soiltechnics

environmental ▪ geotechnical ▪ building fabric

Ground Investigation Report

Proposed Residential Development

Hornby Street, Heywood

August 2024



soiltechnics
environmental ▪ geotechnical ▪ building fabric

Project Details

Site:	Hornby Street, Heywood
Document Title:	Ground Investigation Report
Document no.:	STW6573-R01 Rev A
Date:	August 2024
Client:	R & M Property Group Ltd
Issuing office:	Soiltechnics Ltd Unit 9, Clarence Avenue, Westpoint Enterprise Park, Trafford Park, Manchester M17 1QS Tel: 0161 9470270 E-mail: mail@soiltechnics.net

Document history and status

Revision	Date	Description	Author	Checker	Reviewer
STW6299-R02 Rev A	January 2024	First Issue	CB	DH	SCD
STV6299-R02 Rev B	February 2024	Second issue – updated following completion of gas monitoring	CB	DH	SCD
STW6573-R01 Rev A	August 2024	Third Issue – updated following completion of deeper borehole investigation for our new client, R & M Property Group Ltd	CB	JP	SCD

Any changes made to the February 2024 version of the report are denoted by a single line in the left-hand margin

Registered to ISO 9001:2015
ISO 14001:2015 & ISO 45001:2018

MEMBER OF THE AGS
WWW.AGS.ORG.UK

Table of Contents

Non-technical Summary vii

1 Introduction 1
1.1 Scheme Outline 1
1.2 Brief 1
1.3 Definition of Scope 1
1.4 Limitations 2

2 Desk Study 3
2.1 Sources of information 3
2.2 Site Description 3
2.3 Planning Records 4
2.4 Previous Reports 4
2.5 Site History 4
2.6 Regulatory Enquiries 5
2.7 Anticipated Geology 5
2.8 Hydrogeology and Groundwater Sensitivity 6
2.9 Hydrology and Surface Water Sensitivity 6
2.10 Flood Risk 6
2.11 Non-Mining Ground Instability Hazard 6
2.12 Quarrying and Mining 7
2.13 Landfill and infilled ground 7
2.14 Recent industrial activity 7
2.15 Radon 7
2.16 Underground Infrastructure 7
2.17 Unexploded Ordnance (UXO) Hazard Screen 8

3 Tier 1 Preliminary Contamination Risk Assessment 9
3.1 Objectives 9
3.2 Evaluation Criteria 9
3.3 Methodology 9
3.4 Source Assessment 10
3.5 Receptor Assessment 10
3.6 Pathway Assessment 11
3.7 Initial Conceptual Site Model (iCSM) 12
3.8 Preliminary Risk Assessment Conclusions and Recommendations 17

4 Ground Investigation 18
4.1 Objectives 18
4.2 Fieldwork summary 18
4.3 Unexploded Ordnance (UXO) 18
4.4 Sampling 19
4.5 In-situ Testing 19
4.6 Monitoring Installations 19
4.7 Monitoring visits and groundwater sampling 19
4.8 Investigation Constraints 20

5 Laboratory testing 21
5.1 Overview 21
5.2 Geotechnical Testing 21
5.3 Chemical Testing 21

6 Ground Investigation Findings 22
6.1 Ground Model 22
6.2 Topsoil 22
6.3 Made Ground 22
6.4 Glaciofluvial Deposits 23
6.5 Pennine Lower Coal Measures Formation 24
6.6 Groundwater 24
6.7 Evidence of Possible Contamination 25
6.8 Obstructions and Instability 25

7 Coal Mining Risk Assessment 26
7.1 General 26
7.2 Review of Desk Based Information 26
7.3 Risk Summary 29
7.4 Unrecorded shallow coal mining 29
7.5 Intrusive Investigations 30
7.6 Analysis and Conclusions 30
7.7 Mine Gas Emissions 31

8 Geotechnical Discussion 32
8.1 Scheme Overview 32
8.2 Geotechnical Category 32
8.3 Key Geotechnical Issues 32
8.4 Low Strength and Made Ground 32
8.5 Groundwater 33
8.6 Mining Legacy 33
8.7 Trees and Vegetation 33
8.8 Building Foundation Strategy 33
8.9 Geotechnical Parameters 33
8.10 Spread Foundations 34
8.11 Pile Resistance 35
8.12 Ground Improvement 37
8.13 Residential Ground Floor Construction 38
8.14 Aggressiveness of the Ground to Buried Concrete 38
8.15 Drainage 39
8.16 Suitability For Material Re-use 39
8.17 Constructability 39

9 Tier 2 Generic Quantitative Risk Assessment 41
9.1 Objectives 41
9.2 Fieldwork Observations 41
9.3 Laboratory Testing Rationale 41
9.4 Generic Assessment Criteria 41
9.5 Human Health GQRA (soils and vapour) 42
9.6 Proposed Site Users Risk Assessment (soils and vapour) 42
9.7 Construction Workers Risk Assessment 43
9.8 Adjacent Site Users Risk Assessment 43
9.9 Controlled Waters Risk Assessment 43
9.10 Ground Gas Monitoring Rationale 43
9.11 Ground Gas Monitoring Results 43
9.12 Updated Ground Gas Risk Assessment 44
9.13 Risks to Soft Landscaping Vegetation 44

9.14 Water Supply Pipes 44
9.15 Updated Conceptual Site Model (uCSM) 45
9.16 Risk Assessment Conclusions 48
9.17 Ground Gas Protection Measures 48
9.18 Unexpected and Previously Unencountered Contamination 48

10 Soil and Waste Management 49

10.1 Sustainability 49
10.2 Waste Hierarchy 49
10.3 Liability of Waste Management 49
10.4 Materials Management 49
10.5 Waste Characterisation Governance 50
10.6 Waste Populations 50
10.7 Sampling and Testing 50
10.8 Waste Characterisation 50
10.9 Application of Advice 51
10.10 Minimising Hazardous Waste 51
10.11 Further Recommendations 51

11 Recommendations for further works 52

Appendix A Drawings

Appendix B Exploratory Hole Logs: Boreholes

Appendix C Photographic Records

Appendix D In Situ Test Results

Appendix E In situ Permeability Testing Results

Appendix F Geotechnical Laboratory Test Results

Appendix G Post Fieldwork Monitoring

Appendix H Geoenvironmental Laboratory Test Results

Appendix I Contamination Assessment Screening

Appendix J Waste Characterisation Analysis

Appendix K Consultants Coal Mining Report

Appendix L Utility Service Plans

Appendix M Envirocheck Report

Drawing Register

Title	Produced by	Date	Reference
Exploratory Hole Location Plan	Soiltechnics Ltd	July 2024	STW6573-D01-A
Location Plan	Triangle Architects	August 2023	23-031-SK01-P01
Proposed Site Plan	Triangle Architects	November 2023	23-031-21-P03
Proposed Block Plan	Triangle Architects	November 2023	23-031-11-P05
Proposed Block Elevations	Triangle Architects	November 2023	23-031-21-P05

List of Tables

Table 1-A:	Definition of Investigation Scope	2
Table 2-A:	Site Description	4
Table 2-B:	Summary of site history	5
Table 2-C:	Summary of anticipated geology at the site	6
Table 2-D:	Preliminary Hydrogeological Model	6
Table 2-E:	Non-Mining Ground Stability Hazards	7
Table 3-A:	Contamination source assessment	10
Table 3-B:	Receptor assessment	11
Table 3-C:	Generic pathway assessment	11
Table 3-D:	Generic pathway assessment	12
Table 3-E:	iCSM Risk Ratings	12
Table 3-F:	iCSM – Proposed End Users	13
Table 3-G:	iCSM – Acute Exposure to Construction Workers	13
Table 3-H:	iCSM – Chronic Exposure to Adjacent Site Users	14
Table 3-I:	iCSM – Acute Exposure to Adjacent Site Users	14
Table 3-J:	iCSM – Phytotoxic Risk to Proposed Planting Scheme	14
Table 3-K:	iCSM – Controlled Waters Risk	15
Table 3-L:	iCSM – Current Site Risks (Part IIA)	16
Table 3-M:	Receptors at Risk Under the Proposed Scheme	17
Table 4-A:	Summary of fieldwork undertaken	18
Table 4-B:	Summary of field testing undertaken	19
Table 4-C:	Summary of monitoring installations	19
Table 4-D:	Summary of post fieldwork spot monitoring	20
Table 5-A:	Summary of geotechnical laboratory testing	21
Table 5-B:	Summary of chemical laboratory testing	21
Table 6-A:	Ground Model	22
Table 6-B:	Summary of groundwater observations during the fieldworks	24
Table 6-C:	Summary of groundwater monitoring visits	25
Table 7-A:	Summary of risk assessment in relation to coal mining legacy	29
Table 7-B:	Coal mining investigation findings	30
Table 8-A:	Summary of characteristic geotechnical parameters – Glaciofluvial Deposits (cohesive)	34
Table 8-C:	Summary of characteristic geotechnical parameters – Pennine Lower Coal Measures Formation	34
Table 8-D:	Summary of foundation ultimate limit state analyses (spread foundations)	35
Table 8-E:	Key geotechnical variables used in settlement analyses	35
Table 8-F:	SLS bearing resistance to ensure total settlement to <25mm	35
Table 8-G:	Variables used for determining pile resistance - cohesive strata	36
Table 8-H:	Summary of common ground improvement techniques	38
Table 8-I:	Summary of the aggressiveness of the ground to buried concrete	38
Table 8-J:	Summary of in situ permeability test results in accordance with BS EN ISO 22282	39
Table 9-A:	Human health GQRA models and outcomes	42
Table 9-B:	Human health GQRA exceedances	42
Table 9-C:	CSM Risk Ratings	45
Table 9-D:	uCSM – Proposed End Users	46
Table 9-E:	uCSM – Acute Exposure to Construction Workers	46
Table 9-F:	uCSM – Chronic Exposure to Adjacent Site Users	47
Table 9-G:	uCSM – Controlled Waters Risk	47
Table 8-O:	Ground gas protection measures requirement	48
Table 10-A:	Waste management hierarchy	49
Table 10-B:	Waste characterisation summary	50

Table 11-A: Recommended further works (pre-commencement) 52
Table 11-B: Recommended further works (enabling works & construction phase) 52

List of Figures

Figure 2-A: Aerial photograph and approximate site boundary (redline) 3
Figure 6-A: A photograph of the Made Ground from WS01 from 0.30m – 0.80m depth 23
Figure 6-B: A photograph of the Glaciofluvial Deposits from WS03 from 2.0m – 5.0m depth 23
Figure 6-C: A photograph of the Peat observed from WS01 from 1.0m – 2.0m depth 24
Figure 6-D: A photograph of the Pennine Lower Coal Measures Formation in RBH101 from 7.5m – 10.0m depth 24
Figure 7-A: Coal Authority mapping showing site boundary (red) coal seams (purple) and development high risk areas (black hatching) 27
Figure 7-B: BGS 1:10000 map extract (site boundary in red) 28
Figure 8-A: Pile resistance versus depth (Combination 1) 37
Figure 8-B: Pile resistance versus depth (Combination 2) 37

Non-technical Summary

Topic	Commentary
Site description	The site currently comprises an undeveloped grassed area with a hardstanding track along the western boundary.
Development proposals	It is understood that the proposed schedule of accommodation is 12No. units with 1No. unit for ancillary space for worker accommodation.
Ground conditions	Topsoil over Made Ground was encountered up to 1.3m bgl depth. Superficial Glaciofluvial Deposits were recorded underlying Made Ground to a depth of 7.0m to 8.0m bgl, comprising soft to stiff clay/silt and occasional sand bands. Peat was encountered in the north of the area only, thickest close to the northern boundary. Beneath the Glaciofluvial Deposits bedrock mudstone of the Pennine Lower Coal Measures Formation was recorded to depths >30m bgl.
Mining Risk	Assessments indicated the presence of an unnamed, 0.1m thick coal seam outcrops beneath the north of the site. The Arley Coal seam also subcrops some 190m northeast of the site. Seams are anticipated to dip southwest, thus, both seams are likely to dip below the site. No recorded workings are noted however probable unrecorded workings associated with the unnamed coal seam and Arley Coal seam are indicated. There are no mine entries or opencast mines recorded on or near the site. Rotary borehole investigations confirmed that coal was not present beneath the site to a maximum depth of 30m bgl, with the Arley Coal seam potentially located at depths of 8.5-11.2m bgl associated with an organic mudstone. No evidence of infill material, voiding or loss of support to the drilling equipment, which could otherwise provide an indication of possible workings, was observed. Mitigation works to be necessary and the risk of coal mining related land instability affecting the development is considered to be low,
Foundation and slab solution	Boreholes in the south of the site indicated the presence of competent cohesive strata at shallow depth and therefore shallow spread foundations should be feasible within this area, extending as necessary through any Made Ground. In the central and north of the site, Peat and very soft to soft cohesive natural deposits were encountered to depths between 2.0m and >5.45m, the latter in the northernmost of the site. Should soils are considered unsuitable for supporting concentrated foundation loads of traditional shallow foundations, as such a piled foundation solution is recommended. Alternatively, ground improvement may be an option, subject to specialist advice. Further details are provided within Section 8. Given the nature of the development i.e. terraced block of dwellings, use of differing foundation solutions across the structure is unlikely to be viable. Differing levels of total settlement is likely to occur in such instances between foundations, which could lead to excessive levels of different settlement. If the block is appropriately divided between the southern part of the site, and the central and northern part of the site, differing foundation solutions could be adopted in such instances. In view of the variable thickness of Made Ground across the site, and the nature of the development, it is likely that a suspended ground floor will be required. A concrete classification of DS-1 AC-1s is recommended beneath the site.
Drainage potential	Preliminary infiltration testing was undertaken in the centre of the site and indicated strata of very low permeability (minimum 2.03 to 4.87 x 10^{-7} m/s). Shallow soakaways are highly unlikely to be feasible for the site.
Chemical contamination and remedial requirements	Potential risks from contamination have not been identified which would require further investigation to progress the development through planning on the basis that the site is to be entirely covered in buildings and hardstanding. Should development proposals change the GQRA will need to be updated accordingly.
Waste Classification	Preliminary Waste Acceptance Criteria testing indicates the Made Ground on site is hazardous (by virtue of heavy metals such as lead) and will be suitable for disposal in a stable non-reactive cell within a hazardous waste landfill. Topsoil will be suitable for disposal in an inert landfill site along with clean naturally occurring uncontaminated soils.
Radon, gas risk and protection measures	Six ground gas monitoring rounds have been completed (including 3No. rounds in low atmospheric pressure conditions) with no significantly elevated concentrations of methane or carbon dioxide recorded. A CS-1 scenario has been derived for the site and no ground gas protection measures are considered necessary for the new development.

Topic	Commentary
	The site is in an area where the above ground radon Affected Area status is classed as a Lower Probability Radon Area. No radon protection measures are required in new buildings.
Recommendation for further works	The Principal Contractor should have a discovery strategy in place in the event of exposing unexpected or previously unencountered contamination. The UXO hazard screen identified that bombing may have occurred in the vicinity of the site, therefore a Preliminary Risk Assessment should be undertaken in accordance with CIRIA C785. As the waste classifications provided are preliminary only and based on limited sampling of soils in-situ, it is recommended to undertake additional sampling and testing during the construction works to fully characterise the waste soils intended for disposal.

1 Introduction

1.1 Scheme Outline

1.1.1 It is understood that the proposed schedule of accommodation is 12No. units with 1No. unit for ancillary space for worker accommodation. Development proposals are presented in Appendix A.

1.1.2 The report is based on the project proposals and information outlined above; should the scheme change then it will be necessary to review the conclusions and recommendations presented in this report.

1.2 Brief

1.2.1 This report has been prepared following instructions received from our client R & M Property Group Ltd. The overall brief of works is to:

i) Undertake a ground investigation at the site to establish the prevailing ground conditions and identify potential abnormal development constraints.
ii) Support the planning application by assessing the potential risks from contamination and land instability at the site.
iii) Determine geotechnical parameters and provide a geotechnical appraisal for the scheme.

1.2.2 The objectives of this report are outlined below:

iv) Summarise the intrusive investigation works undertaken and associated laboratory testing.
v) Present a ground model summarising the ground and groundwater conditions at the site including relevant geotechnical parameters.
vi) Provide a geotechnical appraisal for the project and highlight key geotechnical issues that may impact upon the proposed scheme.
vii) Undertake a land contamination Tier 2 generic quantitative risk assessment.
viii) Undertake an intrusive land stability assessment in relation to coal mining legacy.
ix) Provide recommendations to inform an Options Appraisal and Remediation Strategy, should they be required.
x) Provide a waste characterisation assessment of soils at the site for potential disposal to landfill.

1.2.3 Soiltechnics have previously completed a Tier 1 Preliminary Risk Assessment and Coal Mining Risk Assessment (ref STV6299-R01_RevB) dated December 2023. We have replicated such information for completeness within Sections 2, 3 and 7 of this report.

