (N)	525	-	410854 415747
275	**Contemporary Trade Directory Entries** Name: Blackrock Wrought Iron Location: Britannia Mills,Britannia Rd, Huddersfield, West Yorkshire, HD3 4QG Classification: Wrought Ironwork **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A18SW (N)	534	-	410862 415760

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
275	**Contemporary Trade Directory Entries** Name: Armstrong Fabrications Location: 6B Britannia Trading Est,Britannia Rd, Huddersfield, West Yorkshire, HD3 4QB Classification: Gate Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A18SW (N)	534	-	410870 415763
275	**Contemporary Trade Directory Entries** Name: F Q Car Sales Location: Unit 16, Britannia Mills Trading Estate, Britannia Road, Huddersfield, HD3 4QG Classification: Car Dealers - Used **Status: Active** Positional Accuracy: Automatically positioned to the address	A18SW (N)	552	-	410822 415761
276	**Contemporary Trade Directory Entries** Name: J S Bamforth & Co Ltd Location: Top Vale Works, Colne Vale Road, Huddersfield, HD3 4NY Classification: Scrap Metal Merchants **Status: Active** Positional Accuracy: Automatically positioned to the address	A18SE (N)	521	-	411065 415788
277	**Contemporary Trade Directory Entries** Name: Trojan Baths Location: Britannia Mills,Britannia Road, Huddersfield, West Yorkshire, HD3 4QG Classification: Bathroom Fixtures - Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A18SW (N)	521	-	410909 415764
277	**Contemporary Trade Directory Entries** Name: David Connolly Ltd Location: Unit 3, Stanley Mills Business Park, Britannia Road, Huddersfield, HD3 4QS Classification: Office Equipment Manufacturers & Distributors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	522	-	410912 415766
277	**Contemporary Trade Directory Entries** Name: L M H Vehicle Services Location: Unit 5-6b, Britannia Mills, Britannia Road, Huddersfield, HD3 4QG Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	522	-	410912 415766
277	**Contemporary Trade Directory Entries** Name: First Impression Gates & Fences Location: Unit 5-6b, Britannia Mills, Britannia Road, Huddersfield, HD3 4QG Classification: Wrought Ironwork **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	522	-	410912 415766
277	**Contemporary Trade Directory Entries** Name: Jm Car Sales Location: Unit 5-6b, Britannia Mills, Britannia Road, Huddersfield, HD3 4QG Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	522	-	410912 415766
277	**Contemporary Trade Directory Entries** Name: Mallinson Recycling Ltd Location: 65 Britannia Rd, Milnsbridge, Huddersfield, West Yorkshire, HD3 4QG Classification: Recycling Centres **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A18SW (N)	553	-	410926 415802
277	**Contemporary Trade Directory Entries** Name: Apex Auto Services Location: Britannia Road, Huddersfield, HD3 4QG Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	558	-	410909 415802
278	**Contemporary Trade Directory Entries** Name: Midland Automation Ltd Location: Unit 3, Milnsbridge Business Centre, Colne Vale Road, Huddersfield, HD3 4NY Classification: Electronic Component Manufacturers & Distributors **Status: Active** Positional Accuracy: Automatically positioned to the address	A18SE (N)	528	-	411210 415777

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
278	**Contemporary Trade Directory Entries** Name: Kempston Controls Location: Unit 3, Milnsbridge Business Centre, Colne Vale Road, Huddersfield, HD3 4NY Classification: Electronic Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (N)	539	-	411207 415788
278	**Contemporary Trade Directory Entries** Name: Croda Colours Ltd Location: Milnsbridge Business Centre,Colne Vale Rd, Huddersfield, West Yorkshire, HD3 4NX Classification: Chemicals - Distributors & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (N)	539	-	411207 415788
279	**Contemporary Trade Directory Entries** Name: Tag Togs Location: Unit 26, Holme Mills, Britannia Road, Huddersfield, HD3 4QF Classification: Soft Furnishings - Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	531	-	410585 415531
279	**Contemporary Trade Directory Entries** Name: 2m Press Ltd Location: Unit 22, Holme Mills, Britannia Road, Huddersfield, HD3 4QF Classification: Printers **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	549	-	410550 415513
279	**Contemporary Trade Directory Entries** Name: C T L Supplies Ltd Location: Unit 15/A, Holme Mills, Britannia Road, Huddersfield, HD3 4QF Classification: Cleaning Materials & Equipment **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	563	-	410559 415548
279	**Contemporary Trade Directory Entries** Name: Tanks & Systems Location: Unit 15/A, Holme Mills, Britannia Road, Huddersfield, HD3 4QF Classification: Chemical Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	563	-	410559 415548
279	**Contemporary Trade Directory Entries** Name: D & G Office Services Location: Unit 16, Holme Mills, Britannia Road, Huddersfield, HD3 4QF Classification: Office Furniture & Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	564	-	410530 415511
279	**Contemporary Trade Directory Entries** Name: Julian Wadsworth Artist Blacksmith Location: Unit 6, Holme Mills, Britannia Road, Huddersfield, HD3 4QF Classification: Blacksmiths & Forgemasters **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	564	-	410530 415511
279	**Contemporary Trade Directory Entries** Name: D & M Print Location: Unit 23, Holme Mills, Britannia Road, Huddersfield, HD3 4QF Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	564	-	410530 415511
279	**Contemporary Trade Directory Entries** Name: Future Powdercoating Ltd Location: Unit 11,Holme Mills,Britannia Rd, Huddersfield, West Yorkshire, HD3 4QF Classification: Powder Coatings **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	564	-	410530 415511
279	**Contemporary Trade Directory Entries** Name: M D Polymers Ltd Location: Unit 16, Holme Mills, Britannia Road, Huddersfield, HD3 4QF Classification: Recycling Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	564	-	410530 415511

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
279	**Contemporary Trade Directory Entries** Name: Danks Fabrications Location: Unit 19/A, Holme Mills, Britannia Road, Huddersfield, West Yorkshire, HD3 4QF Classification: Wrought Ironwork **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A17SE (NW)	574	-	410582 415593
279	**Contemporary Trade Directory Entries** Name: The Horizon Group Location: UNIT 15B, HOLME MILLS, BRITANNIA ROAD, MILNSBRIDGE, HUDDERSFIELD, HD3 4QF Classification: Seating Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	579	-	410527 415534
280	**Contemporary Trade Directory Entries** Name: Black Cat Location: Standard Drive, Crosland Hill, Huddersfield, HD4 7AD Classification: Firework Stockists **Status: Active** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	531	-	411528 414762
281	**Contemporary Trade Directory Entries** Name: Etp Chemicals Ltd Location: Colne Vale Business Park, Colne Vale Road, Huddersfield, HD3 4NY Classification: Chemicals - Distributors & Wholesalers **Status: Active** Positional Accuracy: Automatically positioned to the address	A18SE (N)	535	-	411135 415798
282	**Contemporary Trade Directory Entries** Name: Sprayaway Accident & Repair Centre Ltd Location: Unit 28, Britannia Mills, Britannia Road, Huddersfield, HD3 4QG Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	548	-	410856 415773
282	**Contemporary Trade Directory Entries** Name: Mills Cash For Scrap Cars Location: Unit 25, Britannia Mills Trading Estate, Britannia Road, Huddersfield, HD3 4QG Classification: Salvage Dealers **Status: Active** Positional Accuracy: Automatically positioned to the address	A18SW (N)	548	-	410856 415773
282	**Contemporary Trade Directory Entries** Name: Pogson Auto Welding Services Location: Unit 26, Britannia Mills, Britannia Road, Huddersfield, HD3 4QG Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	548	-	410856 415773
282	**Contemporary Trade Directory Entries** Name: J R T Location: Unit 25, Britannia Mills, Britannia Road, Huddersfield, HD3 4QG Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	548	-	410856 415773
282	**Contemporary Trade Directory Entries** Name: United Pallet Repairs Ltd Location: Unit 27, Britannia Mills, Britannia Road, Huddersfield, HD3 4QG Classification: Pallets, Crates & Packing Cases **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	548	-	410856 415773
282	**Contemporary Trade Directory Entries** Name: Prestige Sewn Products Location: Unit 6/B, Britannia Mills, Britannia Road, Huddersfield, HD3 4QG Classification: Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	548	-	410856 415773
283	**Contemporary Trade Directory Entries** Name: Stairlift Solutions Uk Location: Unit 5,Colne Vale Rd, Huddersfield, West Yorkshire, HD3 4NY Classification: Stairlifts - Manufacturers & Installers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A18SE (N)	553	-	411273 415781

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
283	**Contemporary Trade Directory Entries** Name: Planters & Ornaments Location: Unit 1, Milnsbridge Business Centre, Colne Vale Road, Huddersfield, HD3 4NY Classification: Stone Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A18SE (N)	558	-	411270 415788
283	**Contemporary Trade Directory Entries** Name: Gt Commercials Location: Unit 2, Milnsbridge Business Centre, Colne Vale Road, Huddersfield, HD3 4NY Classification: Commercial Vehicle Bodybuilders & Repairers **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A18SE (N)	558	-	411270 415788
284	**Contemporary Trade Directory Entries** Name: G K & N Services Ltd Location: Unit 5, Colne Vale Business Park, Colne Vale Road, Huddersfield, HD3 4NY Classification: Drain & Sewer Clearance - Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (NE)	612	-	411319 415826
284	**Contemporary Trade Directory Entries** Name: Specialist Glass Products Location: Unit 3, Milnsbridge Business Centre, Colne Vale Road, Huddersfield, HD3 4NY Classification: Glass Products - Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NE (NE)	651	-	411351 415854
285	**Contemporary Trade Directory Entries** Name: M H Mear Location: Ramsden Mills, Britannia Road, Huddersfield, HD3 4QG Classification: Electrical Engineers **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	617	-	410492 415548
286	**Contemporary Trade Directory Entries** Name: Wheelie Wash Location: 6, Britannia Road, Huddersfield, HD3 4QB Classification: Cleaning Services - Domestic **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NW (N)	628	-	410845 415855
287	**Contemporary Trade Directory Entries** Name: Leaflets 2 Print Location: Unit 22, Holme Mills, Britannia Road, Huddersfield, HD3 4QF Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	630	-	410462 415532
287	**Contemporary Trade Directory Entries** Name: Simply Cheap Leaflet Printing Location: Unit 22, Holme Mills, Britannia Road, Huddersfield, HD3 4QF Classification: Printers **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	630	-	410462 415532
287	**Contemporary Trade Directory Entries** Name: Rollerden Fabrications Ltd Location: Unit 3, Holme Mills, Britannia Road, Huddersfield, West Yorkshire, HD3 4QF Classification: Door Manufacturers - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	636	-	410440 415517
288	**Contemporary Trade Directory Entries** Name: Micks Auto Services Location: 531, Manchester Road, Linthwaite, Huddersfield, HD7 5QX Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SW (W)	636	-	410281 415014
289	**Contemporary Trade Directory Entries** Name: Solutions4print Location: Unit 26,Britannia Rd, Huddersfield, West Yorkshire, HD3 4QF Classification: Printers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A17SE (NW)	656	-	410490 415612

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
290	**Contemporary Trade Directory Entries** Name: C S Associates Location: MILNSBRIDGE, HUDDERSFIELD, HD3 4LX Classification: Road Haulage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	670	-	411624 415652
290	**Contemporary Trade Directory Entries** Name: Bee-Spoke Location: Unit 8, Blakes Business Park, Radcliffe Road, Huddersfield, HD3 4LX Classification: Joinery Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	674	-	411629 415653
290	**Contemporary Trade Directory Entries** Name: Blakes Engineering Co Location: Unit 3, Blakes Business Park, Radcliffe Road, Huddersfield, HD3 4LX Classification: Precision Engineers **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	718	-	411666 415678
290	**Contemporary Trade Directory Entries** Name: Footprints Location: Unit 1, Radcliffe Road, Huddersfield, HD3 4LX Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	718	-	411666 415678
290	**Contemporary Trade Directory Entries** Name: Huddersfield Aluminium Location: Unit 1, Blakes Business Park, Radcliffe Road, Huddersfield, HD3 4LX Classification: Aluminium Fabricators **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	718	-	411666 415678
290	**Contemporary Trade Directory Entries** Name: A D G Engineering Ltd Location: Unit 2, Blakes Business Park, Radcliffe Road, Huddersfield, HD3 4LX Classification: Industrial Engineers **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	718	-	411666 415678
290	**Contemporary Trade Directory Entries** Name: G A S Auto Centre Location: Unit 1, Blakes Business Park, Radcliffe Road, Huddersfield, HD3 4LX Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	718	-	411666 415678
291	**Contemporary Trade Directory Entries** Name: Aso Light Haulage Location: 68, Scar Lane, Huddersfield, West Yorkshire, HD3 4PS Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	681	-	411090 415948
292	**Contemporary Trade Directory Entries** Name: Carriclean Location: 87, Broad Oak, Linthwaite, Huddersfield, West Yorkshire, HD7 5TE Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NW (SW)	696	-	410341 414676
292	**Contemporary Trade Directory Entries** Name: Fays Transport Location: 20, Broad Oak, Linthwaite, Huddersfield, HD7 5TE Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NW (SW)	734	-	410302 414666
293	**Contemporary Trade Directory Entries** Name: Hardy Location: 9a, New Street, Milnsbridge, Huddersfield, West Yorkshire, HD3 4LN Classification: Electrical Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	705	-	411567 415765
293	**Contemporary Trade Directory Entries** Name: Gledhill Motors Location: 9, New Street, Milnsbridge, Huddersfield, HD3 4LN Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	721	-	411586 415769

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
293	**Contemporary Trade Directory Entries** Name: Pennine Blending Co Ltd Location: New Street, Milnsbridge, Huddersfield, HD3 4LN Classification: Textile Manufacturing **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	762	-	411632 415780
293	**Contemporary Trade Directory Entries** Name: Pennine Textiles & Recycling Location: New Street, Milnsbridge, Huddersfield, HD3 4LN Classification: Textile Manufacturing **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	762	-	411632 415780
294	**Contemporary Trade Directory Entries** Name: Lowdhams Location: CROSLAND HILL ROAD, CROSLAND MOOR, HUDDERSFIELD, HD4 5NU Classification: Caravan Dealers & Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	710	-	411656 414637
295	**Contemporary Trade Directory Entries** Name: Ralph M O T Location: Scar Lane, Huddersfield, HD3 4QA Classification: Mot Testing Centres **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NW (N)	715	-	410788 415925
295	**Contemporary Trade Directory Entries** Name: Scar Lane Testing Centre Location: Scar Lane, Huddersfield, HD3 4QA Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NW (N)	715	-	410788 415925
296	**Contemporary Trade Directory Entries** Name: James Crowther Fabrics Ltd Location: Morley Lane, Huddersfield, West Yorkshire, HD3 4NS Classification: Textile Manufacturing **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	721	-	411489 415853
296	**Contemporary Trade Directory Entries** Name: A Batley Ltd Location: Morley Lane, Huddersfield, HD3 4NS Classification: Textile Manufacturing **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	732	-	411498 415861
296	**Contemporary Trade Directory Entries** Name: James Crowther Fabrics Ltd Location: 13-15, Morley Lane, Huddersfield, West Yorkshire, HD3 4NS Classification: Textile Manufacturing **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	781	-	411533 415895
297	**Contemporary Trade Directory Entries** Name: Auto Care Testing Centre Location: Scar Lane, Huddersfield, HD3 4QA Classification: Mot Testing Centres **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NW (N)	724	-	410805 415942
297	**Contemporary Trade Directory Entries** Name: Stern Location: Scar la Motors Filling Station Scar la, Huddersfield, West Yorkshire, HD3 4QA Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A18NW (N)	740	-	410823 415966
297	**Contemporary Trade Directory Entries** Name: Jet Filling Station Location: Scar Lane Motors Filling Station, Scar Lane, Huddersfield, HD3 4QA Classification: Petrol Filling Stations **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NW (N)	740	-	410822 415966
297	**Contemporary Trade Directory Entries** Name: C J Stern Oils Ltd Location: Scar Lane Motors Filling Station, Scar Lane, Huddersfield, HD3 4QA Classification: Oil Fuel Distributors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NW (N)	740	-	410823 415966

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
297	**Contemporary Trade Directory Entries** Name: C J Stern Ltd Location: Scar Lane Motors Filling Station, Scar Lane, HUDDERSFIELD, HD3 4QA Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NW (N)	740	-	410823 415966
298	**Contemporary Trade Directory Entries** Name: Ecoblast Supplies Ltd Location: Unit 3, Old Railway Goods Yard, Scar Lane, Huddersfield, HD3 4PE Classification: Machinery - Industrial & Commercial **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NE (N)	726	-	411141 415990
298	**Contemporary Trade Directory Entries** Name: Custom Cable Communications Location: Unit 2, Old Railway Goods Yard, Scar Lane, Huddersfield, HD3 4PE Classification: Telecommunications Equipment & Systems **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	726	-	411151 415989
298	**Contemporary Trade Directory Entries** Name: K P Motor Engineers Ltd Location: Unit 7, Old Railway Goods Yard, Scar Lane, Huddersfield, HD3 4PE Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NE (N)	747	-	411171 416008
298	**Contemporary Trade Directory Entries** Name: Fitzpatrick Fuels Location: Old Railway Goods Yard, Scar Lane, Huddersfield, HD3 4PE Classification: Coal & Smokeless Fuel Merchants & Distributors **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NE (N)	762	-	411135 416027
298	**Contemporary Trade Directory Entries** Name: Lynda'S Transport Location: Unit 10, Old Railway Goods Yard, Scar Lane, HUDDERSFIELD, HD3 4PE Classification: Road Haulage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NE (N)	763	-	411135 416027
298	**Contemporary Trade Directory Entries** Name: Lynda'S Transport Location: Unit 10, Old Railway Goods Yard, Scar Lane, Huddersfield, HD3 4PE Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	763	-	411135 416027
298	**Contemporary Trade Directory Entries** Name: G Moor Haulage Location: 12, Scar Lane, Huddersfield, HD3 4PE Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	763	-	411135 416027
298	**Contemporary Trade Directory Entries** Name: Soft Start Tech Ltd Location: Unit 3, Old Railway Goods Yard, Scar Lane, Huddersfield, HD3 4PE Classification: Electrical Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	763	-	411135 416027
299	**Contemporary Trade Directory Entries** Name: Arches Car Repairs & Tyre Disposals Location: 43, Scar Lane, Huddersfield, West Yorkshire, HD3 4QH Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NE (N)	728	-	411311 415954
300	**Contemporary Trade Directory Entries** Name: A S Joinery Location: Manchester Road, Spurn Point, Linthwaite, Huddersfield, HD7 5RF Classification: Joinery Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A12SW (W)	729	-	410189 415005
300	**Contemporary Trade Directory Entries** Name: Huddersfield Pallets Ltd Location: Jovil, Manchester Road, Linthwaite, HUDDERSFIELD, HD7 5QX Classification: Pallets, Crates & Packing Cases **Status: Active** Positional Accuracy: Automatically positioned to the address	A12SW (W)	733	-	410189 414975

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
301	**Contemporary Trade Directory Entries** Name: Huddfabs Ltd Location: Unit 11, Old Railway Goods Yard, Scar Lane, Huddersfield, HD3 4PE Classification: Sheet Metal Work **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NE (N)	736	-	411086 416004
302	**Contemporary Trade Directory Entries** Name: Europa Wools Ltd Location: Unit 8, Old Railway Goods Yard, Scar Lane, Huddersfield, HD3 4PE Classification: Knitting Yarn Manufacturers & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	765	-	411228 416016
302	**Contemporary Trade Directory Entries** Name: Pallet Pallet Location: Old Railway Goods Yard,Scar La, Huddersfield, W Yorkshire, HD3 4PZ Classification: Pallets, Crates & Packing Cases **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A18NE (N)	779	-	411218 416032
303	**Contemporary Trade Directory Entries** Name: F G 3 Manufacturing Northern Ltd Location: Unit 8 Blakes Business Park, Radcliffe Road, Huddersfield, West Yorkshire, HD3 4LX Classification: Joinery Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A19SE (NE)	776	-	411708 415717
304	**Contemporary Trade Directory Entries** Name: Jovil Garage Location: Jovil, Manchester Road, Linthwaite, Huddersfield, HD7 5QX Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A12SW (W)	778	-	410157 414901
304	**Contemporary Trade Directory Entries** Name: Xtreme Artworx Location: 6 Linthwaite Business Centre, Linthwaite, Huddersfield, West Yorkshire, HD7 5QX Classification: Car Painters & Sprayers **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A12SW (W)	787	-	410153 414881
304	**Contemporary Trade Directory Entries** Name: Wayne'S Mechanical Repairs Location: Manchester rd, Linthwaite, Huddersfield, West Yorkshire, HD7 5QX Classification: Garage Services **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A12SW (W)	787	-	410153 414881
304	**Contemporary Trade Directory Entries** Name: Nelson Roller Location: Bargate,Manchester Road, Linthwaite, Huddersfield, West Yorkshire, HD7 5QX Classification: Rubber & Plastic Products - Manufacturers **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A12SW (W)	789	-	410151 414880
305	**Contemporary Trade Directory Entries** Name: Morley Bros Ltd Location: Four Horseshoes Yard, Huddersfield, West Yorkshire, HD3 4NE Classification: Sheet Metal Work **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A19NW (NE)	779	-	411587 415848
305	**Contemporary Trade Directory Entries** Name: Transform Office Interiors Location: Four Horse Shoes Yard, Milnsbridge, Huddersfield, HD3 4NE Classification: Office Furniture & Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	793	-	411605 415851
305	**Contemporary Trade Directory Entries** Name: Morley Brothers Hudderfield Ltd Location: Four Horseshoes Yard, Market Street, Milnsbridge, Huddersfield, HD3 4ND Classification: Sheet Metal Work **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	798	-	411610 415854

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
306	**Contemporary Trade Directory Entries** Name: Merlin Motors Location: 47, Scar Lane, Huddersfield, HD3 4QH Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NE (N)	781	-	411360 415992
306	**Contemporary Trade Directory Entries** Name: Merlin Motors (Huddersfield) Ltd Location: 47, Scar Lane, Huddersfield, HD3 4QH Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NE (N)	781	-	411360 415992
306	**Contemporary Trade Directory Entries** Name: Scar Lane Service Station Location: 45, Scar Lane, Huddersfield, HD3 4QH Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A19NW (N)	785	-	411374 415991
307	**Contemporary Trade Directory Entries** Name: Ace Security Products Ltd Location: Unit 1a,Blakes Bus. Park,Radcliffe Rd, Miles Bridge, Huddersfield, West Yorkshire, HD3 4LX Classification: Roller Shutter Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A19SE (NE)	782	-	411724 415708
307	**Contemporary Trade Directory Entries** Name: Vale Engineering Location: 1, Radcliffe Road, Huddersfield, HD3 4LX Classification: Precision Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	808	-	411764 415698
307	**Contemporary Trade Directory Entries** Name: Pennine Domestic Appliances Ltd Location: 1b, Radcliffe Road, HUDDERSFIELD, HD3 4LX Classification: Domestic Appliances - Servicing, Repairs & Parts **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	808	-	411764 415698
307	**Contemporary Trade Directory Entries** Name: Centrifuge Engineering Services Location: 1a, Radcliffe Road, Huddersfield, HD3 4LX Classification: Hydraulic Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	808	-	411764 415698
307	**Contemporary Trade Directory Entries** Name: Niche Fasteners Ltd Location: 2 Radcliffe Rd, Huddersfield, West Yorkshire, HD3 4LX Classification: Fasteners & Fixing Devices **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A19SE (NE)	813	-	411758 415714
308	**Contemporary Trade Directory Entries** Name: H Pennington Location: 480, Blackmoorfoot Road, Huddersfield, HD4 5NS Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SE (E)	787	-	411880 414861
309	**Contemporary Trade Directory Entries** Name: A T L Location: 190, Scar Lane, Huddersfield, HD3 4PY Classification: Breakdown and Recovery **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NW (N)	811	-	410703 415993
310	**Contemporary Trade Directory Entries** Name: Time For You Location: 37, Tom Lane, Huddersfield, HD4 5PP Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NE (E)	813	-	411940 415250

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
311	**Contemporary Trade Directory Entries** Name: Supreme Clean Location: 13, Yates Lane, Huddersfield, West Yorkshire, HD3 4NW Classification: Dry Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	814	-	411606 415879
311	**Contemporary Trade Directory Entries** Name: Scar Lane Car Sales Location: Four Horseshoes Yard, Market Street, Milnsbridge, Huddersfield, HD3 4ND Classification: Car Dealers - Used **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	828	-	411641 415866
311	**Contemporary Trade Directory Entries** Name: Hastings & Henshaw Location: 9, Bridgecroft, Huddersfield, HD3 4NF Classification: Tarpaulins **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	854	-	411637 415904
312	**Contemporary Trade Directory Entries** Name: Envy Fireplace Location: 7, Morley Lane, Huddersfield, HD3 4NR Classification: Fireplaces & Mantelpieces **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	822	-	411554 415931
312	**Contemporary Trade Directory Entries** Name: Fireplace Collection The Location: 7, Morley Lane, Huddersfield, HD3 4NR Classification: Fireplaces & Mantelpieces **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	822	-	411554 415931
312	**Contemporary Trade Directory Entries** Name: Envy Fireplaces Location: 1, Morley Lane, HUDDERSFIELD, HD3 4NR Classification: Fireplaces & Mantelpieces **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	843	-	411574 415942
313	**Contemporary Trade Directory Entries** Name: A D W Electrical Solutions Location: 258, Scar Lane, Golcar, Huddersfield, HD7 4AU Classification: Electrical Engineers **Status: Active** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	827	-	410620 415963
314	**Contemporary Trade Directory Entries** Name: Johnsons Wellfield Location: Crosland Hill, Huddersfield, HD4 7AB Classification: Quarries **Status: Active** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	833	-	411822 414647
315	**Contemporary Trade Directory Entries** Name: Car Scraping Scrap Yards In Huddersfield Location: Herbert Brown House, 50-52, Whiteley Street, Huddersfield, HD3 4LT Classification: Car Breakers & Dismantlers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	834	-	411754 415754
315	**Contemporary Trade Directory Entries** Name: Polymaster (Uk) Ltd Location: Herbert Brown House, 50-52, Whiteley Street, Huddersfield, HD3 4LT Classification: Cutting Tools & Machinery **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	834	-	411754 415754
316	**Contemporary Trade Directory Entries** Name: Clone Valley Motor Co Location: 1 Market Street, Milnsbridge, Huddersfield, West Yorkshire, HD3 4ND Classification: Car Dealers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A19NW (NE)	837	-	411681 415837
317	**Contemporary Trade Directory Entries** Name: Enkae Prestige Motors Location: 537, Blackmoorfoot Road, Huddersfield, HD4 5NT Classification: Car Dealers - Used **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SE (E)	838	-	411927 414840

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
317	**Contemporary Trade Directory Entries** Name: G K Autos Location: 533, Blackmoorfoot Road, Huddersfield, HD4 5NT Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SE (E)	850	-	411949 414870
318	**Contemporary Trade Directory Entries** Name: Genesis Tyres & Alloys Location: Unit 4,Linthwait, Durham, County Durham, DH7 5QS Classification: Tyre Dealers **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A12SW (W)	849	-	410093 414867
319	**Contemporary Trade Directory Entries** Name: Broadbent Car Body Repairs Location: 4-5 The Arches,Crow La, Huddersfield, West Yorkshire, HD3 4PH Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A19NW (N)	856	-	411383 416064
320	**Contemporary Trade Directory Entries** Name: Myhome Location: 511A Blackmoorfoot Road, Crosland Moor, Huddersfield, West Yorkshire, HD4 5NR Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A14SE (E)	859	-	411986 414990
321	**Contemporary Trade Directory Entries** Name: K D T Location: 3, Savile Street, Huddersfield, HD3 4PG Classification: Wrought Ironwork **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	876	-	411452 416055
321	**Contemporary Trade Directory Entries** Name: Stephen Tsang Location: 3, Savile Street, Huddersfield, HD3 4PG Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	876	-	411452 416055
321	**Contemporary Trade Directory Entries** Name: Direct Cleaning Yorkshire Ltd Location: Unit 1, Old Railway Goods Yard, Scar Lane, Huddersfield, HD3 4PE Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	876	-	411452 416055
321	**Contemporary Trade Directory Entries** Name: Ashdale Garage Location: 3a, Savile Street, Huddersfield, HD3 4PG Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	903	-	411473 416074
322	**Contemporary Trade Directory Entries** Name: Grange Precision Engineering Ltd Location: Bridgecroft, Huddersfield, West Yorkshire, HD3 4NF Classification: Precision Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	876	-	411687 415888
323	**Contemporary Trade Directory Entries** Name: Spartan Tools Location: 58, Broad Oak, Linthwaite, Huddersfield, HD7 5TE Classification: Drain & Sewer Clearance - Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NW (SW)	880	-	410233 414509
324	**Contemporary Trade Directory Entries** Name: Scott Brothers Enterprises Ltd Location: Union Mill,Bankwell Road, Huddersfield, West Yorkshire, HD3 4LU Classification: Concrete Products **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A19SE (NE)	897	-	411831 415757

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
325	**Contemporary Trade Directory Entries** Name: E T Location: Unit 17/19, Tanyard Industrial Estate, Tanyard Road, Milnsbridge, Huddersfield, HD3 4NB Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NE (NE)	910	-	411765 415853
325	**Contemporary Trade Directory Entries** Name: A & N Motors Location: Unit 10, Tanyard Industrial Estate, Tanyard Road, Milnsbridge, Huddersfield, HD3 4NB Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NE (NE)	954	-	411789 415891
326	**Contemporary Trade Directory Entries** Name: J M S Upholstery Downstairs Location: 6 Albion Mills,Crow La, Milnsbridge, Huddersfield, West Yorkshire, HD3 4PH Classification: Upholstery Manufacturers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A19NW (N)	915	-	411390 416124
326	**Contemporary Trade Directory Entries** Name: West Yorkshire Bacon Co Ltd Location: Savile Street, Huddersfield, HD3 4PG Classification: Meat - Wholesale **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	917	-	411436 416108
326	**Contemporary Trade Directory Entries** Name: West Yorkshire Bacon Company Location: Savile Street, Huddersfield, HD3 4PG Classification: Bacon & Ham Curers & Merchants **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	917	-	411436 416108
326	**Contemporary Trade Directory Entries** Name: Broad Oak Bodyworks Location: Savile St, Huddersfield, West Yorkshire, HD3 4PG Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A19NW (NE)	922	-	411473 416096
326	**Contemporary Trade Directory Entries** Name: Sps Northern Location: Savile St, Huddersfield, West Yorkshire, HD3 4PG Classification: Screen Process Printers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A19NW (NE)	923	-	411476 416096
326	**Contemporary Trade Directory Entries** Name: D Symonds Location: Savile Street, Huddersfield, HD3 4PG Classification: Car Engine Tuning & Diagnostic Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	930	-	411470 416106
327	**Contemporary Trade Directory Entries** Name: Lodge Joinery (Manufacturing) Ltd Location: Bridgecroft, Huddersfield, West Yorkshire, HD3 4NF Classification: Joinery Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NE (NE)	924	-	411743 415899
327	**Contemporary Trade Directory Entries** Name: T G S Motor Repairs Ltd Location: Bridgecroft, Huddersfield, HD3 4NF Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NE (NE)	924	-	411743 415899
328	**Contemporary Trade Directory Entries** Name: Provu Location: Savile Mill, Savile Street, Huddersfield, West Yorkshire, HD3 4PG Classification: Distribution Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	939	-	411525 416088

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
328	**Contemporary Trade Directory Entries** Name: B Spencer & Son Ltd Location: Milnsbridge Garage, Savile Street, Huddersfield, HD3 4PG Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	956	-	411487 416127
328	**Contemporary Trade Directory Entries** Name: Milnsbridge Garage Location: Milnsbridge Garage, Savile Street, Huddersfield, HD3 4PG Classification: Mot Testing Centres **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	956	-	411487 416127
328	**Contemporary Trade Directory Entries** Name: Milnsbridge Garage Location: Savile Street, Huddersfield, West Yorkshire, HD3 4PG Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	956	-	411486 416127
328	**Contemporary Trade Directory Entries** Name: Parkwood Auto Refinishing Location: Savile Street, Huddersfield, HD3 4PG Classification: Car Body Repairs **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	956	-	411487 416127
328	**Contemporary Trade Directory Entries** Name: Panache Location: 83, Market Street, Milnsbridge, Huddersfield, HD3 4HZ Classification: Seating Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	962	-	411547 416102
328	**Contemporary Trade Directory Entries** Name: Panache Location: 83, Market Street, Milnsbridge, Huddersfield, HD3 4HZ Classification: Seating Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	962	-	411547 416102
328	**Contemporary Trade Directory Entries** Name: Back To Basics Location: Albion Mills, Savile Street, Huddersfield, HD3 4PG Classification: Car Body Repairs **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	984	-	411531 416136
328	**Contemporary Trade Directory Entries** Name: Roger Pearson Location: Albion Mills, Savile Street, Huddersfield, HD3 4PG Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	985	-	411518 416144
328	**Contemporary Trade Directory Entries** Name: Robert Beal Furniture Location: Commercial Mills, Savile Street, Huddersfield, HD3 4PG Classification: Cabinet Makers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	985	-	411518 416144
328	**Contemporary Trade Directory Entries** Name: Starprint Engineering Co Location: Commercial Mills, Savile Street, Huddersfield, HD3 4PG Classification: Engineers - General **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	985	-	411518 416144
329	**Contemporary Trade Directory Entries** Name: Acorn Copier Systems Location: 17, George Street, Milnsbridge, Huddersfield, HD3 4JD Classification: Photocopiers **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	953	-	411676 416001
329	**Contemporary Trade Directory Entries** Name: Yorkshire Wool Dying Co Ltd Location: 1, George Street, Milnsbridge, Huddersfield, West Yorkshire, HD3 4JD Classification: Dyers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NE (NE)	976	-	411720 415995

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
329	**Contemporary Trade Directory Entries** Name: Peter Preston Location: Armitage House, Dowker Street, Huddersfield, HD3 4JB Classification: Engineers - General **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	976	-	411661 416043
329	**Contemporary Trade Directory Entries** Name: Peace Precision Engineering Location: Armitage House, Dowker Street, Huddersfield, HD3 4JB Classification: Precision Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	976	-	411661 416043
329	**Contemporary Trade Directory Entries** Name: W H Robinson Ltd Location: George Street, Milnsbridge, Huddersfield, HD3 4JF Classification: Scrap Metal Merchants **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NE (NE)	991	-	411709 416023
329	**Contemporary Trade Directory Entries** Name: N I S Building Supplies Location: Nis Building Supplies, George Street, Huddersfield, HD3 4JD Classification: Builders' Merchants **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NE (NE)	992	-	411717 416018
330	**Contemporary Trade Directory Entries** Name: Golden Bakery Location: Station Road, Golcar, Huddersfield, West Yorkshire, HD7 4EQ Classification: Food Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	956	-	410021 415433
331	**Contemporary Trade Directory Entries** Name: Yorkshire Ironcraft Location: 27, East Street, Golcar, Huddersfield, HD7 4BS Classification: Wrought Ironwork **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	962	-	410410 415968
332	**Contemporary Trade Directory Entries** Name: Sofas & Fabrics Direct Location: 82, Market Street, Milnsbridge, Huddersfield, HD3 4HT Classification: Foam Products - Rubber & Plastics **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	968	-	411575 416092
333	**Contemporary Trade Directory Entries** Name: Mount Garage Location: George Street, Milnsbridge, Huddersfield, West Yorkshire, HD3 4JD Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NE (NE)	979	-	411728 415991
333	**Contemporary Trade Directory Entries** Name: Crossgrove Associates Ltd Location: Colne Side Business Park, George Street, Milnsbridge, Huddersfield, HD3 4JD Classification: Boxes & Cartons **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NE (NE)	984	-	411746 415980
334	**Contemporary Trade Directory Entries** Name: H C Printers Location: Tanyard Rd, Milnsbridge, Huddersfield, West Yorkshire, HD3 4NB Classification: Printers **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A19NE (NE)	989	-	411876 415849
334	**Contemporary Trade Directory Entries** Name: Longwood Mending Location: Tanyard Rd, Milnsbridge, Huddersfield, West Yorkshire, HD3 4NB Classification: Textile Manufacturing **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A19NE (NE)	991	-	411879 415848

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
335	**Contemporary Trade Directory Entries** Name: D J C Cleaning Location: 1, Laburnum Grove, Golcar, Huddersfield, HD7 4BA Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	991	-	410551 416113
335	**Contemporary Trade Directory Entries** Name: A & A Cleaning & Ironing Services Location: 1, Laburnum Grove, Golcar, Huddersfield, HD7 4BA Classification: Ironing & Home Laundry Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17NE (NW)	991	-	410551 416113
336	**Fuel Station Entries** Name: Co-Op Colne Valley Location: 819, Manchester Road Pymroyd Lane, Milnsbridge , Huddersfield, West Yorkshire, HD4 5SX Brand: Co-Op Premises Type: Petrol Station **Status: Open** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	498	-	411455 415581
337	**Fuel Station Entries** Name: Scar Lane Motors Location: Scar Lane , Milsnbridge , Huddersfield, West Yorkshire, HD3 4QA Brand: JET Premises Type: Petrol Station **Status: Open** Positional Accuracy: Manually positioned to the address or location	A18NW (N)	740	-	410823 415966
338	**Fuel Station Entries** Name: Merlin Motors Location: 45, Scar Lane , Milnsbridge , Huddersfield, West Yorkshire, HD3 4QH Brand: Unbranded Premises Type: Petrol Station **Status: Closed** Positional Accuracy: Manually positioned to the address or location	A19NW (N)	785	-	411374 415991
339	**Fuel Station Entries** Name: H Pennington Location: 480, Blackmoorfoot Road , Crosland Moor , Huddersfield, West Yorkshire, HD4 5NS Brand: Unbranded Premises Type: Petrol Station **Status: Closed** Positional Accuracy: Manually positioned to the address or location	A14SE (E)	787	-	411880 414861
340	**Fuel Station Entries** Name: D Symonds Location: Savile Street , Milnsbridge , Huddersfield, West Yorkshire, HD3 4PG Brand: Obsolete Premises Type: Not Applicable **Status: Obsolete** Positional Accuracy: Manually positioned to the address or location	A19NW (NE)	943	-	411490 416111
341	**Points of Interest - Commercial Services** Name: Happy Motoring Centre Location: Manchester Road, Huddersfield, HD4 5TB Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A18SE (N)	386	8	411091 415653
341	**Points of Interest - Commercial Services** Name: Town Tyres & Autocare Ltd Location: Manchester Road, Huddersfield, HD4 5TB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18SE (N)	388	8	411130 415650
342	**Points of Interest - Commercial Services** Name: Colne Valley Jigging Centre Location: Britannia Mills, Britannia Road, Huddersfield, HD3 4QG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18SW (N)	504	8	410851 415723
342	**Points of Interest - Commercial Services** Name: Colne Valley Jigging Centre Location: Britannia Mills, Britannia Road, Huddersfield, HD3 4QG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18SW (N)	504	8	410851 415723

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
342	**Points of Interest - Commercial Services** Name: Sprayaway Accident & Repair Centre Ltd Location: Unit 28 Britannia Mills, Britannia Road, Huddersfield, HD3 4QG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18SW (N)	548	8	410856 415773
342	**Points of Interest - Commercial Services** Name: Mills Cash for Scrap Cars Location: Unit 25 Britannia Mills Trading Estate, Britannia Road, Huddersfield, HD3 4QG Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A18SW (N)	548	8	410856 415773
343	**Points of Interest - Commercial Services** Name: J S Bamforth & Co Ltd Location: Top Vale Works, Colne Vale Road, Huddersfield, HD3 4NY Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A18SE (N)	521	8	411065 415788
343	**Points of Interest - Commercial Services** Name: J S Bamforth & Co Ltd Location: Top Vale Works, Colne Vale Road, Huddersfield, HD3 4NY Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A18SE (N)	521	8	411065 415789
344	**Points of Interest - Commercial Services** Name: Julian Wadsworth Artist Blacksmith Location: Holme Mills, Britannia Road, Huddersfield, HD3 4QF Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A17SE (NW)	564	8	410530 415510
345	**Points of Interest - Commercial Services** Name: Danks Fabrications Location: Unit 19/A Holme Mills, Britannia Road, Huddersfield, HD3 4QF Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A17SE (NW)	574	8	410582 415593
345	**Points of Interest - Commercial Services** Name: Danks Fabrications Location: Unit 19a Holme Mills, Britannia Road, Huddersfield, HD3 4QF Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A17SE (NW)	574	8	410582 415593
346	**Points of Interest - Commercial Services** Name: C S Associates Location: Milnsbridge, Huddersfield, HD3 4LX Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19SW (NE)	670	8	411624 415652
346	**Points of Interest - Commercial Services** Name: Diesel Blend Location: Unit 1 Blakes Business Park, Radcliffe Road, Huddersfield, HD3 4LX Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SW (NE)	717	8	411665 415677
346	**Points of Interest - Commercial Services** Name: G A S Auto Centre Location: Unit 1 Blakes Business Park, Radcliffe Road, Huddersfield, HD3 4LX Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SW (NE)	721	8	411668 415680
346	**Points of Interest - Commercial Services** Name: A V S Electrical Location: Unit 3 Herbert Brown Business Park, Whiteley Street, Huddersfield, HD3 4LT Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SW (NE)	796	8	411698 415759
347	**Points of Interest - Commercial Services** Name: Aso Light Haulage Location: 68 Scar Lane, Huddersfield, HD3 4PS Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18NE (N)	681	8	411090 415948

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
347	**Points of Interest - Commercial Services** Name: A S O Light Haulage Location: 68 Scar Lane, Huddersfield, HD3 4PS Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18NE (N)	681	8	411090 415948
348	**Points of Interest - Commercial Services** Name: Scar Lane Testing Centre Location: Scar Lane, Huddersfield, HD3 4QA Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NW (N)	715	8	410788 415925
348	**Points of Interest - Commercial Services** Name: Auto Care Testing Centre Location: Scar Lane, Huddersfield, HD3 4QA Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NW (N)	724	8	410805 415942
348	**Points of Interest - Commercial Services** Name: Scar Lane Motors Location: Scar Lane, Milsnbridge, Huddersfield, HD3 4QA Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A18NW (N)	740	8	410823 415966
348	**Points of Interest - Commercial Services** Name: Car Wash Location: Scar Lane, Milsnbridge, Huddersfield, West Yorkshire, HD3 4QA Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A18NW (N)	740	8	410823 415966
349	**Points of Interest - Commercial Services** Name: Gledhill Motors Location: 9 New Street, Milnsbridge, Huddersfield, HD3 4LN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SW (NE)	720	8	411585 415769
349	**Points of Interest - Commercial Services** Name: Morley Bros Ltd Location: Four Horse Shoes Yard, Milnsbridge, Huddersfield, HD3 4NE Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A19NW (NE)	793	8	411605 415851
349	**Points of Interest - Commercial Services** Name: Morley Brothers Hudderfield Ltd Location: Four Horseshoes Yard, Market Street, Milnsbridge, Huddersfield, HD3 4ND Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A19NW (NE)	798	8	411610 415854
349	**Points of Interest - Commercial Services** Name: Vehicle Diagnostic Centre Location: Four Horseshoes Yard, Market Street, Milnsbridge, Huddersfield, HD3 4ND Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NW (NE)	814	8	411649 415838
349	**Points of Interest - Commercial Services** Name: Morley Brothers Huddersfield Ltd Location: Four Horseshoes Yard, Market Street, Milnsbridge, Huddersfield, HD3 4ND Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A19NW (NE)	814	8	411649 415838
349	**Points of Interest - Commercial Services** Name: V D C Vehicle Diagnostic Centre Location: Four Horseshoes Yard, Market Street, Milnsbridge, Huddersfield, HD3 4ND Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NW (NE)	815	8	411650 415838
350	**Points of Interest - Commercial Services** Name: Arches Car Repairs & Tyre Disposals Location: 43 Scar Lane, Huddersfield, HD3 4QH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	727	8	411311 415953

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
350	**Points of Interest - Commercial Services** Name: Arches Car Repairs & Dismantlers Location: 43 Scar Lane, Huddersfield, HD3 4QH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	728	8	411311 415954
350	**Points of Interest - Commercial Services** Name: Scar Lane Testing Centre Location: Scar Lane, Huddersfield, HD3 4QA Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NW (N)	767	8	411365 415975
350	**Points of Interest - Commercial Services** Name: Merlin Motors (Huddersfield) Ltd Location: 47 Scar Lane, Huddersfield, HD3 4QH Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18NE (N)	781	8	411360 415992
350	**Points of Interest - Commercial Services** Name: Merlin Motors Location: 47 Scar Lane, Huddersfield, HD3 4QH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	781	8	411360 415992
351	**Points of Interest - Commercial Services** Name: Downey Machinery Ltd Location: Manchester Road, Spurn Point, Linthwaite, Huddersfield, HD7 5RF Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A12SW (W)	729	8	410189 415005
352	**Points of Interest - Commercial Services** Name: Fays Transport Location: 20 Broad Oak, Linthwaite, Huddersfield, HD7 5TE Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7NW (SW)	734	8	410302 414666
353	**Points of Interest - Commercial Services** Name: Huddfabs Ltd Location: Unit 11 Old Railway Goods Yard, Scar Lane, Huddersfield, HD3 4PE Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A18NE (N)	736	8	411086 416003
353	**Points of Interest - Commercial Services** Name: K P Motor Engineers Ltd Location: Unit 7 Old Railway Goods Yard, Scar Lane, Milnsbridge, Huddersfield, HD3 4PE Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	747	8	411171 416008
353	**Points of Interest - Commercial Services** Name: Sunnybank Garage Location: Unit 7 Old Railway Goods Yard, Scar Lane, Huddersfield, HD3 4PE Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	748	8	411171 416009
353	**Points of Interest - Commercial Services** Name: Sunnybank Garage Location: Unit 7 Old Railway Goods Yard, Scar Lane, Huddersfield, HD3 4PE Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NE (N)	748	8	411171 416009
353	**Points of Interest - Commercial Services** Name: G Moor Haulage Location: 12 Scar Lane, Huddersfield, HD3 4PE Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18NE (N)	762	8	411135 416027
353	**Points of Interest - Commercial Services** Name: Lynda's Transport Location: Unit 10 Old Railway Goods Yard, Scar Lane, Huddersfield, HD3 4PE Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18NE (N)	762	8	411135 416027

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
353	**Points of Interest - Commercial Services** Name: Lynda's Transport Location: Unit 10 Old Railway Goods Yard, Scar Lane, Huddersfield, HD3 4PE Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18NE (N)	763	8	411135 416027
353	**Points of Interest - Commercial Services** Name: Furniture Logistics Location: 12 Scar Lane, Huddersfield, HD3 4PE Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18NE (N)	763	8	411135 416027
353	**Points of Interest - Commercial Services** Name: Direct Pest Control Location: Unit 11 Old Railway Goods Yard, Scar Lane, Huddersfield, HD3 4PE Category: Contract Services Class Code: Pest and Vermin Control Positional Accuracy: Positioned to address or location	A18NE (N)	763	8	411135 416027
354	**Points of Interest - Commercial Services** Name: Walkers Windscreens Location: 667-669 Blackmoorfoot Road, Huddersfield, HD4 7AE Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9NW (SE)	772	8	411620 414519
355	**Points of Interest - Commercial Services** Name: H Pennington Location: 480 Blackmoorfoot Road, Huddersfield, HD4 5NS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SE (E)	787	8	411880 414861
355	**Points of Interest - Commercial Services** Name: H Pennington Location: 480 Blackmoorfoot Road, Huddersfield, HD4 5NS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SE (E)	787	8	411880 414861
355	**Points of Interest - Commercial Services** Name: G K Autos Location: 533 Blackmoorfoot Road, Huddersfield, HD4 5NT Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SE (E)	847	8	411946 414871
355	**Points of Interest - Commercial Services** Name: G K Autos Location: 533 Blackmoorfoot Road, Huddersfield, HD4 5NT Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SE (E)	850	8	411949 414870
356	**Points of Interest - Commercial Services** Name: A V S Location: Unit 3 Herbert Brown Business Park, Whiteley Street, Huddersfield, HD3 4LT Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SW (NE)	811	8	411699 415780
357	**Points of Interest - Commercial Services** Name: A T L Recovery Ltd Location: 190 Scar Lane, Huddersfield, HD3 4PY Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18NW (N)	811	8	410703 415992
358	**Points of Interest - Commercial Services** Name: Bodycote Ensecon Location: 511 Blackmoorfoot Road, Crosland Moor, Huddersfield, HD4 5NR Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A14SE (E)	875	8	412003 414997
358	**Points of Interest - Commercial Services** Name: Bodycote Ensecon Location: Colne Valley House 511, Blackmoorfoot Road, Crosland Moor, Huddersfield, HD4 5NR Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A14SE (E)	875	8	412003 414997

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
359	**Points of Interest - Commercial Services** Name: Stephen Tsang Location: 3 Savile Street, Huddersfield, HD3 4PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NW (NE)	876	8	411452 416055
359	**Points of Interest - Commercial Services** Name: K D T Wrought Iron Specialists Location: 3 Savile Street, Huddersfield, HD3 4PG Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A19NW (NE)	876	8	411452 416055
359	**Points of Interest - Commercial Services** Name: K D T Wrought Iron Specialists Location: 3 Savile Street, Huddersfield, HD3 4PG Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A19NW (NE)	876	8	411452 416055
359	**Points of Interest - Commercial Services** Name: Ashdale Garage Location: 3a Savile Street, Huddersfield, HD3 4PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NW (NE)	902	8	411472 416074
359	**Points of Interest - Commercial Services** Name: Stephen Tsang Auto Engineer Location: 3a Savile Street, Huddersfield, HD3 4PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NW (NE)	916	8	411479 416086
359	**Points of Interest - Commercial Services** Name: Parkwood Auto Refinishing Location: Savile Street, Huddersfield, HD3 4PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NW (NE)	932	8	411471 416108
359	**Points of Interest - Commercial Services** Name: Provu Location: Savile Mill, Savile Street, Huddersfield, HD3 4PG Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A19NW (NE)	939	8	411525 416088
359	**Points of Interest - Commercial Services** Name: Back to Basics Location: Albion Mills, Savile Street, Huddersfield, HD3 4PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NW (N)	948	8	411411 416152
359	**Points of Interest - Commercial Services** Name: B Spencer & Son Ltd Location: Milnsbridge Garage, Savile Street, Huddersfield, HD3 4PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NW (NE)	956	8	411486 416127
359	**Points of Interest - Commercial Services** Name: Milnsbridge Garage Location: Milnsbridge Garage, Savile Street, Huddersfield, HD3 4PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NW (NE)	956	8	411487 416127
359	**Points of Interest - Commercial Services** Name: Broad Oak Bodyworks Location: Savile Street, Huddersfield, HD3 4PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NW (NE)	956	8	411487 416127
359	**Points of Interest - Commercial Services** Name: Milnsbridge Garage Location: Milnsbridge Garage, Savile Street, Huddersfield, HD3 4PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NW (NE)	956	8	411486 416127

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
359	**Points of Interest - Commercial Services** Name: R Pearson Location: Albion Mills, Savile Street, Huddersfield, HD3 4PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NW (NE)	984	8	411531 416136
359	**Points of Interest - Commercial Services** Name: Roger Pearson Location: Albion Mills, Savile Street, Huddersfield, HD3 4PG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NW (NE)	985	8	411518 416144
360	**Points of Interest - Commercial Services** Name: T G S Motor Repairs Ltd Location: Unit 1-2, Bridgecroft, Huddersfield, HD3 4NF Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NW (NE)	876	8	411686 415888
360	**Points of Interest - Commercial Services** Name: Keogh Fabrications Ltd Location: Unit 1-2, Bridgecroft, Huddersfield, HD3 4NF Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A19NW (NE)	876	8	411687 415888
360	**Points of Interest - Commercial Services** Name: E T Garage Location: Unit 17-19 Tanyard Industrial Estate, Tanyard Road, Milnsbridge, Huddersfield, HD3 4NB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NE (NE)	909	8	411764 415853
360	**Points of Interest - Commercial Services** Name: E T Garage Location: Unit 17/19 Tanyard Industrial Estate, Tanyard Road, Milnsbridge, Huddersfield, HD3 4NB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NE (NE)	910	8	411765 415853
360	**Points of Interest - Commercial Services** Name: A & N Motors Location: Unit 10 Tanyard Industrial Estate, Tanyard Road, Milnsbridge, Huddersfield, HD3 4NB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NE (NE)	953	8	411789 415891
361	**Points of Interest - Commercial Services** Name: R S Auto Care Location: 43a George Street, Milnsbridge, Huddersfield, HD3 4JA Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A19NW (NE)	920	8	411621 416003
361	**Points of Interest - Commercial Services** Name: R S Auto Care Location: A 43 George Street, Milnsbridge, Huddersfield, HD3 4JA Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A19NW (NE)	921	8	411622 416004
361	**Points of Interest - Commercial Services** Name: Vehicle Electrics Location: Armitage Road, Milnsbridge, Huddersfield, HD3 4JN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NW (NE)	985	8	411612 416089
362	**Points of Interest - Commercial Services** Name: Iwl Location: 18 Holmfield Drive, Golcar, Huddersfield, HD7 4AY Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A17NE (NW)	932	8	410550 416042

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
363	**Points of Interest - Commercial Services** Name: Yorkshire Ironcraft Location: 27 East Street, Golcar, Huddersfield, HD7 4BS Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A17NE (NW)	961	8	410411 415969
363	**Points of Interest - Commercial Services** Name: Yorkshire Ironcraft Location: 27 East Street, Golcar, Huddersfield, HD7 4BS Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A17NE (NW)	962	8	410410 415968
363	**Points of Interest - Commercial Services** Name: White Rose Maintenance Ltd Location: 27 East Street, Golcar, Huddersfield, HD7 4BS Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A17NE (NW)	962	8	410410 415968
364	**Points of Interest - Commercial Services** Name: Mount Garage Location: George Street, Milnsbridge, Huddersfield, HD3 4JD Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19NE (NE)	975	8	411719 415994
364	**Points of Interest - Commercial Services** Name: W H Robinson Ltd Location: George Street, Milnsbridge, Huddersfield, HD3 4JF Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to address or location	A19NE (NE)	991	8	411709 416023
365	**Points of Interest - Manufacturing and Production** Name: Works Location: HD7 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NW (NW)	321	8	410795 415448
365	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NW (NW)	322	8	410794 415448
366	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18SE (N)	326	8	411029 415591
366	**Points of Interest - Manufacturing and Production** Name: Works Location: HD4 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A18SE (N)	331	8	411028 415596
367	**Points of Interest - Manufacturing and Production** Name: Works Location: HD7 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12SE (W)	382	8	410533 415043
367	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12SE (W)	383	8	410532 415043
368	**Points of Interest - Manufacturing and Production** Name: Quarry (Disused) Location: HD4 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	427	8	411558 415193

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
368	**Points of Interest - Manufacturing and Production** Name: Quarry (Disused) Location: HD4 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to address or location	A14NW (E)	431	8	411563 415185
369	**Points of Interest - Manufacturing and Production** Name: Factory Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A8NE (SE)	445	8	411340 414725
370	**Points of Interest - Manufacturing and Production** Name: Quarry (Disused) Location: HD4 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A8NW (S)	462	8	410852 414589
370	**Points of Interest - Manufacturing and Production** Name: Quarry (Disused) Location: HD4 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to address or location	A8NW (S)	464	8	410874 414584
371	**Points of Interest - Manufacturing and Production** Name: Factory Location: HD4 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A9NW (SE)	499	8	411513 414793
372	**Points of Interest - Manufacturing and Production** Name: Tank Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A18SE (N)	516	8	411115 415782
372	**Points of Interest - Manufacturing and Production** Name: Business Park Location: HD3 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A18SE (N)	524	8	411138 415787
372	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18SE (N)	530	8	411134 415794
372	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A18SE (N)	531	8	411137 415794
372	**Points of Interest - Manufacturing and Production** Name: Tank Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A18SE (N)	541	8	411088 415808
372	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A18SE (N)	542	8	411210 415791
372	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18SE (N)	543	8	411209 415792

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
373	**Points of Interest - Manufacturing and Production** Name: Kenneth Bates Location: 97 Crosland Hill Road, Huddersfield, HD4 5NZ Category: Farming Class Code: Livestock Farming Positional Accuracy: Positioned to address or location	A14SW (E)	520	8	411656 415081
374	**Points of Interest - Manufacturing and Production** Name: Stanley Mills Business Park Location: HD3 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A18SW (NW)	520	8	410791 415707
374	**Points of Interest - Manufacturing and Production** Name: Stanley Mills Business Park Location: HD3 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A18SW (NW)	523	8	410778 415703
375	**Points of Interest - Manufacturing and Production** Name: Mallinson Recycling Ltd Location: 65 Britannia Road, Huddersfield, HD3 4QG Category: Extractive Industries Class Code: Stone Quarrying and Preparation Positional Accuracy: Positioned to address or location	A18SW (N)	539	8	410975 415799
376	**Points of Interest - Manufacturing and Production** Name: Quarry (Disused) Location: HD7 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A12SE (W)	544	8	410384 414958
376	**Points of Interest - Manufacturing and Production** Name: Quarry (Disused) Location: HD7 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A12SE (W)	544	8	410385 414956
377	**Points of Interest - Manufacturing and Production** Name: Tank Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A18SE (N)	550	8	411258 415784
377	**Points of Interest - Manufacturing and Production** Name: Tank Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A18SE (N)	551	8	411256 415786
377	**Points of Interest - Manufacturing and Production** Name: Tank Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A18SE (N)	552	8	411262 415785
377	**Points of Interest - Manufacturing and Production** Name: Tanks Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A18SE (N)	562	8	411263 415795
378	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	563	8	411489 415641
378	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	563	8	411489 415642

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
379	**Points of Interest - Manufacturing and Production** Name: Industrial Estate Location: HD3 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	583	8	410537 415553
379	**Points of Interest - Manufacturing and Production** Name: Holme Mills Industrial Park Location: HD3 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	603	8	410503 415540
380	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NE (NW)	584	8	410454 415452
380	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A12NE (NW)	591	8	410454 415463
380	**Points of Interest - Manufacturing and Production** Name: Holme Mills Industrial Estate Location: HD3 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	611	8	410483 415526
381	**Points of Interest - Manufacturing and Production** Name: Quarries (Disused) Location: HD4 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	603	8	410839 414448
381	**Points of Interest - Manufacturing and Production** Name: Quarries (Disused) Location: HD7 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	650	8	410770 414414
382	**Points of Interest - Manufacturing and Production** Name: Tank Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A18NE (N)	613	8	411305 415833
382	**Points of Interest - Manufacturing and Production** Name: Tanks Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A18NE (N)	613	8	411305 415833
382	**Points of Interest - Manufacturing and Production** Name: Tanks Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A18NE (NE)	636	8	411322 415851
382	**Points of Interest - Manufacturing and Production** Name: Tank Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A18NE (NE)	638	8	411329 415850
382	**Points of Interest - Manufacturing and Production** Name: Tank Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A18NE (NE)	653	8	411344 415860

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
382	**Points of Interest - Manufacturing and Production** Name: Tank Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A18NE (NE)	655	8	411346 415861
382	**Points of Interest - Manufacturing and Production** Name: Tanks Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A18NE (NE)	655	8	411342 415863
382	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	669	8	411382 415858
382	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	669	8	411382 415858
383	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	627	8	410331 415322
383	**Points of Interest - Manufacturing and Production** Name: Works Location: HD7 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A12NW (W)	627	8	410329 415317
384	**Points of Interest - Manufacturing and Production** Name: Matlock House Quarry (Disused) Location: HD4 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	662	8	411429 414527
384	**Points of Interest - Manufacturing and Production** Name: Matlock House Quarry (Disused) Location: HD4 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	662	8	411429 414527
385	**Points of Interest - Manufacturing and Production** Name: Tank Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A19SW (NE)	703	8	411626 415699
385	**Points of Interest - Manufacturing and Production** Name: Tank Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A19SW (NE)	708	8	411632 415700
385	**Points of Interest - Manufacturing and Production** Name: Tank Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A19SW (NE)	713	8	411638 415701
385	**Points of Interest - Manufacturing and Production** Name: Tank Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A19SW (NE)	718	8	411645 415702

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
385	**Points of Interest - Manufacturing and Production** Name: Tank Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A19SW (NE)	724	8	411651 415703
385	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	724	8	411671 415681
385	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	725	8	411672 415681
385	**Points of Interest - Manufacturing and Production** Name: Tanks Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	729	8	411658 415704
386	**Points of Interest - Manufacturing and Production** Name: Works Location: HD4 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	705	8	411628 414615
387	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	711	8	411480 415847
387	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	711	8	411480 415847
387	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A19NW (NE)	736	8	411513 415854
387	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	739	8	411495 415871
387	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	739	8	411495 415871
387	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A19NW (NE)	753	8	411552 415845
387	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	754	8	411550 415847

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
387	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	797	8	411612 415850
387	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	797	8	411612 415850
387	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	803	8	411629 415842
387	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	803	8	411629 415842
388	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9NE (SE)	811	8	411847 414728
388	**Points of Interest - Manufacturing and Production** Name: Works Location: HD4 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9NE (SE)	811	8	411847 414728
388	**Points of Interest - Manufacturing and Production** Name: Johnsons Wellfield Location: Crosland Hill, Huddersfield, HD4 7AB Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to address or location	A9NE (SE)	824	8	411797 414628
388	**Points of Interest - Manufacturing and Production** Name: Johnsons Wellfield Quarries Ltd Location: Crosland Hill, Huddersfield, HD4 7AB Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to address or location	A9NE (SE)	833	8	411822 414647
389	**Points of Interest - Manufacturing and Production** Name: Works Location: HD4 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9NE (E)	822	8	411901 414816
389	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9NE (E)	831	8	411911 414818
390	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SE (NE)	835	8	411769 415736
390	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19SE (NE)	835	8	411769 415736

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
391	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A19NW (NE)	866	8	411682 415878
391	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	868	8	411694 415869
391	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A19NE (NE)	917	8	411731 415901
391	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NE (NE)	932	8	411731 415922
392	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	877	8	412004 414991
392	**Points of Interest - Manufacturing and Production** Name: Works Location: HD4 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A14SE (E)	877	8	412004 414989
393	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (N)	892	8	411364 416109
393	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (N)	892	8	411364 416109
393	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (N)	928	8	411413 416129
393	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (N)	928	8	411413 416129
394	**Points of Interest - Manufacturing and Production** Name: Tank Location: HD3 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A19SE (NE)	939	8	411874 415769
395	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	952	8	411595 416060

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
395	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	952	8	411595 416060
395	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	970	8	411664 416033
395	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A19NW (NE)	974	8	411666 416037
395	**Points of Interest - Manufacturing and Production** Name: Huddersfield Granite Works Ltd Location: Colne Side Business Park, George Street, Milnsbridge, Huddersfield, HD3 4JD Category: Extractive Industries Class Code: Stone Quarrying and Preparation Positional Accuracy: Positioned to address or location	A19NE (NE)	979	8	411726 415992
395	**Points of Interest - Manufacturing and Production** Name: Works Location: HD3 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	986	8	411635 416074
395	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A19NW (NE)	986	8	411635 416074
396	**Points of Interest - Manufacturing and Production** Name: Denard Industrial Estate Location: HD3 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A19NE (NE)	953	8	411809 415870
396	**Points of Interest - Manufacturing and Production** Name: Denard Industrial Estate Location: HD3 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A19NE (NE)	954	8	411809 415872
397	**Points of Interest - Manufacturing and Production** Name: Moorfield Quarries Location: HD4 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A9SW (SE)	978	8	411495 414211
397	**Points of Interest - Manufacturing and Production** Name: Moorfield Quarries Location: HD4 Category: Extractive Industries Class Code: Unspecified Quarries Or Mines Positional Accuracy: Positioned to an adjacent address or location	A9SW (SE)	993	8	411531 414210
398	**Points of Interest - Public Infrastructure** Name: Weir Location: HD7 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A18SW (NW)	483	8	410763 415642
398	**Points of Interest - Public Infrastructure** Name: Weir Location: HD7 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A18SW (NW)	483	8	410763 415642

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
398	**Points of Interest - Public Infrastructure** Name: Sluice Location: HD7 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A18SW (NW)	504	8	410751 415659
398	**Points of Interest - Public Infrastructure** Name: Sluice Location: HD7 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A18SW (NW)	504	8	410752 415660
398	**Points of Interest - Public Infrastructure** Name: Weir Location: HD7 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	531	8	410678 415629
398	**Points of Interest - Public Infrastructure** Name: Weir Location: HD7 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	532	8	410677 415629
399	**Points of Interest - Public Infrastructure** Name: Cooperative Group Colne Valley Location: Manchester Road, Milnsbridge, Huddersfield, HD4 5SX Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A19SW (NE)	489	8	411448 415576
399	**Points of Interest - Public Infrastructure** Name: BP Services Colne Valley Service Station Location: 819 Manchester Road, Huddersfield, HD4 5SX Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A19SW (NE)	491	8	411449 415577
399	**Points of Interest - Public Infrastructure** Name: BP Location: 819 Manchester Road, Huddersfield, HD4 5SX Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A19SW (NE)	491	8	411449 415577
399	**Points of Interest - Public Infrastructure** Name: Colne Valley Service Station Location: 819 Manchester Road, Huddersfield, HD4 5SX Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A19SW (NE)	491	8	411449 415577
399	**Points of Interest - Public Infrastructure** Name: Co-Op Colne Valley Location: 819 Manchester Road, Huddersfield, HD4 5SX Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A19SW (NE)	491	8	411449 415577
399	**Points of Interest - Public Infrastructure** Name: Texaco Location: Milnsbridge Service Station 819, Manchester Road, Huddersfield, HD4 5SX Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A19SW (NE)	498	8	411455 415581
399	**Points of Interest - Public Infrastructure** Name: Co-op Petrol Location: Milnsbridge, Huddersfield, HD4 5SX Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A19SW (NE)	498	8	411455 415581
400	**Points of Interest - Public Infrastructure** Name: Mallinson Recycling Ltd Location: 65 Britannia Rd, Milnsbridge, Huddersfield, West Yorkshire, HD3 4QG Category: Infrastructure and Facilities Class Code: Recycling Centres Positional Accuracy: Positioned to address or location	A18SW (N)	553	8	410926 415802

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
401	**Points of Interest - Public Infrastructure** Name: Weir Location: HD3 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A18NE (N)	592	8	411196 415846
401	**Points of Interest - Public Infrastructure** Name: Weir Location: HD3 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A18NE (N)	593	8	411197 415847
402	**Points of Interest - Public Infrastructure** Name: Weir Location: HD7 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	592	8	410487 415503
402	**Points of Interest - Public Infrastructure** Name: Weir Location: HD7 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A17SE (NW)	592	8	410487 415503
403	**Points of Interest - Public Infrastructure** Name: Weir Location: HD7 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	660	8	410313 415364
403	**Points of Interest - Public Infrastructure** Name: Weir Location: HD7 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	661	8	410314 415368
403	**Points of Interest - Public Infrastructure** Name: Sluice Location: HD7 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	691	8	410266 415331
403	**Points of Interest - Public Infrastructure** Name: Sluice Location: HD7 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	695	8	410261 415329
404	**Points of Interest - Public Infrastructure** Name: Jet Filling Station Location: Scar Lane Motors Filling Station, Scar Lane, Huddersfield, HD3 4QA Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A18NW (N)	740	8	410822 415966
404	**Points of Interest - Public Infrastructure** Name: C J Stern Ltd Location: Scar Lane Motors Filling Station, Scar Lane, Huddersfield, HD3 4QA Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A18NW (N)	740	8	410822 415966
404	**Points of Interest - Public Infrastructure** Name: C J Stern Ltd Location: Scar Lane Motors Filling Station, Scar Lane, Huddersfield, HD3 4QA Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A18NW (N)	740	8	410823 415966
404	**Points of Interest - Public Infrastructure** Name: C J Stern Oils Ltd Location: Scar Lane Motors Filling Station, Scar Lane, Huddersfield, HD3 4QA Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A18NW (N)	740	8	410823 415966