1.3 Definition of Scope

1.3.1 The phasing and scope of the ground investigation works is broadly defined by the following documents.

Title	Document Reference	Publisher	Investigation Scope
Code of practice for ground investigations	BS 5930:2015	British Standards Institution	Phase 1: Desk study Phase 2: Preliminary investigation

Title	Document Reference	Publisher	Investigation Scope
Eurocode 7 — Geotechnical design Part 2: Ground investigation and Testing	BS EN 1997-2:2007	British Standards Institution	Preliminary Investigation
Investigation of potentially contaminated sites – Code of practice	BS 10175: 2011+A2: 2017	British Standards Institution	Preliminary Investigation (desk study) Exploratory Investigation
Land contamination risk management	Online resource, updated April 2021	Environment Agency	Stage 1 Risk Assessment: Tier 1: Preliminary risk assessment Tier 2: Generic quantitative risk assessment
https://www.gov.uk/guidance/planning-applications-coal-mining-risk-assessments	-	The Coal Authority	Intrusive coal mining risk assessment
Abandoned mine workings manual	C758 2019	CIRIA	

Table 1-A: Definition of Investigation Scope

1.4 Limitations

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

2 Desk Study

2.1 Sources of information

2.1.1 Reference has been made to the following sources of information:

- An Envirocheck Report and historical map records, presented as Appendix M.
- British Geological Survey (BGS) GeoIndex – Onshore database.
- BGS Sheet 085 (Scale 1:50 000) – Manchester (2010).
- Ordnance Survey OpenData.
- Coal Authority Development and Specific Risk databases.
- Environment Agency open-source databases.
- Google mapping services.
- Interrogation of search engines for anecdotal information on the site history and other readily available online resources.

2.2 Site Description

2.2.1 The proposed development lies within Heywood, approximately 400m southeast of the town centre. The post code for the site is OL10 1BH, and the site is accessed from Hornby Street which lies adjacent to the site's eastern boundary.

2.2.2 An aerial image showing the approximate site boundary is presented below, followed by a table summarising the key site features. A Site Plan is provided within Appendix A.



Figure 2-A: Aerial photograph and approximate site boundary (redline)

Theme	Feature
Current site use	The site is currently an undeveloped grassed area with a hardstanding track along the western boundary, which provides access to the rear of residential properties off Stanley Street. A concrete panel fence aligns the western edge of the grassed area.
Local area land use	The surrounding area is dominantly residential in nature. Heywood Park Primary School is located beyond Hornby Street to the northeast of the site.
Topography	The topography of the surrounding area is generally flat. On site, levels are relatively flat with the exception of the westernmost area of grass which fall gently west down towards the hardstanding track by ~0.5m.
Buildings, surfacing and other permanent features	80% of the site comprises grassed landscaping. A hardstanding track runs along the western boundary of the site. No structures observed.
Boundary features	The site boundaries are defined by fencing (wooden to the north and concrete panels to the south). The western boundary is defined by the rear of the dwellings locate doff Staley Street. The eastern boundary of the site is defined by the public footpath of Hornby Street.
Vegetation	No significant vegetation is present within the site boundary.
On-site / adjacent surface water features	None observed.
Environmental Designations	The site is not reported to be within or in close proximity to any areas of designated sensitive land use, such as a Ramsar Site, Site of Special Scientific Interest (SSSI), or Special Area of Conservation.
Injurious and invasive weeds	None observed.
Asbestos containing material (ACM) in buildings	Not applicable – no structures present on site.
ACMs on site	No suspected ACMs were observed in any surface debris.
Potential sources of contamination	None observed.
Evidence for ground instability	None observed.

Table 2-A: Site Description

2.2.3 The observations provided above are made by a Geoenvironmental Engineer, who is not a specialist in asbestos surveying or invasive weed identification. Any associated comments are intended for use by this report only, and not for any other purpose. A series of photographic records of the site are presented in Appendix C.

2.3 Planning Records

2.3.1 Planning records held for adjacent properties indicates that a Coal Mining Risk Assessment (CMRA) was required for an extension of Heywood Park Primary School adjacent. The CMRA recommended undertaking rotary boreholes to assess the status of the Arley Coal seam underlying the school.

2.4 Previous Reports

2.4.1 Soiltechnics are not aware of any previous ground investigation reports undertaken at the site.

2.5 Site History

2.5.1 The site itself has remained undeveloped throughout history. The immediate surrounding area has been largely residential with the exception of reservoirs immediately north of the site associated with Stanley Mill 80m north of the site. The reservoirs were infilled in 1969 and the mill disused around the same time.

2.5.2 A chronological summary of the site's history is provided below.

Date	On-site	Off-site
Mid 1800s	The site was occupied by agricultural fields.	Surrounding area was dominantly agricultural. There are a number of cotton mills and multiple reservoirs 100-150m northeast, east and southeast including Bowling Green Mill (NE), Gordon Mill (E) and Scholfield Street Mill (SE).
Late-1800s – Early 1900s	The site remains undeveloped, but is no longer part of wider agricultural field.	Four reservoirs are located immediately north of the site. A gravel pit is located 225m northwest. Stanley Mill (Cotton) is located 80m north. Scholfield Mill is labelled as a Cotton Waste Mill by 1893. Corporation Yard 150-250m west. Woolpack Brewery located 100m southeast in the late 1800s is shown as disused by 1937.
Mid 1900s	No significant changes.	By 1956 most of the off-site reservoirs have been backfilled, with the exception of the reservoirs immediately north of the site. Bowling Green Mill has been replaced by a rope works and Burns Mill (Disinfectants) is shown 200m east. Two garages are located 200m northeast and north. Reservoirs immediately north shown as infilled in 1969 and Stanley Mill shown as disused.
Late 1900s – present day	No significant changes.	Houses have been constructed over the infilled reservoirs immediately north by 1990. Cotton Waste Mill to the southeast has been converted into a care home. All former mills to the NE, E and SE are shown as unspecified works. Former Stanley Mill demolished and replaced by houses. Corporation Yard to the west no longer shown.

Table 2-B: Summary of site history

2.6 Regulatory Enquiries

2.6.1 Soiltechnics have commissioned the Local Authority Environmental Health department to conduct a search of their records for any pertinent information they may hold for the site and surrounding area. No response was received.

2.6.2 The Building Control department indicated they held no relevant information for the site.

2.7 Anticipated Geology

2.7.1 Based on a review of available records, the site is anticipated to be underlain by the following geological units, in order of sequence, superficial Glaciofluvial Deposits, superficial Devensian Till and bedrock of the Pennine Lower Coal Measures Formation.

2.7.2 An unnamed coal seam is recorded outcropping beneath the north of the site trending NW-SE.

2.7.3 Although no development has occurred on the site itself, the site has been open and unused throughout history and may have been an attractive area for the deposition of waste material from historical construction and demolition phases form surrounding industry/residential development.

2.7.4 A summary of the anticipated geology underlying the site is summarised as follows:

Stratum	Bedrock / superficial	Anticipated thickness (m)	Typical description
Glaciofluvial Deposits	Superficial	1-3	Clay, sand and gravel
Devensian Till		6	Gravelly clay
Pennine Lower Coal Measures Formation	Bedrock	Up to 700	Mudstone, siltstone, sandstone and coal

Table 2-C: Summary of anticipated geology at the site

2.8 Hydrogeology and Groundwater Sensitivity

2.8.1 The general hydrogeological profile of the site is provided in the table above.

Stratum	Aquifer Designation	Stratum Thickness (m)	Groundwater commentary
Glaciofluvial Deposits	Secondary A	1-3	Local borehole records suggest groundwater is standing at approximately 4m below ground level
Devensian Till	Secondary Undifferentiated	6	
Pennine Lower Coal Measures	Secondary A	Up to 700	Assumed to be water bearing at depth/in fractures

Table 2-D: Preliminary Hydrogeological Model

2.8.2 Published borehole records in the surrounding area encountered groundwater within the base of the Glaciofluvial Deposits at depths of around 4m bgl.

2.8.3 The site is not located within a Source Protection Zone.

2.8.4 The nearest groundwater abstraction point is some 505m east of the site for use as process water for a tannery.

2.9 Hydrology and Surface Water Sensitivity

2.9.1 The nearest surface water feature is Millers Brook, located 461m northeast of the site.

2.9.2 The nearest surface water abstraction point lies 538m northeast of the site, taken from Millers Brook for boiler feed.

2.10 Flood Risk

2.10.1 The site falls within a Flood Zone 1 area. This designation indicates there is less than a 0.1% chance of flooding from rivers or the sea in any year.

2.10.2 The site is not recorded in an area with the potential for surface water flooding.

2.10.3 The site falls within an area with the potential for groundwater flooding within property below ground level.

2.10.4 It should be noted that this information does not constitute a site-specific Flood Risk Assessment and one may be required for the scheme.

2.11 Non-Mining Ground Instability Hazard

2.11.1 The Envirocheck Report includes hazard ratings due to natural ground instability, which have been derived by the BGS. These hazards have been summarised in the table below.

Hazard	Hazard Potential	Discussions
Collapsible ground	Very Low	N/A
Compressible ground	No hazard	N/A
Ground dissolution	No hazard	N/A
Landslide	Very Low	N/A
Running sand	Very Low	N/A
Shrinking or swelling clay	No hazard	N/A

Table 2-E: Non-Mining Ground Stability Hazards

2.12 Quarrying and Mining

2.12.1 The site is located within a coal mining Development High Risk Area. On this basis a Consultants Coal Mining Report has been obtained from the Coal Authority and a copy is presented as Appendix J. A Coal Mining Risk Assessment is presented in Section 7.

2.12.2 Historically a gravel pit was recorded some 225m northwest of the site. The closest BGS recorded mineral site is located 201m southwest, exploited for the gravels of the Glaciofluvial Deposits in the area. No active mineral sites are present within 1km of the site.

2.13 Landfill and infilled ground

2.13.1 No records of landfills are held within 250m of the site. There are 8 records of infilled ground within 250m of the site, the nearest of which are 27m north and 58m northwest (former reservoirs).

2.14 Recent industrial activity

2.14.1 There are no regulated facilities or activities in the vicinity of the site under IPPC or LAPPC control, and no registered radioactive substances within 250m of the site.

2.14.2 There are no Contemporary Trade Directory entries associated with site itself, and 17 are held within 250m with the closest being an electrical service shop 101m south. Other entries of note include a damp & dry rot control business 121m northeast, a boat repairer 148m northwest, 3No. garages/car dealers 211m northeast and a latex factory 243m east.

2.14.3 There are no records held of discharge consents within 250m of the site. There is 1No. pollution incident recorded within 250m of the site relating to a chemical spill on dated 1996, located 101m northwest. The incident was categorised as a Category 3 – minor incident.

2.15 Radon

2.15.1 The site is in an area where the above ground radon Affected Area status is classed as a Lower Probability Radon Area. No radon protection measures are required in new buildings.

2.16 Underground Infrastructure

2.16.1 Copies of all utility plans obtained are presented as Appendix L. The plans are provided for information only and should not be relied upon to be accurate. In addition, it is worth noting that the public utility plans provided by the asset owners typically exclude private service runs.

2.16.2 The plans do not show any mains services to cross the site.

2.17 Unexploded Ordnance (UXO) Hazard Screen

2.17.1 A preliminary risk review has been undertaken by a UXO specialist to assess the risk of encountering UXO during future ground investigation works undertaken by Soiltechnics only and to identify any precautionary measures required. It should be noted that the risk assessment has not been carried out fully in accordance with CIRIA report C785 'Unexploded Ordnance (UXO) A guide for the construction Industry'.

2.17.2 The risk review concluded that there was not a credible risk of encountering UXO intrusive ground investigation. It should be noted that this preliminary risk review does not consider risks to the construction phase.

3 Tier 1 Preliminary Contamination Risk Assessment

3.1 Objectives

3.1.1 The objective of this preliminary risk assessment (PRA) is to determine the suitability of the site for the proposed redevelopment and end users, in terms of the risk from contamination. The assessment comprises the following steps:

- Identify potential contaminant linkages (PCLs) between sources, pathways and receptors.
- To provide data to assist in the design of potential exploratory and detailed intrusive investigations and to give an early indication of possible remedial requirements, if necessary.

3.2 Evaluation Criteria

3.2.1 The following assessment is undertaken within the legislative framework of the planning system. Therefore, the assessment needs to identify if land contamination could pose an unacceptable risk to human health or the environment, within the context of the proposed development site. In the context of the existing site use, as a minimum, land should not be capable of being determined as 'contaminated land' under Part IIA of the Environmental Protection Act 1990.

3.2.2 The risk criteria for the proposed development is based on a 'minimal risk' approach, whereas under the existing land use a designation of 'contaminated land' would only apply if there is a significant possibility of significant harm (SPOSH).

3.3 Methodology

3.3.1 The objectives listed above are achieved by utilising the information presented within the desk study to develop an initial conceptual site model (iCSM) and identification of potential unacceptable risks. Depending upon the outcome of the Tier 1 assessment, it may be necessary to undertake a Tier 2 generic quantitative risk assessment (GQRA).

3.3.2 An iCSM relies upon the identification and assessment of PCLs. A contaminant linkage comprises of three key components:

- Source – a contaminant or pollutant that is in, on or under the land and that has the potential to cause harm or pollution.
- Pathway – Current and post-development routes by which a receptor is, or could be, affected by a contaminant.
- Receptor – Something that could be adversely affected by a contaminant, for example a person (current and proposed end users or neighbours), controlled waters and ecosystems.

3.3.3 The Tier 1 risk assessment has been produced with reference to the following guidance:

- 'Land contamination risk management' (EA, 2021).
- BS 10175:2011+A2:2017 'Investigation of potentially contaminated sites – Code of Practice'.
- CIRIA C552 'Contaminated land risk assessment- a guide to good practice', 2001.
- BS EN ISO 21365:2020 'Soil quality – Conceptual site models for potentially contaminated sites'
- BS 8576:2013 'Guidance on investigations for ground gas – Permanent gases and Volatile Organic Compounds (VOC)'.

3.4 Source Assessment

3.4.1 The table below summarises identified sources based on the findings of the desk study. Where appropriate, further discussion has been provided in the paragraphs which follow.

Potential Sources	Contaminant(s) of concern	Detail	Viable source?
On-site sources			
Made Ground of unknown origin	Metals, polycyclic aromatic hydrocarbons (PAH), asbestos	The site has remained undeveloped in a largely urban area with several large industries in the area. The use of the site to deposit Made Ground in the past cannot be ruled out.	Y
	Permanent ground gases (CH4 and CO2)	Elevated concentrations of ground gas generated from thick Made Ground with high levels of putrescible material. Made Ground if present is unlikely to be significantly thick.	N
Worked Coal Seams	Permanent ground gases (CH_4, CO_2 and CO)	6m thickness of largely cohesive superficial deposits (Devensian Till) are likely to be present and act as a vertical barrier to migration of mine gas.	N
Radon	Radon	The site is recorded as being in a Lower Probability Radon Area.	N
Aggressive ground conditions due to historical industrial activities	Acids	The risk of aggressive ground affecting concrete is to be considered under geotechnical investigations and has been excluded from further consideration.	N
Aggressive ground conditions due to potentially pyritic ground	Pyrite and sulphates		N
Off-site sources			
Historical infilled reservoirs immediately north	Permanent ground gases (CH4 and CO2)	Reservoirs were backfilled in 1969 and infill may contain a significant proportion of putrescible organic material.	Y
Infilled reservoirs over 100m from site	Permanent ground gases (CH4 and CO2)	All other off-site reservoirs were shown as infilled by 1955. Due to distance (>100m) and age of fill, in addition to the presence of cohesive Till in the area restricting migration, the risk of landfill gases affecting the site is considered very low.	N
Off-site historical industry (cotton, rope works, disinfectant works)	Hydrocarbons and VOCs	With the exception of Stanley Mill 80m north all industry was located >100m with migration of a contamination plume on groundwater over such a distance not anticipated.	N
Off-site pollution incident and contemporary trade directories	Hydrocarbons and VOCs	Both pollution incident and contemporary trade directories are small scale and >100m from site.	N

Table 3-A: Contamination source assessment

3.5 Receptor Assessment

3.5.1 The following table summarises the identified receptors based on current site conditions and our understanding of the proposed end use:

Receptor Category	Principal Receptor	Receptor present?	Detail
Human health	Users of the current site	Yes	Currently undeveloped land but accessible to the general public.
	End user of the developed site	Yes	Proposed residential use with private gardens.
	Construction operatives and other site investigators	Yes	Site to be developed.
	Adjacent site users and off-site members of the public	Yes	Public highway and residential properties present adjacent to site.
Controlled waters	Surface waters	No	Nearest surface water feature is located 461m northeast of the site therefore unlikely to be affected.
	Groundwater	Yes	Site over superficial Secondary A Aquifer (Glaciofluvial Deposits) and bedrock Secondary A (Pennine Lower Coal Measures).
Sensitive ecosystems and species	Current site	No	Site is not currently within, or proposed to form, a designated environmentally sensitive area (e.g. SSSI, RAMSAR, AONB, SPA, SAC).
	Developed site	No	
Property	Soft landscaping (current)	Yes	Only grass currently present on site.
	Soft landscaping (proposed)	Yes	Private gardens proposed.
	Building materials	No	Concrete classification to be assessed under the geotechnical investigation.

Table 3-B: Receptor assessment

3.6 Pathway Assessment

3.6.1 The following table summarises the generic human health pathway assessment for the site, assuming a range of contaminant sources within the underlying soils. Source-specific pathways are considered within the iCSM in subsequent report sections.

Human Health Exposure Pathway	Public Open Space	Residential land with gardens (proposed)	Construction operatives	Adjacent Site Users
Ingestion, inhalation and dermal contact with soils and dusts	✓	✓	✓	✓ *(inhalation only)*
Ingestion, inhalation and dermal contact with site derived dusts indoors	×	✓	✓	×
Ingestion of home-grown vegetables	×	✓	×	×
Inhalation of vapours in outside spaces	✓	✓	✓	✓
Intrusion and inhalation of vapours indoors	×	✓	✓	×
Accumulation and Inhalation of ground gas in enclosed structures	×	✓	✓	×
Permeation into below-ground drinking water pipes	✓	✓	×	×

Table 3-C: Generic pathway assessment

3.6.2 The following table summarises generic pathways for the site which could be viable for the identified controlled water receptors, given our understanding of the hydrogeological model and assuming a range of contaminants in the sub-surface.