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
404	**Points of Interest - Public Infrastructure** Name: Scar Lane Motors Location: Scar Lane, Milsnbridge, Huddersfield, HD3 4QA Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A18NW (N)	740	8	410823 415966
405	**Points of Interest - Public Infrastructure** Name: Sluice Location: HD7 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	752	8	410163 415147
405	**Points of Interest - Public Infrastructure** Name: Sluice Location: HD7 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	757	8	410158 415146
405	**Points of Interest - Public Infrastructure** Name: Weir Location: HD7 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	759	8	410156 415137
405	**Points of Interest - Public Infrastructure** Name: Weir Location: HD7 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	764	8	410150 415133
405	**Points of Interest - Public Infrastructure** Name: Weir Location: HD7 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	768	8	410147 415147
406	**Points of Interest - Public Infrastructure** Name: H Pennington Location: 480 Blackmoorfoot Road, Crosland Moor, Huddersfield, HD4 5NS Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A14SE (E)	787	8	411880 414861
407	**Points of Interest - Public Infrastructure** Name: Cemetery Location: HD4 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A19SE (NE)	839	8	411863 415598
408	**Points of Interest - Public Infrastructure** Name: Refuse Tip Location: HD4 Category: Infrastructure and Facilities Class Code: Refuse Disposal Facilities Positional Accuracy: Positioned to an adjacent address or location	A9SW (SE)	916	8	411416 414245
409	**Points of Interest - Public Infrastructure** Name: Weir Location: HD3 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A19NE (NE)	949	8	411705 415971
410	**Points of Interest - Public Infrastructure** Name: Refuse Tip Location: HD7 Category: Infrastructure and Facilities Class Code: Refuse Disposal Facilities Positional Accuracy: Positioned to an adjacent address or location	A11NE (W)	951	8	409969 415205
411	**Points of Interest - Public Infrastructure** Name: Graveyard Location: Not Supplied Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A7SW (SW)	972	8	410227 414373

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
411	**Points of Interest - Public Infrastructure** Name: Grave Yard Location: HD7 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A7SW (SW)	973	8	410228 414371
412	**Points of Interest - Recreational and Environmental** Name: Play Area Location: HD4 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A13NE (N)	34	8	411089 415295
413	**Points of Interest - Recreational and Environmental** Name: Play Area Location: HD4 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A13SW (SW)	146	8	410794 414992
414	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	515	8	411514 415543
414	**Points of Interest - Recreational and Environmental** Name: Playground Location: Park Road, HD4 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A19SW (NE)	519	8	411522 415539
415	**Points of Interest - Recreational and Environmental** Name: Play Area Location: HD4 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A14NE (E)	613	8	411744 415207
416	**Points of Interest - Recreational and Environmental** Name: Play Area Location: HD4 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	652	8	411696 414786
417	**Points of Interest - Recreational and Environmental** Name: Play Area Location: HD4 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	724	8	411848 414982
418	**Points of Interest - Recreational and Environmental** Name: Play Area Location: HD7 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A7NW (SW)	792	8	410310 414552
419	**Points of Interest - Recreational and Environmental** Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A17SW (NW)	898	8	410156 415573
419	**Points of Interest - Recreational and Environmental** Name: Playground Location: New Street, HD7 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A17SW (NW)	898	8	410156 415573

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
420	**Areas of Adopted Green Belt** Authority: Kirklees Metropolitan Borough Council Plan Name: Kirklees Unitary Development Plan **Status: Adopted** Plan Date: 1st March 1999	A13SE (SE)	0	10	411052 415086
421	**Areas of Unadopted Green Belt** Authority: Kirklees Metropolitan Borough Council Plan Name: Kirklees Local Plan **Status: Submission Draft** Plan Date: 25th April 2017	A13SE (SE)	0	10	411052 415086

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Environment Agency - Head Office	June 2020	Annually
Calderdale Metropolitan Borough Council - Environmental Health	October 2017	Annual Rolling Update
Kirklees Metropolitan Borough Council - Planning Services	October 2017	Annual Rolling Update
Discharge Consents		
Environment Agency - North East Region	January 2022	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - North East Region	March 2013	
Integrated Pollution Controls		
Environment Agency - North East Region	January 2009	
Integrated Pollution Prevention And Control		
Environment Agency - North East Region	January 2022	Quarterly
Local Authority Integrated Pollution Prevention And Control		
Kirklees Metropolitan Borough Council - Environmental Health Department	April 2014	Variable
Calderdale Metropolitan Borough Council - Environmental Health	October 2014	Variable
Local Authority Pollution Prevention and Controls		
Kirklees Metropolitan Borough Council - Environmental Health Department	April 2014	Annual Rolling Update
Calderdale Metropolitan Borough Council - Environmental Health	October 2014	Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements		
Kirklees Metropolitan Borough Council - Environmental Health Department	April 2014	Variable
Calderdale Metropolitan Borough Council - Environmental Health	October 2014	Variable
Nearest Surface Water Feature		
Ordnance Survey	February 2022	
Pollution Incidents to Controlled Waters		
Environment Agency - North East Region	December 1998	
Prosecutions Relating to Authorised Processes		
Environment Agency - North East Region	July 2015	
Prosecutions Relating to Controlled Waters		
Environment Agency - North East Region	March 2013	
Registered Radioactive Substances		
Environment Agency - North East Region	June 2016	As notified
River Quality		
Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points		
Environment Agency - Head Office	April 2012	
River Quality Chemistry Sampling Points		
Environment Agency - Head Office	April 2012	
Substantiated Pollution Incident Register		
Environment Agency - North East Region - Ridings Area	January 2022	Quarterly
Environment Agency - North East Region - Yorkshire Area	January 2022	Quarterly
Water Abstractions		
Environment Agency - North East Region	January 2022	Quarterly
Water Industry Act Referrals		
Environment Agency - North East Region	October 2017	
Groundwater Vulnerability Map		
Environment Agency - Head Office	June 2018	As notified
Bedrock Aquifer Designations		
Environment Agency - Head Office	January 2018	Annually
Superficial Aquifer Designations		
Environment Agency - Head Office	January 2018	Annually

Data Currency

Agency & Hydrological	Version	Update Cycle
Source Protection Zones Environment Agency - Head Office	May 2021	Bi-Annually
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	February 2022	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	February 2022	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	February 2022	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	February 2022	Quarterly
Flood Defences Environment Agency - Head Office	February 2022	Quarterly
OS Water Network Lines Ordnance Survey	January 2022	Quarterly
Surface Water 1 in 30 year Flood Extent Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 100 year Flood Extent Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 1000 year Flood Extent Environment Agency - Head Office	May 2018	Annually
Surface Water Suitability Environment Agency - Head Office	February 2016	Annually
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	As notified

Data Currency

Waste	Version	Update Cycle
BGS Recorded Landfill Sites		
British Geological Survey - National Geoscience Information Service	November 2002	As notified
Historical Landfill Sites		
Environment Agency - Head Office	January 2022	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - North East Region	January 2009	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - North East Region - Ridings Area	January 2022	Quarterly
Environment Agency - North East Region - Yorkshire Area	January 2022	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - North East Region - Ridings Area	January 2022	Quarterly
Environment Agency - North East Region - Yorkshire Area	January 2022	Quarterly
Local Authority Landfill Coverage		
Calderdale Metropolitan Borough Council - Environmental Health	February 2003	Not Applicable
Kirklees Metropolitan Borough Council - Planning Services	February 2003	Not Applicable
Local Authority Recorded Landfill Sites		
Calderdale Metropolitan Borough Council - Environmental Health	October 2018	
Kirklees Metropolitan Borough Council - Planning Services	October 2018	
Potentially Infilled Land (Non-Water)		
Landmark Information Group Limited	December 1999	Not Applicable
Potentially Infilled Land (Water)		
Landmark Information Group Limited	December 1999	
Registered Landfill Sites		
Environment Agency - North East Region - Ridings Area	March 2006	Not Applicable
Environment Agency - North East Region - Yorkshire Area	March 2006	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - North East Region - Ridings Area	April 2018	
Environment Agency - North East Region - Yorkshire Area	April 2018	
Registered Waste Treatment or Disposal Sites		
Environment Agency - North East Region - Ridings Area	June 2015	
Environment Agency - North East Region - Yorkshire Area	June 2015	
Hazardous Substances	**Version**	**Update Cycle**
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	January 2022	Bi-Annually
Explosive Sites		
Health and Safety Executive	March 2017	Annually
Notification of Installations Handling Hazardous Substances (NIHHS)		
Health and Safety Executive	August 2001	
Planning Hazardous Substance Enforcements		
Kirklees Metropolitan Borough Council - Planning Services	August 2015	Variable
Calderdale Metropolitan Borough Council	February 2016	Variable
Peak District National Park - Development Control	February 2016	Variable
Planning Hazardous Substance Consents		
Kirklees Metropolitan Borough Council - Planning Services	August 2015	Variable
Calderdale Metropolitan Borough Council	February 2016	Variable
Peak District National Park - Development Control	February 2016	Variable

Data Currency

Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	As notified
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	December 2015	As notified
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	November 2021	Bi-Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB) Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011 November 2020	As notified
Coal Mining Affected Areas The Coal Authority - Property Searches	March 2014	Annual Rolling Update
Mining Instability Ove Arup & Partners	June 1998	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	April 2020	As notified
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	July 2011	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	July 2011	Annually

Data Currency

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	January 2022	Quarterly
Fuel Station Entries Catalist Ltd - Experian	March 2022	Quarterly
Gas Pipelines National Grid	October 2021	Bi-Annually
Points of Interest - Commercial Services PointX	March 2022	Quarterly
Points of Interest - Education and Health PointX	March 2022	Quarterly
Points of Interest - Manufacturing and Production PointX	March 2022	Quarterly
Points of Interest - Public Infrastructure PointX	March 2022	Quarterly
Points of Interest - Recreational and Environmental PointX	March 2022	Quarterly
Underground Electrical Cables National Grid	May 2021	Bi-Annually

Data Currency

Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural England	February 2021	Bi-Annually
Areas of Adopted Green Belt		
Calderdale Metropolitan Borough Council	October 2020	Quarterly
Kirklees Metropolitan Borough Council	October 2020	Quarterly
Peak District National Park	October 2020	Quarterly
Areas of Unadopted Green Belt		
Calderdale Metropolitan Borough Council	October 2020	Quarterly
Kirklees Metropolitan Borough Council	October 2020	Quarterly
Peak District National Park	October 2020	Quarterly
Areas of Outstanding Natural Beauty		
Natural England	January 2021	Bi-Annually
Environmentally Sensitive Areas		
Natural England	January 2017	
Forest Parks		
Forestry Commission	April 1997	Not Applicable
Local Nature Reserves		
Natural England	February 2021	Bi-Annually
Marine Nature Reserves		
Natural England	July 2019	Bi-Annually
National Nature Reserves		
Natural England	January 2021	Bi-Annually
National Parks		
Natural England	February 2018	Bi-Annually
Nitrate Sensitive Areas		
Natural England	April 2016	Not Applicable
Nitrate Vulnerable Zones		
Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	April 2016	
Environment Agency - Head Office	June 2017	Bi-Annually
Ramsar Sites		
Natural England	August 2020	Bi-Annually
Sites of Special Scientific Interest		
Natural England	February 2021	Bi-Annually
Special Areas of Conservation		
Natural England	July 2020	Bi-Annually
Special Protection Areas		
Natural England	February 2021	Bi-Annually

Data Suppliers

A selection of organisations who provide data within this report

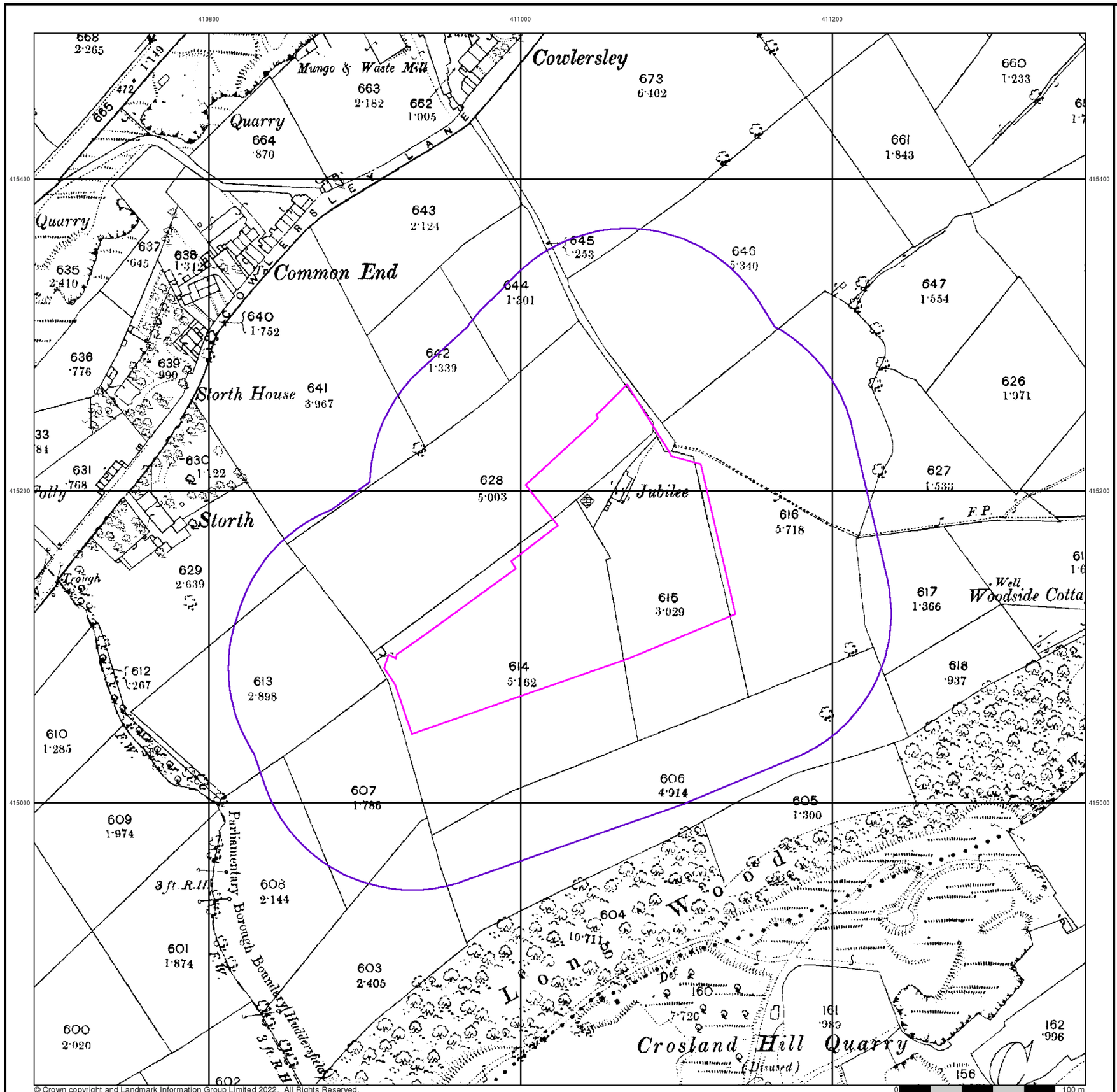
Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	
Centre for Ecology and Hydrology	
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Stantec UK Ltd	

Useful Contacts

Contact	Name and Address	Contact Details
1	**British Geological Survey - Enquiry Service** British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	**Environment Agency - National Customer Contact Centre (NCCC)** PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	**Kirklees Metropolitan Borough Council - Environmental Health Department** West Riding House, 9 Manchester Road, Huddersfield, West Yorkshire, HD1 3HH	Telephone: 01484 221000 Email: customer.relations@kirklees.gov.uk Website: www.kirklees.gov.uk
4	**Environment Agency - Head Office** Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
5	**Ordnance Survey** Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
6	**Kirklees Metropolitan Borough Council - Planning Services** PO BOX B93, Civic Centre III, Off Market Street, Huddersfield, West Yorkshire, HD1 2JR	Telephone: 01484 221000 Fax: 01484 221613 Website: www.kirklees.gov.uk
7	**Health and Safety Executive** 5S.2 Redgrave Court, Merton Road, Bootle, L20 7HS	Website: www.hse.gov.uk
8	**PointX** 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
9	**Natural England** County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
10	**Kirklees Metropolitan Borough Council** Town Hall, Civic Centre, Huddersfield, West Yorkshire, HD1 2TA	Telephone: 01484 221000 Fax: 01484 442768 Website: www.kirklees.gov.uk
-	**Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards** Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	**Landmark Information Group Limited** Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

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

Appendix D – Historical Plans



0 100 m

ROBERTS ENVIRONMENTAL LTD

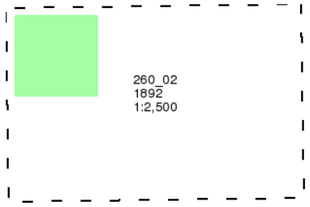
Yorkshire

Published 1892

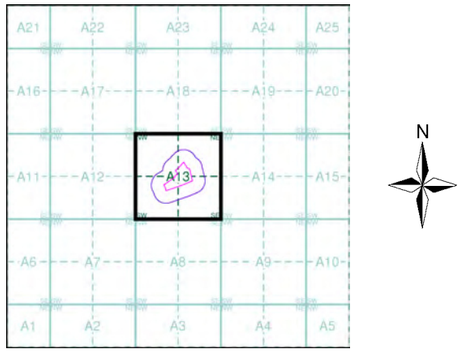
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



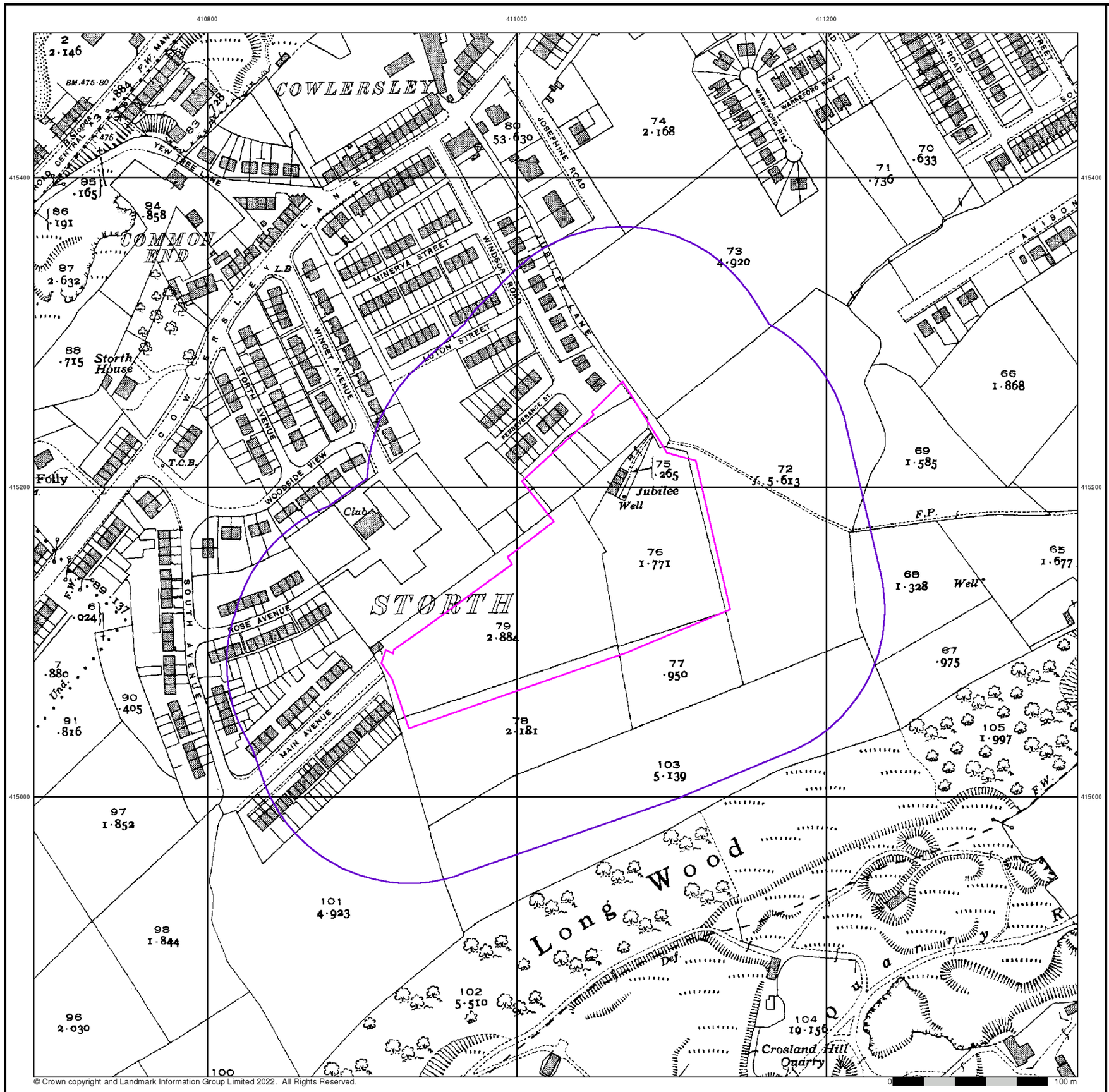
Order Details

Order Number:	293555057_1_1
Customer Ref:	220322
National Grid Reference:	411030, 415140
Slice:	A
Site Area (Ha):	2.28
Search Buffer (m):	100

Site Details

Main Avenue, HUDDERSFIELD, HD4 5US

Landmark INFORMATION GROUP
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



ROBERTS ENVIRONMENTAL LTD

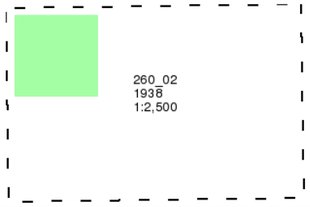
Yorkshire

Published 1938

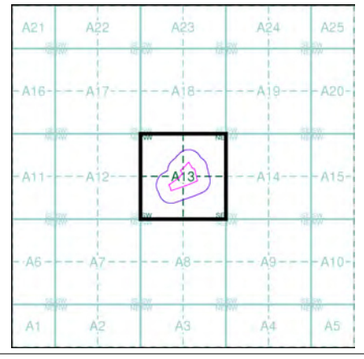
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



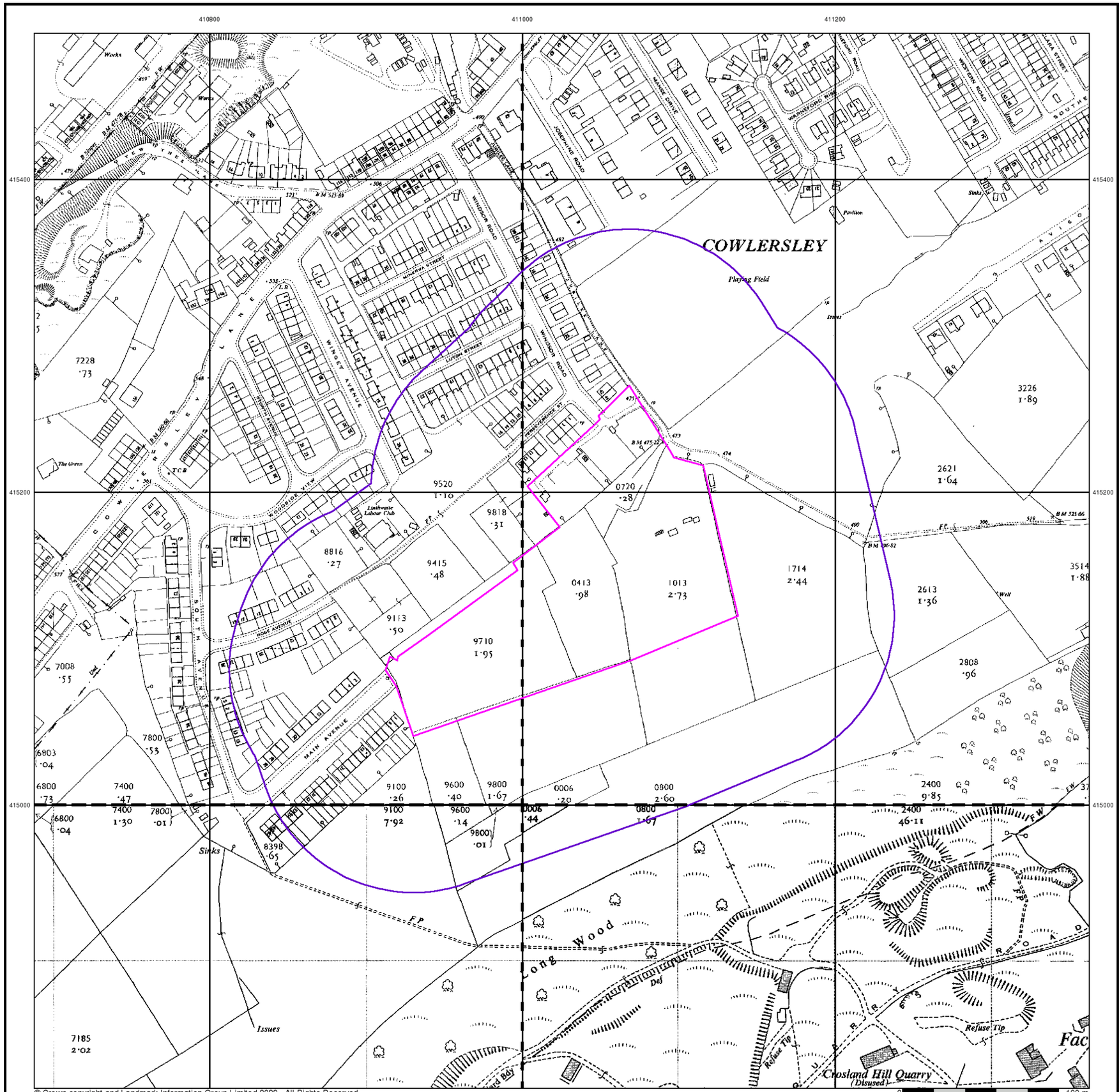
Order Details

Order Number:	293555057_1_1
Customer Ref:	220322
National Grid Reference:	411030, 415140
Slice:	A
Site Area (Ha):	2.28
Search Buffer (m):	100

Site Details

Main Avenue, HUDDERSFIELD, HD4 5US

Landmark INFORMATION GROUP
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



0 100 m

ROBERTS ENVIRONMENTAL LTD

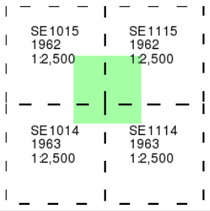
Ordnance Survey Plan

Published 1962 - 1963

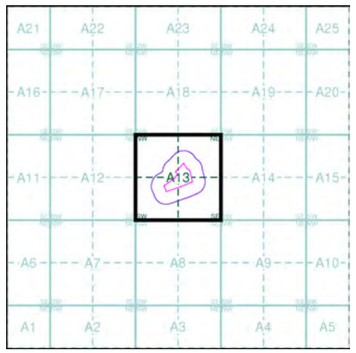
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



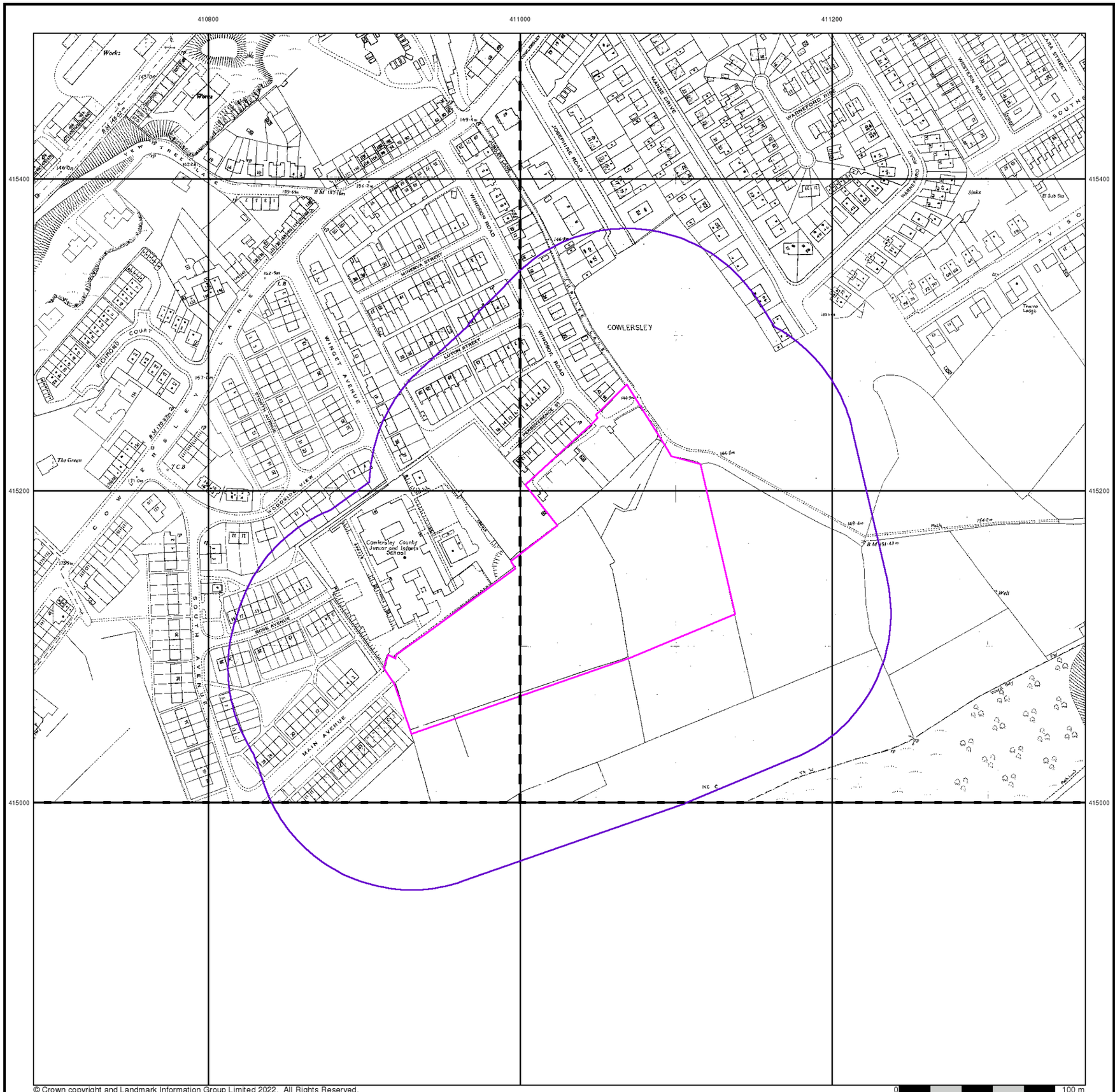
Order Details

Order Number:	293555057_1_1
Customer Ref:	220322
National Grid Reference:	411030, 415140
Slice:	A
Site Area (Ha):	2.28
Search Buffer (m):	100

Site Details

Main Avenue, HUDDERSFIELD, HD4 5US

Landmark INFORMATION GROUP
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



ROBERTS ENVIRONMENTAL LTD

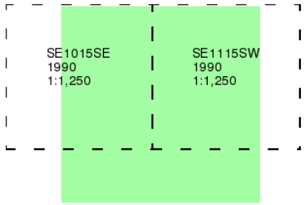
Additional SIMs

Published 1990

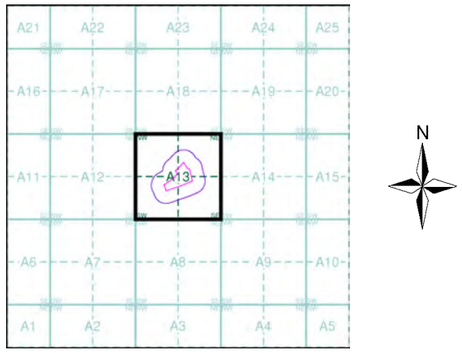
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	293555057_1_1
Customer Ref:	220322
National Grid Reference:	411030, 415140
Slice:	A
Site Area (Ha):	2.28
Search Buffer (m):	100

Site Details

Main Avenue, HUDDERSFIELD, HD4 5US

Landmark INFORMATION GROUP
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

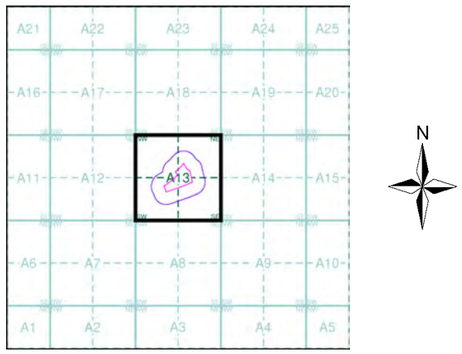
ROBERTS ENVIRONMENTAL LTD

Historical Aerial Photography

Published 2000

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

Historical Aerial Photography - Segment A13



Order Details

Order Number:	293555057_1_1
Customer Ref:	220322
National Grid Reference:	411030, 415140
Slice:	A
Site Area (Ha):	2.28
Search Buffer (m):	100

Site Details

Main Avenue, HUDDERSFIELD, HD4 5US

Landmark INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

Appendix E – Ground Investigation Data

Borehole Log

LOCATION MAP

Edited by APEX consulting	Main Avenue, Kirklees
Matthew Thompson | matthew.thompson@apexconsulting.co.uk	soilcloud.tech

APEX CONSULTING ENGINEERS

Borehole Log

LAYOUT MAP

Edited by APEX consulting	Main Avenue, Kirklees
Matthew Thompson | matthew.thompson@apexconsulting.co.uk	soilcloud.tech

Borehole Log

LAYOUT MAP

Surveys accuracy (X / Y)	Carried out by surveyor
Not specified	No
Coordinate Reference System of the project	**Leveling**
OSGB 1936 / British National Grid	Not specified

	WGS 84		OSGB 1936 / British National Grid		
Name	Longitude	Latitude	X	Y	Elevation [m]
PH101	-1.833580598	53.63332127	411,102	415,213	Not specified
PH102	-1.833352396	53.632913493	411,117	415,167	Not specified
PH103	-1.834042977	53.632781247	411,072	415,152	Not specified
PH104	-1.835073419	53.632807992	411,004	415,155	Not specified
PH105	-1.83457515	53.632594955	411,037	415,132	Not specified
PH106	-1.835909987	53.632254404	410,948	415,093	Not specified
TP101	-1.833936802	53.633579452	411,079	415,241	Not specified
TP102	-1.833456531	53.633328303	411,110	415,213	Not specified
TP103	-1.833768001	53.633017476	411,090	415,179	Not specified
TP104	-1.834033617	53.632705993	411,072	415,144	Not specified
TP105	-1.833271752	53.632697743	411,123	415,143	Not specified
TP106	-1.833734842	53.633383511	411,092	415,219	Not specified
TP107	-1.834597013	53.632513523	411,035	415,122	Not specified
TP108	-1.834931806	53.632672706	411,013	415,140	Not specified
TP109	-1.835388115	53.632455003	410,983	415,116	Not specified
TP111	-1.835524859	53.632039996	410,974	415,070	Not specified
TP112	-1.836038071	53.632053792	410,940	415,071	Not specified

Borehole Log

TP101

PROJECT NO	1152	**CO-ORDS**	411,078.55E / 415,241.19N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	2024-05-16

Logged Matthew Thompson

Checked Matthew Thompson

SAMPLE STATUS
ES: Environmental Soil Sample

SAMPLING METHODS
T: Tub / **J, K & T:** Jar, Small Jar & Tub

Depth	Lithology	Descriptions	Status	Method	Samples
0		MADE GROUND TOPSOIL: Dark grey slightly sandy CLAY with rootlets. Anthropogenic materials throughout, including fragments of glass, pottery, clay piping, crisp packet, brick cobble, sandstone gravel and 1 fragment of suspected corrugated asbestos sheeting. 0.2 m	ES ES	T J, K & T	0.05 m 0.1 m
		MADE GROUND: Orange sandy GRAVEL AND COBBLE of sandstone in random orientation.			
1		*1.20m: At 1.2m, clay pipe noted, likely foul sewer with top removed. Top replaced and backfilled.*			

Borehole Log

TP102

PROJECT NO	1152	**CO-ORDS**	411,110.37E / 415,213.32N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	2024-05-16

Logged Matthew Thompson

Checked Matthew Thompson

SAMPLE STATUS
ES: Environmental Soil Sample / **B:** Bulk Disturbed

SAMPLING METHODS
J, K & T: Jar, Small Jar & Tub / **B:** Bulk Bag

Depth	Lithology	Descriptions	Status	Method	Samples
0		TOPSOIL: Black slightly gravelly fine SAND with rootlets. Gravel is rounded to subangular fine to medium of mixed lithologies.	ES	J, K & T	0.1 m
		0.3 m			
		Stiff mottled grey and orange slightly sandy gravelly CLAY. Gravel is angular tabular medium to coarse of sandstone. Low cobble content of tabular sandstone.	B	B	0.9 m
1		1.2 m			
		Orange-brown slightly clayey angular table coarse GRAVEL AND COBBLE of sandstone.			
		1.4 m			
		Moderately strong thinly bedded SANDSTONE. Recovered as angular tabular COBBLE with some boulders. *1.45 - 1.50m: Unable to excavate beyond 1.5m.*			

Matthew Thompson | matthew.thompson@apexconsulting.co.uk | soilcloud.tech

Borehole Log

TP103

PROJECT NO	1152	**CO-ORDS**	411,089.86E / 415,178.69N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	2024-05-16

Logged Matthew Thompson

Checked Matthew Thompson

SAMPLE STATUS
ES: Environmental Soil Sample / **D:** Disturbed Sample

SAMPLING METHODS
J, K & T: Jar, Small Jar & Tub / **T:** Tub

Depth	Lithology	Descriptions	Status	Method	Samples
0		TOPSOIL: Black slightly gravelly fine SAND with rootlets. Gravel is rounded to subangular fine to medium of mixed lithologies.	ES	J, K & T	0.1 m
		0.2 m			
		Soft orange and grey slightly sandy gravelly CLAY. Gravel is subangular to angular medium to coarse of sandstone. Becoming very gravelly with low cobble content.			
		0.85 - 0.90m: At 0.85m in south face, locally very dark carbonaceous mudstone gravel. Possible boundary of sandstone/mudstone strata identified.			
1		Stiff mottled orange and grey very gravelly CLAY. Gravel is predominantly mudstone and siltstone lithorelicts with some coarse gravel of sandstone. Low cobble content.	D	T	1.1 m
		1.5 m			
		Grey and black slightly clayey fine GRAVEL of very weak mudstone.	D	T	1.7 m
2		*2.00 - 2.30m: From 2.0m, gravel is fine to medium.*			

Matthew Thompson | matthew.thompson@apexconsulting.co.uk | soilcloud.tech

Borehole Log

TP104

PROJECT NO	1152	**CO-ORDS**	411,072.38E / 415,144.00N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	2024-05-16

Logged Matthew Thompson

Checked Matthew Thompson

SAMPLE STATUS
ES: Environmental Soil Sample / **D:** Disturbed Sample

SAMPLING METHODS
J, K & T: Jar, Small Jar & Tub / **T:** Tub

Depth	Lithology	Descriptions	Status	Method	Samples	Water level
0		TOPSOIL: Dark grey-black slightly sandy gravelly friable CAY with occasional rootlets. Gravel is of sandstone.	ES	J, K & T	0.1 m	
		0.25 m				
		Firm orange and grey slightly sandy CLAY with low cobble cobble of SANDSTONE. Becoming very sandy.	D	T	0.4 m	
		0.55 m				
		Orange and grey very sandy very gravelly angular tabular COBBLE of sandstone with low boulder content.				
		0.9 m				
		Moderately strong thiny bedded SANDSTONE. Recovered as very gravelly angular tabular cobble and boulder.				1
1		*1.00m: Unable to excavate beyond 1.0m.*				

1 2024-05-16 - At 1.0m groundwater seepage in base of pit. 1m

Borehole Log

TP105

PROJECT NO	1152	**CO-ORDS**	411,122.76E / 415,143.20N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	2024-05-16

Logged Matthew Thompson

Checked Matthew Thompson

SAMPLE STATUS
ES: Environmental Soil Sample / **D:** Disturbed Sample

SAMPLING METHODS
J, K & T: Jar, Small Jar & Tub / **T:** Tub

Depth	Lithology	Descriptions	Status	Method	Samples
0		TOPSOIL: Dark grey sandy friable CLAY with rootlets.	ES	J, K & T	0.1 m
		0.3 m			
		Firm sandy slightly gravelly CLAY. Gravel is subangular to angular medium to coarse of SANDSTONE.			
		0.9 m			
1		Wet grey-black very clayey subangular to angular fine GRAVEL of extremely weak mudstone.			
		1.2 m			
		Firm dark grey CLAY. Becoming light grey-brown. Locally wet & softened with decaying tree roots.	D	T	1.4 m
		1.50 - 1.90m: From 1.9m, with gravel of mudstone lithorelicts.			
2		Dark grey and iron-stained slightly clayey angular fine to medium angular GRAVEL of extremely weak mudstone.	D	T	2 m
		2.30m: From 2.3m, gravel becomes medium to coarse.			

Borehole Log

TP106

PROJECT NO	1152	**CO-ORDS**	411,091.96E / 415,219.42N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	Not specified

Logged Matthew Thompson

Checked Matthew Thompson

SAMPLE STATUS
ES: Environmental Soil Sample

SAMPLING METHODS
J, K & T: Jar, Small Jar & Tub

Depth	Lithology	Descriptions	Status	Method	Samples
0		MADE GROUND TOPSOIL: Black slightly clayey very gravelly fine SAND with rootlets. Gravel is predominantly fine to coarse sandstone. Anthropogenic materials noted including glass, pottery, clay piping.	ES	J, K & T	0.1 m
		0.2 m			
		MADE GROUND: Orange and brown very clayey GRAVEL AND COBBLE of sandstone. Low boulder content of sandstone. Rare fragments of pottery and clay piping.	ES	J, K & T	0.3 m
		0.40m: At 0.4m, evidence of possible service run, pit stopped and backfilled.			

Matthew Thompson | matthew.thompson@apexconsulting.co.uk | soilcloud.tech

Borehole Log

TP107

PROJECT NO	1152	**CO-ORDS**	411,035.17E / 415,122.50N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	2024-05-16

Logged Matthew Thompson

Checked Matthew Thompson

SAMPLE STATUS
ES: Environmental Soil Sample / **D:** Disturbed Sample / **B:** Bulk Disturbed

SAMPLING METHODS
J, K & T: Jar, Small Jar & Tub / **T:** Tub / **B:** Bulk Bag

Depth	Lithology	Descriptions	Status	Method	Samples
0		TOPSOIL: Black peaty turf over brown slightly gravelly very clayey fine SAND with rootlets. Gravel is fine to coarse sandstone.	ES	J, K & T	0.1 m
		0.25 m			
		Firm orange and grey slightly gravelly CLAY. Gravel is subangular fine to medium sandstone.	D	T	0.8 m
1		*1.40 - 1.50m: From 1.4m, becoming stiff.*			
		Stiff dark grey and gleyed orange CLAY.			
		2 m			
2		Dark grey and orange clayey angular tabular fine to coarse GRAVEL of very weak mudstone.	B	B	2.3 m
		2.7 m			
		Black vitreous COAL. Recovered at tabular gravel and cobble.	D	T	2.8 m
		3 m			
3					

Borehole Log

TP108

PROJECT NO	1152	**CO-ORDS**	411,012.99E / 415,140.16N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	2024-05-16

Logged Matthew Thompson

Checked Matthew Thompson

SAMPLE STATUS
ES: Environmental Soil Sample / **D:** Disturbed Sample

SAMPLING METHODS
J, K & T: Jar, Small Jar & Tub / **T:** Tub

Depth	Lithology	Descriptions	Status	Method	Samples
0		TOPSOIL: Black peaty turf over brown slightly gravelly very clayey fine SAND with rootlets. Gravel is fine to coarse sandstone.	ES	J, K & T	0.1 m
		0.2 m			
		Orange and brown slightly gravelly SAND. Gravel is subagnular medium to coarse sandstone.			
		1 m			
1		Orange-brown clayey very sandy subangular to angular GRAVEL AND COBBLE of sandstone. Low boulder conent with depth.	D	T	1.3 m
		1.80m: At 1.8m, unable to dig.			

Borehole Log

TP109

PROJECT NO	1152	**CO-ORDS**	410,982.87E / 415,115.87N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	2024-05-16

Logged Matthew Thompson

Checked Matthew Thompson

SAMPLE STATUS
ES: Environmental Soil Sample / **D:** Disturbed Sample

SAMPLING METHODS
J, K & T: Jar, Small Jar & Tub / **B:** Bulk Bag

Depth	Lithology	Descriptions	Status	Method	Samples
0		TOPSOIL: Black peaty turf over brown slightly gravelly very clayey fine SAND with rootlets. Gravel is fine to coarse sandstone.	ES	J, K & T	0.05 m
		0.35 m Orange-borown gravelly very clayey fine to medium SAND. Gravel is subangualr to angular medium to coarse sandstone.			
		0.6 m Firm orange and grey slightly sandy slighty gravelly CLAY. Gravel is coarse subangular gravel of sandstone.	D	B	0.9 m
1		1.1 m Stiff grey very gravelly CLAY. Gravel is tabular fine to medium of mudstone and siltstone lithorelicts.			
		1.6 m Grey very clayey fine to medium GRAVEL of very weak mudstone and siltstone.			
2		*2.00 - 2.20m: From 2.0m, becoming slightly clayey and fine to coarse gravel. Iron stained and hard to excavate.*			

Matthew Thompson | matthew.thompson@apexconsulting.co.uk | soilcloud.tech

Borehole Log

TP110

PROJECT NO	1152	**CO-ORDS**	411,024.04E / 415,087.36N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	2024-05-16

Logged Not specified

Checked Not specified

SAMPLE STATUS
ES: Environmental Soil Sample / **B:** Bulk Disturbed

SAMPLING METHODS
J, K & T: Jar, Small Jar & Tub / **B:** Bulk Bag

Depth	Lithology	Descriptions	Status	Method	Samples
0		TOPSOIL: Black peaty turf over brown slightly gravelly very clayey fine SAND with rootlets. Gravel is fine to coarse sandstone.	ES	J, K & T	0.1 m
		0.25 m			
		Stiff orange and grey slightly gravelly CLAY. Gravel is suubangular sandstone.	B	B	0.6 m
		0.8 m			
		Black very clayey fine GRAVEL of mudstone.			
		0.9 m			
1		Brown and grey silty subangular fine to coarse very sandy GRAVEL of sandstone.	B	B	1.6 m
2		2.4 m			
		Moderately strong thinly bedded SANDSTONE. Recovered as tabular angular gravel and cobble.			
		2.5 m			

Borehole Log

TP111

PROJECT NO	1152	**CO-ORDS**	410,973.94E / 415,069.67N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	2024-05-16

Logged Matthew Thompson

Checked Matthew Thompson

SAMPLE STATUS
ES: Environmental Soil Sample / **B:** Bulk Disturbed

SAMPLING METHODS
J, K & T: Jar, Small Jar & Tub / **B:** Bulk Bag

Depth	Lithology	Descriptions	Status	Method	Samples
0		TOPSOIL: Black peaty turf over brown slightly gravelly very clayey fine SAND with rootlets. Gravel is fine to coarse sandstone.	ES	J, K & T	0.1 m
		0.3 m			
		Stiff orange-brown slightly gravelly CLAY. Gravel is subangular medium to coarse sandstone.			
		0.7 m			
		Black very ckayey fine GRAVEL of very weak mudstone.			
		0.8 m			
		Stiff orange and grey silty CLAY. Low cobble content of sandstone.			
1		*1.00 - 1.20m: From 1.0m, with mudstone lithorelicts.*	B	B	1.1 m
		Grey very clayey angular fine to medium GRAVEL of extremely weak mudstone.			
		1.5 m			
		Wet very weak orange-grey very thinly bedded SILTSTONE. Recovered as medium to coarse angular GRAVEL.			
		1.60m: Unable to excavate beyond 1.6m.			

Matthew Thompson | matthew.thompson@apexconsulting.co.uk | soilcloud.tech

Borehole Log

TP112

PROJECT NO	1152	**CO-ORDS**	410,939.99E / 415,071.13N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	2024-05-16

Logged Matthew Thompson

Checked Matthew Thompson

SAMPLE STATUS
ES: Environmental Soil Sample / **D:** Disturbed Sample

SAMPLING METHODS
J, K & T: Jar, Small Jar & Tub / **T:** Tub

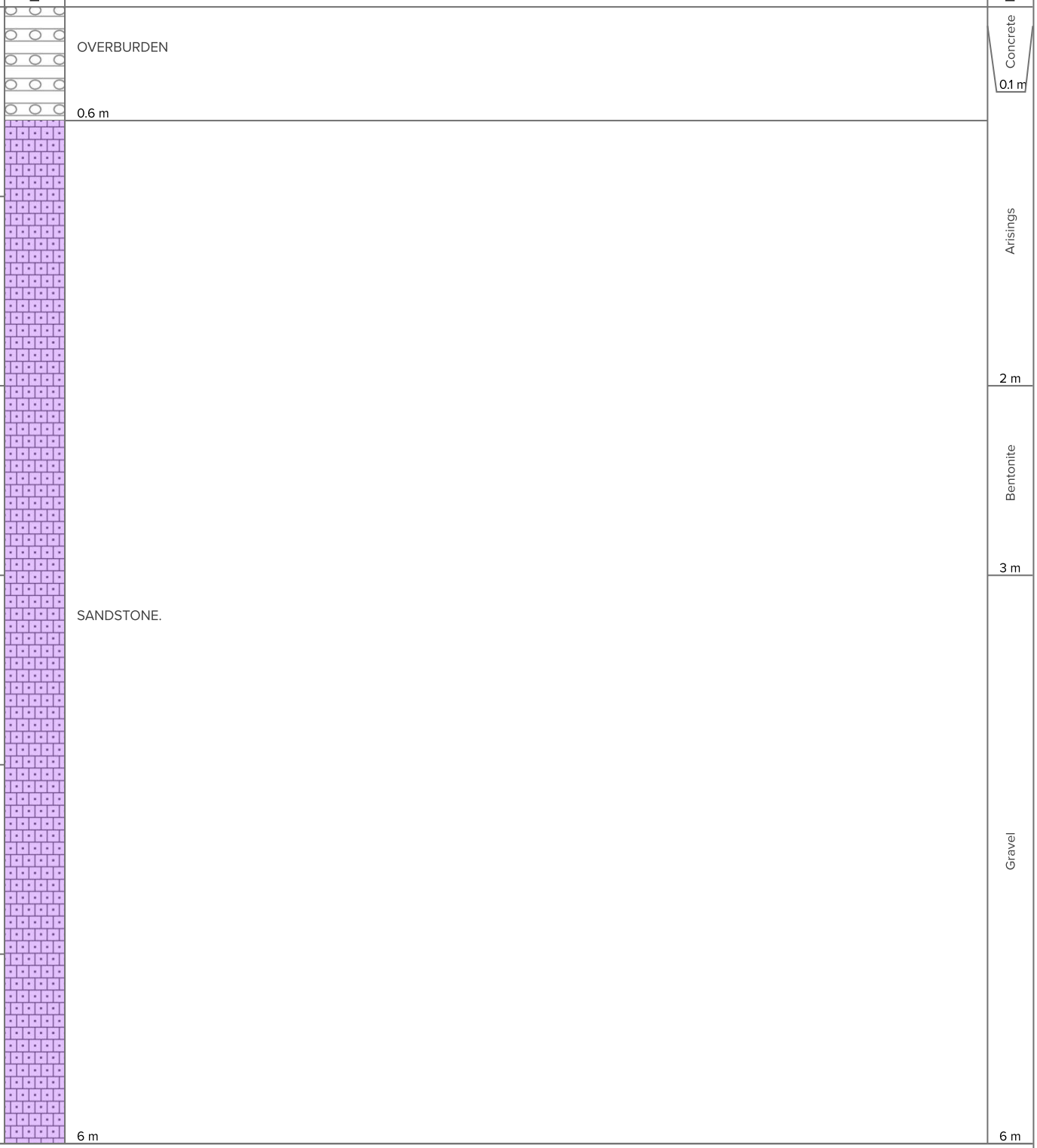
Depth	Lithology	Descriptions	Status	Method	Samples	Water level
0		MADE GROUND: Black (coarse) sandy angular fine to medium GRAVEL of clinker and mixed lithologies and COBBLE of suspected limestone.	ES	J, K & T	0.1 m	
		0.2 m				
		Stiff mottled orange and grey CLAY. Low coble content of sandstone.				
1			D	T	1.2 m	
		1.6 m				
		Orange very sandy angular medium to coarse GRAVEL AND COBBLE of weak sandstone.				
		1.8 m				
		Moderately strong thinly bedded SANDSTONE. Recovered as tabular cobble and boulder.				1
		1.90m: Unable to excavate beyond 1.9m.				

1 2024-05-16 - At 1.9m, groundwater seepage in base of pit. 1.9m

Borehole Log

PH101

PROJECT NO	1152	**CO-ORDS**	411,102.17E / 415,212.52N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	2024-05-16
Logged Matthew Thompson		**Checked** Matthew Thompson	



Borehole Log

PH102

PROJECT NO	1152	**CO-ORDS**	411,117.37E / 415,167.19N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	2024-05-16
Logged	Matthew Thompson	**Checked**	Matthew Thompson

Depth	Lithology	Descriptions	Backfills
0			Concrete 0.1 m
1		OVERBURDEN	Arisings
		1.6 m	2 m
2			Bentonite 3 m
3		Grey SANDSTONE.	
4			Gravel
5		6 m	6 m
6			

Edited by APEX consulting
Matthew Thompson | matthew.thompson@apexconsulting.co.uk

Borehole Log

PH103

PROJECT NO	1152	**CO-ORDS**	411,071.74E / 415,152.37N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	2024-05-16
		Logged	Matthew Thompson
		Checked	Matthew Thompson

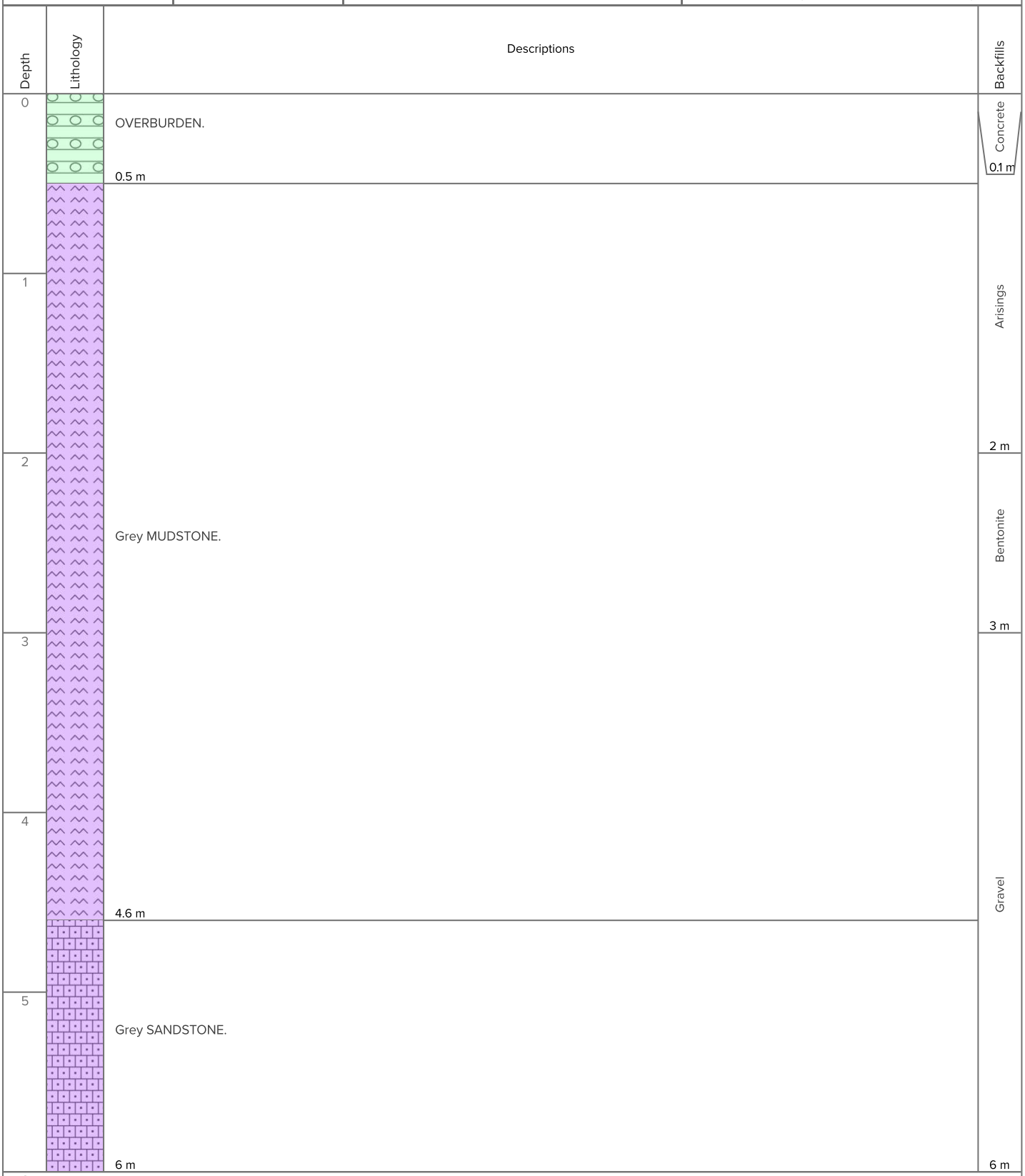
Depth	Lithology	Descriptions	Backfills
0		OVERBURDEN	Concrete 0.1 m
1		1.3 m	Arisings
2		Orangish SANDSTONE.	2 m Bentonite 3 m
3			
4		4.1 m	Gravel
5		Grey SANDSTONE.	
6		6 m	6 m

Edited by APEX consulting
Matthew Thompson | matthew.thompson@apexconsulting.co.uk

Borehole Log

PH104

PROJECT NO	1152	**CO-ORDS**	411,003.59E / 415,155.19N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	2024-05-16
Logged Matthew Thompson		**Checked** Matthew Thompson	

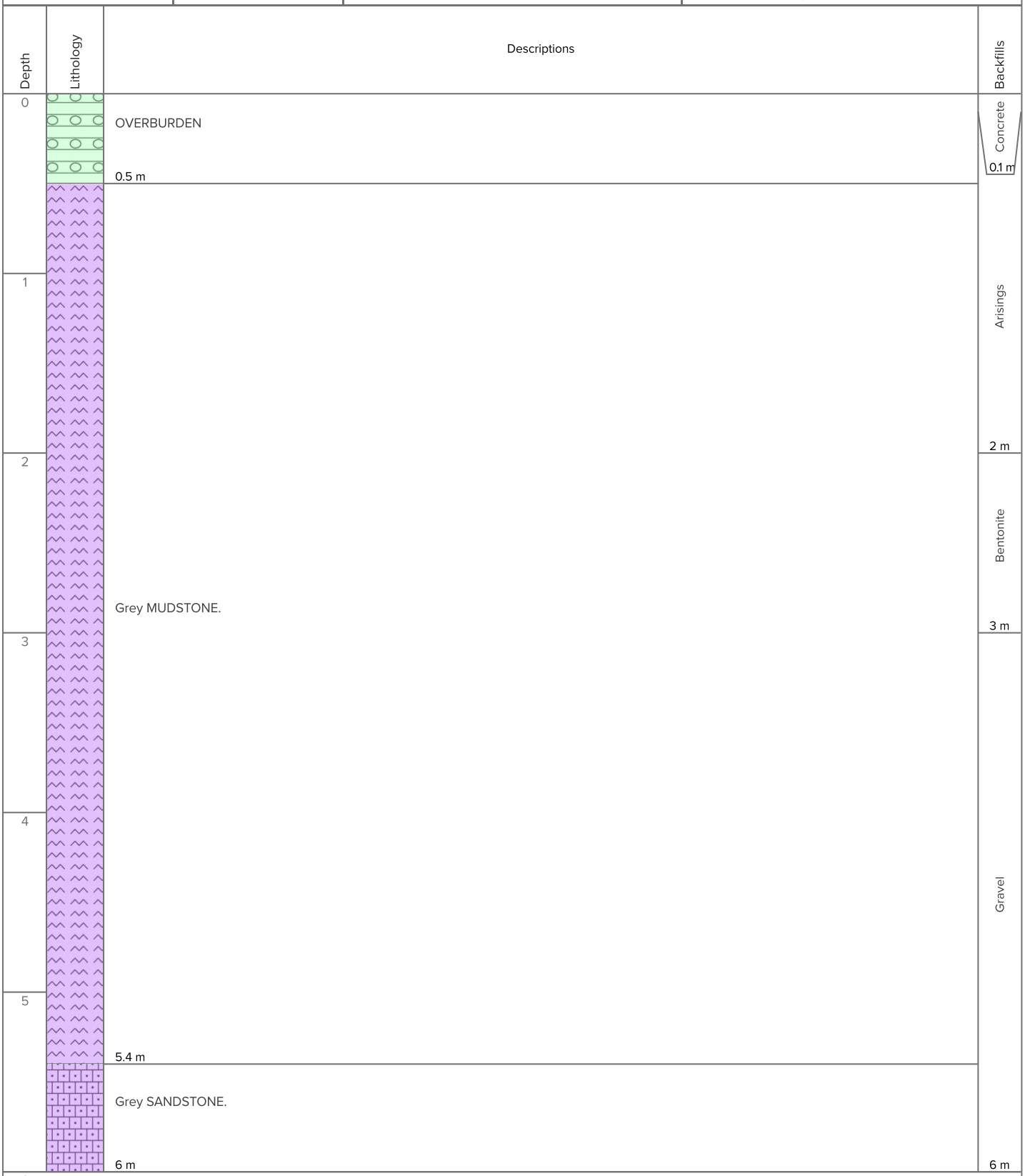


Edited by APEX consulting
Matthew Thompson | matthew.thompson@apexconsulting.co.uk

Borehole Log

PH105

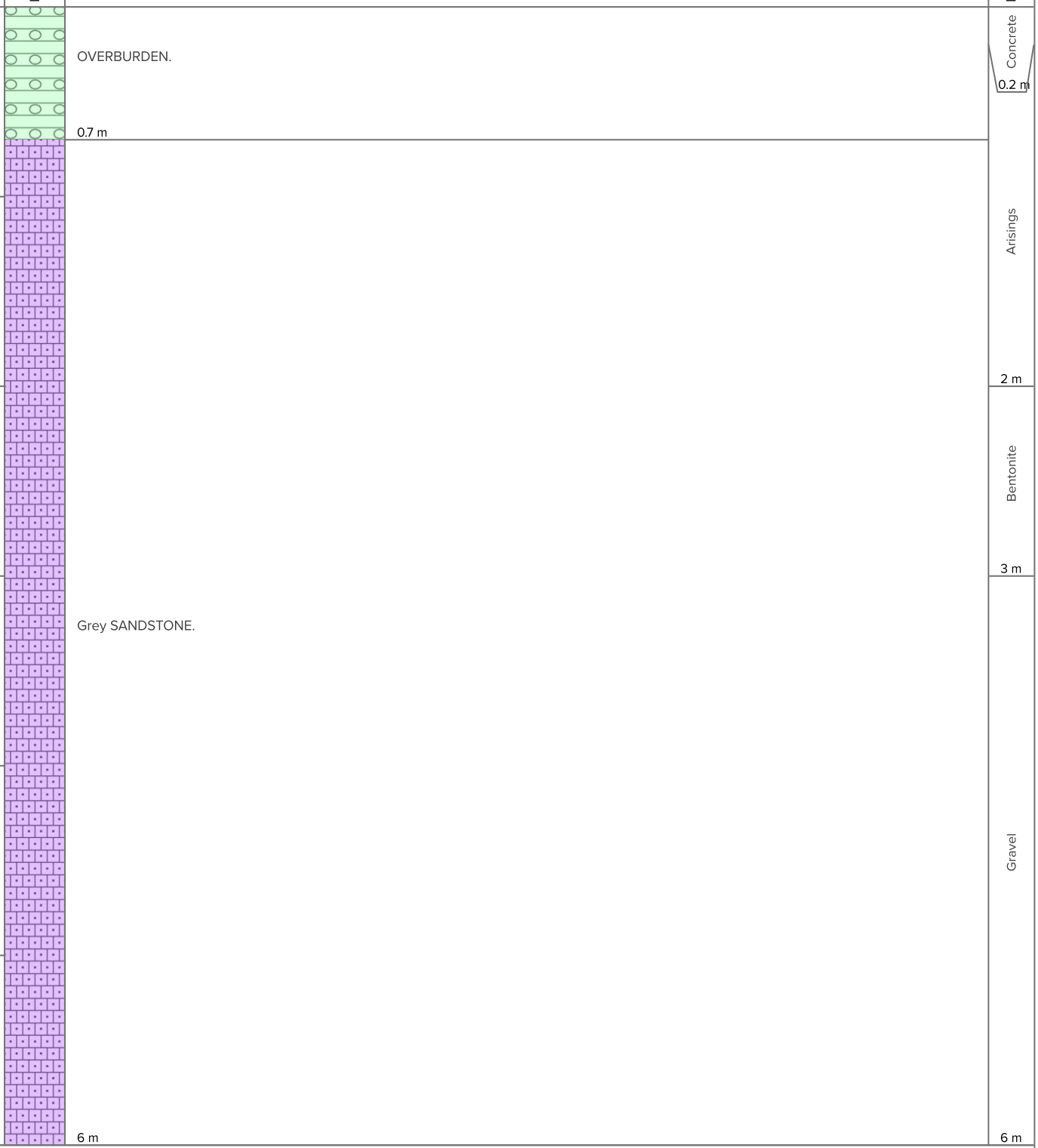
PROJECT NO	1152	**CO-ORDS**	411,036.59E / 415,131.56N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	2024-05-16
Logged Matthew Thompson		**Checked** Matthew Thompson	