Controlled Water Exposure Pathways	Current Setting	Proposed Setting	Mechanism
Site characteristics			
Leaching via infiltration through unsurfaced areas, and surface run-off	✓	✓	Mobilisation
Leaching via infiltration through cracks/joints in hardstanding areas and drainage infrastructure	✓	✓	Mobilisation
Leaching via saturation from groundwater flooding and shallow/perched groundwater bodies	✓	✓	Mobilisation
Infiltration through sustainable drainage systems	×	?	Mobilisation
Preferential lateral pathways (e.g. underground services)	×	✓	Migration
Preferential vertical pathways (e.g. piling, vibro-stone columns)	×	?	Migration
Hydrogeological characteristics			
Vertical migration through permeable strata into shallow aquifers and perched groundwater bodies	✓	✓	Migration
Vertical migration through permeable strata into sensitive aquifers at depth	×	×	Migration
Lateral migration within shallow and perched groundwater bodies into surface waters	×	×	Migration

Table 3-D: Generic pathway assessment

3.7 Initial Conceptual Site Model (iCSM)

3.7.1 The table below presents our approach to the assessment of risks associated with PCLs. The categories below are based upon the definitions within CIRIA C552 (2001), with the addition of a 'negligible likelihood' scenario, which is to be used where there is no realistic scenario in which harm could occur.

3.7.2 The initial conceptual site model (iCSM) is presented within the following tables overleaf.

		Consequence of harm			
		Severe	**Medium**	**Mild**	**Minor**
Probability of harm	**High likelihood**	**Risk: Very high** (high – severe)	**Risk: High** (high – medium)	**Risk: Moderate** (high – mild)	**Risk: Moderate/Low** (high – minor)
	Likely	**Risk: High** (likely – severe)	**Risk: Moderate** (likely – medium)	**Risk: Moderate/Low** (likely – mild)	**Risk: Low** (likely - minor)
	Low Likelihood	**Risk: Moderate** (low – severe)	**Risk: Moderate/Low** (low – medium)	**Risk: Low** (low – mild)	**Risk: Very low** (low – minor)
	Unlikely	**Risk: Moderate/Low** (unlikely – severe)	**Risk: Low** (unlikely – medium)	**Risk: Very low** (unlikely – mild)	**Risk: Very low** (unlikely – minor)
	Negligible Likelihood	**Risk: Low** (negligible– severe)	**Risk: Very Low** (negligible– medium)	**Risk: Very Low** (negligible– mild)	**Risk: Negligible** (negligible– minor)

Table 3-E: iCSM Risk Ratings

RECEPTOR: PROPOSED END USERS				
Potential Source	Contaminants of Concern	Pathway	Tier 1 Risk Assessment (probability of harm x consequence)	Discussion
Made Ground of unknown origin, including contamination from adjacent historical industrial/ commercial activities	Metals, PAHs, TPH, phenol	Ingestion, inhalation and contact with soils, dusts and vapours	**Risk: Moderate/Low** (low – medium)	Elevated levels of inorganic and organic contaminants could be present in any deposits Made Ground from nearby industrial sites, however significant quantities of Made Ground not anticipated.
Asbestos fibres and ACMs contained within Made Ground	Asbestos	Inhalation of dusts	**Risk: Moderate/Low** (low – medium)	Asbestos could be present in uncontrolled demolition material within the Made Ground deposited on site from nearby industry.
Off-site: Backfilled reservoirs immediately north	Permanent Ground Gases (CH_4 & CO_2)	Lateral migration through the sub-surface into enclosed spaces	**Risk: Moderate** (low – severe)	The historical reservoirs may have been infilled with organic rich materials. Infilling occurred over 50 years ago and therefore generation of large volumes of landfill is not anticipated. However due to proximity of the infilled ground to the site the migration of lower, but still potentially hazardous, volumes of ground gas cannot be discounted.

Table 3-F: iCSM – Proposed End Users

RECEPTOR: CONSTRUCTION WORKERS				
Potential Source	Contaminants of Concern	Pathway	Tier 1 Risk Assessment (probability of harm x consequence)	Discussion
Made Ground	Asbestos fibres and ACMs	Inhalation of dusts	**Risk: Moderate/Low** (low – medium)	If present, asbestos in soils can present an acute risk to construction workers, particularly during the enabling works phases. Very low and trace concentrations often pose a low risk if appropriate controls are put in place.
All other contamination sources, excluding asbestos	Metals, PAHs, TPHs	Ingestion, inhalation and contact with soils, dusts and vapours	**Risk: Low** (low – mild)	No gross contamination of high-risk contaminants anticipated (e.g. cyanide, benzene, and vinyl chloride). Standard PPE and hygiene protocols for working on brownfield sites are likely to be sufficient to the mitigate risk.
Unexploded Ordnance	UXO	Direct contact / explosion	**Risk: Moderate/Low** (unlikely – severe)	The Preliminary Risk Assessment indicates a low risk of encountering UXO during ground investigation works; however, the review does not specifically cover the construction phase and development of the site. A project specific risk assessment should be undertaken, to be completed by a specialist.

Table 3-G: iCSM – Acute Exposure to Construction Workers

RECEPTOR: ADJACENT SITE USERS FOLLOWING COMPLETION				
Potential Source	Contaminants of Concern	Pathway	Tier 1 Risk Assessment (probability of harm x consequence)	Discussion
All identified potential contaminant sources	Metals, PAHs, TPH, (S)VOCs, Asbestos	Ingestion, inhalation and contact with soils, dusts and vapours	**Risk: Low** (unlikely – medium)	Based on the exposure pathways that would be present from the developed site, and on the anticipated levels of contamination, it is considered unlikely that a pollutant linkage could pose an unacceptable risk to off-site receptors.

Table 3-H: iCSM – Chronic Exposure to Adjacent Site Users

RECEPTOR: ADJACENT SITE USERS DURING THE CONSTRUCTION PHASE				
Potential Source	Contaminants of Concern	Pathway	Tier 1 Risk Assessment (probability of harm x consequence)	Discussion
Asbestos fibres and ACMs within the Made Ground	Asbestos	Inhalation of dusts	**Risk: Moderate/Low** (low – medium)	Potential risk associated with generation of air-borne asbestos fibres and dust during construction main earthworks phase. Whilst there is a low likelihood of harm occurring due to the effect of fresh-air dilution, the risk cannot be discounted at this stage.
All other potential contaminant sources	Metals, PAHs, TPH	Ingestion, inhalation and contact with soils, dusts and vapours	**Risk: Low** (unlikely – medium))	Unlikely to pose a viable risk to off-site receptors.

Table 3-I: iCSM – Acute Exposure to Adjacent Site Users

RECEPTOR: PROPOSED PLANTING				
Potential Source	Contaminants of Concern	Pathway	Tier 1 Risk Assessment (probability of harm x consequence)	Discussion
Contaminants within topsoil and the shallow sub-surface	Metals, pH and inorganics	Direct contact and root uptake	**Risk: Very low** (low – minor)	Topsoil and shallow soils may have been impacted by the deposition of lead and other contaminants due to the site's location in an urban environment. Elevated levels of phytotoxic contaminants may be present; however following our site reconnaissance, significant barren areas, signs of poor growth, or evidence of significant vegetative stress was not identified.

Table 3-J: iCSM – Phytotoxic Risk to Proposed Planting Scheme

RECEPTOR: CONTROLLED WATERS				
Potential Source	Contaminants of Concern	Pathway	Tier 1 Risk Assessment (probability of harm x consequence)	Discussion
All potential contaminant sources identified	Various	Leaching and vertical migration (Groundwater)	**Risk: Low** (unlikely – medium)	Significant quantities of Made Ground are not anticipated and the site has never been developed. Thus, generation of large volumes of hazardous leachates is considered to be low. In addition, largely cohesive glacial soils in the area will restrict vertical migration into shallow groundwater some 4m below surface.

Table 3-K: iCSM – Controlled Waters Risk

3.7.3 The risk to identified receptors from the proposed developments under the planning regime are assessed under a 'minimal risk' approach. Whereas, the risk to receptors under the current and continued use of the site is dealt with under the regulatory framework of the Part IIA regime, where Soiltechnics consider if there is a reasonable chance of a 'significant potential of significant harm' (SPOSH) occurring. This is not equivalent to a due diligence assessment for the continued use of the site to aid in determining potential contaminated land liabilities or land valuations.

3.7.4 The following table sets out the risk to current users considering a SPOSH approach:

Receptor	Potential Source	Contaminants of Concern	Pathway	Preliminary Assessment: Is their reasonable evidence of SPOSH?	Discussion
Human Health (Current and adjacent site users)	All potential contaminant sources identified above	Various Contaminants	Inhalation, ingestion and contact with soils, dusts and vapours.	**No**	Whilst potential contamination sources have been identified, Soiltechnics have not encountered any evidence which indicates there could be a significant possibility of significant harm to human health occurring from contamination on site.
Controlled Waters (Surface water and groundwater)	All potential contaminant sources identified above	Various Contaminants	Mobilisation and migration	**No**	Whilst potential contamination sources have been identified, Soiltechnics have not encountered any evidence which indicates there could be a significant possibility of significant harm to controlled waters occurring from contamination on site.
Ecosystems	All potential contaminant sources identified above	Various Contaminants	Direct contact and root uptake	**No**	The site does not fall within a relevant designation for environmentally sensitive land (e.g. SSSI, NRA, Ramsar). The site falls within a SSSI area; however, s precursory review of aerial and street view imagery does not show any significant barren areas, signs of poor growth, or significant vegetative stress.

Receptor	Potential Source	Contaminants of Concern	Pathway	Preliminary Assessment: Is their reasonable evidence of SPOSH?	Discussion
Property	All potential contaminant sources identified above	Various Contaminants	Various pathways	**No**	Through undertaking the desk study, no evidence of potentially significant harm occurring to property has been identified.

Table 3-L: iCSM – Current Site Risks (Part IIA)

3.8 Preliminary Risk Assessment Conclusions and Recommendations

3.8.1 In summary, the PRA has not highlighted any potential contaminant linkages (PCL) which could pose a significant possibility of significant harm under the current land use. In terms of the proposed development scheme, a minimal risk approach applies, and PCLs have been identified which require further consideration.

3.8.2 In particular, the industrial heritage of the area and potential for Made Ground deposits could give rise to a wide range of contaminants. Further intrusive investigation works are recommended to further refine the assessment and to determine if any remedial measures are necessary.

3.8.3 The site is at a moderate risk from ground gas migration associated with an off-site area of infilled ground immediately north. It is recommended that ground gas monitoring is undertaken as part of future investigation works.

3.8.4 Overall, each PCL identified as posing a risk of 'Moderate/Low' or higher should be considered as part of an intrusive Tier 2 generic quantitative risk assessment (GQRA). The following table summarises the principal receptors at risk which require further investigation to support the proposed development.

Receptor Category	Principal Receptor	PCL Present Requiring Further Investigation?
Human health	Current site users	No
	Proposed site users (soils, dusts, and vapour)	Yes
	Proposed site users (permanent ground gas)	Yes
	Proposed site users (radon)	No
	Adjacent site users and off-site members of the public (during the long-term use of the site)	No
	Adjacent site users and off-site members of the public (during the construction phase)	Yes – Asbestos risk only
	Construction operatives	Yes – Asbestos risk only
Controlled waters	Surface waters	No
	Groundwater	No
Property	Soft landscaping (current)	No
	Soft landscaping (proposed)	No
	Potable infrastructure	Yes
	Building materials	To be considered by the specifier

Table 3-M: Receptors at Risk Under the Proposed Scheme

4 Ground Investigation

4.1 Objectives

4.1.1 The ground investigation scope and location of exploratory holes was determined by Soiltechnics Ltd, based upon our overall brief outlined in Section 1.

4.1.2 The objectives of the fieldwork were to:

i) Establish ground and groundwater conditions at the site.
ii) Obtain samples for subsequent laboratory testing.
iii) Install gas and groundwater monitoring wells and undertake a programme of monitoring visits.

4.2 Fieldwork summary

4.2.1 Fieldwork was initially undertaken on 27th November 2023. A secondary phase of fieldwork was undertaken between 17th July and 19th July 2024.

4.2.2 A summary of the works completed is set out in the table below, along with the location of the exploratory logs. The exploratory hole location plan is presented within Appendix A, and photographic records from rotary cores are presented in Appendix C.

Date	Exploratory Hole Logs	Method	Qty	Final Depth Range (m bgl)	Comments
27th Nov 2023	Appendix B	Dynamic windowless sampling boreholes	4	5.45	WS01, WS03 to WS05 Boreholes terminated at scheduled depth.
			1	4.50	WS02 Borehole terminated due to SPT refusal.
17th - 19th July 2024	Appendix B	Rotary boreholes	1	30.00	RBH101 Borehole terminated at scheduled depth.
			1	10.00	RBH102 Boreholes terminated due to time constraints.

Table 4-A: Summary of fieldwork undertaken

4.2.3 All soils encountered were described in accordance with BS EN ISO 14688 “Identification and Classification of soil”.

4.3 Unexploded Ordnance (UXO)

4.3.1 In the absence of a UXO Risk Assessment in accordance with CIRIA C681, Soiltechnics commissioned a UXO specialist to undertake a preliminary risk review for the purpose of the ground investigation works phase only.

4.3.2 The review concluded that the UXO risk to the ground investigation works is low within the site boundary and therefore no special precautions were required.

4.4 Sampling

4.4.1 During the fieldwork, sampling of soil, rock and groundwater for geotechnical purposes has been undertaken in accordance with BS EN ISO 22475-1 *"Geotechnical Investigation and testing – sampling by drilling and excavation and groundwater measurements".*

4.4.2 Samples collected for chemical analysis have been taken and handled in accordance with BS ISO 18400-105:2017 *"Soil quality — Sampling Part 105: Packaging, transport, storage and preservation of samples".*

4.4.3 Various sampling and sub-sampling methodologies have been adopted as appropriate, with the primary aim of obtaining the highest quality sample class practicable.

4.4.4 Untested chemical and geotechnical samples will be held for a period of 4 weeks from the date of the first report issue, after which they will be disposed of.

4.5 In-situ Testing

4.5.1 The following table summarises the field testing carried out. The results are summarised on individual exploratory hole logs where appropriate and detailed within the Appendices indicated.

Tests	Qty	Applicable standard / guidance	Location of Results
Standard penetration test (SPT)	35	BS EN ISO 22476-3	Included within logs Detailed in Appendix D
Pocket penetrometer	20	Manufacturer's instructions	Included within logs Detailed in Appendix D
Variable head permeability	3	BS EN ISO 22282-2	Appendix E

Table 4-B: Summary of field testing undertaken

4.6 Monitoring Installations

4.6.1 Instrumentation installed within exploratory holes during the fieldwork are shown on the logs within Appendix B and are summarised below:

Installation type	Target Stratum	Qty	Exploratory hole ID
Combined gas and groundwater well	Glaciofluvial Deposits	3	WS01, WS03, WS05

Table 4-C: Summary of monitoring installations

4.7 Monitoring visits and groundwater sampling

4.7.1 A summary of the gas and groundwater spot monitoring visits undertaken is outlined in the table below. Results of the post fieldwork monitoring are presented in Appendix G.

4.7.2 Six ground gas monitoring visits have been undertaken over a period of 12 weeks, as recommended within the preliminary risk assessment. The table below summarises the monitoring visits.

Date	Purpose
08/12/2023	Gas and groundwater spot monitoring
21/12/2023	
08/01/2024	
18/01/2024	

Date	Purpose
01/02/2024	
16/02/2024	

Table 4-D: Summary of post fieldwork spot monitoring

4.8 Investigation Constraints

4.8.1 No significant constraints were encountered which limited the design of the scope of works or the undertaking of fieldworks. Borehole RBH102 was terminated at 10m depth due to time constraints as a result of very slow drilling within BH101.

5 Laboratory testing

5.1 Overview

5.1.1 Samples obtained from exploratory holes were sent to independent accredited laboratories for geotechnical and chemical testing.

5.2 Geotechnical Testing

5.2.1 The geotechnical testing schedule was prepared by Soiltechnics using a targeted and judgemental approach, based upon the scheme proposals and our initial understanding of the ground conditions.

5.2.2 Geotechnical laboratory test results are presented in Appendix F, and the total number of geotechnical tests undertaken is summarised below:

Qty	Test
6	BRE SD1 Suite D
3	Moisture content
3	Atterberg limits
3	Point load index
2	Particle size distribution (coarse)
1	Particle size distribution (fines)

Table 5-A: Summary of geotechnical laboratory testing

5.3 Chemical Testing

5.3.1 The chemical testing schedule was prepared by Soiltechnics using a targeted and judgemental approach, based upon the initial conceptual site model and fieldwork observations. This is further elaborated on within subsequent report sections.

5.3.2 Chemical laboratory test results are presented in Appendix H, and the total number of chemical tests undertaken is summarised below:

Sample Type	Qty	Testing	Suite Name
Soils	5	*Basic Contamination Suite* [metals, cyanides, PAHs, phenol]	ST Suite 1
	3	*Full WAC Suite (2 stage leachate)*	-

Table 5-B: Summary of chemical laboratory testing

6 Ground Investigation Findings

6.1 Ground Model

6.1.1 The tables below present our generalised interpretation of geological and hydrogeological conditions at the site. Unless otherwise stated in subsequent interpretive report sections, this represents the adopted ground model.