Borehole Log

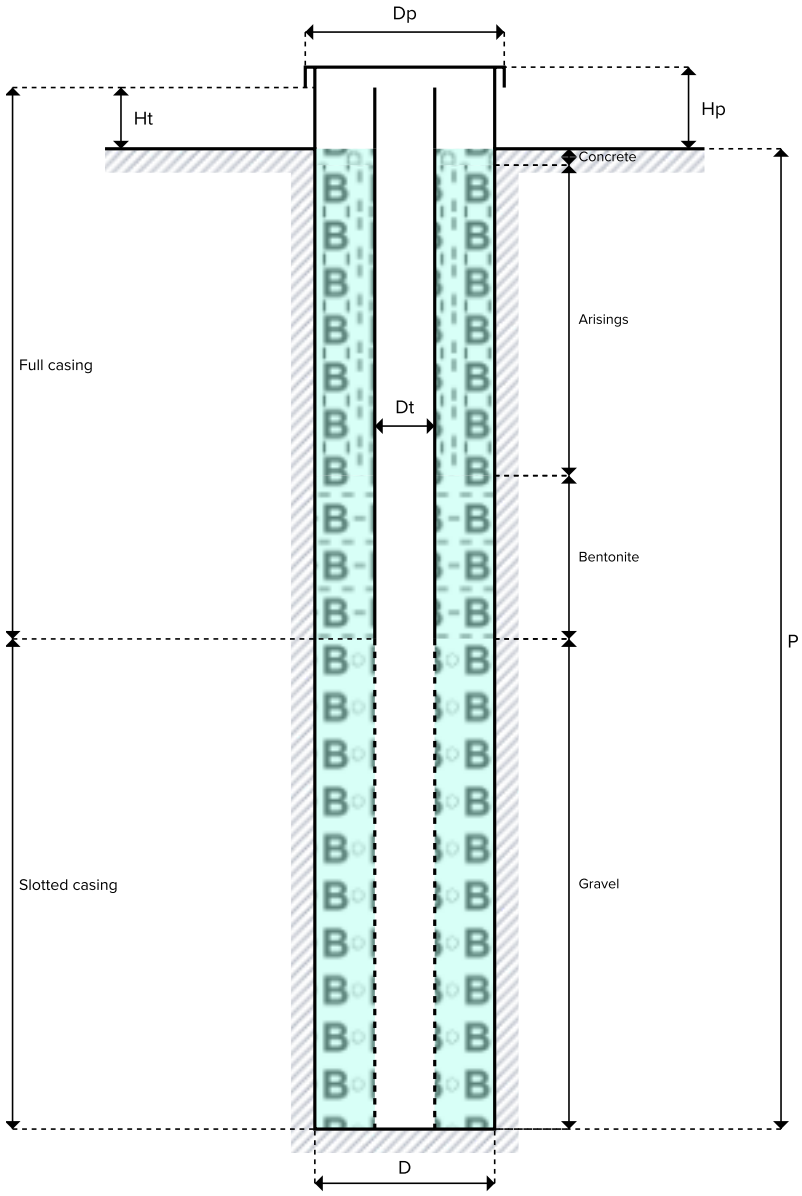
PH106

PROJECT NO	1152	**CO-ORDS**	410,948.41E / 415,093.47N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	Not specified
Logged	Matthew Thompson	**Checked**	Matthew Thompson



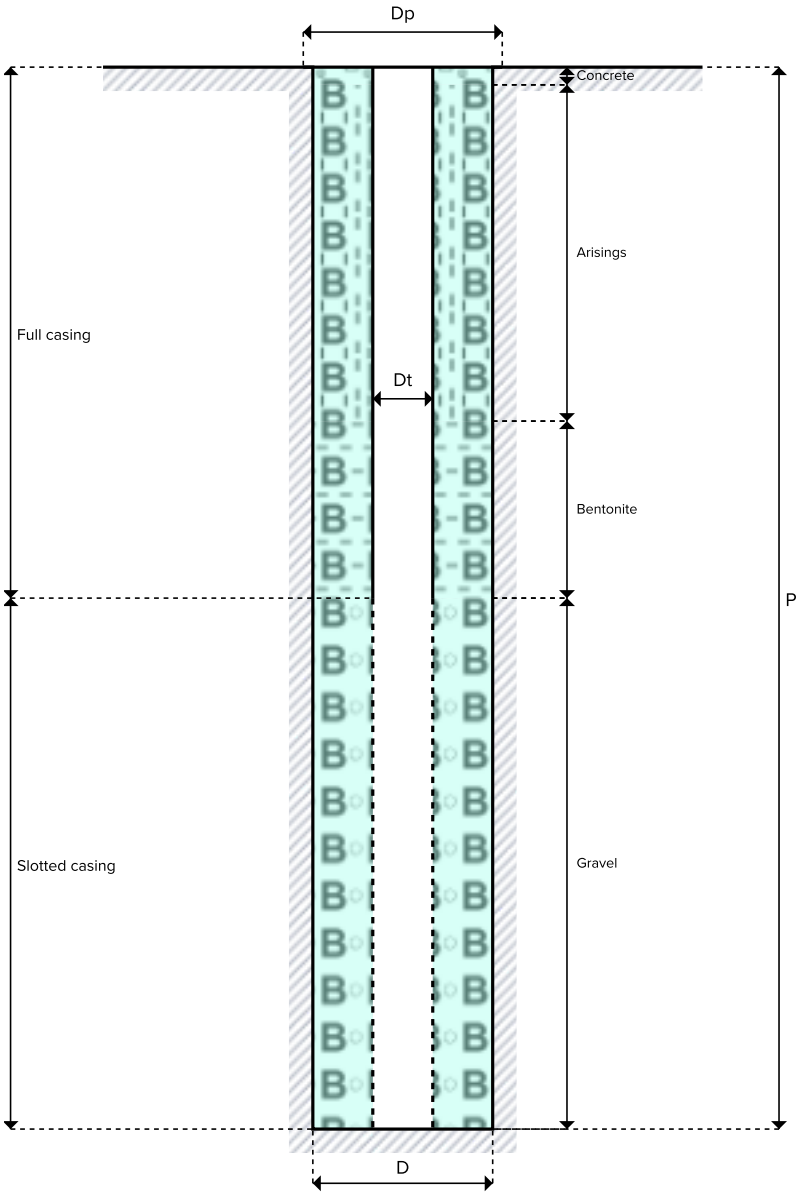
APEX CONSULTING ENGINEERS		**Borehole Log**		**PH101**	
PROJECT NO	1152	**CO-ORDS**	411,102.17E / 415,212.52N		
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified		
CLIENT	STRATA HOMES	**DATES**	2024-05-16	**Logged** Matthew Thompson	**Checked** Matthew Thompson

Borehole			
Depth	P	**6.0**	m
Diameter	D	**150.0**	mm
Water level			
Being drilled	H_w	-	m
After equipment	H_w	-	m
Tube			
☑ PVC			
Inner diameter	D_t	**50.0**	mm
Outer diameter	D_t	**50.0**	mm
Slotted	From **3.0** To **6.0**		m
	Slot	-	mm
Development	☒ No		
Bottom plug	☑ Yes		
Height from ground	H_t	-	m
Backfills			
Concrete	From **0.0** To **0.1**		m
Arisings	From **0.1** To **2.0**		m
Bentonite	From **2.0** To **3.0**		m
Gravel	From **3.0** To **6.0**		m
Protection			
Metal head	☒ No		
Lock	☒ No		
Key hole	☒ No		
Concrete manhole	☒ No		
Protection diameter	D_p	**150.0**	mm
Height from ground	H_p	-	m
Piezometer Reception			
Water Depth - Start receiving		-	m
Water Depth - End receiving		-	m
Reception duration		-	h



APEX CONSULTING ENGINEERS		**Borehole Log**		**PH102**	
PROJECT NO	1152	**CO-ORDS**	411,117.37E / 415,167.19N		
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified		
CLIENT	STRATA HOMES	**DATES**	2024-05-16	**Logged** Matthew Thompson	**Checked** Matthew Thompson

Borehole			
Depth	P	**6.0**	m
Diameter	D	**150.0**	mm
Water level			
Being drilled	H_w	-	m
After equipment	H_w	-	m
Tube			
☑ PVC			
Inner diameter	D_t	**50.0**	mm
Outer diameter	D_t	**50.0**	mm
Slotted	From **3.0** To **6.0**		m
	Slot	-	mm
Development	☒ No		
Bottom plug	☒ No		
Height from ground	H_t	-	m
Backfills			
Concrete	From **0.0** To **0.1**		m
Arisings	From **0.1** To **2.0**		m
Bentonite	From **2.0** To **3.0**		m
Gravel	From **3.0** To **6.0**		m
Protection			
Metal head	☒ No		
Lock	☒ No		
Key hole	☒ No		
Concrete manhole	☒ No		
Protection diameter	D_p	**150.0**	mm
Height from ground	H_p	**0.0**	m
Piezometer Reception			
Water Depth - Start receiving		-	m
Water Depth - End receiving		-	m
Reception duration		-	h

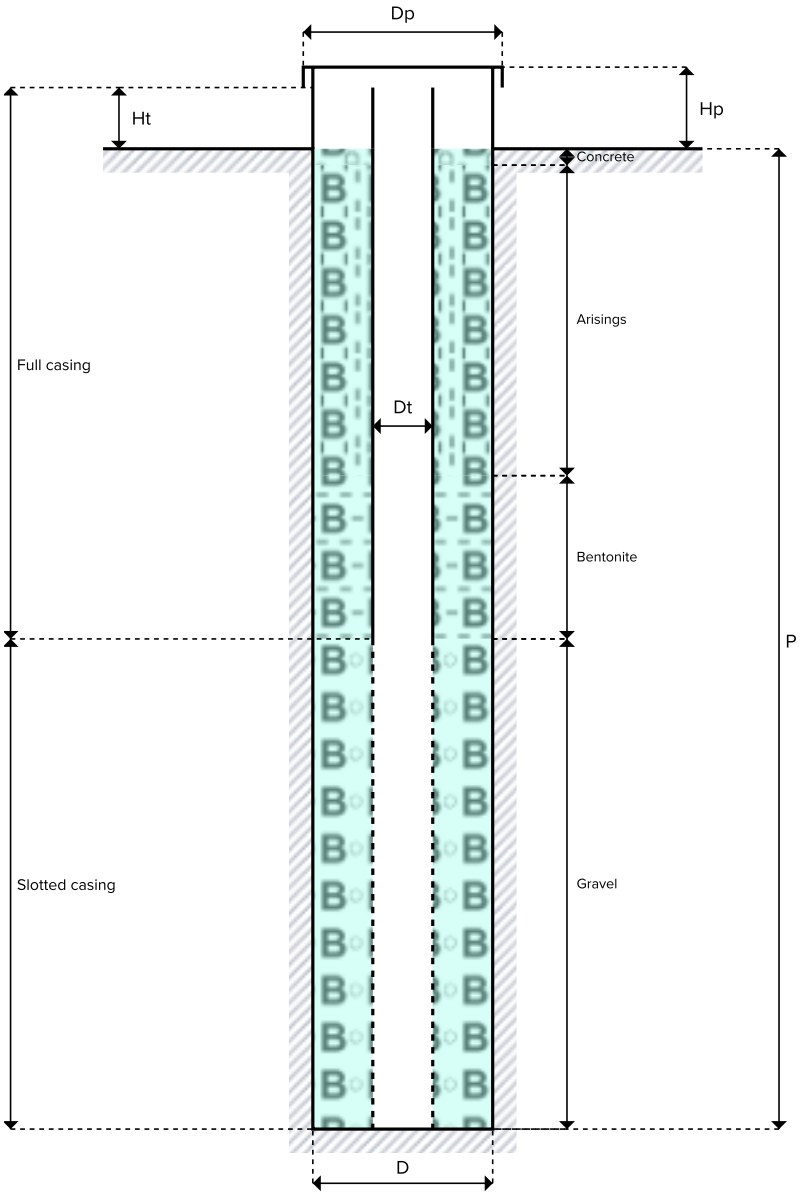


Borehole Log

PH103

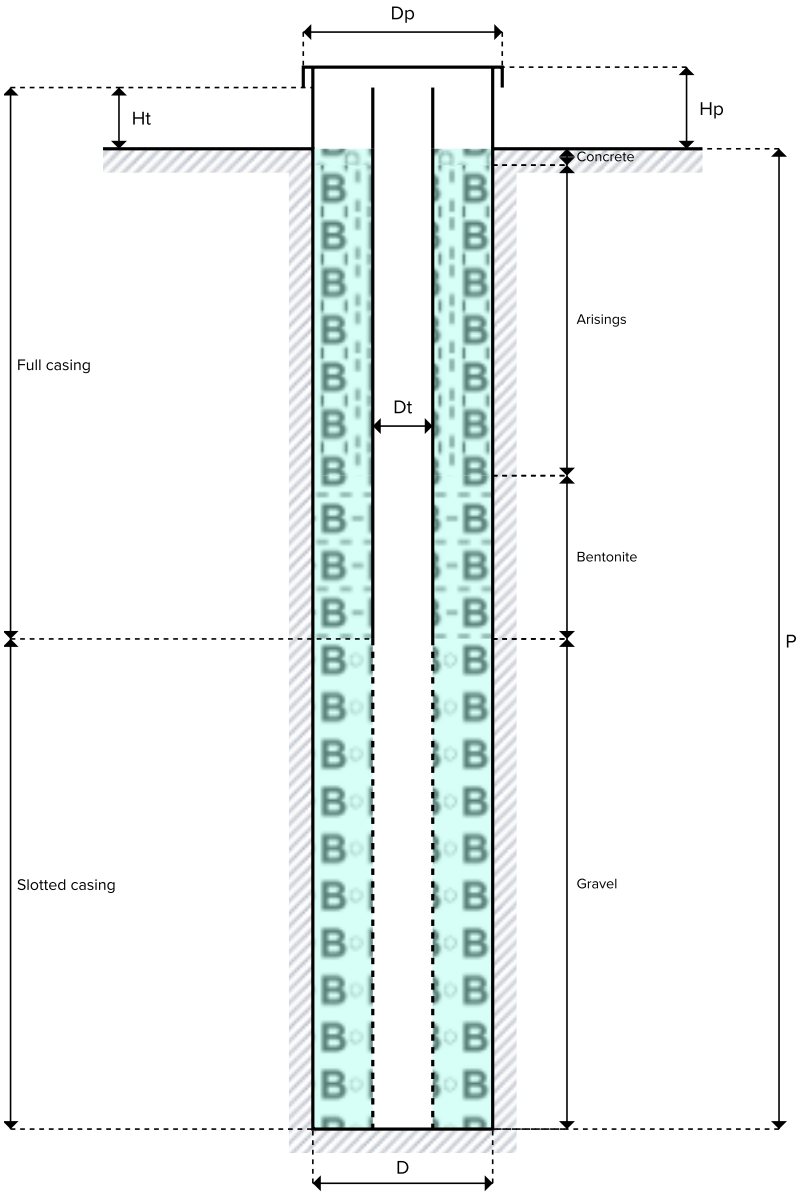
PROJECT NO	1152	**CO-ORDS**	411,071.74E / 415,152.37N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	2024-05-16
		Logged	Matthew Thompson
		Checked	Matthew Thompson

Borehole			
Depth	P	6.0	m
Diameter	D	150.0	mm
Water level			
Being drilled	H_w	-	m
After equipment	H_w	-	m
Tube			
☑ PVC			
Inner diameter	D_t	50.0	mm
Outer diameter	D_t	50.0	mm
Slotted	From 3.0 To 6.0		m
	Slot	-	mm
Development	☒ No		
Bottom plug	☒ No		
Height from ground	H_t	-	m
Backfills			
Concrete	From 0.0 To 0.1		m
Arisings	From 0.1 To 2.0		m
Bentonite	From 2.0 To 3.0		m
Gravel	From 3.0 To 6.0		m
Protection			
Metal head	☒ No		
Lock	☒ No		
Key hole	☒ No		
Concrete manhole	☒ No		
Protection diameter	D_p	150.0	mm
Height from ground	H_p	-	m
Piezometer Reception			
Water Depth - Start receiving		-	m
Water Depth - End receiving		-	m
Reception duration		-	h



APEX CONSULTING ENGINEERS		**Borehole Log**		**PH104**	
PROJECT NO	1152	**CO-ORDS**	411,003.59E / 415,155.19N		
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified		
CLIENT	STRATA HOMES	**DATES**	2024-05-16	**Logged** Matthew Thompson	**Checked** Matthew Thompson

Borehole			
Depth	P	**6.0**	m
Diameter	D	**150.0**	mm
Water level			
Being drilled	H_w	-	m
After equipment	H_w	-	m
Tube			
☑ PVC			
Inner diameter	D_t	**50.0**	mm
Outer diameter	D_t	**50.0**	mm
Slotted	From **3.0** To **6.0**		m
	Slot	-	mm
Development	☒ No		
Bottom plug	☑ Yes		
Height from ground	H_t	-	m
Backfills			
Concrete	From **0.0** To **0.1**		m
Arisings	From **0.1** To **2.0**		m
Bentonite	From **2.0** To **3.0**		m
Gravel	From **3.0** To **6.0**		m
Protection			
Metal head	☒ No		
Lock	☒ No		
Key hole	☒ No		
Concrete manhole	☒ No		
Protection diameter	D_p	**150.0**	mm
Height from ground	H_p	-	m
Piezometer Reception			
Water Depth - Start receiving		-	m
Water Depth - End receiving		-	m
Reception duration		-	h

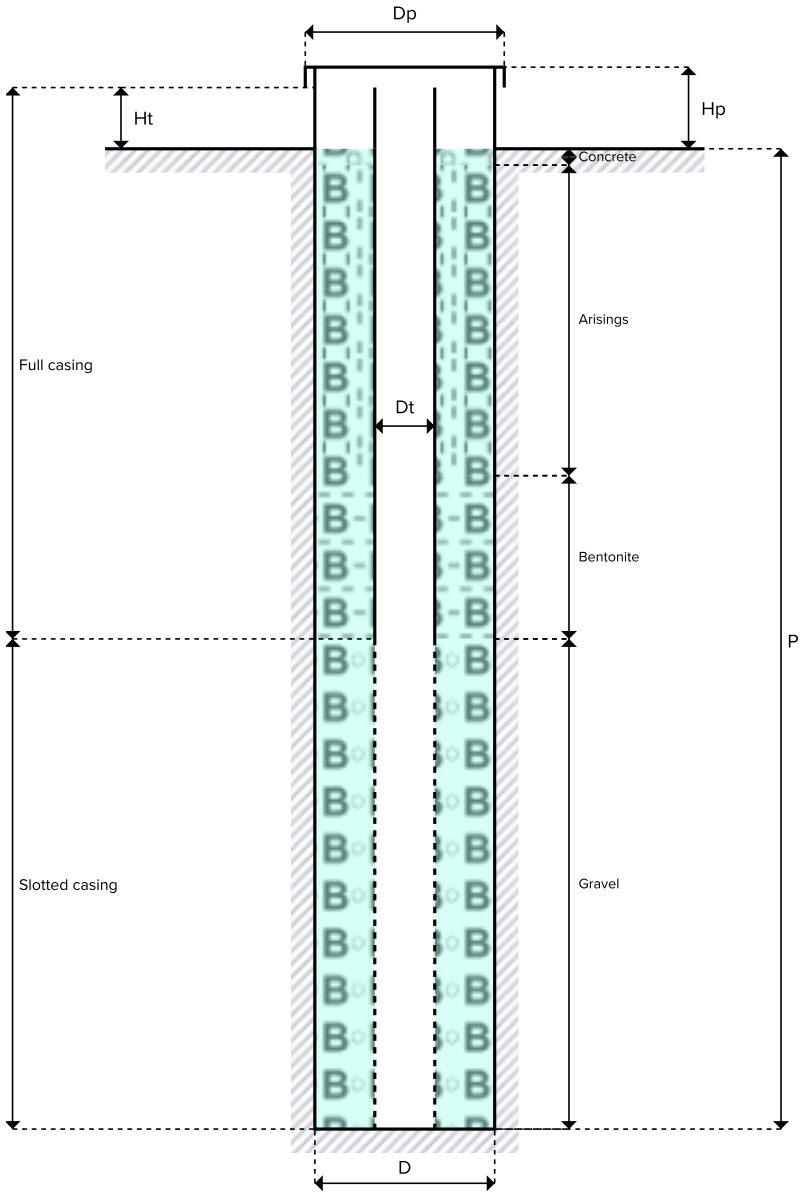


Borehole Log

PH105

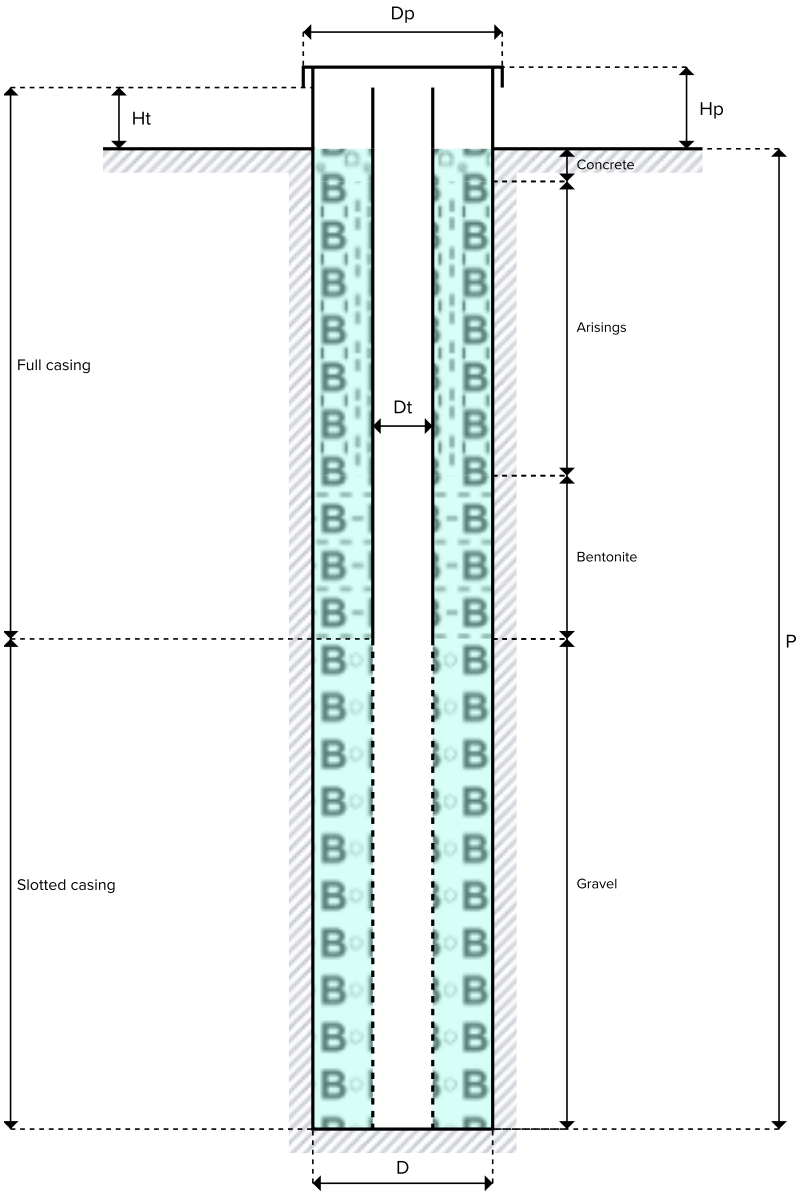
PROJECT NO	1152	**CO-ORDS**	411,036.59E / 415,131.56N
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified
CLIENT	STRATA HOMES	**DATES**	2024-05-16
		Logged	Matthew Thompson
		Checked	Matthew Thompson

Borehole			
Depth	P	**6.0**	m
Diameter	D	**150.0**	mm
Water level			
Being drilled	H_w	-	m
After equipment	H_w	-	m
Tube			
☑ PVC			
Inner diameter	D_t	**50.0**	mm
Outer diameter	D_t	**50.0**	mm
Slotted	From **3.0** To **6.0**		m
	Slot	-	mm
Development	☒ No		
Bottom plug	☑ Yes		
Height from ground	H_t	-	m
Backfills			
Concrete	From **0.0** To **0.1**		m
Arisings	From **0.1** To **2.0**		m
Bentonite	From **2.0** To **3.0**		m
Gravel	From **3.0** To **6.0**		m
Protection			
Metal head	☒ No		
Lock	☒ No		
Key hole	☒ No		
Concrete manhole	☒ No		
Protection diameter	D_p	**150.0**	mm
Height from ground	H_p	-	m
Piezometer Reception			
Water Depth - Start receiving		-	m
Water Depth - End receiving		-	m
Reception duration		-	h



APEX CONSULTING ENGINEERS		**Borehole Log**		**PH106**	
PROJECT NO	1152	**CO-ORDS**	410,948.41E / 415,093.47N		
PROJECT NAME	MAIN AVENUE, KIRKLEES	**LEVEL**	Not specified		
CLIENT	STRATA HOMES	**DATES**	Not specified	**Logged** Matthew Thompson	**Checked** Matthew Thompson

Borehole				
Depth	P		6.0	m
Diameter	D		150.0	mm
Water level				
Being drilled	H_w		-	m
After equipment	H_w		-	m
Tube				
☑ PVC				
Inner diameter	D_t		50.0	mm
Outer diameter	D_t		50.0	mm
Slotted	From 3.0	To 6.0		m
	Slot		-	mm
Development	☑ Yes			
Bottom plug	☒ No			
Height from ground	H_t		-	m
Backfills				
Concrete	From 0.0	To 0.2		m
Arisings	From 0.2	To 2.0		m
Bentonite	From 2.0	To 3.0		m
Gravel	From 3.0	To 6.0		m
Protection				
Metal head	☒ No			
Lock	☒ No			
Key hole	☒ No			
Concrete manhole	☒ No			
Protection diameter	D_p		150.0	mm
Height from ground	H_p		-	m
Piezometer Reception				
Water Depth - Start receiving			-	m
Water Depth - End receiving			-	m
Reception duration			-	h



Appendix F – Chemical Laboratory Results

Apex Consulting Engineers Ltd
Unit 3, Acres Hill Business Park
2 Acres Hill Lane
Sheffield
South Yorkshire
S9 4LT

t: (114) 2419360

e: Matthew.Thompson@apexconsulting.co.uk

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 : 24-020590

Project / Site name:	Main Ave, Kirklees	**Samples received on:**	20/05/2024
Your job number:	1522	**Samples instructed on/ Analysis started on:**	20/05/2024
Your order number:	PO GEO-SY-679	**Analysis completed by:**	29/05/2024
Report Issue Number:	1	**Report issued on:**	03/06/2024
Samples Analysed:	12 soil samples - 1 bulk sample		

Signed:

Anna Goc
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: 24-020590
Project / Site name: Main Ave, Kirklees
Your Order No: PO GEO-SY-679

Lab Sample Number				204545	204546	204547	204548	204549
Sample Reference				TP112	TP101	TP106	TP107	TP106
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.10	0.10	0.30
Date Sampled				16/05/2024	16/05/2024	16/05/2024	16/05/2024	16/05/2024
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	%	0.01	NONE	4.4	26	22	29	16
Total mass of sample received	kg	0.1	NONE	0.7	1.2	0.6	0.6	1.2
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	-	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MJN	MJN	-	MJN	MJN
General Inorganics								
pH (L099)	pH Units	N/A	MCERTS	9.6	6.3	-	6.4	6.3
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	53	-	-	-	15
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	26.4	-	-	-	7.28
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	3.8	-	-	-	< 0.5
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	5.7	4.3	-	3	1.2
Water Soluble Nitrate (2:1) as N	mg/kg	2	NONE	< 2.0	-	-	-	< 2.0
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	-	-	-	< 2.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.9	0.33	1.3	0.06	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	0.62	0.74	0.63	0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	2.6	0.78	0.39	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	2	1.1	0.33	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	15	16	5.6	0.4	0.08
Anthracene	mg/kg	0.05	MCERTS	4.7	2.7	1.5	0.08	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	19	25	13	0.61	0.17
Pyrene	mg/kg	0.05	MCERTS	17	20	12	0.63	0.15
Benzo(a)anthracene	mg/kg	0.05	MCERTS	7.6	7.9	7.9	< 0.05	0.11
Chrysene	mg/kg	0.05	MCERTS	7.9	9.5	8.2	0.37	0.11
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	8.8	9	9	0.44	0.12
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	4.6	3.4	3.6	0.17	0.06
Benzo(a)pyrene	mg/kg	0.05	MCERTS	5.5	7.3	7.4	0.34	0.08
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	4.1	3.8	3	0.18	0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.92	1	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	4.2	4	3.2	0.18	0.06
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	104	112	78.2	3.51	0.99

Analytical Report Number: 24-020590
Project / Site name: Main Ave, Kirklees
Your Order No: PO GEO-SY-679

Lab Sample Number				204545	204546	204547	204548	204549
Sample Reference				TP112	TP101	TP106	TP107	TP106
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.10	0.10	0.30
Date Sampled				16/05/2024	16/05/2024	16/05/2024	16/05/2024	16/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	5.7	22	-	35	6.4
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	< 0.2	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	< 0.2	-	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	-	< 1.8	< 1.8
Chromium (III)	mg/kg	1	NONE	110	20	-	28	23
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	110	20	-	28	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	26	42	-	57	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	45	110	-	140	22
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	42	22	-	16	9.8
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	-	1.9	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	57	26	-	51	33
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	83	140	-	52	53
Magnesium (leachate equivalent)	mg/l	2.5	NONE	< 2.5	-	-	-	< 2.5
Magnesium (water soluble)	mg/kg	5	NONE	< 5.0	-	-	-	< 5.0
Petroleum Hydrocarbons								
Petroleum Range Organics (C6 - C10) HS_1D_TOTAL	mg/kg	1	ISO 17025	< 1.0	< 1.0	-	< 1.0	< 1.0
TPH (C10 - C25) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	1200	85	-	< 10	< 10
TPH (C25 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	9300	140	-	26	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-020590
Project / Site name: Main Ave, Kirklees
Your Order No: PO GEO-SY-679

Lab Sample Number				204550	204551	204552	204553	204554
Sample Reference				TP102	TP104	TP105	TP108	TP109
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.10	0.10	0.05
Date Sampled				16/05/2024	16/05/2024	16/05/2024	16/05/2024	16/05/2024
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	32.2	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	21	35	19	16	25
Total mass of sample received	kg	0.1	NONE	1.3	1.3	1.2	1.3	1.2
Asbestos								
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	-	-	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SCA	SCA	-	-	SCA
General Inorganics								
pH (L099)	pH Units	N/A	MCERTS	5.4	5.8	-	-	4.8
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	-	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3.2	5.4	-	3	7.5
Water Soluble Nitrate (2:1) as N	mg/kg	2	NONE	-	-	-	-	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	-	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	7.4	0.08	0.14	0.14
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.41	< 0.05	< 0.05	0.06
Acenaphthene	mg/kg	0.05	MCERTS	0.11	6.1	< 0.05	< 0.05	0.34
Fluorene	mg/kg	0.05	MCERTS	0.07	4.6	< 0.05	< 0.05	0.23
Phenanthrene	mg/kg	0.05	MCERTS	0.87	12	0.34	0.17	3.1
Anthracene	mg/kg	0.05	MCERTS	0.18	2.3	0.06	< 0.05	0.62
Fluoranthene	mg/kg	0.05	MCERTS	1.3	7	0.62	0.14	5.3
Pyrene	mg/kg	0.05	MCERTS	1.2	5.5	0.57	0.13	4.7
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.6	2.2	0.32	0.07	2.5
Chrysene	mg/kg	0.05	MCERTS	0.7	2.4	0.39	0.1	2.9
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.77	2.2	< 0.05	< 0.05	3.2
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.28	1.1	0.17	< 0.05	1.3
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.6	2	0.36	0.05	2.6
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.29	0.96	0.2	< 0.05	1.3
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.08	0.23	0.05	< 0.05	0.35
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.32	1	0.21	< 0.05	1.3
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	7.41	57.1	3.37	< 0.80	29.8

Analytical Report Number: 24-020590
Project / Site name: Main Ave, Kirklees
Your Order No: PO GEO-SY-679

Lab Sample Number				204550	204551	204552	204553	204554
Sample Reference				TP102	TP104	TP105	TP108	TP109
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.10	0.10	0.05
Date Sampled				16/05/2024	16/05/2024	16/05/2024	16/05/2024	16/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	24	43	-	-	27
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	0.4	-	-	0.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	2	-	-	2.4
Chromium (III)	mg/kg	1	NONE	26	38	-	-	14
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	26	38	-	-	14
Copper (aqua regia extractable)	mg/kg	1	MCERTS	35	77	-	-	34
Lead (aqua regia extractable)	mg/kg	1	MCERTS	89	200	-	-	89
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.7	-	-	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15	22	-	-	7.9
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	-	-	1.2
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	40	60	-	-	24
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	71	130	-	-	23
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	-	-	-	-
Magnesium (water soluble)	mg/kg	5	NONE	-	-	-	-	-
Petroleum Hydrocarbons								
Petroleum Range Organics (C6 - C10) HS_1D_TOTAL	mg/kg	1	ISO 17025	-	-	-	-	-
TPH (C10 - C25) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	-	-	-	-	-
TPH (C25 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-020590
Project / Site name: Main Ave, Kirklees
Your Order No: PO GEO-SY-679

Lab Sample Number				204555	204556
Sample Reference				TP110	TP111
Sample Number				None Supplied	None Supplied
Depth (m)				0.10	0.10
Date Sampled				16/05/2024	16/05/2024
Time Taken				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	%	0.01	NONE	19	25
Total mass of sample received	kg	0.1	NONE	0.7	1.4
Asbestos					
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	-	-
Asbestos Analyst ID	N/A	N/A	N/A	-	-
General Inorganics					
pH (L099)	pH Units	N/A	MCERTS	-	-
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	3.3
Water Soluble Nitrate (2:1) as N	mg/kg	2	NONE	-	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	-
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	0.07	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.62	0.3
Anthracene	mg/kg	0.05	MCERTS	0.13	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	1.1	0.47
Pyrene	mg/kg	0.05	MCERTS	1.1	0.46
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.52	0.2
Chrysene	mg/kg	0.05	MCERTS	0.61	0.24
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.61	0.27
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.24	0.07
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.55	0.21
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.27	0.11
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.08	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.28	0.12
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	6.18	2.45

Analytical Report Number: 24-020590
Project / Site name: Main Ave, Kirklees
Your Order No: PO GEO-SY-679

Lab Sample Number				204555	204556
Sample Reference				TP110	TP111
Sample Number				None Supplied	None Supplied
Depth (m)				0.10	0.10
Date Sampled				16/05/2024	16/05/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-
Chromium (III)	mg/kg	1	NONE	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	-
Magnesium (water soluble)	mg/kg	5	NONE	-	-
Petroleum Hydrocarbons					
Petroleum Range Organics (C6 - C10) HS_1D_TOTAL	mg/kg	1	ISO 17025	-	-
TPH (C10 - C25) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	-	-
TPH (C25 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 24-020590
Project / Site name: Main Ave, Kirklees
Your Order No: PO GEO-SY-679

Lab Sample Number				204544
Sample Reference				TP101
Sample Number				None Supplied
Depth (m)				0.05
Date Sampled				16/05/2024
Time Taken				None Supplied
Analytical Parameter (Bulk Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	

Asbestos

Asbestos in bulks	Type	N/A	ISO 17025	Detected
Asbestos Analyst ID	N/A	N/A	N/A	MJN
Actinolite detected	Type	N/A	ISO 17025	Not-detected
Amosite detected	Type	N/A	ISO 17025	Not-detected
Anthophyllite detected	Type	N/A	ISO 17025	Not-detected
Chrysotile detected	Type	N/A	ISO 17025	Detected
Crocidolite detected	Type	N/A	ISO 17025	Not-detected
Tremolite detected	Type	N/A	ISO 17025	Not-detected

Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	Asbestos Cement

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 24-020590
Project / Site name: Main Ave, Kirklees

* 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 *
204545	TP112	None Supplied	0.1	Brown loam and gravel with clinker and vegetation
204546	TP101	None Supplied	0.1	Brown loam and clay with gravel and vegetation
204547	TP106	None Supplied	0.1	Brown loam and sand with gravel and vegetation
204548	TP107	None Supplied	0.1	Brown clay and loam with vegetation
204549	TP106	None Supplied	0.3	Brown loam and sand with gravel and vegetation
204550	TP102	None Supplied	0.1	Brown loam and clay with gravel and vegetation
204551	TP104	None Supplied	0.1	Brown loam and sand with gravel and vegetation
204552	TP105	None Supplied	0.1	Brown loam and sand with gravel and vegetation
204553	TP108	None Supplied	0.1	Brown loam and sand with gravel and vegetation
204554	TP109	None Supplied	0.05	Brown loam and sand with gravel and vegetation
204555	TP110	None Supplied	0.1	Brown loam and sand with gravel and vegetation
204556	TP111	None Supplied	0.1	Brown loam and sand with gravel and vegetation

Analytical Report Number : 24-020590
Project / Site name: Main Ave, Kirklees

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Bulks	Asbestos Identification in bulk material with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	W	ISO 17025
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
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.	L019B	D	NONE
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	L038B	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES	In-house method based on Second Site Properties version 3	L038B	D	MCERTS
Magnesium, water soluble, in soil	Determination of water soluble magnesium by extraction with water followed by ICP-OES	In-house method based on TRL 447	L038B	D	NONE
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS
Water Soluble Nitrate (2:1) as N in soil	Determination of nitrate by reaction with sodium salicylate and colorimetry	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08, 2:1 extraction	L078B	W	NONE
Chromium III in soil	In-house method by calculation from total Cr and Cr VI	In-house method by calculation	L080	W	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080	W	MCERTS
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser	In-house method	L082B	D	MCERTS

Analytical Report Number : 24-020590
Project / Site name: Main Ave, Kirklees

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099	D	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' 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.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Appendix G – Geotechnical Laboratory Results

TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS EN ISO 17892-12:2018+A2:2022, cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022, cl 5.2 and 6

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

4041

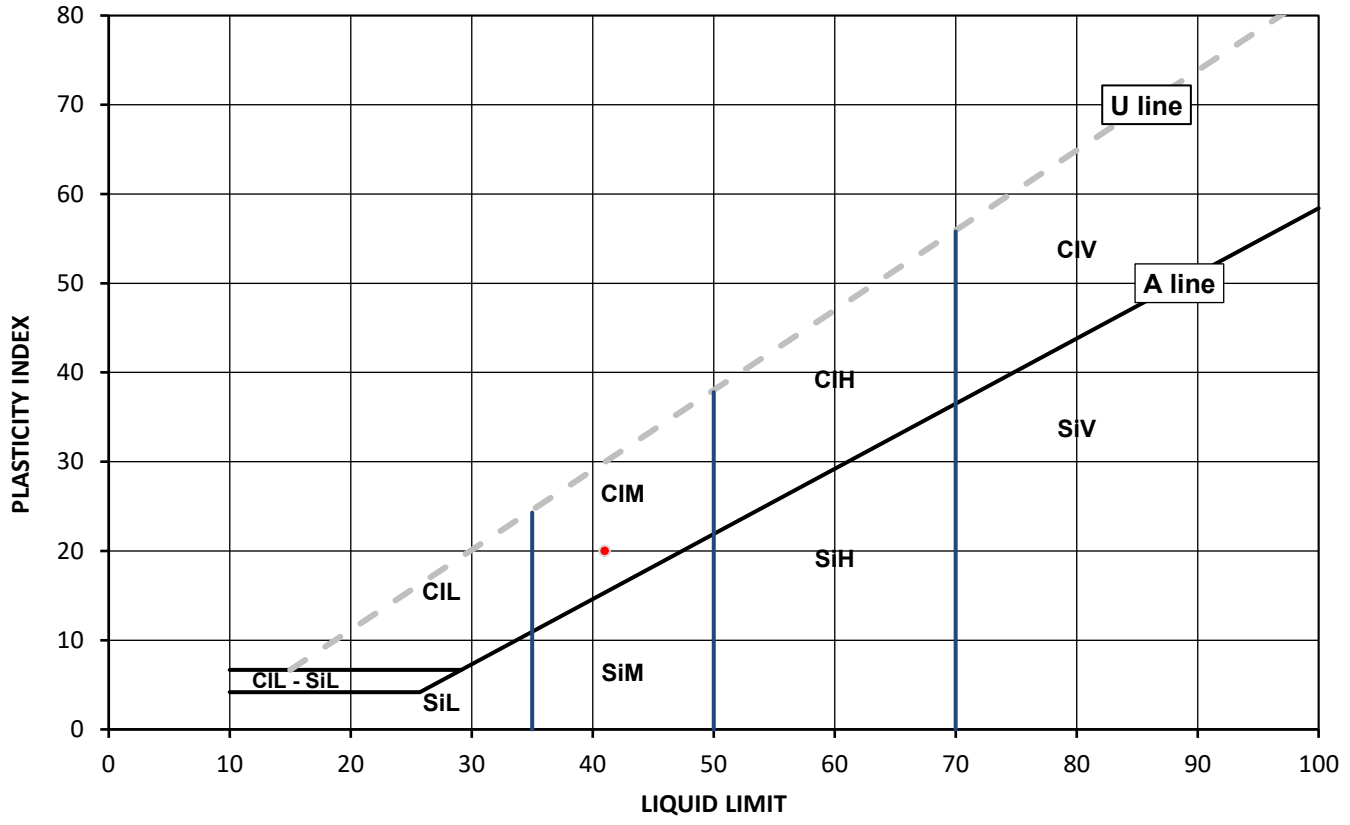
Client:	Apex Consulting Engineers Ltd	Client Reference:	1152
Client Address:	Unit 3, Acres Hill Business Park, 2 Acres Hill Lane, Sheffield, South Yorkshire, S9 4LT	Job Number:	24-020615-1
		Date Sampled:	16/05/2024
		Date Received:	20/05/2024
Contact:	Matthew Thompson	Date Tested:	28/05/2024
Site Address:	Main Ave, Kirklees	Sampled By:	Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	204739	Depth Top [m]:	0.90
Hole No.:	TP102	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	B
Sample Description:	Greyish brown slightly gravelly sandy CLAY		
Sample Preparation:	Tested after washing to remove >0.425mm; The water content in the sample was increased		
Cone Type:	80g/30deg		

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	Liquidity Index [IL] % #	Consistency Index [IC] % #	% Passing 425µm BS Test Sieve
20.8	41	21	20	0.00	1.00	78



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Water Content by BS EN 17892-1: 2014; # Non accredited

Remarks:

Signed: Katarzyna Koziel

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

Date Reported: 13/06/2024

GF 337.13

TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS EN ISO 17892-12:2018+A2:2022, cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022, cl 5.2 and 6

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

4041

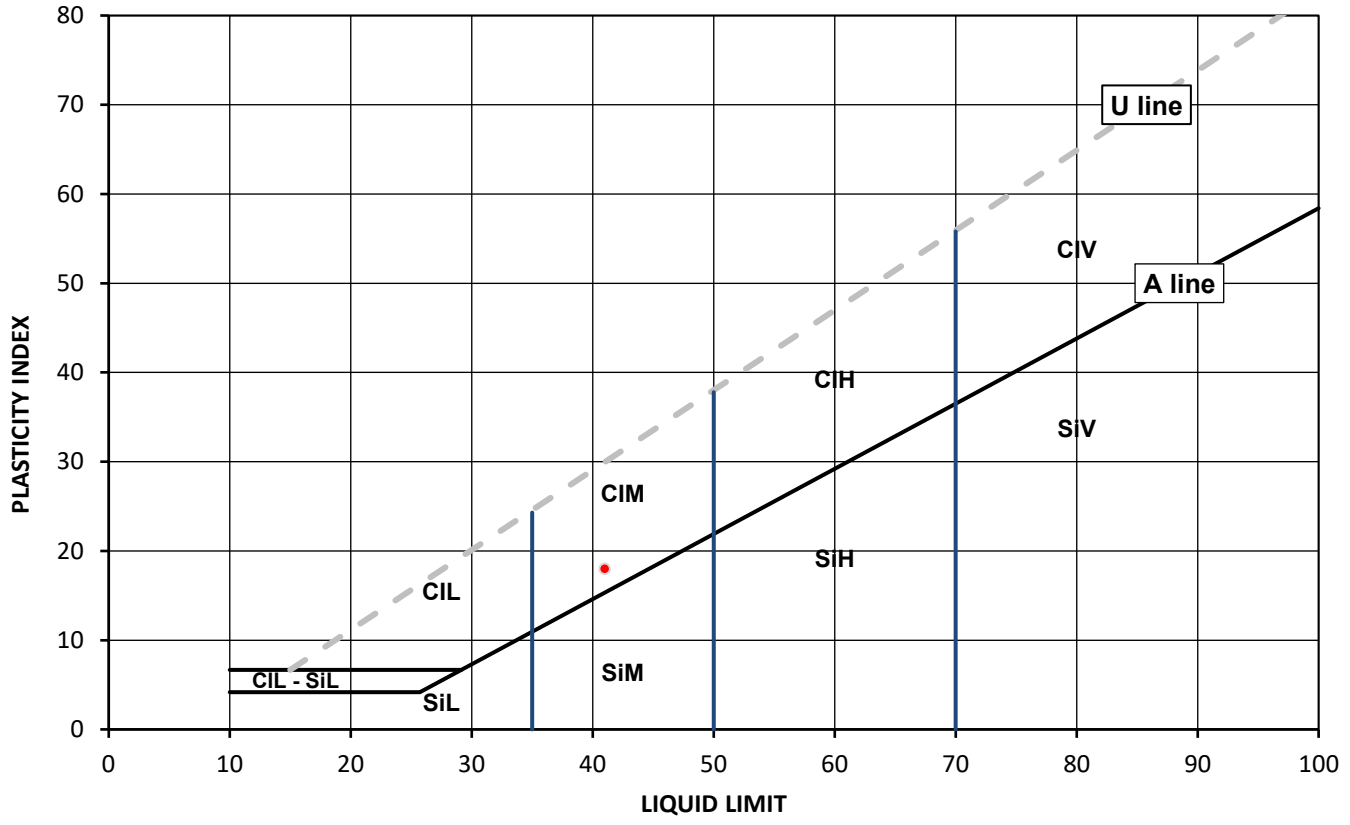
Client:	Apex Consulting Engineers Ltd	Client Reference:	1152
Client Address:	Unit 3, Acres Hill Business Park, 2 Acres Hill Lane, Sheffield, South Yorkshire, S9 4LT	Job Number:	24-020615-1
		Date Sampled:	16/05/2024
		Date Received:	20/05/2024
Contact:	Matthew Thompson	Date Tested:	28/05/2024
Site Address:	Main Ave, Kirklees	Sampled By:	Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	204740	Depth Top [m]:	1.10
Hole No.:	TP103	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Sample Description:	Orangish grey slightly gravelly sandy CLAY		
Sample Preparation:	Tested after >0.425mm removed by hand; The water content in the sample was increased		
Cone Type:	80g/30deg		

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	Liquidity Index [IL] % #	Consistency Index [IC] % #	% Passing 425µm BS Test Sieve
18.3	41	23	18	-0.28	1.28	93



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Water Content by BS EN 17892-1: 2014; # Non accredited

Remarks:

Signed: Katarzyna Koziel

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

Date Reported: 13/06/2024

GF 337.13

TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS EN ISO 17892-12:2018+A2:2022, cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022, cl 5.2 and 6

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

4041

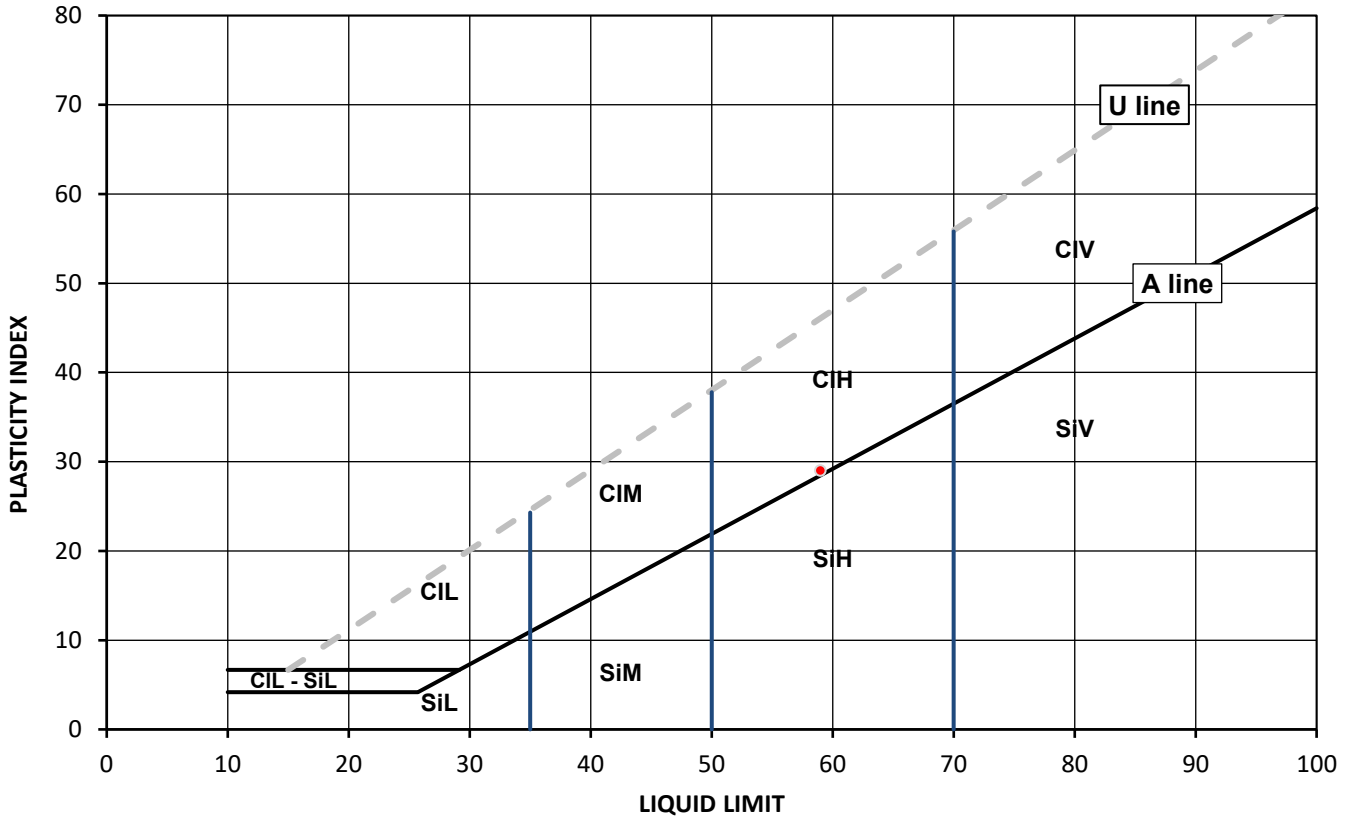
Client:	Apex Consulting Engineers Ltd	Client Reference:	1152
Client Address:	Unit 3, Acres Hill Business Park, 2 Acres Hill Lane, Sheffield, South Yorkshire, S9 4LT	Job Number:	24-020615-1
		Date Sampled:	16/05/2024
		Date Received:	20/05/2024
Contact:	Matthew Thompson	Date Tested:	28/05/2024
Site Address:	Main Ave, Kirklees	Sampled By:	Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	204741	Depth Top [m]:	0.40
Hole No.:	TP104	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Sample Description:	Brownish grey slightly sandy silty CLAY		
Sample Preparation:	Tested in natural condition; The water content in the sample was increased		
Cone Type:	80g/30deg		

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	Liquidity Index [IL] % #	Consistency Index [IC] % #	% Passing 425µm BS Test Sieve
39.1	59	30	29	0.31	0.69	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Water Content by BS EN 17892-1: 2014; # Non accredited

Remarks:

Signed: Katarzyna Koziel

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

Date Reported: 13/06/2024

GF 337.13

TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS EN ISO 17892-12:2018+A2:2022, cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022, cl 5.2 and 6

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

4041

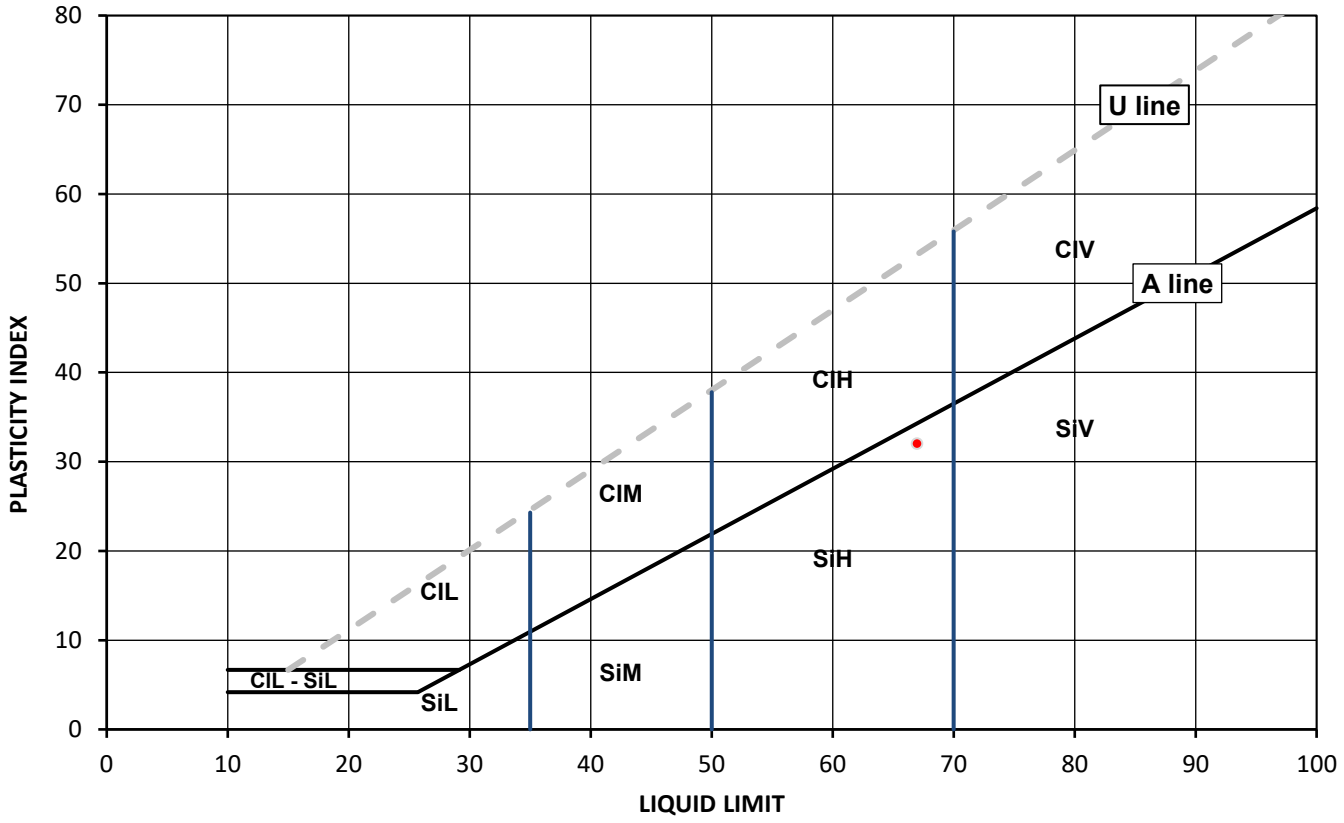
Client:	Apex Consulting Engineers Ltd	Client Reference:	1152
Client Address:	Unit 3, Acres Hill Business Park, 2 Acres Hill Lane, Sheffield, South Yorkshire, S9 4LT	Job Number:	24-020615-1
		Date Sampled:	16/05/2024
		Date Received:	20/05/2024
Contact:	Matthew Thompson	Date Tested:	28/05/2024
Site Address:	Main Ave, Kirklees	Sampled By:	Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	204742	Depth Top [m]:	1.40
Hole No.:	TP105	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Sample Description:	Dark grey silty CLAY		
Sample Preparation:	Tested in natural condition; The water content in the sample was increased		
Cone Type:	80g/30deg		

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	Liquidity Index [IL] % #	Consistency Index [IC] % #	% Passing 425µm BS Test Sieve
43.7	67	35	32	0.28	0.72	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Water Content by BS EN 17892-1: 2014; # Non accredited

Remarks:

Signed: Katarzyna Koziel

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

Date Reported: 13/06/2024

GF 337.13

TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS EN ISO 17892-12:2018+A2:2022, cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022, cl 5.2 and 6

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

4041

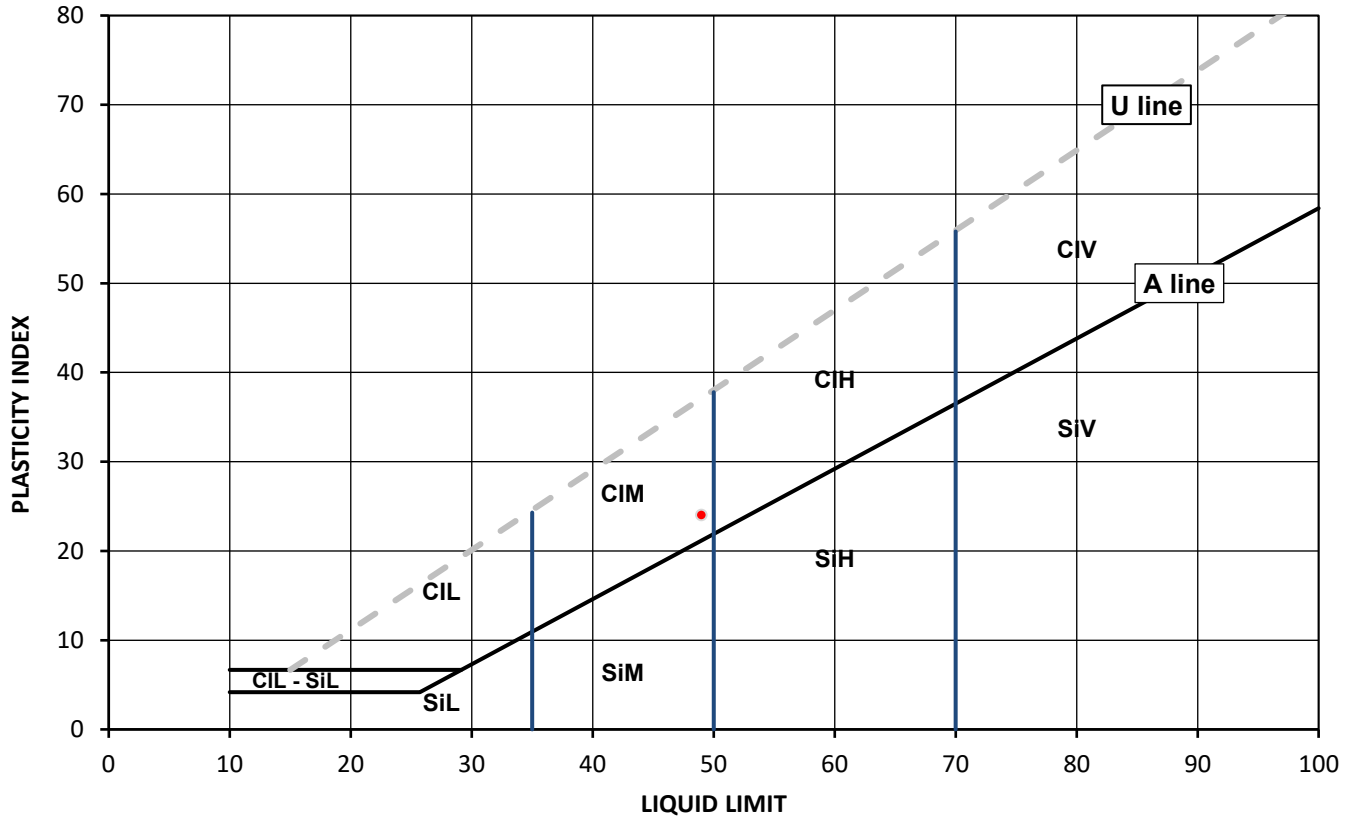
Client:	Apex Consulting Engineers Ltd	Client Reference:	1152
Client Address:	Unit 3, Acres Hill Business Park, 2 Acres Hill Lane, Sheffield, South Yorkshire, S9 4LT	Job Number:	24-020615-1
		Date Sampled:	16/05/2024
		Date Received:	20/05/2024
Contact:	Matthew Thompson	Date Tested:	28/05/2024
Site Address:	Main Ave, Kirklees	Sampled By:	Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	204743	Depth Top [m]:	0.80
Hole No.:	TP107	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Sample Description:	Brownish grey slightly gravelly slightly sandy silty CLAY		
Sample Preparation:	Tested after >0.425mm removed by hand; The water content in the sample was increased		
Cone Type:	80g/30deg		

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	Liquidity Index [IL] % #	Consistency Index [IC] % #	% Passing 425µm BS Test Sieve
28.5	49	25	24	0.17	0.83	90



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Water Content by BS EN 17892-1: 2014; # Non accredited

Remarks:

Signed: Katarzyna Koziel

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

Date Reported: 13/06/2024

GF 337.13

TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS EN ISO 17892-12:2018+A2:2022, cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022, cl 5.2 and 6

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

4041

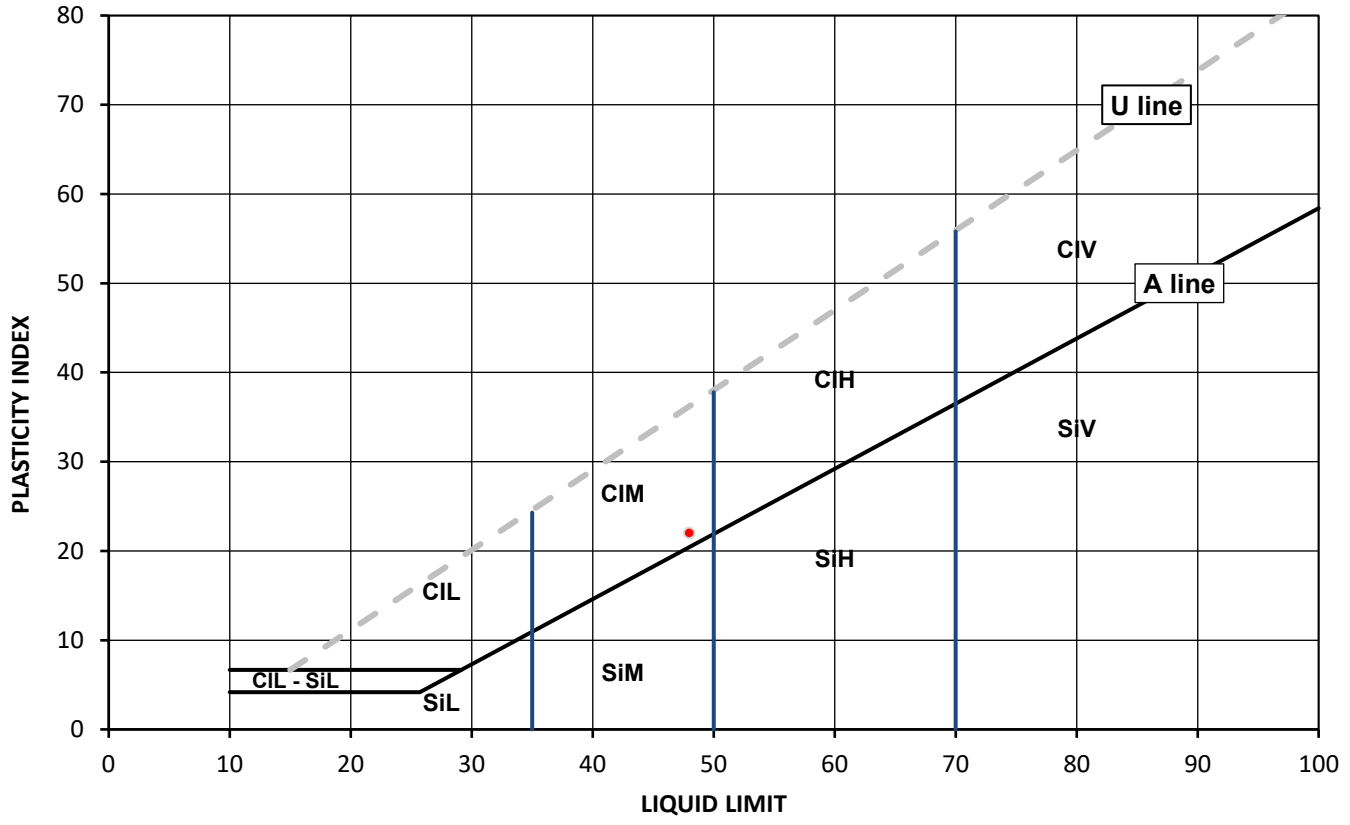
Client:	Apex Consulting Engineers Ltd	Client Reference:	1152
Client Address:	Unit 3, Acres Hill Business Park, 2 Acres Hill Lane, Sheffield, South Yorkshire, S9 4LT	Job Number:	24-020615-1
		Date Sampled:	16/05/2024
		Date Received:	20/05/2024
Contact:	Matthew Thompson	Date Tested:	28/05/2024
Site Address:	Main Ave, Kirklees	Sampled By:	Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	204744	Depth Top [m]:	0.90
Hole No.:	TP109	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	B
Sample Description:	Yellowish brown slightly gravelly slightly sandy silty CLAY		
Sample Preparation:	Tested after >0.425mm removed by hand; The water content in the sample was increased		
Cone Type:	80g/30deg		

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	Liquidity Index [IL] % #	Consistency Index [IC] % #	% Passing 425µm BS Test Sieve
28.0	48	26	22	0.09	0.91	94



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Water Content by BS EN 17892-1: 2014; # Non accredited

Remarks:

Signed: Katarzyna Koziel

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

Date Reported: 13/06/2024

GF 337.13

TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS EN ISO 17892-12:2018+A2:2022, cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022, cl 5.2 and 6