6.1.2 Further detail about the ground conditions encountered is provided in the relevant sub-sections below.

Stratum	Brief description	Top depth range (m bgl)	Adopted model top depth (m bgl)	Thickness (m)
Topsoil	Dark brown sandy clay.	G.L	G.L.	0.15 - 0.30
Made Ground (Locally observed)	Grey sandy gravelly clay with ash, glass, plastic and brick. Light brown sandy gravel of quartzite, sandstone and coal.	0.20 - 0.30	0.20	0.60 - 1.00
Glaciofluvial Deposits	Gravelly clay and silt with sand lenses.	0.15 - 1.30	0.40	6.10 - 7.85
	Peat (WS01, WS02 and RBH101).	0.80 – 1.65	0.80	0.35 - 1.90
Pennine Lower Coal Measures Formation	Weak to medium strong dark and light grey mudstone	7.00 – 8.00	8.00	Not proven

Table 6-A: Ground Model

6.2 Topsoil

6.2.1 Topsoil was encountered in all exploratory holes. The base of the unit was typically 0.25m bgl and varied between 0.15m and 0.3m thick. Deposits comprised of dark brown slightly sandy clay.

6.3 Made Ground

6.3.1 Made Ground was recorded in the north of the site to a maximum depth of 0.8m in WS01 and 0.9m in WS02 and RBH101, in addition to the south of the site in WS04 to 1.3m depth. Made Ground was encountered as a dark grey sandy gravelly clay to the north, and light brown sandy gravel to the south. Gravel comprises with bricks, glass, clinker, coal, quartz, wood, ash and plastic.

6.3.2 A photograph of the Made Ground encountered is presented below.



Figure 6-A: A photograph of the Made Ground from WS01 from 0.30m – 0.80m depth

6.4 Glaciofluvial Deposits

6.4.1 Glaciofluvial Deposits were present site wide to a maximum depth of 7.0m bgl in the north and 8.0m bgl in the south.

6.4.2 The Glaciofluvial Deposits were encountered as cohesive and granular deposits, but primarily as a brown sandy silt with occasional bands of gravel and sand, however firm to stiff clays and silty sands where also encountered locally on site.

6.4.3 Peat was recorded in WS01, WS02 and RBH101 in the north of the site between depths of 0.8m to 2.7m bgl, 1.65m to 2.0m bgl and 0.9m to 2.3m bgl, respectively. Very soft to soft clay/silt was encountered underlying Peat in WS01 to the maximum exploratory depth of 5.45m.

6.4.4 A photograph of the Glaciofluvial Deposits and Peat encountered is presented below.



Figure 6-B: A photograph of the Glaciofluvial Deposits from WS03 from 2.0m – 5.0m depth

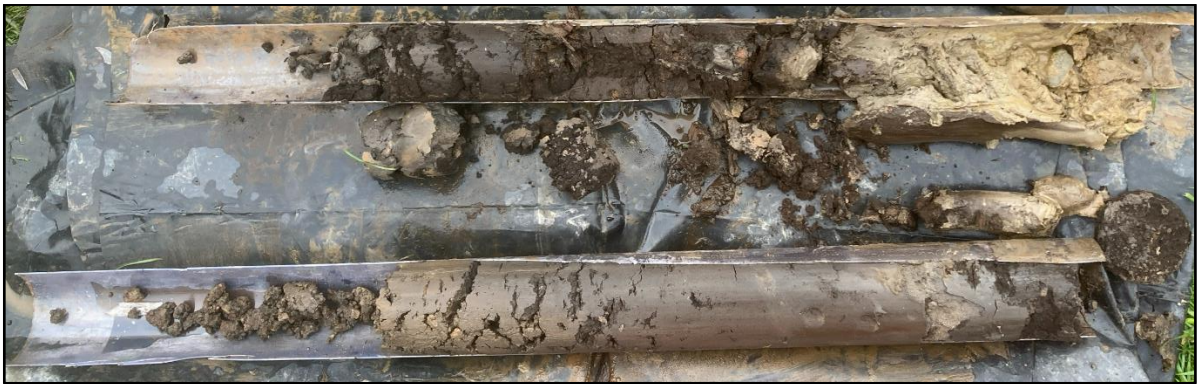


Figure 6-C: A photograph of the Peat observed from WS01 from 1.0m – 2.0m depth

6.5 Pennine Lower Coal Measures Formation

6.5.1 Pennine Lower Coal Measures Formation were encountered in both rotary boreholes RBH101 and RBH102 below the Glaciofluvial Deposits. The base of the unit was not proven with the maximum depth achieved being 30.0m bgl (RBH101).

6.5.2 The Pennine Lower Coal Measures Formation were observed as a weak to medium strong grey and dark grey thinly laminated organic mudstone with very closely spaced discontinuities and a clay infill between a cored depth of 7.0m and 11.2m bgl in RBH101 (north of site).

6.5.3 Beneath a depth of 11.2m in RBH101 the Pennine Lower Coal Measures Formation was drilled through open hole techniques and was observed as a dark grey mudstone. All the bedrock in RBH102 was open hole drilled and exhibited similar characteristics to RBH101. Deposits of coal were not encountered in the deposits, but areas of more organic mudstone were present.

6.5.4 A photograph of the Pennine Lower Coal Measures Formation encountered is presented below.



Figure 6-D: A photograph of the Pennine Lower Coal Measures Formation in RBH101 from 7.5m – 10.0m depth

6.6 Groundwater

6.6.1 A summary of the groundwater level data obtained during the fieldworks phase is presented below.

Exploratory hole ID	Groundwater observation
WS02	Strike at 4.5m depth, rising to 1.4m after 20 minutes.
WS04	Strike at 2.3m depth, rising to 1.9m after 20 minutes.
RBH101	Strike at 4.0m depth, rising to 3.9m after 20 minutes. Recorded at 3.1m on completion of borehole.
RBH102	Strike at 2.8m depth, remaining stable upon completion of borehole.

Table 6-B: Summary of groundwater observations during the fieldworks

6.6.2 A summary of the groundwater level data obtained during the monitoring phase is presented below and is detailed within Appendix G.

Targeted strata / Aquifer	Exploratory hole ID	Instrument Type(s)	Range during monitoring period
			Water depth (m bgl)
Glaciofluvial Deposits/Peat	WS01	Well	0.46 – 2.7
	WS03		0.6 – 2.95
	WS05		2.95 – 4.0. Dry on last 3No. rounds

Table 6-C: Summary of groundwater monitoring visits

6.6.3 A review of the available groundwater level data from the surrounding area (see desk study) generally concurs with the findings above. It is likely that recorded water results are consistent with pockets of perched water, where more granular deposits are present.

6.6.4 Groundwater levels are expected to vary seasonally and in response to recent weather conditions. Long term monitoring will provide a reasonable quantification of such variation.

6.7 Evidence of Possible Contamination

6.7.1 During the ground investigation works, no significant visual or olfactory evidence of contamination was noted, except for the presence of anthropogenic materials contained within the Made Ground (ash, brick, clinker-like material).

6.8 Obstructions and Instability

6.8.1 The progress of the ground investigation works was not generally affected by below ground obstructions or instability, with the exception of a likely cobble in the base of WS02.

7 Coal Mining Risk Assessment

7.1 General

7.1.1 The site lies within a Coal Mining Reporting area and a Development High Risk Area, therefore, a Coal Authority Consultants report has been obtained for the site and is presented in Appendix K.

7.1.2 A Coal Mining Risk Assessment Report is required for developments within a designated 'Coal Mining Development High Risk Area'. 'Coal Mining Development High Risk Areas' are areas, based upon Coal Authority records, where the potential land instability and other safety risks associated with former coal mining activities are likely to be greatest. They include, for example, areas of known or suspected shallow coal mining, recorded mine entries and areas of former surface mining. This assessment is based upon the guidance documents outlined below and comprises a review of available desk-based information.

7.1.3 We have reviewed available information in relation to coal mining to produce a risk assessment, which follows guidance produced by The Coal Authority (https://www.gov.uk/guidance/planning-applications-coal-mining-risk-assessments), in addition to information contained within CIRIA report C758 "Abandoned mine workings manual" (2019).

7.2 Review of Desk Based Information

7.2.1 The following sources of information have been used in production of the assessment and are summarised in the following sections:

- Historical Ordnance Survey Maps
- Consultants Coal Mining Report produced by The Coal Authority
- Geological information obtained from the British Geological Survey
- Coal Authority online database
- Other relevant information

7.2.2 Based on site history presented in Section 2.5, the site has generally been open land since mapping records began.

7.2.3 The Consultants Coal Mining Report states that there is a likelihood of the presence of shallow unrecorded coal mine workings (<30m depth), however, no past underground shallow or deep (>30m) coal mine workings are recorded beneath the site. The site is underlain by a thin unnamed coal seam subcropping beneath the north of the site and trending NW-SE.

7.2.4 There are no mine entries recorded on site or within 100m of the site, no opencast workings 500m of the site or mine gas emissions within 50m of the site. A summary extract from the Coal Authority interactive mapping is also presented Figure 7-A.

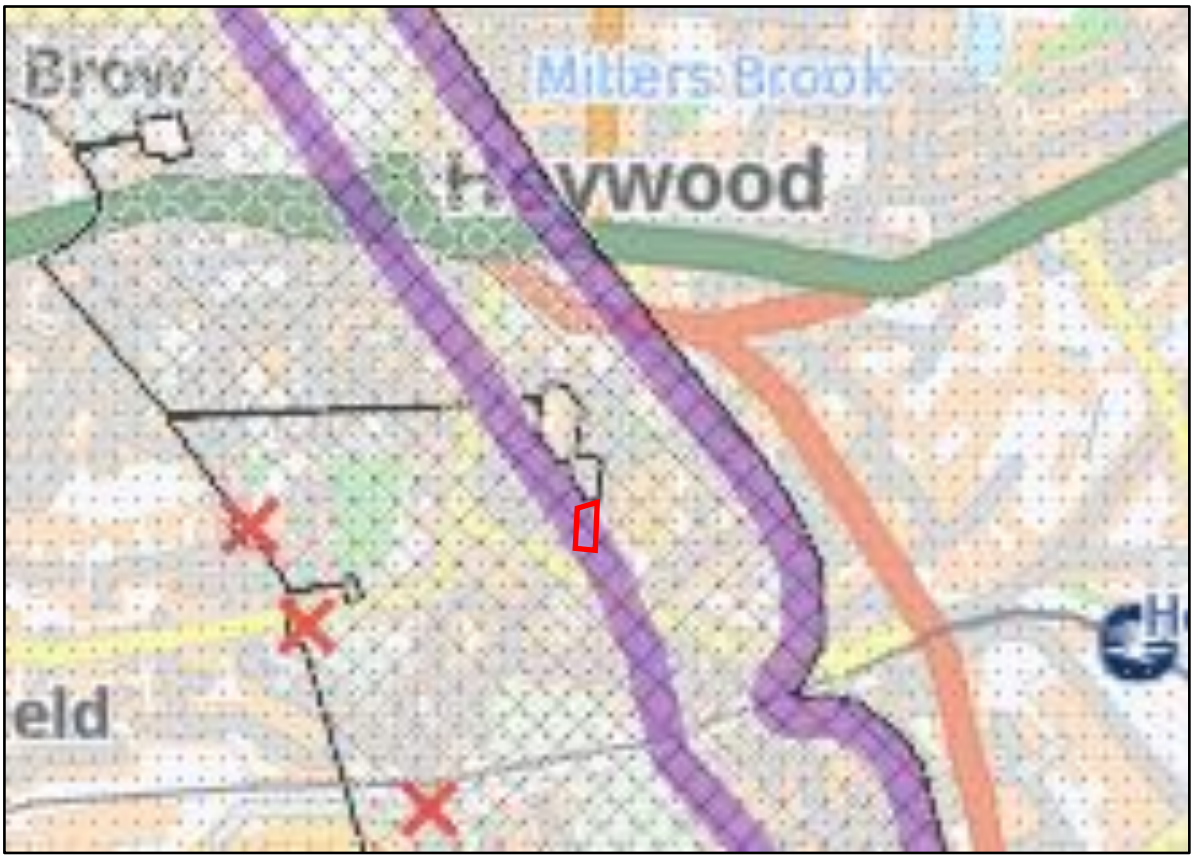


Figure 7-A: Coal Authority mapping showing site boundary (red) coal seams (purple) and development high risk areas (black hatching)

7.2.5 The shallow unrecorded workings recorded below the site are likely to be associated with the thin unnamed coal seam subcropping beneath the north of the site, but also potentially due to the Arley Coal seam, which outcrops approximately 190m northeast of the site. Strata dip angle in the area is indicated to be towards the southwest, so both the Arley Coal seam and unnamed coal seam are likely to be present beneath the site.

7.2.6 An extract from the BGS 1:10000 geological mapping and stratigraphic column illustrating the succession of bedrock/coal seams for the area is presented in Figure 7-B. The unnamed 'thin' coal seam present onsite if recorded to be 0.1m in thickness and not laterally extensive in the area, with the Arley Coal seam up to 0.5m in thickness and more prominent in the area.

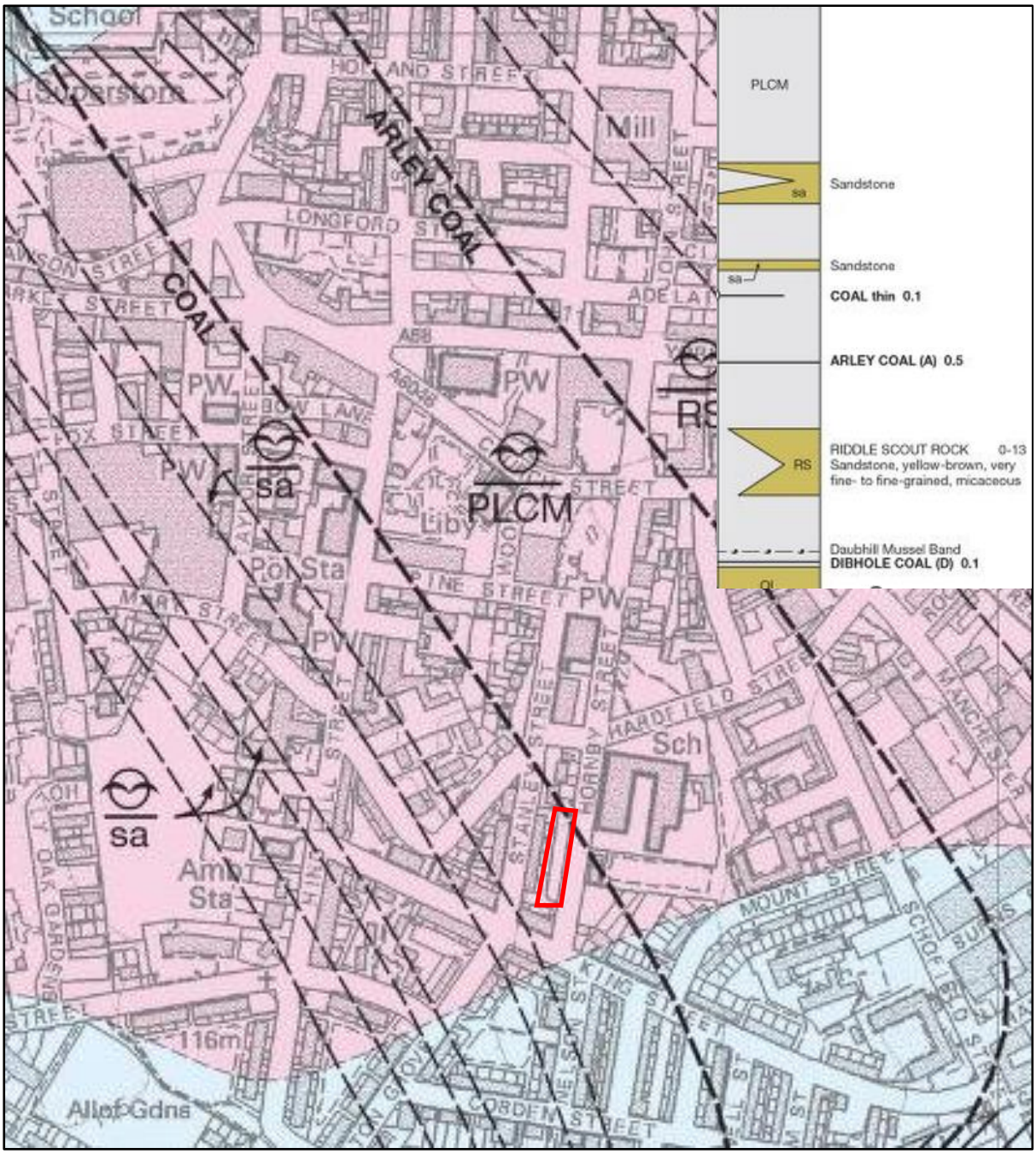


Figure 7-B: BGS 1:10000 map extract (site boundary in red)

7.2.7 The site is indicated to be underlain by ~8-10m of superficial deposits including Glaciofluvial Deposits and Devensian Till.

7.2.8 A nearby BGS borehole 10m north of the site does not indicate the presence of a coal seam within its 45m of surface level. Similarly, a series of boreholes 75m north of the site also do not indicate the presence of a coal seam within 30m of surface.

7.2.9 BGS mapping does not provide a local indication of strata dip angle for bedrock in the area. The Pennine Lower Coal measures tend to have shallow dip angles, therefore, a conservative estimate of 3° has been adopted.

7.3 Risk Summary

7.3.1 The table below summarises the potential risks associated with coal mining legacy at the site, identified from the sources of information as presented in preceding sections of this report: -

Coal Mining Aspect	Potentially High Risk?	Risk Assessment
Recorded underground shallow coal mining	×	None recorded.
Probable underground shallow coal mining	✓	Recorded by Coal Authority, associated with thin unnamed coal seam, and the Arley Coal seam present to the northeast.
Underground coal mining (recorded at depths >30m)	×	None recorded.
Mine entries (shafts / adits)	×	None recorded within 100m of the site.
Coal mining geology (fissures)	×	None recorded.
Record of past mine gas emissions	✓	None recorded. However shallow unrecorded workings may be present.
Recorded coal mining surface hazard	×	None recorded.
Surface mining (opencast workings)	×	None recorded.

Table 7-A: Summary of risk assessment in relation to coal mining legacy

7.4 Unrecorded shallow coal mining

7.4.1 The Coal Authority Consultants report indicates that the site is recorded in an area where probable unrecorded workings could exist. These are likely to be associated with the thick unnamed coal seam in the northern part of the site, and the Arley Coal seam to the northeast, which both dip below the site.

7.4.2 The unnamed coal recorded subcropping beneath the site is noted to be 0.1m in thickness by the BGS. Given its likely depth below surface level and limited thickness and lateral extent, the thin unnamed coal seam is likely to have been considered economical to exploit. Based on such, we do not anticipate possible shallow workings to be present below the site associated with the thin unnamed coal seam.

7.4.3 The Arley Coal seam is recorded as being 0.5m thick on BGS records and subcrops 190m northeast of the site. Assuming a shallow conservative dip angle of 3˚, superficial cover thickness of 8m and the site ground level to be 3m lower than the ground level where the seam subcrops, the top of the Arley seam would be expected at c.~15m depth below the site.

7.4.4 Based on guidance presented in CIRIA C758, if coals associated with the Arley seam have been extracted by pillar and stall techniques, there is a risk of roof collapse, with the consequence of mine voids (as a result of roof collapse) migrating to the surface and causing adverse movement of foundations to proposed developments. Considering a worst case scenario of 30% bulking for mine collapse within coal measures, the zone of influence of conical collapse within the Arley Coal seam could potentially migrate to 10m, based on extraction thicknesses of 0.5m (based on 10x extraction thickness). Thus, there is likely to be sufficient competent bedrock cover to arrest migration of any resultant collapse void, and is not anticipated to be present a near surface ground instability risk.

7.4.5 Off-site BGS boreholes immediately adjacent to the north of the site did not indicate the presence of any coal seams, including a 45m deep borehole 10m north of the site. The seam should be present based on subcrop location and dip direction. Based on the Arley Coal seam not being recorded within 45m depth at this location, this would indicate a minimum dip angle of 13° within the Pennine Lower Coal Measures and therefore the Arley Coal seam would be at significant depth beneath the site.

7.4.6 Should the Arley Coal seam be present at 15m depth beneath the site, consideration will need to be given to the risk of piled foundations some 5-10m deep below surface (which could be required to support the development) encroaching close to the collapse zone if the Arley seam has been worked and collapsed.

7.4.7 Whilst BGS data suggests the Arley Coal seam is not present at shallow depths below the site, given the uncertainty and assumptions made in our assessment, there remains a residual risk of ground instability.

7.4.8 Based on the above, rotary boreholes have been drilled to confirm the sequence of strata below the site and to confirm, or otherwise, worked coal seams are not present. Further details of the intrusive Coal Mining Investigation are detailed within Section 7.5, below.

7.5 Intrusive Investigations

7.5.1 2 No. rotary boreholes (RBH101 and RBH102) were advanced to depths of 30.0m bgl and 10.0m bgl respectively to establish the presence and condition of any coal seams beneath the site. Exploratory records are presented in Appendix B.

7.5.2 The table below summarises the findings of the coal mining investigation.

Exploratory hole location	Location on site	Final depth (m)	Depth of drift (m)	Intact Coal (m)	Broken/soft ground (m)	Void (m)	Comments
RBH101	North	30.0	7	-	-	-	Mudstone encountered to base of the hole with no coal encountered.
RBH102	Southern central	10	8	-	-	-	Mudstone encountered to base of the hole with no coal encountered.

Table 7-B: Coal mining investigation findings

7.6 Analysis and Conclusions

7.6.1 Given the Arley Coal seam is recorded to dip towards the southwest across the site, the coal seam will be shallowest within the north of the site. This is consistent with the depth to bedrock, observed as 7m bgl in the north and 8m bgl in the south. Based on the distance between the rotary holes, this would imply a dip of c.1-2° for the top of bedrock. Based on such, the Arley Coal seam, if present, would be expected to be present at a depth of c.9-10m bgl.

7.6.2 No evidence of coal, intact or broken/voided, was observed in RBH101, or within the limited bedrock observed in RBH102. Organic mudstone deposits were observed locally within the core recovered from RBH101 between depths of 8.5m to 11.2m bgl, but no discernible intact coal was observed. This organic rich material could correspond to the Arley Coal seam, which based on the observed dip of bedrock in boreholes, is located at the expected depth of the seam.

7.6.3 As no evidence of infill material, voiding or loss of support to the drilling equipment, which could otherwise provide an indication of possible workings, was observed to a depth of 30.0m bgl within RBH101, the Arley Coal seam if present is not anticipated to have been worked below the site.

7.6.4 Furthermore, no voiding was encountered within the south of the site (BH102) with the maximum depth achieved being 10.0m bgl.

7.6.5 Based on the above, it is not considered mitigation works to be necessary and the risk of coal mining related land instability affecting the development is considered to be low.

7.7 Mine Gas Emissions

7.7.1 The Consultants Mining Report states that the Coal Authority has no record of any onsite mine gas emission requiring action.

7.7.2 The site is underlain by a significant thickness (7-8m) of Devensian Till deposits which are likely to act as an impermeable barrier to the migration of mine gases to ground level.

7.7.3 In addition, there is no evidence of shallow unrecorded workings being present, nor recorded workings at depths from which mine gases could potentially migrate.

7.7.4 Overall, the risk of mine gas omissions affecting the development is considered to be very low.

8 Geotechnical Discussion

8.1 Scheme Overview

8.1.1 The following assessments are made on the investigatory data presented in the preceding sections of this report and are made with reference to the specific nature of the development. Should scheme proposals change then it is recommended that the validity of the conclusions of this report in relation to the revised scheme are checked.

8.1.2 It is understood that the proposed schedule of accommodation is 12No. [2-storey] units with 1No. unit for ancillary space for worker accommodation. In view of the scheme proposals, the geotechnical elements considered in this report are outlined below:

- Building foundations
- Drainage
- Floor slab
- Piling

8.2 Geotechnical Category

8.2.1 In accordance with BS EN1997-1:2004 + A1:2013 (Eurocode 7), the project is designated as Geotechnical Category 2. This category includes projects with *conventional types of structures and foundations with no exceptional risk, or difficult ground or loading conditions*. Furthermore, *routine design procedures* are appropriate.

8.2.2 It should be noted that this report does not constitute a Geotechnical Design Report (GDR) as defined in Eurocode 7. Accordingly, a GDR should be prepared by the designer during the detailed design phase.

8.3 Key Geotechnical Issues

8.3.1 In view of the ground conditions, the following list summarises the key geotechnical issues that may impact the scheme and will therefore need to be appropriately managed during the lifecycle of the project:

- Low strength soils and Made Ground
- Groundwater
- Mining legacy

8.4 Low Strength and Made Ground

8.4.1 The near surface Made Ground soils are unsuitable for supporting concentrated foundation loads due to their low strength/density and or compressible nature. Accordingly, foundations should extend, as a minimum, through such deposits.

8.4.2 Compressible organic Peat deposits were encountered within WS01 between depths of 0.8-2.7m bgl, RBH101 between depths of 0.9-2.3m bgl and to a lesser extent within WS02 between depths of 1.65-2.0m bgl. Additionally, very soft and soft silt/clay of the Glaciofluvial Deposits was encountered within WS01 to the base of the borehole (5.45m), within WS03 between depths of 1.3-3.1m bgl and within RBH102 between depths of 4.0-5.0m bgl. Accordingly, foundations should extend, as a minimum, through such deposits.

8.5 Groundwater

8.5.1 Groundwater was struck within WS02, WS04, RBH101 and RBH102 within the Glaciofluvial Deposits at depths of 4.5m, 2.3m, 4.0m and 2.8m, respectively. Groundwater rose to depths between 1.4-3.1m in these holes upon completion. Groundwater has been encountered at depths of 0.6m to 4.0m during return monitoring visits. Groundwater is likely to be perched and confined to more granular lenses within the Glaciofluvial Deposits.

8.5.2 Groundwater levels are expected to vary seasonally and in response to weather events.

8.5.3 The inflow of groundwater into excavations may lead to instability and excavation collapse.

8.6 Mining Legacy

8.6.1 As stated in Section 7, it is not considered mitigation works are necessary and the risk of coal mining related land instability affecting the development is considered to be low.

8.7 Trees and Vegetation

8.7.1 No specific vegetation is present onsite, however there are some mature trees present immediately adjacent to the site beyond Hornbby Street to the east. Such vegetation may impact upon the foundation design depth. It is recommended that a suitably qualified arboriculturist is appointed to undertake a survey such that building foundations can be designed appropriately. The survey should include the location, species, height (and mature height) and water demand of each tree and major vegetation.

8.7.2 Any future planting schemes should consider the effect that the new trees could have on foundations when they reach maturity.

8.8 Building Foundation Strategy

8.8.1 In view of the key geotechnical issues discussed above and anticipated loadings the following foundation types are considered suitable for the project;

- Spread foundations
- Piles
- Ground improvement

8.9 Geotechnical Parameters

8.9.1 Characteristic values of geotechnical parameters have been derived, in accordance with Eurocode 7. The following tables present the recommended characteristic values for the strata encountered:

Variable	Characteristic value	Derivation
Weight density above water table, γ_b (kN/m^3)	16	BS8004:2015 Figure 1
Weight density below water table, γ_{sat} (kN/m^3)	18	BS8004:2015 Figure 2
Undrained shear strength, cu (kN/m2)	50	In situ testing
Undrained deformation modulus, Eu (MN/m2)	25	Eu/cu = 500 from Jamiolkowski et al (1979)

Table 8-A: Summary of characteristic geotechnical parameters – Glaciofluvial Deposits (cohesive)

Variable	Characteristic value	Derivation
Weight density above water table, γ_b (kN/m^3)	23	BS8004:2015 Figure 1
Weight density below water table, γ_{sat} (kN/m^3)	23	BS8004:2015 Figure 2
Uniaxial compressive strength, UCS (MN/m^2)	3	Observations Correlation with point load indices

Table 8-B: Summary of characteristic geotechnical parameters – Pennine Lower Coal Measures Formation

8.10 Spread Foundations

8.10.1 The soils underlying the proposed foundations are of low to medium volume change potential when classified in accordance with NHBC Standards, Chapter 4.2. Accordingly, and in isolation of other considerations affecting foundation depth, foundations should be founded at a minimum depth of 0.9m bgl to penetrate the zone of shrinkage and swelling caused by seasonal wetting and drying.

8.10.2 Made Ground and very soft to soft compressible natural deposits (including Peat) were encountered across the north and central/south central parts of the site, with spread foundations unsuitable within the upper 5.45m in the area of WS01, 2.0m in WS02, 3.1m in WS03 and potentially the upper 4-5m in RBH102 (difficult to determine precisely as location was open holed). As a result, it is recommended that foundations in the north of the site (i.e. north of WS04) are supported by a piled solution, or appropriate ground improvement adopted (specialist input would be required to determine feasibility of the latter).

8.10.3 In addition, given the nature of the development i.e. terraced block of dwellings, use of differing foundation solutions across the structure is unlikely to be viable. Differing levels of total settlement is likely to occur in such instances between foundations, which could lead to excessive levels of different settlement, beyond the capacity of the superstructure. If the block is appropriately divided between the southern part of the site, and the central and northern part of the site, differing foundation solutions could be adopted in such instances.

8.10.4 In the south of the site (WS04 and WS05), all foundations should extend through Made Ground and into the underlying competent Glaciofluvial Deposits by a minimum of 0.3m. Based on the considerations outlined above, it is anticipated that spread foundations in the south of the site will be a minimum 0.9m deep, but potentially reaching depths of 1.6m in the area of WS04 where Made Ground is present.

8.10.5 Ultimate limit state analyses (bearing capacity) have been undertaken in accordance with the approach outlined in Annex D of Eurocode 7 to derive the following design bearing resistances:

Type	Size / width (m)	Founding depth (m bgl)	Founding stratum	Bearing resistance	
				Combination 1	Combination 2
Strip/trench fill	0.45	0.9	Glaciofluvial Deposits	270kNm^2	195kNm^2
	0.6			270kNm^2	195kNm^2
	0.9			275kNm^2	200kNm^2

Table 8-C: Summary of foundation ultimate limit state analyses (spread foundations)

8.10.6 Serviceability limit state (SLS) has been assessed by undertaking settlement analyses in accordance with the approach outlined in Annex F of Eurocode 7 and adopting the following variables:

Stratum	Variable	Value adopted	Derivation
Glaciofluvial Deposits	Coefficient of volume compressibility, mv (m2/MN)	0.3	Literature Correlation with SPT N Value
	Geological factor, µg	0.7	Literature

Table 8-D: Key geotechnical variables used in settlement analyses

8.10.7 The proposed loads are not known at this stage. Accordingly, the maximum bearing pressures have derived to ensure settlement is less than 25mm, which is typically adopted as a maximum tolerable limit. The following table summarises the results.

Foundation type	Width (m)	SLS bearing resistance
Strip/trench fill	0.45	195kNm^2
	0.6	155kNm^2
	0.9	105kNm^2

Table 8-E: SLS bearing resistance to ensure total settlement to <25mm

8.10.8 It should be noted that foundation design is iterative. Accordingly, a final check of ultimate and serviceability limit states should be undertaken following confirmation of foundation size and loads.

8.11 Pile Resistance

8.11.1 A preliminary assessment of single pile capacity has been undertaken to assist the foundation designer in establishing a foundation layout who will also retain design responsibility. The assessment has been undertaken in accordance with BS EN1997-1:2004 + A1:2013 and BS 8004:2015. It is recommended that the design and installation of the piles are determined by a specialist piling contractor who has experience in pile installation in these or similar ground conditions.

8.11.2 It is assumed that the piles will be installed using replacement piling techniques; i.e. bored piles, to achieve sufficient capacity and embedment into the bedrock at depth.

8.11.3 The calculations have been undertaken with the aid of PILE, a specialist geotechnical software programme developed by OASYS. The analyses have been undertaken without explicit verification of serviceability limit state. Accordingly, set R4 partial factors have been adopted for Combination 2. However, as a general guide, the settlement of a single pile at working loads (factor of safety > 2) is typically of the order of 1% of the pile diameter.

8.11.4 A model factor of 1.4 has been adopted in the analyses. The value may be reduced to 1.2 if the resistance is verified by a maintained load test taken to the required, unfactored ultimate resistance.

8.11.5 Shaft resistance within the Made Ground and underlying Peat/very soft Glaciofluvial Deposits is assumed to be zero. It is further assumed that such deposits will not cause downdrag on the pile.

8.11.6 Unit base and shaft resistances within Glaciofluvial Deposits have been derived using a total stress approach and effective stress approach, adopting the variables detailed in Table 8-F for cohesive and granular soils. Due to softening and polishing effects during installation, the unit shaft resistance within the cohesive strata have been capped at 100kN/m^2 respectively. When deriving unit base resistance within the granular soils, a bearing pressure coefficient has been adopted based on the relationship suggested by Berezantsev (1961).

Stratum	Variable	Value	Derivation
Glaciofluvial Deposits (Cohesive)	Adhesion factor, α	0.76	BS 8004:2015 – Eqn 41
	Bearing pressure coefficient, N_c	8	BS 8004:2015 – Eqn 44
Glaciofluvial Deposits (Granular)	Earth pressure coefficient, K_s	0.7	BS 8004:2015 – Table 8
	Angle of interface friction, δ (°)	32	BS 8004:2015 – Eqn 36

Table 8-F: Variables used for determining pile resistance - cohesive strata

8.11.7 Unit shaft resistance within the Pennine Lower Coal Measures Formation has been derived based on the compressive strength of the material and the formulae presented in Table 54.8 of the ICE Manual of Geotechnical Engineering; an average value has been adopted. It is assumed that 'good' construction practices will occur when the piles are installed, and as a result full bonding between the concrete and Pennine Lower Coal Measures Formation has been assumed. On this basis a unit shaft resistance of 5000kN/m^2 has been adopted.

8.11.8 Unit base resistance within the Pennine Lower Coal Measures Formation has been derived based on the compressive strength of the material and the guidance given in Section 54.3.7.2 of the ICE Manual of Geotechnical Engineering. On this basis a unit base resistance of 3000kN/m^2 has been adopted.

8.11.9 The variation of single pile resistance in relation to pile toe level is presented below for three different pile diameters. It should be noted that the resistance of a single pile is reduced in the vicinity of other piles. Accordingly, detailed design of the piled foundation arrangement should take into account spacing between piles and pile group effects.