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

4041

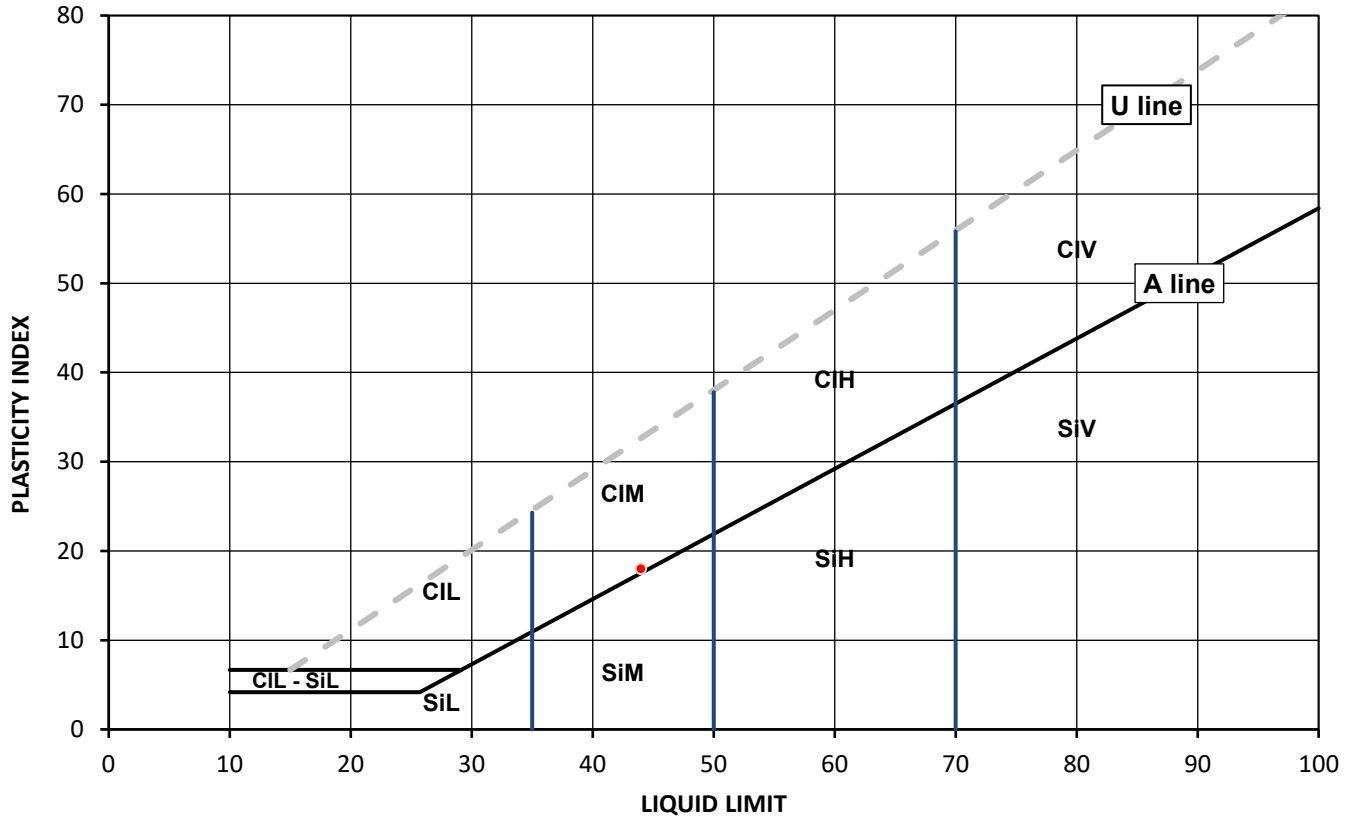
Client:	Apex Consulting Engineers Ltd	Client Reference:	1152
Client Address:	Unit 3, Acres Hill Business Park, 2 Acres Hill Lane, Sheffield, South Yorkshire, S9 4LT	Job Number:	24-020615-1
		Date Sampled:	16/05/2024
		Date Received:	20/05/2024
Contact:	Matthew Thompson	Date Tested:	28/05/2024
Site Address:	Main Ave, Kirklees	Sampled By:	Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	204745	Depth Top [m]:	0.60
Hole No.:	TP110	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	B
Sample Description:	Brownish grey slightly gravelly sandy silty CLAY		
Sample Preparation:	Tested after washing to remove >0.425mm; The water content in the sample was increased		
Cone Type:	80g/30deg		

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	Liquidity Index [IL] % #	Consistency Index [IC] % #	% Passing 425µm BS Test Sieve
25.9	44	26	18	0.00	1.00	82



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Water Content by BS EN 17892-1: 2014; # Non accredited

Remarks:

Signed: Katarzyna Koziel

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

Date Reported: 13/06/2024

GF 337.13

4041

TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS EN ISO 17892-12:2018+A2:2022, cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022, cl 5.2 and 6

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

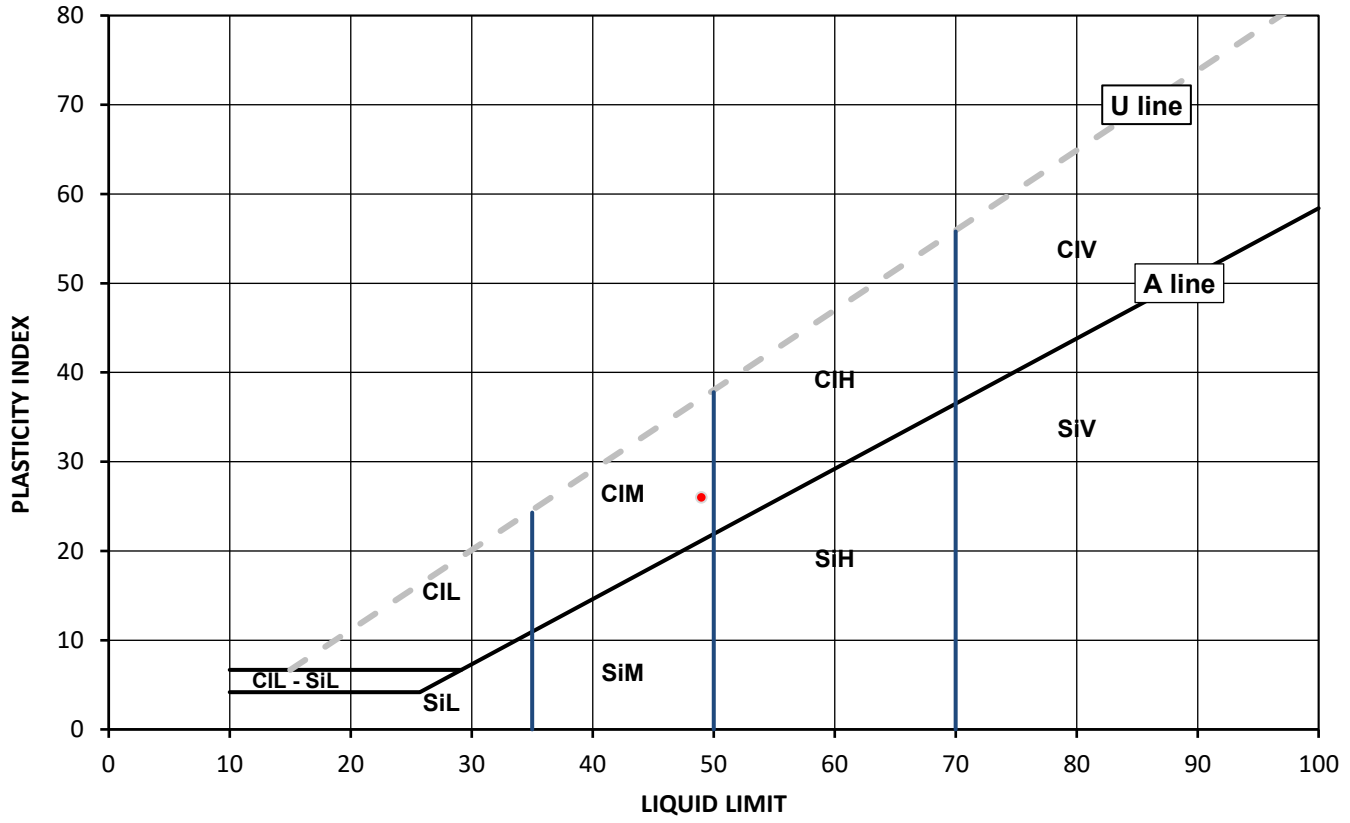
Client:	Apex Consulting Engineers Ltd	Client Reference:	1152
Client Address:	Unit 3, Acres Hill Business Park, 2 Acres Hill Lane, Sheffield, South Yorkshire, S9 4LT	Job Number:	24-020615-1
		Date Sampled:	16/05/2024
		Date Received:	20/05/2024
Contact:	Matthew Thompson	Date Tested:	28/05/2024
Site Address:	Main Ave, Kirklees	Sampled By:	Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	204747	Depth Top [m]:	1.20
Hole No.:	TP112	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Sample Description:	Orangish white slightly sandy CLAY		
Sample Preparation:	Tested in natural condition; The water content in the sample was increased		
Cone Type:	80g/30deg		

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	Liquidity Index [IL] % #	Consistency Index [IC] % #	% Passing 425µm BS Test Sieve
30.4	49	23	26	0.27	0.73	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Water Content by BS EN 17892-1: 2014; # Non accredited

Remarks:

Signed: Katarzyna Koziel

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

Date Reported: 13/06/2024

GF 337.13

SUMMARY REPORT

SUMMARY OF CLASSIFICATION TEST RESULTS

Tested in Accordance with:

BS EN ISO 17892-12:2018+A2:2022 cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022, cl 5.2 and 6. W by BS EN 17892-1:2014.

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

4041

Client: Apex Consulting Engineers Ltd

Client Address: Unit 3, Acres Hill Business Park, 2 Acres Hill Lane,
Sheffield, South Yorkshire,
S9 4LT

Contact: Matthew Thompson

Site Address: Main Ave, Kirklees

Client Reference: 1152
Job Number: 24-020615-1
Date Sampled: 16/05/2024
Date Received: 20/05/2024
Date Tested: 28/05/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	W	Liquid & Plastic Limit							Density		
		Reference	Depth Top m	Depth Base m	Type			%	% Passing 425um %	WL* %	Correlation Factor	Wp %	Ip %	Cone type	Sample Preparation	bulk Mg/m3	dry Mg/m3	PD Mg/m3
204739	TP102	Not Given	0.90	Not Given	B	Greyish brown slightly gravelly sandy CLAY	Atterberg 4 Point	20.8	78	41	-	21	20	80g/30 deg	W / I			
204740	TP103	Not Given	1.10	Not Given	D	Orangish grey slightly gravelly sandy CLAY	Atterberg 4 Point	18.3	93	41	-	23	18	80g/30 deg	R / I			
204741	TP104	Not Given	0.40	Not Given	D	Brownish grey slightly sandy silty CLAY	Atterberg 4 Point	39.1	100	59	-	30	29	80g/30 deg	N / I			
204742	TP105	Not Given	1.40	Not Given	D	Dark grey silty CLAY	Atterberg 4 Point	43.7	100	67	-	35	32	80g/30 deg	N / I			
204743	TP107	Not Given	0.80	Not Given	D	Brownish grey slightly gravelly slightly sandy silty CLAY	Atterberg 4 Point	28.5	90	49	-	25	24	80g/30 deg	R / I			
204744	TP109	Not Given	0.90	Not Given	B	Yellowish brown slightly gravelly slightly sandy silty CLAY	Atterberg 4 Point	28.0	94	48	-	26	22	80g/30 deg	R / I			
204745	TP110	Not Given	0.60	Not Given	B	Brownish grey slightly gravelly sandy silty CLAY	Atterberg 4 Point	25.9	82	44	-	26	18	80g/30 deg	W / I			
204747	TP112	Not Given	1.20	Not Given	D	Orangish white slightly sandy CLAY	Atterberg 4 Point	30.4	100	49	-	23	26	80g/30 deg	N / I			

Note: # Non accredited; NP - Non plastic; N - Tested in natural condition, R - Tested after >0,425mm removed by hand, W - Tested after washing to remove >425mm; I - The water content in the sample was increased , D - The water content in the sample was decreased; * - One point liquid limit corrected as per the report Correlation Factor by Clayton C.R.I and Jukes A.W (1978)

Comments:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

Date Reported: 13/06/2024 **GF 362.14**

TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/WATER CONTENT RELATIONSHIP COMPACTION METHOD USING 2.5 KG RAMMER

Tested in Accordance with: BS 1377-2:2022, cl. 11.3, 11.4

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

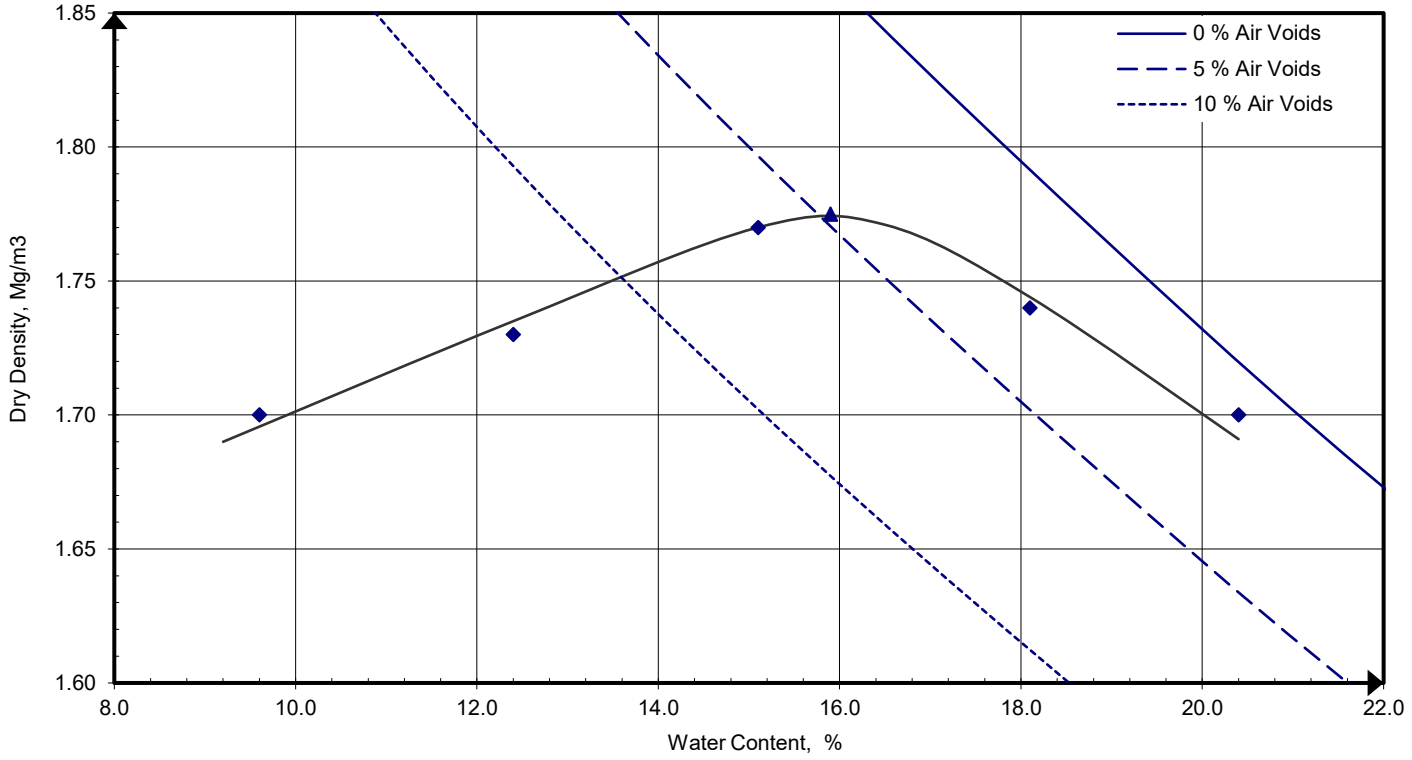
4041

Client:	Apex Consulting Engineers Ltd	Client Reference:	1152
Client Address:	Unit 3, Acres Hill Business Park, 2 Acres Hill Lane, Sheffield, South Yorkshire, S9 4LT	Job Number:	24-020615-1
		Date Sampled:	16/05/2024
		Date Received:	20/05/2024
Contact:	Matthew Thompson	Date Tested:	05/06/2024
Site Address:	Main Ave, Kirklees	Sampled By:	Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	204739	Depth Top [m]:	0.90
Hole No.:	TP102	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	B
Sample Description:	Greyish brown slightly gravelly sandy CLAY		
Sample Preparation:	Sample was quartered and broken down by hand. Material used was natural.		



Compaction Point No.		1	2	3	4	5
Water Content	%	9.60	12.4	15.1	18.1	20.4
Dry Density	Mg/m³	1.70	1.73	1.77	1.74	1.70

Grading zone	2
Mould Type	1 Litre
Samples Used	Single sample tested

Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	4
Particle Density - Assumed	Mg/m³	2.65
As received Water Content	%	20
Maximum Dry Density	Mg/m³	**1.78**

Optimum Water Content	%	**16**

Remarks:

Signed: Katarzyna Koziel

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

Date Reported: 13/06/2024

GF 599.1

4041

TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/WATER CONTENT RELATIONSHIP COMPACTION METHOD USING 2.5 KG RAMMER

Tested in Accordance with: BS 1377-2:2022, cl. 11.3, 11.4

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

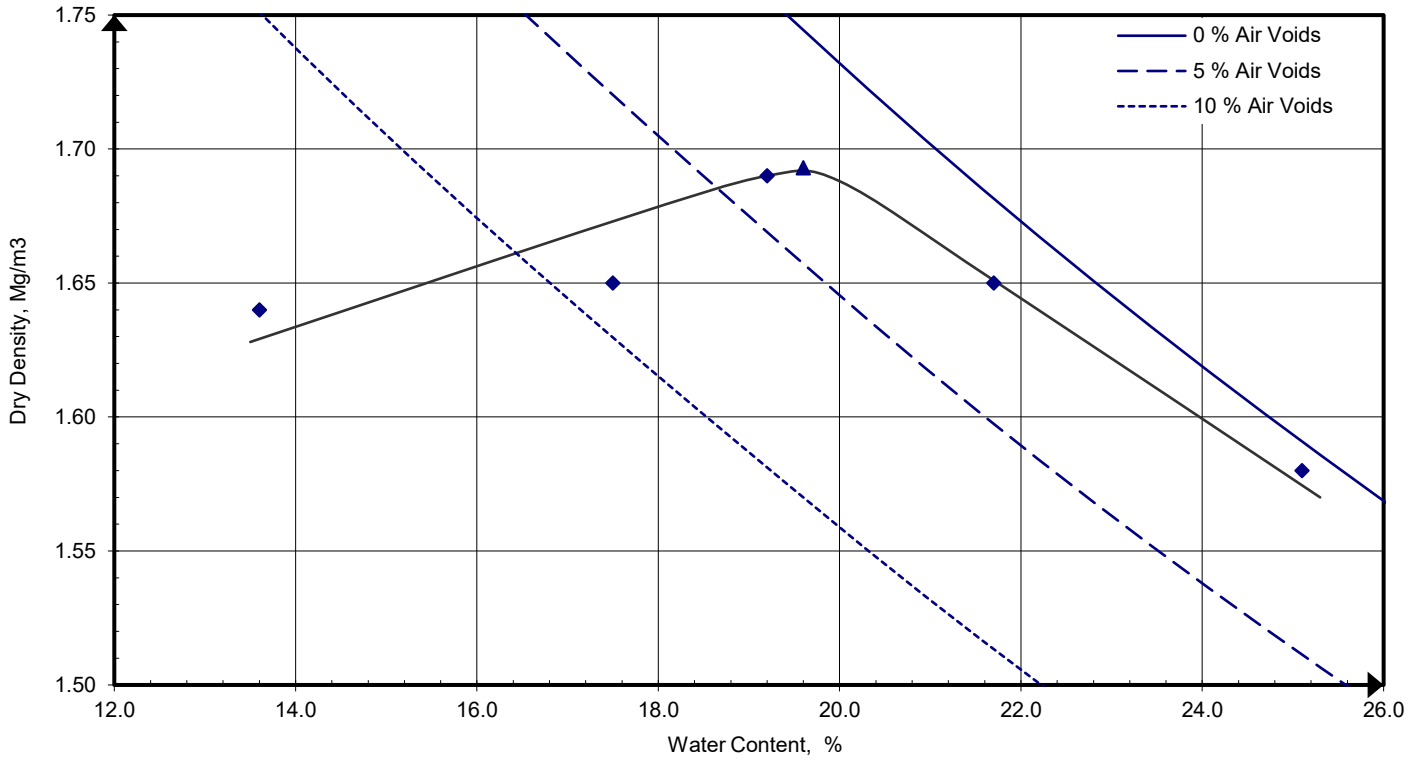
Environmental Science

Client:	Apex Consulting Engineers Ltd	Client Reference:	1152
Client Address:	Unit 3, Acres Hill Business Park, 2 Acres Hill Lane, Sheffield, South Yorkshire, S9 4LT	Job Number:	24-020615-1
		Date Sampled:	16/05/2024
		Date Received:	20/05/2024
Contact:	Matthew Thompson	Date Tested:	05/06/2024
Site Address:	Main Ave, Kirklees	Sampled By:	Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	204744	Depth Top [m]:	0.90
Hole No.:	TP109	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	B
Sample Description:	Yellowish brown slightly gravelly slightly sandy silty CLAY		
Sample Preparation:	Sample was quartered and broken down by hand. Material used was natural.		



Compaction Point No.		1	2	3	4	5
Water Content	%	13.6	17.5	19.2	21.7	25.1
Dry Density	Mg/m³	1.64	1.65	1.69	1.65	1.58

Grading zone	1
Mould Type	1 Litre
Samples Used	Single sample tested

Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	0
Particle Density - Assumed	Mg/m³	2.65
As received Water Content	%	25
Maximum Dry Density	Mg/m³	**1.69**

Optimum Water Content	%	**20**

Remarks:

Signed: Katarzyna Koziel

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

Date Reported: 13/06/2024

TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/WATER CONTENT RELATIONSHIP COMPACTION METHOD USING 2.5 KG RAMMER

Tested in Accordance with: BS 1377-2:2022, cl. 11.3, 11.4

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

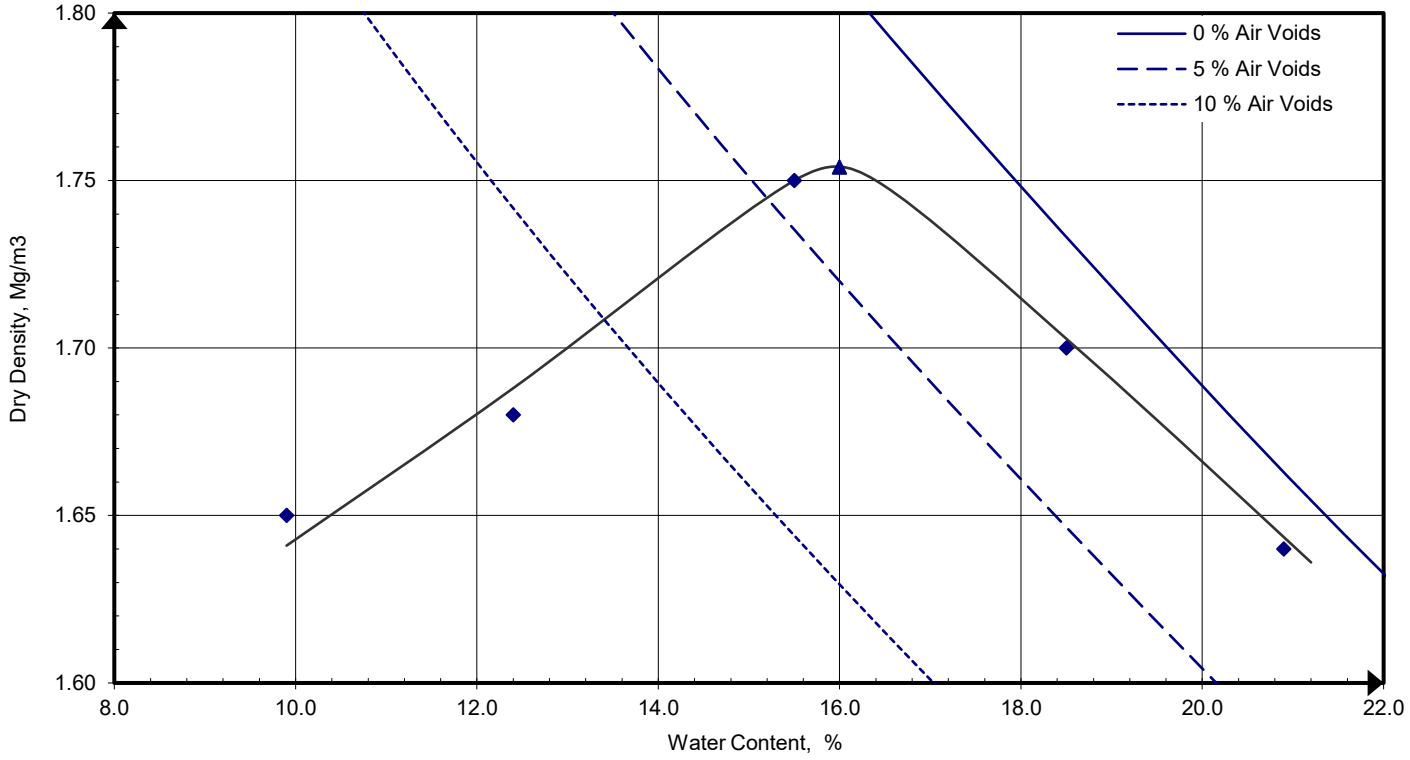
4041

Client:	Apex Consulting Engineers Ltd	Client Reference:	1152
Client Address:	Unit 3, Acres Hill Business Park, 2 Acres Hill Lane, Sheffield, South Yorkshire, S9 4LT	Job Number:	24-020615-1
		Date Sampled:	16/05/2024
		Date Received:	20/05/2024
Contact:	Matthew Thompson	Date Tested:	05/06/2024
Site Address:	Main Ave, Kirklees	Sampled By:	Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	204745	Depth Top [m]:	0.60
Hole No.:	TP110	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	B
Sample Description:	Brownish grey slightly gravelly sandy silty CLAY		
Sample Preparation:	Sample was quartered and broken down by hand. Material used was natural.		



Compaction Point No.		1	2	3	4	5
Water Content	%	9.90	12.4	15.5	18.5	20.9
Dry Density	Mg/m³	1.65	1.68	1.75	1.70	1.64

Grading zone	2
Mould Type	1 Litre
Samples Used	Single sample tested

Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	3
Particle Density - Assumed	Mg/m³	2.55
As received Water Content	%	21
Maximum Dry Density	Mg/m³	**1.75**

Optimum Water Content	%	**16**

Remarks:

Signed: Katarzyna Koziel

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

Date Reported: 13/06/2024

GF 599.1

TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/WATER CONTENT RELATIONSHIP COMPACTION METHOD USING 2.5 KG RAMMER

Tested in Accordance with: BS 1377-2:2022, cl. 11.3, 11.4

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

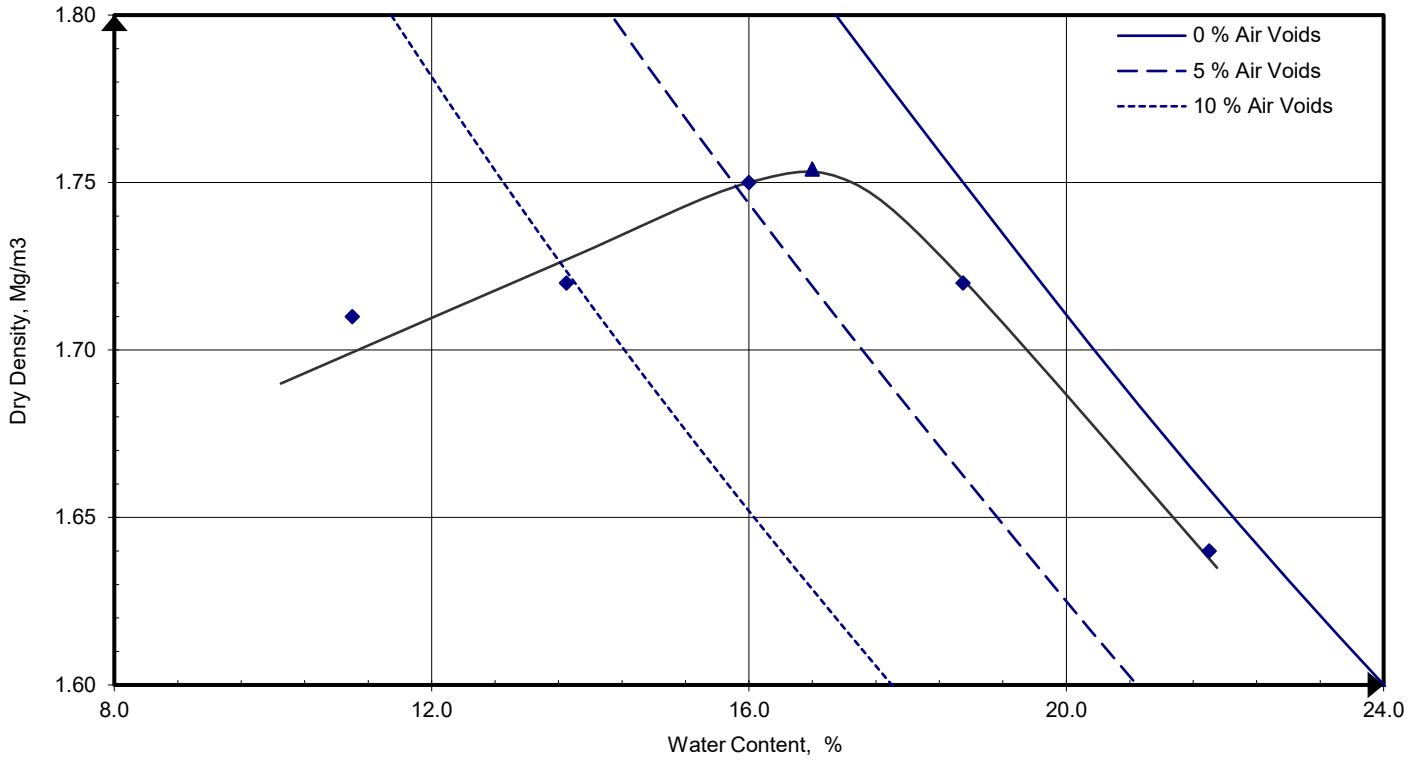
4041

Client:	Apex Consulting Engineers Ltd	Client Reference:	1152
Client Address:	Unit 3, Acres Hill Business Park, 2 Acres Hill Lane, Sheffield, South Yorkshire, S9 4LT	Job Number:	24-020615-1
		Date Sampled:	16/05/2024
		Date Received:	20/05/2024
Contact:	Matthew Thompson	Date Tested:	05/06/2024
Site Address:	Main Ave, Kirklees	Sampled By:	Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	204746	Depth Top [m]:	1.10
Hole No.:	TP111	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	B
Sample Description:	Brownish grey CLAY		
Sample Preparation:	Sample was quartered and broken down by hand. Material used was natural.		



Compaction Point No.		1	2	3	4	5
Water Content	%	11.0	13.7	16.0	18.7	21.8
Dry Density	Mg/m³	1.71	1.72	1.75	1.72	1.64

Grading zone	1
Mould Type	1 Litre
Samples Used	Single sample tested

Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	0
Particle Density - Assumed	Mg/m³	2.60
As received Water Content	%	22
Maximum Dry Density	Mg/m³	**1.75**

Optimum Water Content	%	**17**

Remarks:

Signed: Katarzyna Koziel

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

Date Reported: 13/06/2024

TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/WATER CONTENT RELATIONSHIP COMPACTION METHOD USING 2.5 KG RAMMER

Tested in Accordance with: BS 1377-2:2022, cl. 11.3, 11.4

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

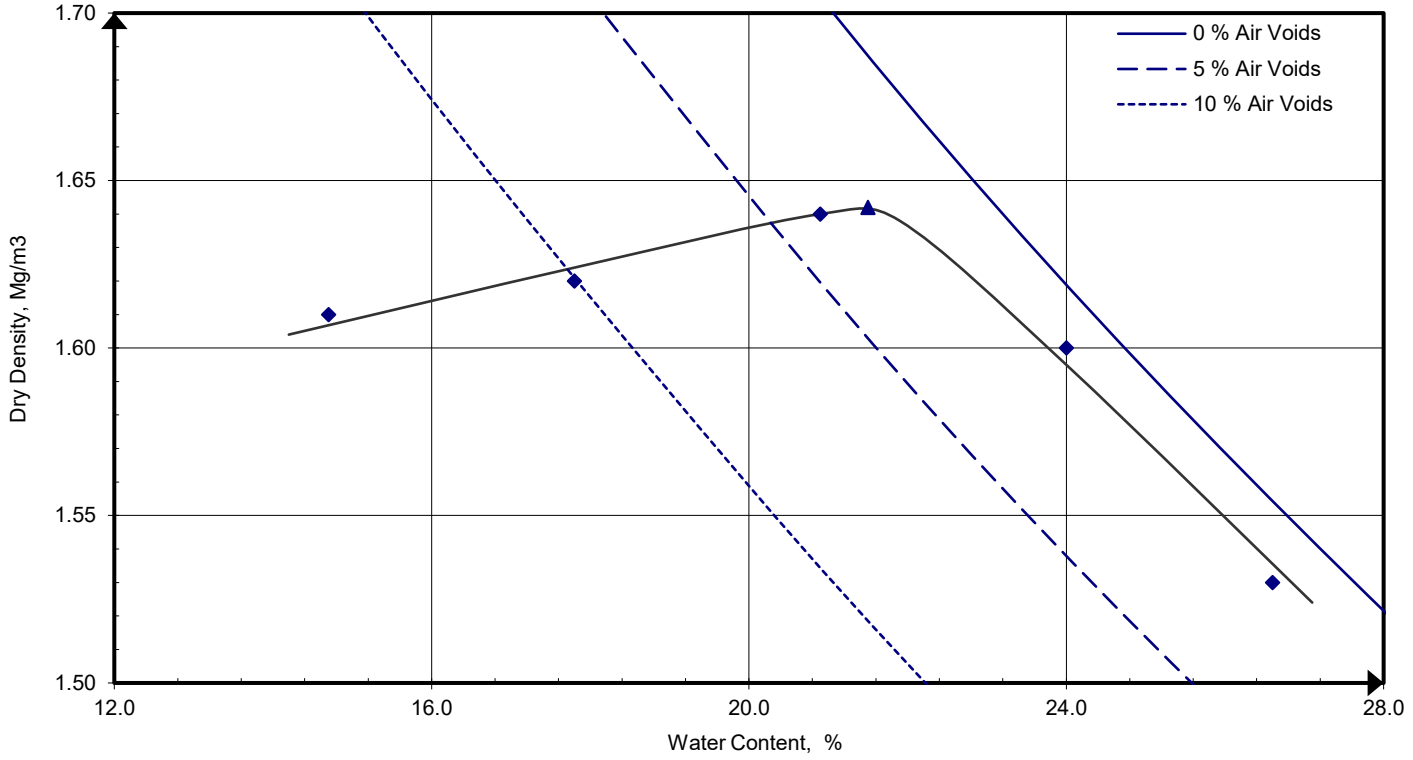
4041

Client:	Apex Consulting Engineers Ltd	Client Reference:	1152
Client Address:	Unit 3, Acres Hill Business Park, 2 Acres Hill Lane, Sheffield, South Yorkshire, S9 4LT	Job Number:	24-020615-1
		Date Sampled:	16/05/2024
		Date Received:	20/05/2024
Contact:	Matthew Thompson	Date Tested:	05/06/2024
Site Address:	Main Ave, Kirklees	Sampled By:	Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	204748	Depth Top [m]:	2.30
Hole No.:	TP107	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	B
Sample Description:	Greyish brown CLAY		
Sample Preparation:	Sample was quartered and broken down by hand. Material used was natural.		