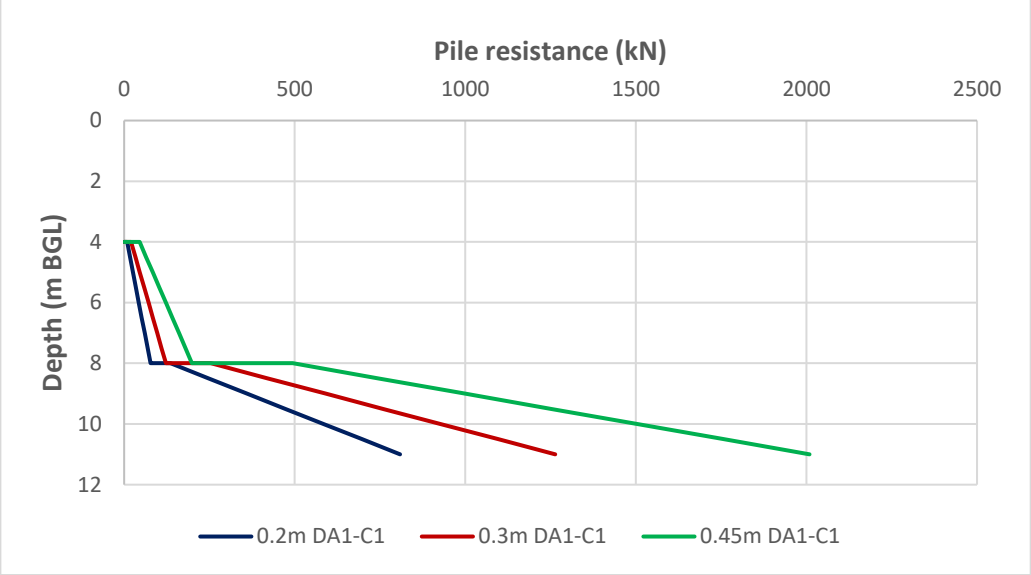


Figure 8-A: Pile resistance versus depth (Combination 1)

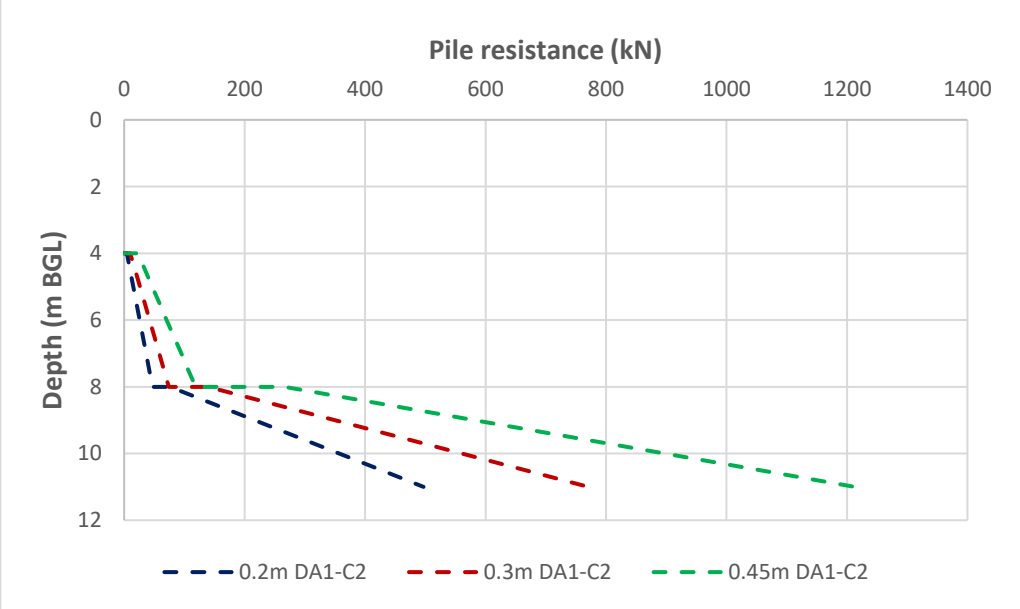


Figure 8-B: Pile resistance versus depth (Combination 2)

8.12 Ground Improvement

8.12.1 Ground improvement is typically associated with increasing the strength and stiffness of the ground, thereby leading to increased bearing capacity and lower settlement. This has the consequential benefit that foundation designs can be leaner, economical and more sustainable.

8.12.2 There are many techniques associated with ground improvement and consultation with specialist contractors should be undertaken. The following table summarises the common techniques adopted and the relative advantages and disadvantages of each:

Technique	Overview	Advantages	Disadvantages
Dynamic compaction	Repeated dropping of large weights (10-20t) from a notable height (e.g. 10-20m).	Tried and tested technique. Can compact circa 5-6m.	Unsuitable for clayey soils. Induces notable ground vibration.

Technique	Overview	Advantages	Disadvantages
Vibro-compaction	Insertion of a poker into the ground which vibrates leading to settlement of overlying fill.	Densifies granular soils. Reduces risk of liquefaction and collapse settlement.	Unsuitable in clay soils Induces vibration.
Surcharging	Application of additional load to induce settlement before main construction phase.	Effects the soil uniformly. Applicable to all soil types.	Time consuming (weeks and month) but can be sped up through inclusion of vertical drains. Volume of surcharge material removed needs a receptor.
Controlled modulus columns	Installation of low strength concrete columns.	Effective up to tens of metres. Alternative option to driven piles.	Tight spacing required in very soft soils.
Soil mixing	A stabilising agent is (typically lime / cement) is mixed with the in situ soils to lower the water content	Effective up to 20m Can render unacceptable materials acceptable for use in earthworks.	Unsuitable in sulphide rich material due to formation of ettringite and consequential heave.
Grouting	Cement or polymer based grout is injected into the ground.	Minimal surface footprint required – can repair existing problems in situ.	Less suitable in clayey soils.
Excavate and recompact	Excavate existing soft deposits, condition if required (dry out) and place back in compacted layers.	Straightforward with no specialist plant required	Can be time consuming as material is conditioned.

Table 8-G: Summary of common ground improvement techniques

8.13 Residential Ground Floor Construction

8.13.1 In view of the variable thickness of Made Ground across the site, and the nature of the development, it is likely that a suspended ground floor will be required.

8.14 Aggressiveness of the Ground to Buried Concrete

8.14.1 The aggressiveness of the ground with respect to buried concrete has been assessed in accordance with Building Research Establishment Special Digest 1: Concrete in Aggressive Ground Third Edition (2005).

8.14.2 The site is interpreted to be a brownfield site where pyrite is likely to be present.

8.14.3 The classification of the strata is tabulated below:

Stratum	Disturbed / Undisturbed	Design sulphate class	Aggressive chemical environment for concrete class
Made Ground	Disturbed	DS-1s	AC-1s
Glaciofluvial Deposits	Undisturbed	DS-1	AC-1s
	Disturbed	DS-1	AC-1s
Pennine Lower Coal Measures Formation	Undisturbed	DS-1	AC-1s
	Disturbed	DS-1	AC-1s

Table 8-H: Summary of the aggressiveness of the ground to buried concrete

8.15 Drainage

8.15.1 In situ permeability testing has been undertaken at the site in accordance with BS EN ISO 22282 Geotechnical investigation and testing – Geohydraulic testing (2012). The results are presented as Appendix E and summarised below:

Exploratory hole ID	Stratum tested	Permeability (m/s)
WS03 (Cycle 1)	Glaciofluvial Deposits	4.87×10^{-7}
WS03 (Cycle 2)		3.48×10^{-7}
WS03 (Cycle 3)		2.03×10^{-7}

Table 8-I: Summary of in situ permeability test results in accordance with BS EN ISO 22282

8.15.2 It should be noted that infiltration testing in boreholes uses notably less water than tests undertaken within soakaway trial pits. Accordingly, results should be considered as an indication of the potential viability of soakaways. However, given the very low permeability indicated from preliminary testing it is considered highly unlikely that shallow soakaway type systems will be feasible for the site.

8.15.3 Consideration should be given to connection to existing drainage infrastructure in the adjacent highways. Consultation with the local water authority (United Utilities) is recommended in the first instance.

8.16 Suitability For Material Re-use

8.16.1 Significant earthworks are not anticipated to be required at the site. Soils excavated at the site are likely to be suitable for re-use as a general bulk fill, subject to water content (given the silty nature of soils). It is recommended that the soils are classified and compacted in accordance with the Specification for Highway Works Series 600.

8.17 Constructability

8.17.1 Under most standard contracts it is the responsibility of the Contractor to design, construct and maintain temporary works. Accordingly, the following discussion is provided for information only.

8.17.2 Groundwater is anticipated to be encountered during excavations to form spread foundations. Flow rates are anticipated to relatively minor but still may cause instability of the excavation sides. It is possible that groundwater can be controlled via conventional sump pumping techniques. It is likely that dewatering will be required to control groundwater and therefore maintain stability of the excavation.

8.17.3 In the event that a soft area is located in the course of foundation excavations then excavation should continue to locate stiffer / denser soils.

8.17.4 It is recommended that foundation concrete be poured as soon as practicable after excavation to prevent deterioration of the formation.

8.17.5 It is difficult to predict the stability of service trench sides from borehole investigations. In general there is a risk of some over break/instability in the Made Ground and more granular strata. On this basis the risk of significant instability is considered to be low / moderate.

8.17.6 Other items to consider in constructability:

- Obstructions for piling (if adopted)

- Spatial constraints
- Sequencing of construction

9 Tier 2 Generic Quantitative Risk Assessment

9.1 Objectives

9.1.1 The objective of this generic quantitative risk assessment (GQRA) is to further assess the potential contaminant linkages (PCLs) identified by the preliminary risk assessment using the following:

- The findings of the intrusive site investigation and resulting site specific ground and hydrogeological model.
- Laboratory analysis of soils and groundwater.
- Monitoring of ground gases and vapours.

9.2 Fieldwork Observations

9.2.1 Fieldwork observations on the potential for contamination and the underlying ground conditions did not identify any new contaminant sources or significant pathway alterations to the anticipated ground model. Therefore, no PCL additions or amendments are required to be made to the CSM at this stage.

9.3 Laboratory Testing Rationale

9.3.1 Laboratory testing has been scheduled by targeting potential contaminant linkages identified within the iCSM and observations made during fieldworks. The sampling and testing strategy is based on a judgemental approach.

9.3.2 The testing of the general Made Ground/Topsoil deposits was undertaken across various locations to gain spatial coverage over the site and to characterise the strata encountered. Testing included a broad suite of analysis due to the potential for unknown contamination to be present.

9.4 Generic Assessment Criteria

9.4.1 Assessment of laboratory test data has been carried out using published generic assessment criteria (GACs). The GACs act as screening values to provide a 'trigger' to an assessor that soil concentrations above these limits might present an unacceptable risk.

9.4.2 Various GAC sources are used within this report. Key assumptions are made in the derivation of screening values in regard to their use and application, and exposure modelling is based on precautionary national scenarios. This generic approach can result in an overly conservative assessment; therefore, the assessor is required to review the outcome of the GQRA screening in the context of the site specific CSM and identified potential contaminant linkages.

9.4.3 Asbestos does not currently have published GACs which can be used for generic assessment purposes, at this stage a present / absent trigger limit has been adopted.

9.4.4 Specific details regarding the published GAC sources chosen and any parameter refinements made are summarised within Appendix I, along with the order of preference where multiple GAC sources are available. The exposure models adopted are discussed in the relevant sections below.

9.5 Human Health GQRA (soils and vapour)

9.5.1 The results of the human health screening assessment for soils and vapours are detailed in Appendix I. The following table outlines the exposure models adopted, along with summarising the outcome of each screening assessment.

Receptor	Exposure Model	Outcome
All human health receptors	Presence of asbestos	No suspected ACMs observed during fieldworks. No fibres detected through laboratory analysis.
Proposed users	Residential without plant uptake	1 sample showing 1 PAH exceedance (dibenz(a,h)anthracene). 4 out of 5 samples showing exceedances of lead.
Construction operatives	Acute occupational exposure (assumed no PPE worn)	No exceedances.
Adjacent site users and the public	Acute off-site public exposure during construction phase	No exceedances.

Table 9-A: Human health GQRA models and outcomes

9.5.2 The table below summarises the instances where contaminants have exceeded the generic screening criteria.

Receptor	Strata	Contaminant	Locations & Depths	Test Result / Range (mg/kg)	GAC (mg/kg)
Proposed users	Topsoil	Dibenzo(a,h)anthracene	WS05 0.1-0.2m	0.43	0.24
Proposed users	Topsoil	Lead	WS05 0.1 - 0.2m	360	310
Proposed users	Made Ground	Lead	WS01 0.3 - 0.7m WS02 0.3 – 0.6m WS04 0.4 - 0.8m	1,200 - 3,900	310

Table 9-B: Human health GQRA exceedances

9.6 Proposed Site Users Risk Assessment (soils and vapour)

9.6.1 Analysis indicates exceedances in concentrations of lead in Made Ground (and 1 No. exceedance in topsoil) across the site. One very marginal exceedance of dibenz(a,h)anthracene (0.43 mg/kg compared to a GAC of 0.31 mg/kg) was also recorded within a topsoil sample from WS05.

9.6.2 As the proposed development is to remain entirely covered in buildings and hardstanding upon completion, with limited areas of vegetation contained in small above ground planters along Hornby Street, all dermal contact, ingestion and inhalation of dust pathways will effectively be severed, with the inhalation of vapours remaining the only viable pathway.

9.6.3 Lead will not generate vapour and therefore all PCL linkages from lead are effectively severed and no further risk to human health remains.

9.6.4 Dibenz(a,h)anthracene is a hydrocarbon and as such is capable of producing vapours, however, given the very low concentrations and marginal nature of the GAC exceedance (which includes dermal/inhalation pathways in the exposure modelling), significant vapour generation sufficient to harm human health is not expected.

9.6.5 All reported concentrations of all other contaminants are below the relevant generic assessment criteria for human health receptors. In addition, the fieldwork observations did not detect areas of suspected contamination which require further assessment, and the overall coverage of the site is considered to have adequately targeted the PCLs identified within the iCSM. Overall, no relevant contaminant linkages have been identified.

9.7 Construction Workers Risk Assessment

9.7.1 Analysis indicates that contaminant levels do not pose an acute risk to construction workers. In general, standard PPE and hygiene protocols for working on brownfield sites is considered adequate to mitigate against the potential risk from contaminants on site, and no special precautions are required.

9.8 Adjacent Site Users Risk Assessment

9.8.1 Based upon the laboratory results and our understanding of the site, there is not considered to be an unacceptable level of risk to adjacent site users, both during construction and following completion of the development.

9.9 Controlled Waters Risk Assessment

9.9.1 No groundwater analysis has been undertaken on the site as only perched groundwater was recorded in the maximum depth of the investigation (5.45m).

9.9.2 It is understood that the site will be entirely covered in positively drained hardstanding upon completion and therefore the potential for leachate generation (particularly compared to current land usage (grassed public open space) will be negligible.

9.9.3 Additionally due to the low permeability of underlying superficial soils recorded to date and relatively low levels of contamination observed through field observations and total soil testing, Soiltechnics are of the opinion that the site does not pose an unacceptable level of risk to controlled waters.

9.10 Ground Gas Monitoring Rationale

9.10.1 Ground gas sources which were identified in the iCSM as potentially posing an unacceptable risk to development were as follows:

- Off-site backfilled reservoir (adjacent to the north of site)
- Potential worked coal seams at shallow depth

9.10.2 3 No. gas monitoring wells were installed at the site, and a total of 6 No. visits have been undertaken over a period of 12 weeks.

9.10.3 All gas monitoring wells were installed within the natural Glaciofluvial Deposits at varying distances from the off-site reservoir to measure ground gas concentrations gradients across the site should they exist.

9.11 Ground Gas Monitoring Results

9.11.1 A summary of the gas monitoring results follows, with the full results detailed within Appendix G.

- Gas flow rates were detected from 0.1 - 0.7l/hr.

- Steady concentrations of methane were recorded at or below the limit of detection of 0.1%, with maximum concentrations of 0.2% recorded.
- Concentrations of carbon dioxide were in the range of 0.5% to 3.9%.
- Steady concentrations of oxygen were marginally depleted within WS01 on one occasion (08/12/23), down to a concentration of 14.6%.
- Of the 18No. sets of data collected to date, 3No. were captured from a flooded wells (WS03 first visit, WS01 fifth and sixth visit).
- Three of the six rounds were undertaken during low atmospheric pressure conditions (<1,000 mbar) therefore worst case conditions should have been captured.

9.12 Updated Ground Gas Risk Assessment

9.12.1 The absence of significant methane or carbon dioxide indicates that there is no significant migration of ground gases occurring from the nearby backfilled reservoir or potentially from underlying worked shallow coal seams (albeit the risk of the latter occurring is considered to be low given the amount of low permeability cohesive superficial strata at the site).

9.12.2 Due to the absence of a significant actively generating ground gas source and open migration pathway, as well as the low ground gas concentrations/flow rates, it is considered very unlikely that ground gases could migrate into the proposed structures on site at sufficient speed and volume to pose any viable risk.

9.12.3 A CS-1 scenario classification applies to the site and no ground gas protection measures are deemed necessary in new buildings.

9.13 Risks to Soft Landscaping Vegetation

9.13.1 Given landscaping is not proposed based on development proposals (refer to Appendix A), only above ground planters, risks to vegetation are not considered further.

9.14 Water Supply Pipes

9.14.1 A full site investigation as set out in the UK Water Industry Research (UKWIR) document *'Guidance for the selection of Water supply pipes to be used in Brownfield sites'* has not been undertaken.

9.14.2 The UKWIR document advises a trigger concentration of 0.125mg/kg for the 'extended VOC (volatile organic compounds) suite', which includes the PAH (polycyclic aromatic hydrocarbons) suite that has been included in the soil analysis during this investigation.

9.14.3 The maximum summed concentration of PAH congeners from individual samples obtained from the site at likely pipe depths (0.50m to 1.50m bgl) exceeds the trigger concentration of 0.125mg/kg in 3 out of 3 samples, and on this basis the installation of protective barrier-pipes in below ground water infrastructure is recommended as a precaution, unless service trenches are over-dug and backfilled with suitable clean materials.

9.14.4 In all instances, it is advised to consult the water company for advice to determine if protective pipe is necessary or if further assessment and investigation works are warranted. Irrespective of the assessment made here, water companies may insist on barrier pipe being installed. Once the initial consultation has taken place, Soiltechnics can support you in any further assessments that may be required.

9.15 Updated Conceptual Site Model (uCSM)

9.15.1 Following on from the discussions above, an updated conceptual site model has been tabulated overleaf.

9.15.2 The table below presents our approach to the assessment of risks associated with potential contaminant linkages. The categories are based upon the definitions within CIRIA C552 (2001), with the addition of a 'negligible likelihood' scenario, which is to be used where there is no realistic scenario in which harm could occur.

		Consequence of harm			
		Severe	**Medium**	**Mild**	**Minor**
Probability of harm	**High likelihood**	**Risk: Very high** (high – severe)	**Risk: High** (high – medium)	**Risk: Moderate** (high – mild)	**Risk: Moderate/Low** (high – minor)
	Likely	**Risk: High** (likely – severe)	**Risk: Moderate** (likely – medium)	**Risk: Moderate/Low** (likely – mild)	**Risk: Low** (likely - minor)
	Low Likelihood	**Risk: Moderate** (low – severe)	**Risk: Moderate/Low** (low – medium)	**Risk: Low** (low – mild)	**Risk: Very low** (low – minor)
	Unlikely	**Risk: Moderate/Low** (unlikely – severe)	**Risk: Low** (unlikely – medium)	**Risk: Very low** (unlikely – mild)	**Risk: Very low** (unlikely – minor)
	Negligible Likelihood	**Risk: Low** (negligible– severe)	**Risk: Very Low** (negligible– medium)	**Risk: Very Low** (negligible– mild)	**Risk: Negligible** (negligible– minor)

Table 9-C: CSM Risk Ratings

RECEPTOR: PROPOSED END USERS				
Potential Source	Contaminants of Concern	Pathway	Tier 1 Risk Assessment (probability of harm x consequence)	Discussion
Made Ground of unknown origin, including contamination from adjacent historical industrial/ commercial activities	Metals, PAHs, TPH, phenol	Ingestion, inhalation and contact with soils, dusts and vapours	**Risk: Low** (low – mild)	Elevated levels of inorganic and organic contaminants have been recorded however given the development is to be covered in hardstanding all PCL are effectively severed, and the risk of significant vapour generation from elevated dibenz(a,h)anthracene is considered to be low.
Asbestos fibres and ACMs contained within Made Ground	Asbestos	Inhalation of dusts	**Risk: Low** (low – mild)	No asbestos was recorded in the 5 shallow samples analysed. Given the development is to be covered in hardstanding all PCL are effectively severed.
Off-site: Backfilled reservoirs immediately north	Permanent Ground Gases (CH_4 & CO_2)	Lateral migration through the sub-surface into enclosed spaces	**Risk: Low** (negligible – severe)	Ground gas monitoring has not recorded elevated concentrations of methane or carbon dioxide and a 'Green' NHBC Traffic Light/CS-1 designation is recommended. No ground gas protection measures are considered necessary in new buildings.

Table 9-D: uCSM – Proposed End Users

RECEPTOR: CONSTRUCTION WORKERS				
Potential Source	Contaminants of Concern	Pathway	Tier 1 Risk Assessment (probability of harm x consequence)	Discussion
Made Ground	Asbestos fibres and ACMs	Inhalation of dusts	**Risk: Low** (low – mild)	No asbestos was recorded in the 5 shallow samples analysed. Very low and trace concentrations often pose a low risk if appropriate controls are put in place.
All other contamination sources, excluding asbestos	Metals, PAHs, TPHs	Ingestion, inhalation and contact with soils, dusts and vapours	**Risk: Low** (low – mild)	No gross contamination of high-risk contaminants anticipated (e.g. cyanide, benzene, and vinyl chloride). Standard PPE and hygiene protocols for working on brownfield sites are likely to be sufficient to the mitigate risk.
Unexploded Ordnance	UXO	Direct contact / explosion	**Risk: Moderate/Low** (unlikely – severe)	The Preliminary Risk Assessment indicates a low risk of encountering UXO during ground investigation works; however, the review does not specifically cover the construction phase and development of the site. A project specific risk assessment should be undertaken, to be completed by a specialist.

Table 9-E: uCSM – Acute Exposure to Construction Workers

RECEPTOR: ADJACENT SITE USERS DURING THE CONSTRUCTION PHASE				
Potential Source	Contaminants of Concern	Pathway	Tier 1 Risk Assessment (probability of harm x consequence)	Discussion
Asbestos fibres and ACMs within the Made Ground	Asbestos	Inhalation of dusts	**Risk: Low** (low – medium)	No asbestos was recorded in the 5 shallow samples analysed.
All other potential contaminant sources	Metals, PAHs, TPH	Ingestion, inhalation and contact with soils, dusts and vapours	**Risk: Low** (unlikely – medium)	Unlikely to pose a viable risk to off-site receptors.

Table 9-F: uCSM – Chronic Exposure to Adjacent Site Users

RECEPTOR: CONTROLLED WATERS				
Potential Source	Contaminants of Concern	Pathway	Tier 1 Risk Assessment (probability of harm x consequence)	Discussion
All potential contaminant sources identified	Various	Leaching and vertical migration (Groundwater)	**Risk: Low** (unlikely – medium)	Significant quantities of Made Ground have not been recorded and proposed development will cover site in drained hardstanding, severely limiting leachate generation. In addition, largely cohesive glacial soils in the area will restrict vertical migration into groundwater.

Table 9-G: uCSM – Controlled Waters Risk

9.16 Risk Assessment Conclusions

9.16.1 Based on the updated CSM, no potential contaminant linkages have been identified above the low-risk threshold.

9.16.2 The following items are considered to be outside the formal scope of a Remediation Strategy and subsequent verification works, and must be controlled by the developer and their Principal Contractor. It will be their responsibility to satisfy the appropriate regulatory bodies that mitigation works have been carried out appropriately.

- The installation of protective barrier pipe for potable infrastructure.
- Production of preliminary UXO Risk Assessment for the construction phase.

9.17 Ground Gas Protection Measures

9.17.1 For clarity, the requirement for ground gas protection measures is summarised in the table below.

Gas Type	Contaminant of Concern	Protection Measures Required?
Permanent Ground Gases	N/A	None required
Hydrocarbon Vapours	N/A	None required
Radon	N/A	None required

Table 9-H: Ground gas protection measures requirement

9.18 Unexpected and Previously Unencountered Contamination

9.18.1 With the development of any site, there is a residual risk of contamination being found that is unexpected or has not been encountered during investigation or other siteworks.

9.18.2 Should any previously unencountered and unexpected contamination be encountered, works should be temporarily halted and Soiltechnics informed. The Consultant should then assess the situation to determine what remedial action is required and inform the Local Authority at the earliest opportunity.

9.18.3 It is often a requirement of Local Authority planning conditions that the building/demolition contractor has a contamination discovery/contingency strategy in place for dealing with unexpected contamination. Soiltechnics are pleased to provide advice on such a strategy if required.

10 Soil and Waste Management

10.1 Sustainability

10.1.1 Where possible, disposal of soils to landfill should be avoided in preference for more sustainable alternatives. Such alternatives are set out below and rely on appropriate planning and design.

10.1.2 Soiltechnics can provide additional support and guidance to assist in overall material management and soil waste minimisation upon request.

10.2 Waste Hierarchy

10.2.1 Under the Waste Regulations, there is a requirement to apply (where reasonable) the waste management hierarchy, which is summarised below. Within the hierarchy, soil disposal to landfill should be limited to the necessary minimum.

Stage (in order of preference)	Example application
Prevention / Reduce	Design, planning, Site Waste Management Plans (SWMP).
Reuse	Reuse of soils under exemption, permit or Materials Management Plan (MMP), sorting at the point of excavation, screening of excavated material.
Recycling	Recycling aggregate, waste segregation, screening and sorting.
Recovery	Remediation works, transfer to a Soil Treatment Facility
Pre-treatment	Non-hazardous and hazardous soils do not need to be treated, where such treatment would not reduce the volume of waste.
Disposal	If the waste hierarchy steps outline above are followed, the remaining waste can be disposed of to a landfill without any further treatment.

Table 10-A: Waste management hierarchy

10.3 Liability of Waste Management

10.3.1 Part III of the Finance Act was amended in 2018 to extend the scope of landfill tax to cover any site (not exclusively landfills) operating without an appropriate environmental permit, exemption, or MMP.

10.3.2 These changes have given HMRC the powers to work with the Environment Agency to identify non-compliant sites and pursue and penalise the person(s) illegally disposing of waste, and anyone who knowingly facilitates the disposal. This includes sites filling site-won soils which are surplus to requirement.

10.4 Materials Management

10.4.1 In terms of the development, where reasonably practicable, landfill disposal should be minimised through the reuse of site-won materials on site, or off-site transfer of surplus soils to other development schemes or Soil Treatment Facilities. Early consideration of the site's overall material balance at the design stage is also critical in reducing the need for off-site disposal, limiting costs, and increasing the overall sustainability of the development.

10.4.2 Where Made Ground soils are to be reused onsite or materials transferred between sites, a Materials Management Plan (MMP) or Waste Exemption is recommended.

10.4.3 The process of an MMP allows soils that are suitable for reuse and have a certainty of use to not be considered a waste, and therefore not fall under the waste regulations. This scheme is self-regulated within the industry and is supported in principle by the Environment Agency.

10.5 Waste Characterisation Governance

10.5.1 The classification of soils for disposal to landfill is undertaken in accordance with WM3 (v1.2GB), and a Waste Acceptance Criteria assessment (WAC) undertaken in accordance with the limits in Annex II of the Landfill Directive (Directive 1999/31/EC).

10.6 Waste Populations

10.6.1 For preliminary assessment purposes, the Made Ground across the site is taken as a single waste population.

10.7 Sampling and Testing

10.7.1 The hazardous waste classification assessment has been undertaken by adopting the maximum recorded concentration of each compound from all the samples tested within the identified waste population, as outlined in WM3, Approach D.

10.7.2 For the Waste Acceptance Criteria (WAC) assessment, representative samples were obtained. These are as follows:

- RBH101 at 0.3m depth (General Made Ground)
- RBH101 at 0.6m depth (General Made Ground)
- RBH102 at 0.1m depth (Topsoil)

10.7.3 The rate of testing has been chosen to provide a preliminary waste categorisation only.

10.8 Waste Characterisation

10.8.1 Where testing has been carried out, the waste classification assessment sheets are enclosed within Appendix J, and a summary of the findings is presented in the table below.

10.8.2 Observations from the fieldwork indicate that the underlying natural soils are not impacted by contamination, and therefore are considered suitable for disposal as non-hazardous waste in an inert landfill site without the requirement for further testing.

Potential Waste Population	Hazardous Classification (LoW code)	Landfill Classification	Comments
Made Ground	Hazardous (17-05-03*)	Stable non-reactive hazardous waste cell within a non-hazardous waste landfill site	Hazardous classification due to elevated HP5 - STOT & aspiration toxicity; HP10 - Toxic for reproduction and HP14 Ecotoxic.
Clean, uncontaminated, natural materials	Non-hazardous (17-05-04)	Inert	Considered non-hazardous and inert without any testing required.
Topsoil	Non-hazardous (17-05-04)	Inert	Topsoil suitable for disposal in an inert landfill.

Table 10-B: Waste characterisation summary

10.9 Application of Advice

10.9.1 Where assessments have been carried out of soils currently in-situ at the time of investigation and not of stockpiled waste soils, they should be treated as provisional only.

10.9.2 Additional investigation works and testing may help to identify and segregate different waste populations on site, including inert materials, and therefore reduce costs.

10.9.3 There is no obligation on any waste operator to accept our waste characterisation assessments. Landfill operators may consider your waste to fall under a different classification and/or may require additional testing of waste soils prior to acceptance. It is therefore recommended that this report along with the chemical results is provided to the preferred facility to confirm (or otherwise) it can accept the waste.

10.9.4 It should be noted that there remains the potential for unexpected or previously unencountered contamination to be encountered. Any such materials intended for waste disposal should be segregated and tested to determine the appropriate classification and disposal route.

10.10 Minimising Hazardous Waste

10.10.1 Due to the high costs associated with disposal of hazardous wastes, Soiltechnics recommend that the development is designed with a view to limiting as far as possible the removal of these materials. Often, there is the potential to reuse such materials in low-risk areas of the development, such as below hardstanding.

10.11 Further Recommendations

10.11.1 As the waste classifications provided are preliminary only and based on limited sampling of soils in-situ, it is recommended to undertake additional sampling and testing during the construction works to fully characterise the waste soils intended for disposal. The overall frequency of testing should be dependent upon the composition, volume and variability of the material excavated.

11 Recommendations for further works

11.1.1 No further works are recommended to progress the development through planning with respect to contaminated land.

11.1.2 The Principal Contractor should have a discovery strategy in place in the event of exposing unexpected or previously unencountered contamination. Soiltechnics should be informed at the earliest opportunity to undertake an assessment of the material, and to inform the Local Authority as appropriate.

11.1.3 The following table summarises the additional works which should be undertaken prior to commencement of any construction works and in support of the planning conditions.

Aspect	Delivered By	Description	Necessity
Discovery Strategy	Principal Contractor	The Principal Contractor should have a discovery strategy in place in the event of exposing unexpected or previously unencountered contamination. Soiltechnics should be informed at the earliest opportunity to undertake an assessment, and to inform the Local Authority as appropriate.	**REQUIRED**
Preliminary UXO Risk Assessment Study	3rd Party	The UXO hazard screen identified that bombing may have occurred in the vicinity of the site, therefore a Preliminary Risk Assessment should be undertaken in accordance with CIRIA C785. This must be commissioned directly with a specialist.	**RECOMMENDED**

Table 11-A: Recommended further works (pre-commencement)

11.1.4 The following table summarises the additional works which should be undertaken during the enabling and construction works phases to support the safe development of the site.

Aspect	Delivered By	Description	Necessity
Waste Classification	Soiltechnics	As the waste classifications provided are preliminary only and based on limited sampling of soils in-situ, it is recommended to undertake additional sampling and testing during the construction works to fully characterise the waste soils intended for disposal. The overall frequency of testing should be dependent upon the composition, volume and variability of the material excavated.	**RECOMMENDED**

Table 11-B: Recommended further works (enabling works & construction phase)

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Appendix A Drawings



Key:

Exploratory Holes

- Rotary Borehole
- Windowless Sampling Borehole
- Monitoring Well Installation
- Infiltration Testing

Site Features

- Site Boundary

Notes

1) Base image provided by Google.

2) All drawn features are approximate.

Contains OS data © Crown copyright [and database right] [2024]
Map data © 2024 Google

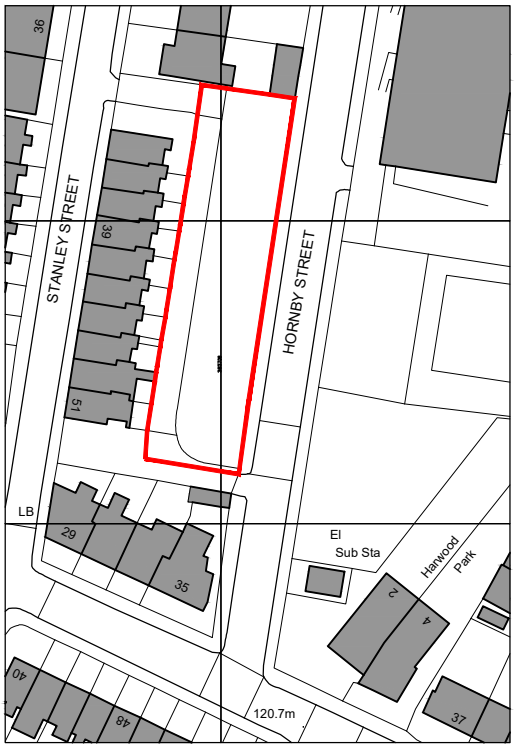
REV	DATE	COMMENT ON VARIATION
A	Sept 2024	First issue

soiltechnics
environmental ▪ geotechnical ▪ building fabric

PROJECT
Hornby Street, Heywood

TITLE
Exploratory Hole Location Plan

DRAWING No.
STW6573-D01-A



Ordnance Survey, (c) Crown Copyright 2023. All rights reserved. Licence number 100022432