Compaction Point No.		1	2	3	4	5
Water Content	%	14.7	17.8	20.9	24.0	26.6
Dry Density	Mg/m³	1.61	1.62	1.64	1.60	1.53

Grading zone	2
Mould Type	1 Litre
Samples Used	Single sample tested

Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	1
Particle Density - Assumed	Mg/m³	2.65
As received Water Content	%	24
Maximum Dry Density	Mg/m³	**1.64**

Optimum Water Content	%	**22**

Remarks:

Signed: Katarzyna Koziel

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

Date Reported: 13/06/2024

GF 599.1

TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/WATER CONTENT RELATIONSHIP COMPACTION METHOD USING 2.5 KG RAMMER

Tested in Accordance with: BS 1377-2:2022, cl. 11.3, 11.4

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

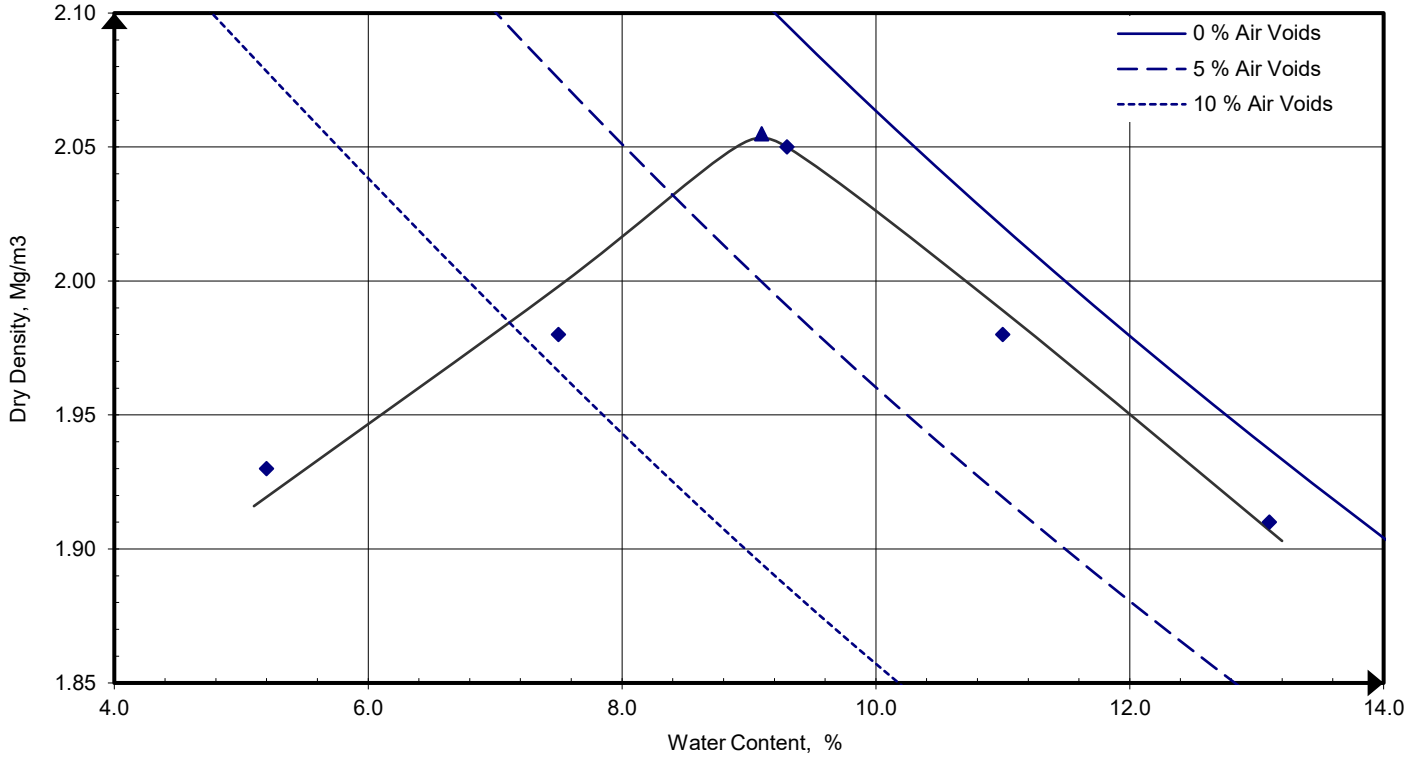
4041

Client:	Apex Consulting Engineers Ltd	Client Reference:	1152
Client Address:	Unit 3, Acres Hill Business Park, 2 Acres Hill Lane, Sheffield, South Yorkshire, S9 4LT	Job Number:	24-020615-1
		Date Sampled:	16/05/2024
		Date Received:	20/05/2024
Contact:	Matthew Thompson	Date Tested:	05/06/2024
Site Address:	Main Ave, Kirklees	Sampled By:	Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	204749	Depth Top [m]:	1.60
Hole No.:	TP110	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	B
Sample Description:	Brown very clayey GRAVEL with siltstones		
Sample Preparation:	Sample was quartered and broken down by hand. Material used was natural.		



Compaction Point No.		1	2	3	4	5
Water Content	%	5.20	7.50	9.30	11.0	13.1
Dry Density	Mg/m³	1.93	1.98	2.05	1.98	1.91

Grading zone	4
Mould Type	CBR
Samples Used	Single sample tested

Material Retained on 37.5 mm Sieve	%	2
Material Retained on 20.0 mm Sieve	%	4
Particle Density - Assumed	Mg/m³	2.60
As received Water Content	%	11
Maximum Dry Density	Mg/m³	**2.06**

Optimum Water Content	%	**9.1**

Remarks:

Signed: Katarzyna Koziel

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

Date Reported: 13/06/2024

GF 599.1

Apex Consulting Engineers Ltd
Unit 3, Acres Hill Business Park
2 Acres Hill Lane
Sheffield
South Yorkshire
S9 4LT

t: (114) 2419360

e: Matthew.Thompson@apexconsulting.co.uk

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 : 24-020617

Project / Site name:	Main Ave, Kirklees	**Samples received on:**	20/05/2024
Your job number:	1152	**Samples instructed on/ Analysis started on:**	20/05/2024
Your order number:	PO GEO-SY-680	**Analysis completed by:**	28/05/2024
Report Issue Number:	1	**Report issued on:**	04/06/2024
Samples Analysed:	9 soil samples		

Signed:

Anna Goc
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: 24-020617
Project / Site name: Main Ave, Kirklees
Your Order No: PO GEO-SY-680

Lab Sample Number				204755	204756	204757	204758	204759
Sample Reference				TP107	TP102	TP104	TP105	TP109
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.80	0.90	0.40	1.40	0.90
Date Sampled				16/05/2024	16/05/2024	16/05/2024	16/05/2024	16/05/2024
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	%	0.01	NONE	15	12	21	29	18
Total mass of sample received	kg	0.1	NONE	0.5	0.5	0.5	0.5	0.5
General Inorganics								
pH (L099)	pH Units	N/A	MCERTS	5.3	6	5.2	4.7	5.7
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	35	19	44	45	270
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	17.5	9.71	21.9	22.3	134

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-020617
Project / Site name: Main Ave, Kirklees
Your Order No: PO GEO-SY-680

Lab Sample Number				204760	204761	204762	204763
Sample Reference				TP110	TP112	TP105	TP108
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	1.20	2.00	1.30
Date Sampled				16/05/2024	16/05/2024	16/05/2024	16/05/2024
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	%	0.01	NONE	15	21	13	12
Total mass of sample received	kg	0.1	NONE	0.5	0.5	0.5	0.5
General Inorganics							
pH (L099)	pH Units	N/A	MCERTS	6.2	5.6	4.8	5.5
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	270	18	22	15
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	134	8.79	11.1	7.56

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 24-020617
Project / Site name: Main Ave, Kirklees

* 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 *
204755	TP107	None Supplied	2.8	Brown clay and sand with gravel
204756	TP102	None Supplied	0.9	Brown clay and sand with gravel
204757	TP104	None Supplied	0.4	Brown sandy clay with gravel and vegetation
204758	TP105	None Supplied	1.4	Brown clay and loam with gravel
204759	TP109	None Supplied	0.9	Brown clay and sand
204760	TP110	None Supplied	0.6	Brown clay and sand
204761	TP112	None Supplied	1.2	Brown clay and sand
204762	TP105	None Supplied	2	Brown clay and sand
204763	TP108	None Supplied	1.3	Brown clay and sand with gravel and vegetation

Analytical Report Number : 24-020617
Project / Site name: Main Ave, Kirklees

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
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.	L019B	D	NONE
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099	D	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' 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.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Apex Consulting Engineers Ltd☐
Unit 3, Acres Hill Business Park
2 Acres Hill Lane
Sheffield
South Yorkshire
S9 4LT

t: (114) 2419360

e: Matthew.Thompson@apexconsulting.co.uk

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 : 24-020617

Replaces Analytical Report Number: 24-020617, issue no. 1
Additional analysis undertaken.
Water Soluble Chloride and Water Soluble Nitrate added to all samples at clients request

Project / Site name:	Main Ave, Kirklees	**Samples received on:**	20/05/2024
Your job number:	1152	**Samples instructed on/ Analysis started on:**	20/05/2024
Your order number:	PO GEO-SY-680	**Analysis completed by:**	25/06/2024
Report Issue Number:	2	**Report issued on:**	27/06/2024
Samples Analysed:	9 soil samples		

Signed:

Adam Fenwick
Key Account Executive
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: 24-020617
Project / Site name: Main Ave, Kirklees
Your Order No: PO GEO-SY-680

Lab Sample Number				204755	204756	204757	204758	204759
Sample Reference				TP107	TP102	TP104	TP105	TP109
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.80	0.90	0.40	1.40	0.90
Date Sampled				16/05/2024	16/05/2024	16/05/2024	16/05/2024	16/05/2024
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	%	0.01	NONE	15	12	21	29	18
Total mass of sample received	kg	0.1	NONE	0.5	0.5	0.5	0.5	0.5
General Inorganics								
pH (L099)	pH Units	N/A	MCERTS	5.3	6	5.2	4.7	5.7
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	35	19	44	45	270
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	17.5	9.71	21.9	22.3	134
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	3.6	4.2	3.9	2.9	5
Water Soluble Nitrate (2:1) as NO_3	mg/kg	2	NONE	< 2.0	< 2.0	4	< 2.0	< 2.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-020617
Project / Site name: Main Ave, Kirklees
Your Order No: PO GEO-SY-680

Lab Sample Number				204760	204761	204762	204763
Sample Reference				TP110	TP112	TP105	TP108
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	1.20	2.00	1.30
Date Sampled				16/05/2024	16/05/2024	16/05/2024	16/05/2024
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	%	0.01	NONE	15	21	13	12
Total mass of sample received	kg	0.1	NONE	0.5	0.5	0.5	0.5
General Inorganics							
pH (L099)	pH Units	N/A	MCERTS	6.2	5.6	4.8	5.5
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	270	18	22	15
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	134	8.79	11.1	7.56
Water Soluble Chloride (2:1)	mg/kg	1	MCERTS	3.9	2.1	1.3	2.6
Water Soluble Nitrate (2:1) as NO_3	mg/kg	2	NONE	< 2.0	< 2.0	< 2.0	< 2.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 24-020617
Project / Site name: Main Ave, Kirklees

* 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 *
204755	TP107	None Supplied	2.8	Brown clay and sand with gravel
204756	TP102	None Supplied	0.9	Brown clay and sand with gravel
204757	TP104	None Supplied	0.4	Brown sandy clay with gravel and vegetation
204758	TP105	None Supplied	1.4	Brown clay and loam with gravel
204759	TP109	None Supplied	0.9	Brown clay and sand
204760	TP110	None Supplied	0.6	Brown clay and sand
204761	TP112	None Supplied	1.2	Brown clay and sand
204762	TP105	None Supplied	2	Brown clay and sand
204763	TP108	None Supplied	1.3	Brown clay and sand with gravel and vegetation

Analytical Report Number : 24-020617
Project / Site name: Main Ave, Kirklees

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
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.	L019B	D	NONE
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Nitrate, water soluble, in soil	Determination of nitrate by reaction with sodium salicylate and colorimetry	In-house method based on Examination of Water and Wastewatern & Polish Standard Method PN-82/C-04579.08, 2:1 extraction	L078	W	NONE
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser	In-house method	L082B	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099	D	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' 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.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

Appendix H – Soakaway Test Results

Soakaway Test Calculation

Site:Main Kirklees
Jon no.:1152
Date: 16 05 24

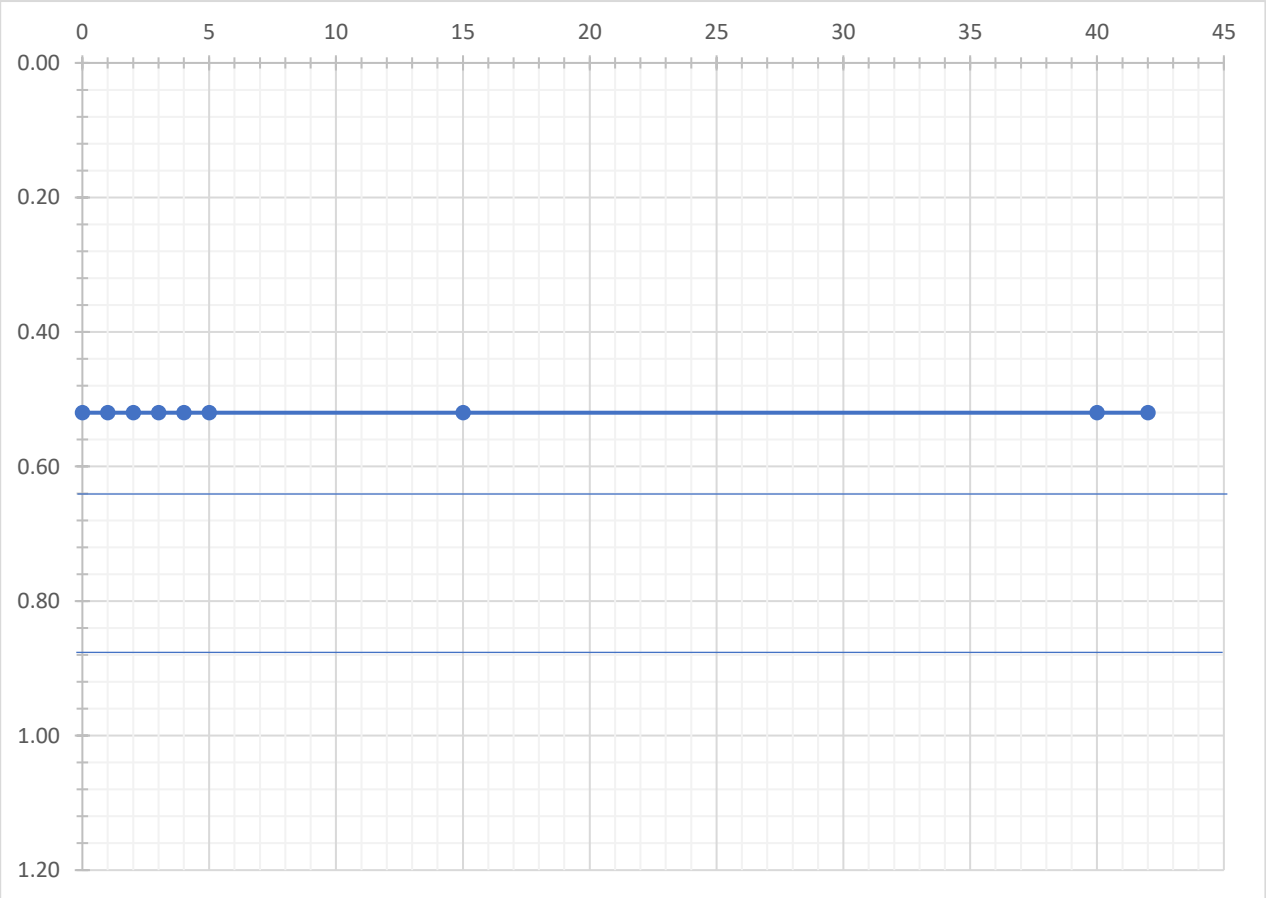
Trial Pit	TP104
Test no.	1

Elapsed Time (min)	Depth to water (m)
0	0.52
1	0.52
2	0.52
3	0.52
4	0.52
5	0.52
15	0.52
40	0.52
42	0.52

Length (m)	2.30
Width (m)	0.60
Depth (m)	1.00
Water column (m)	0.48
75%-25% Water volume (m^3)	0.33
Water surface area (m^2)	2.77
75% effective depth	0.64
50% effective depth	0.24
25% effective depth	0.88

Mins at 75 % effective depth	N/A
Mins at 25% effective depth	N/A

Infiltration rate
Unable to calculate



Soakaway Test Calculation

Site:Main Kirklees
Jon no.:1152
Date: 16 05 24

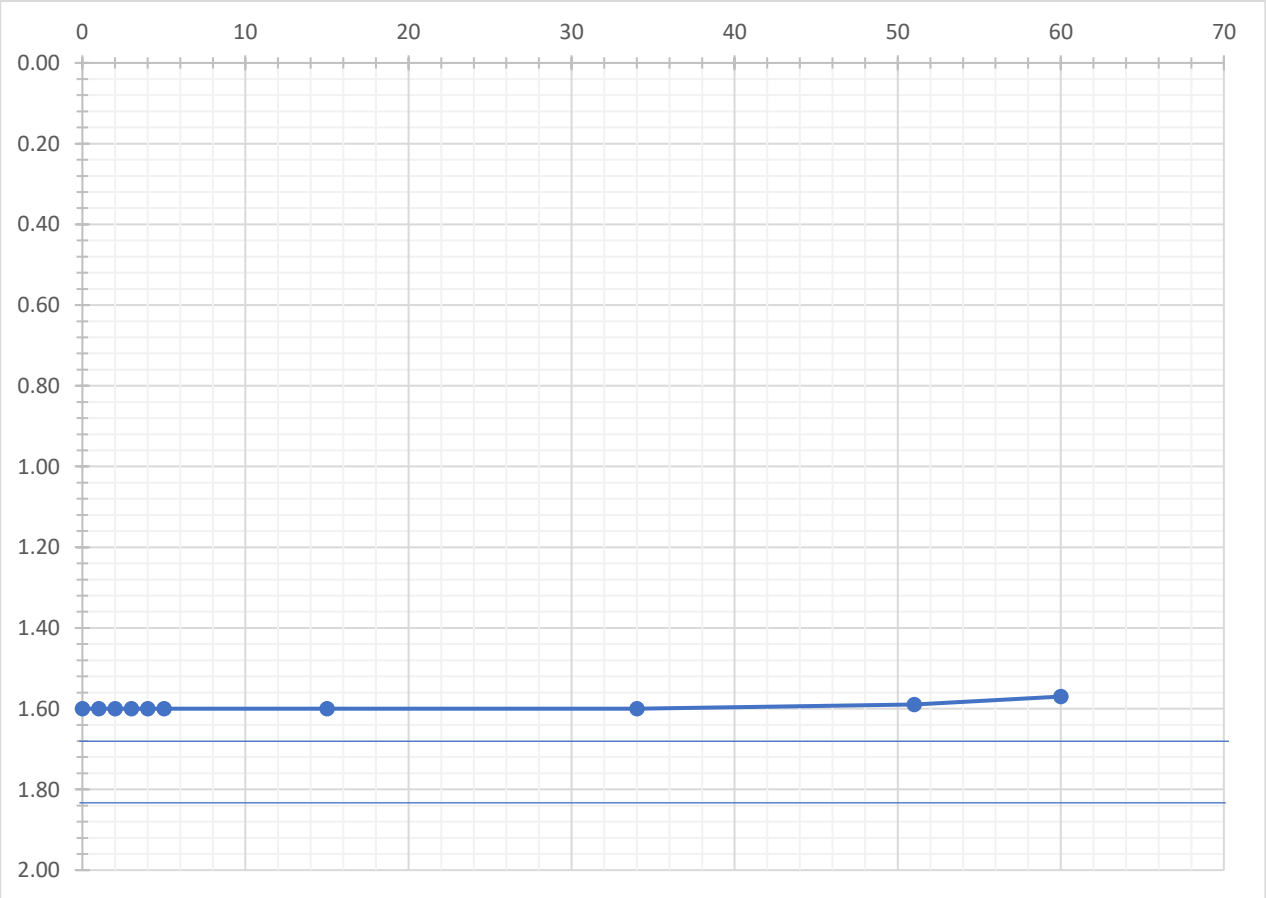
Trial Pit	TP112
Test no.	1

Elapsed Time (min)	Depth to water (m)
0	1.60
1	1.60
2	1.60
3	1.60
4	1.60
5	1.60
15	1.60
34	1.60
51	1.59
60	1.57

Length (m)	1.70
Width (m)	0.60
Depth (m)	1.90
Water column (m)	0.30
75%-25% Water volume (m^3)	0.15
Water surface area (m^2)	1.71
75% effective depth	1.68
50% effective depth	0.15
25% effective depth	1.83

Mins at 75 % effective depth	N/A
Mins at 25% effective depth	N/A

Infiltration rate
Unable to calculate



Soakaway Test Calculation

Site:Main Kirklees
Jon no.:1152
Date: 16 05 24

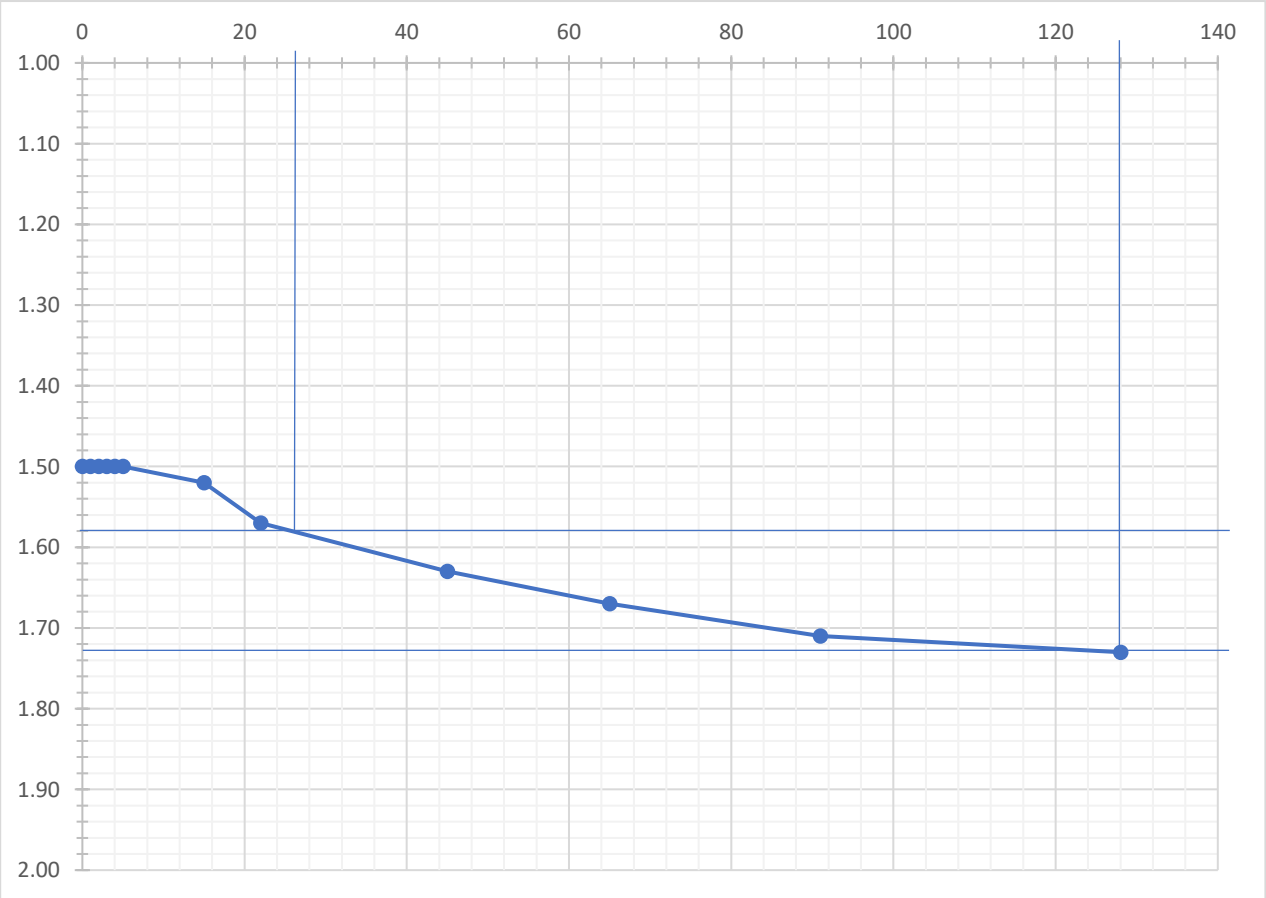
Trial Pit	TP108
Test no.	1

Elapsed Time (min)	Depth to water (m)
0	1.50
1	1.50
2	1.50
3	1.50
4	1.50
5	1.50
15	1.52
22	1.57
45	1.63
65	1.67
91	1.71
128	1.73

Length (m)	1.80
Width (m)	0.60
Depth (m)	1.80
Water column (m)	0.30
75%-25% Water volume (m^3)	0.16
Water surface area (m^2)	1.80
75% effective depth	1.58
50% effective depth	0.15
25% effective depth	1.73

Mins at 75 % effective depth	26
Mins at 25% effective depth	128

Infiltration rate
1.47059E-05



Appendix I – Gas Monitoring Results

Client: Strata Homes

Gas Monitoring Results

Site name: Main Avenue, Kirklees

Job number: 11152

Visit Details

Date	Visit no.	Engineer	Atmospheric Pressure (mb)		Ambient Conditions (% vol)		
			Time	Reading	CH_4	CO_2	O_2
29/05/2024	1	MS	11:30	987	0	0	20.7
			12:20	987			
			13:05	986			

Results

BH	Flow (lt/hr)		Gas concentration (% volume)					Groundwater depth (mbgl)	Depth to base (mbgl)	Remarks
	Peak	Steady	Methane		Carbon dioxide		Oxygen			
			Peak	Steady	Peak	Steady	Lowest			
PH101	31.80	3.20	0.00	0.00	0.70	0.70	20.30	2.52	5.85	
PH102			0.00	0.00	2.40	2.40	11.40			Blocked valve prevented flow readings, unable to remove bung for goundwater monitoring
PH103	3.90	3.90	0.00	0.00	0.70	0.70	20.20	1.30	5.70	
PH104			0.00	0.00	0.40	0.20	19.40	1.40	5.81	Blocked valve prevented flow readings
PH105			0.00	0.00	2.50	2.50	13.50	4.75	5.75	Blocked valve prevented flow readings
PH106	119.60	3.10	0.00	0.00	0.30	0.30	20.4	1.63	5.60	

Equiment used: GFM 436 Infrared gas analyser (serial no. 13865) and Stuart Well Services electronic dip meter

Client: Strata Homes

Gas Monitoring Results

Site name: Main Avenue, Kirklees

Job number: 1152

Visit Details

Date	Visit no.	Engineer	Atmospheric Pressure (mb)		Ambient Conditions (% vol)		
			Time	Reading	CH_4	CO_2	O_2
17/06/2024	2	MS	09:30	988	0	0	20.5
			10:05	987			
			11:35	988			

Results

BH	Flow (lt/hr)		Gas concentration (% volume)					Groundwater depth (mbgl)	Depth to base (mbgl)	Remarks
	Peak	Steady	Methane		Carbon dioxide		Oxygen			
			Peak	Steady	Peak	Steady	Lowest			
PH101	0.00	0.00	0.00	0.00	1.20	0.90	19.9	2.02	5.85	
PH102	0.00	0.00	0.00	0.00	3.00	3.00	9.5	3.07	5.69	
PH103	0.00	0.00	0.00	0.00	0.70	0.70	20.2	1.44	5.70	
PH104	0.00	0.00	0.00	0.00	0.60	0.30	20.1	1.36	5.80	
PH105	0.00	0.00	0.00	0.00	3.20	3.20	12.9	4.78	5.76	
PH106	0.00	0.00	0.00	0.00	0.50	0.50	20	0.95	5.62	

Equiment used: GFM 436 Infrared gas analyser (serial no. 13865) and Stuart Well Services electronic dip meter

Client: Strata Homes

Gas Monitoring Results

Site name: Main Avenue, Kirklees

Job number: 1152

Visit Details

Date	Visit no.	Engineer	Atmospheric Pressure (mb)		Ambient Conditions (% vol)		
			Time	Reading	CH_4	CO_2	O_2
01/07/2024	3	MS	11:00	997	0	0	20.5
			11:45	997			
			12:35	997			

Results

BH	Flow (lt/hr)		Gas concentration (% volume)					Groundwater depth (mbgl)	Depth to base (mbgl)	Remarks
	Peak	Steady	Methane		Carbon dioxide		Oxygen			
			Peak	Steady	Peak	Steady	Lowest			
PH101	0.00	0.00	0.00	0.00	0.90	0.90	19.7	2.06	5.85	
PH102	0.00	0.00	0.00	0.00	3.90	3.90	7.7	3.04	5.69	
PH103	0.00	0.00	0.00	0.00	0.20	0.20	20.3	1.97	5.74	
PH104	1.30	0.00	0.00	0.00	0.70	0.50	19.4	1.59	5.80	
PH105	0.00	0.00	0.00	0.00	2.60	2.40	13.2	4.80	5.76	
PH106	0.00	0.00	0.00	0.00	0.70	0.70	19.5	0.95	5.62	

Equiment used: GFM 436 Infrared gas analyser (serial no. 13865) and Stuart Well Services electronic dip meter

Client: Strata Homes

Gas Monitoring Results

Site name: Main Avenue, Kirklees

Job number: 1152

Visit Details

Date	Visit no.	Engineer	Atmospheric Pressure (mb)		Ambient Conditions (% vol)		
			Time	Reading	CH_4	CO_2	O_2
25/07/2024	4	MJT	09:00	989	0	0	20.5
			09:20	989			
			09:45	989			

Results

BH	Flow (lt/hr)		Gas concentration (% volume)					Groundwater depth (mbgl)	Depth to base (mbgl)	Remarks
	Peak	Steady	Methane		Carbon dioxide		Oxygen			
			Peak	Steady	Peak	Steady	Lowest			
PH101	-0.30	0.00	0.00	0.00	1.20	1.20	19.4	2.09	5.86	
PH102	62.80	3.30	0.00	0.00	4.10	4.10	2.9	3.38	5.69	
PH103	-65.00	0.00	0.00	0.00	0.80	0.80	20	2.22	5.75	
PH104	3.00	0.00	0.00	0.00	0.70	0.60	20	1.54	5.76	
PH105	0.40	0.00	0.00	0.00	4.00	4.00	9.1	4.94	5.76	
PH106										Vandalised

Equiment used: GFM 436 Infrared gas analyser (serial no. 13865) and Stuart Well Services electronic dip meter

Client: Strata Homes

Gas Monitoring Results

Site name: Main Avenue, Kirklees

Job number: 1152

Visit Details

Date	Visit no.	Engineer	Atmospheric Pressure (mb)		Ambient Conditions (% vol)		
			Time	Reading	CH_4	CO_2	O_2
31/07/2024	5	MS	14:30	994	0	0	21
			15:00	995			
			15:20	994			

Results

BH	Flow (lt/hr)		Gas concentration (% volume)					Groundwater depth (mbgl)	Depth to base (mbgl)	Remarks
	Peak	Steady	Methane		Carbon dioxide		Oxygen			
			Peak	Steady	Peak	Steady	Lowest			
PH101	-33.30	0.00	0.00	0.00	1.00	1.00	19.9	2.09	5.85	
PH102	28.90	0.00	0.00	0.00	3.90	3.90	3.5	3.41	5.65	
PH103	-68.10	0.00	0.00	0.00	0.70	0.70	20.5	2.49	5.74	
PH104	0.00	0.00	0.00	0.00	0.60	0.20	20.5	1.60	5.76	
PH105	0.00	0.00	0.00	0.00	4.00	4.00	8.5	5.00	5.75	
PH106										Vandalised

Equiment used: GFM 436 Infrared gas analyser (serial no. 13865) and Stuart Well Services electronic dip meter

Client: Strata Homes

Gas Monitoring Results

Site name: Main Avenue, Kirklees

Job number: 1152

Visit Details

Date	Visit no.	Engineer	Atmospheric Pressure (mb)		Ambient Conditions (% vol)		
			Time	Reading	CH_4	CO_2	O_2
19/08/2024	6	MS	15:30	990	0	0	20.5
			15:45	990			
			16:00	990			

Results

BH	Flow (lt/hr)		Gas concentration (% volume)					Groundwater depth (mbgl)	Depth to base (mbgl)	Remarks
	Peak	Steady	Methane		Carbon dioxide		Oxygen			
			Peak	Steady	Peak	Steady	Lowest			
PH101	-20.70	0.00	0.00	0.00	1.20	1.20	19.6	2.00	5.85	
PH102	56.20	3.20	0.00	0.00	3.60	3.60	1.7	3.57	5.65	
PH103	0.00	0.00	0.00	0.00	0.60	0.60	20.1	2.54	5.74	
PH104	0.00	0.00	0.00	0.00	0.40	0.40	20.5	1.66	5.76	
PH105	0.00	0.00	0.00	0.00	4.30	4.30	7.7	5.05	5.75	
PH106										Vandalised

Equiment used: GFM 436 Infrared gas analyser (serial no. 13865) and Stuart Well Services electronic dip meter