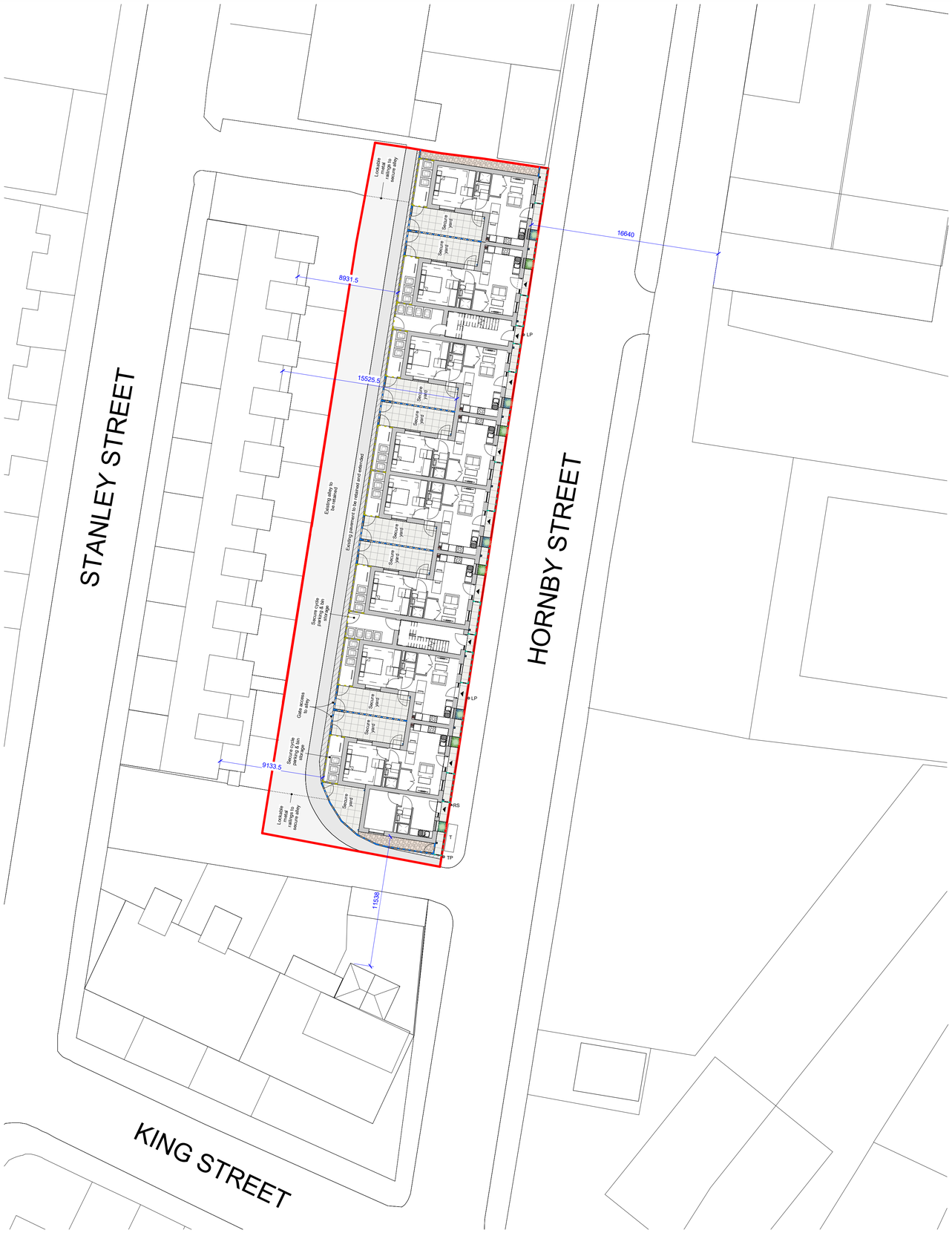
Site Boundary - (0.1Ha)

Existing Buildings

scale 1:1250 0 50m

Client: **Cornerstone Place**	Project: **Hornby Street, Heywood**			Drawing Name: **Location Plan**								
		Date:		Scale @ A4:	Project Number:		Drawing Number:			Drawing Purpose:		Revision:
		Aug 2023		1:1250	23-031		SK01			INFORMATION		P01
		Drawn:	Checked:	Status:	Project	Originator	Vol/Sys	Level	Type	Role	Number	
		JH	AJD		XX - XX - XX - XX - XX - XX - XX							

TRIANGLE ARCHITECTS
Tel: 0161 272 3500
E-mail: studio@trianglearchitects.co.uk
Web: www.trianglearchitects.co.uk
Twitter: @TriangleArch
Raven House,
113 Fairfield Street,
Manchester,
M12 6EL
©TRIANGLE ARCHITECTS LIMITED



Proposed Site Plan
1 : 200

© TRIANGLE ARCHITECTS LIMITED

- THIS DRAWING IS THE SUBJECT OF COPYRIGHT WHICH VESTS IN TRIANGLE ARCHITECTS LIMTED. IT IS AN INFRINGEMENT OF COPYRIGHT TO REPRODUCE THIS DRAWING, BY WHATEVER MEANS, INCLUDING ELECTRONIC, WITHOUT THE EXPRESS WRITTEN CONSENT OF TRIANGLE ARCHITECTS LIMITED WHICH RESERVES ALL ITS RIGHTS.
- TRIANGLE ARCHITECTS LIMITED ASSERTS ITS RIGHTS TO BE IDENTIFIED AS THE AUTHOR OF THIS DESIGN.
- DRAWING NOT TO BE SCALED. FIGURE DIMENSIONS TO BE WORKED TO IN ALL CASES
- THE CONTRACTOR IS RESPONSIBLE FOR CHECKING DIMENSIONS, TOLERANCES & REFERENCES.
- ANY DISCREPANCY TO BE VERIFIED WITH THE ARCHITECT BEFORE PROCEEDING WITH THE WORKS
- REPORT ERRORS & OMISSIONS TO ARCHITECT.
- WHERE AN ITEM IS COVERED BY DRAWINGS OF DIFFERENT SCALE, THE LARGER SCALE DRAWING TO BE WORKED TO. DO NOT SCALE FROM THE DRAWING. FIGURED DIMENSIONS TO BE WORKED TO IN ALL CASES.
- CHECK ALL DIMENSIONS ON SITE.
- DRAWING TO BE READ IN CONJUNCTION WITH THE HEALTH & SAFETY PLAN. AND ALL RELEVANT RISK ASSESSMENTS AND THE FOLLOWING DRAWINGS.

Site Plan Legend

- Planting in palnters to the front of dwellings
- Paving to front gardens and secure yards
- Existing pavement to be retained
- Extension to existing pavement
- Existing alley to be retained
- Maintance strip
- LP/TP — Lampost / telegraph pole (lamposts to be re-located)
- RS — Road Sign (to be re-located)
- T — Telecom Inspection Chamber
- Site boundary 0.1Ha
- Overlooking distances
- Full height close boarded timber fence
- Half height metal railings
- Single brick wall (to attach to roof)

N

Scale 1:200
0m 2m 4m 10m

DRAFT

Rev	Date	By	Remarks
P03	18.12.23		Revised to add annotations and site key.
P02	28.11.23		Revised in line with clients comments for DTM.
P01	24.11.23		Draft issue for comment.

Client: Cornerstone Place

Project Name: Hornby Street, Heywood

Drawing Name: Proposed Site Plan

Drawing Purpose: **Preliminary**

TRI no.	Project Number:	Drawing Number:	Revision
	23-031	02	P03

CDE no.	Project	Origin	Vol/Sys	Level	Type	Role	Number

Status	Scale @ A1	Drawn	Checked	Date
	As indicated	JH	AJD	Nov 2023

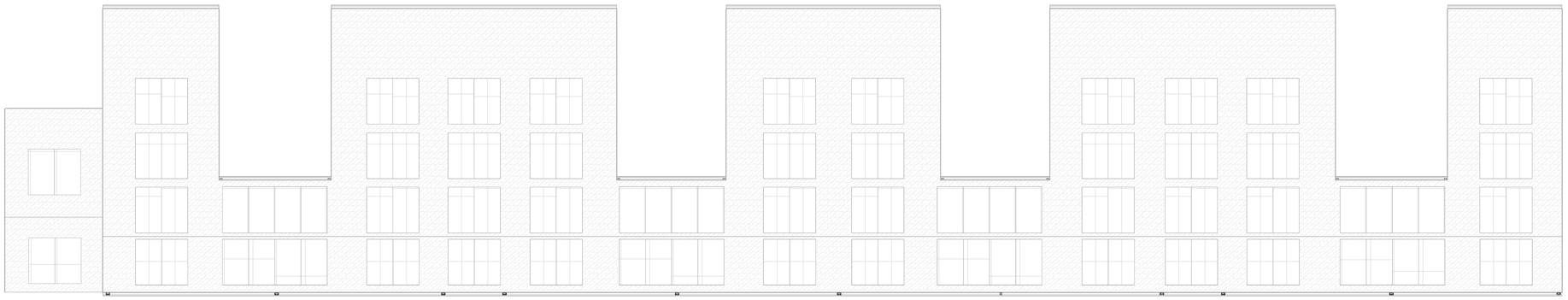
TRIANGLE ARCHITECTS

Tel: 0161 272 3500
E-mail: studio@trianglearchitects.co.uk
Web: www.trianglearchitects.co.uk
Twitter: @TriangleArch

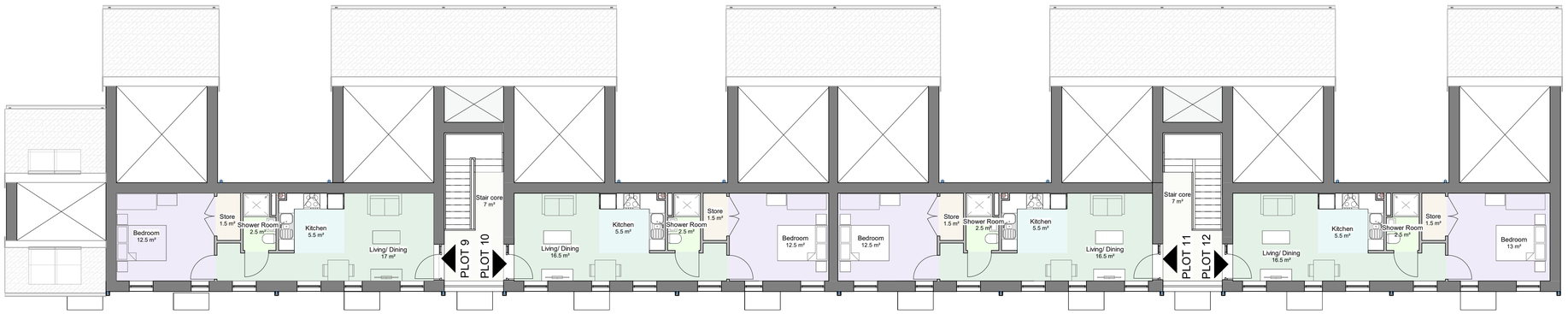
Lower Ground Floor,
4 Jordan Street,
Manchester,
M15 4PY

© TRIANGLE ARCHITECTS LIMITED

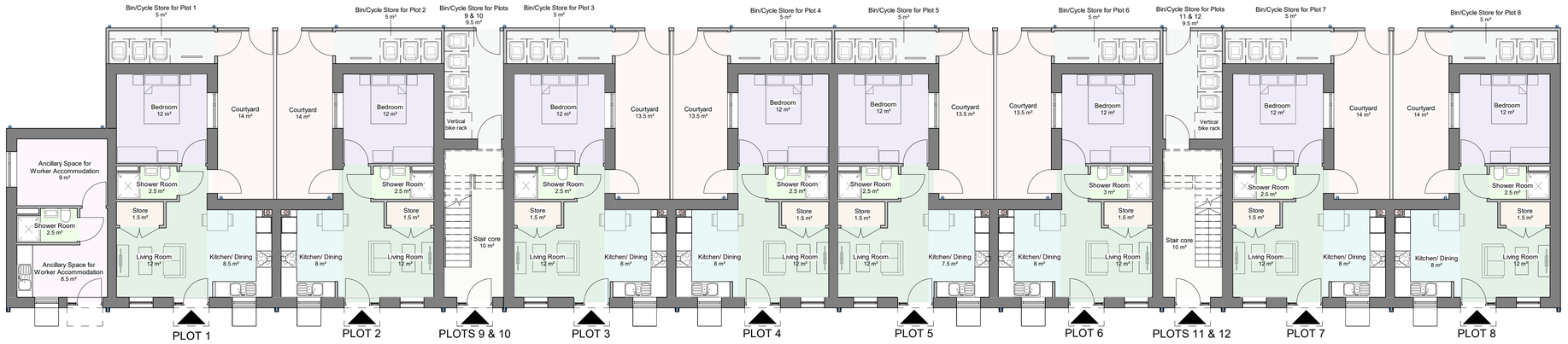
- THIS DRAWING IS THE SUBJECT OF COPYRIGHT WHICH VESTS IN TRIANGLE ARCHITECTS LIMTED. IT IS AN INFRINGEMENT OF COPYRIGHT TO REPRODUCE THIS DRAWING, BY WHATEVER MEANS, INCLUDING ELECTRONIC, WITHOUT THE EXPRESS WRITTEN CONSENT OF TRIANGLE ARCHITECTS LIMITED WHICH RESERVES ALL ITS RIGHTS.
- TRIANGLE ARCHITECTS LIMITED ASSERTS ITS RIGHTS TO BE IDENTIFIED AS THE AUTHOR OF THIS DESIGN.
- DRAWING NOT TO BE SCALED. FIGURE DIMENSIONS TO BE WORKED TO IN ALL CASES
- THE CONTRACTOR IS RESPONSIBLE FOR CHECKING DIMENSIONS, TOLERANCES & REFERENCES.
- ANY DISCREPANCY TO BE VERIFIED WITH THE ARCHITECT BEFORE PROCEEDING WITH THE WORKS
- REPORT ERRORS & OMISSIONS TO ARCHITECT.
- WHERE AN ITEM IS COVERED BY DRAWINGS OF DIFFERENT SCALE, THE LARGER SCALE DRAWING TO BE WORKED TO. DO NOT SCALE FROM THE DRAWING. FIGURED DIMENSIONS TO BE WORKED TO IN ALL CASES.
- CHECK ALL DIMENSIONS ON SITE.
- DRAWING TO BE READ IN CONJUNCTION WITH THE HEALTH & SAFETY PLAN. AND ALL RELEVANT RISK ASSESSMENTS AND THE FOLLOWING DRAWINGS.



Roof Plan
1:100



First Floor Plan
1:100



Ground Floor Plan
1:100



DRAFT

Rev	Date	By	Remarks
P05	18.12.23		Ancillary space renamed to 'ancillary space for worker accommodation' as requested by planning officer.
P04	13.12.23		Revised in line with client comments from DTM.
P03	06.12.23		Revised in line with clients comments.
P02	28.11.23		Revised in line with client comments from DTM.
P01	24.11.23		Draft Issue for Comment.

Client: Cornerstone Place

Project Name: Hornby Street, Heywood

Drawing Name: Proposed Block Plan

Drawing Purpose: **Preliminary**

Dwg no.	Project	Origin	Vol/Sys	Level	Type	Role	Number

TRI no.	Project Number:	TRI dwg no:	Revision
	23-031	11	P05

Status	Scale @ A1	Drawn	Checked	Date
	1 : 100	JH	AJD	Nov 2023

TRIANGLE ARCHITECTS

Tel: 0161 272 3500
E-mail: studio@trianglearchitects.co.uk
Web: www.trianglearchitects.co.uk
Twitter: @TriangleArch

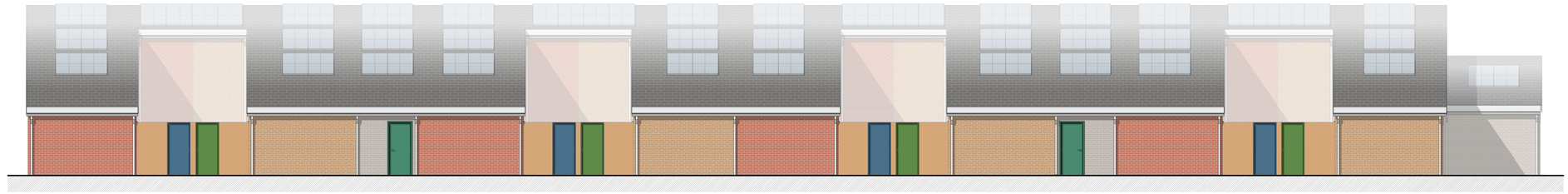
Lower Ground Floor,
4 Jordan Street,
Manchester,
M15 4PY

© TRIANGLE ARCHITECTS LIMITED

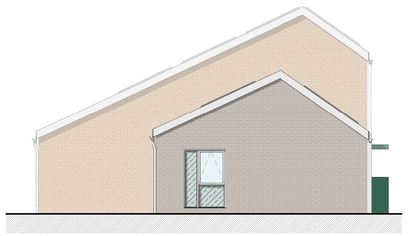
- THIS DRAWING IS THE SUBJECT OF COPYRIGHT WHICH VESTS IN TRIANGLE ARCHITECTS LIMTED. IT IS AN INFRINGEMENT OF COPYRIGHT TO REPRODUCE THIS DRAWING, BY WHATEVER MEANS, INCLUDING ELECTRONIC, WITHOUT THE EXPRESS WRITTEN CONSENT OF TRIANGLE ARCHITECTS LIMITED WHICH RESERVES ALL ITS RIGHTS.
- TRIANGLE ARCHITECTS LIMITED ASSERTS ITS RIGHTS TO BE IDENTIFIED AS THE AUTHOR OF THIS DESIGN.
- DRAWING NOT TO BE SCALED. FIGURE DIMENSIONS TO BE WORKED TO IN ALL CASES
- THE CONTRACTOR IS RESPONSIBLE FOR CHECKING DIMENSIONS, TOLERANCES & REFERENCES.
- ANY DISCREPANCY TO BE VERIFIED WITH THE ARCHITECT BEFORE PROCEEDING WITH THE WORKS
- REPORT ERRORS & OMISSIONS TO ARCHITECT.
- WHERE AN ITEM IS COVERED BY DRAWINGS OF DIFFERENT SCALE, THE LARGER SCALE DRAWING TO BE WORKED TO. DO NOT SCALE FROM THE DRAWING. FIGURED DIMENSIONS TO BE WORKED TO IN ALL CASES.
- CHECK ALL DIMENSIONS ON SITE.
- DRAWING TO BE READ IN CONJUNCTION WITH THE HEALTH & SAFETY PLAN. AND ALL RELEVANT RISK ASSESSMENTS AND THE FOLLOWING DRAWINGS.



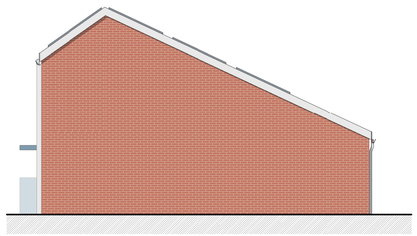
Front Block Elevation
1:100



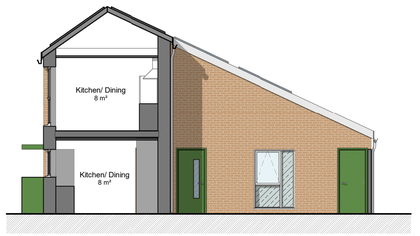
Rear Block Elevation
1:100



Side 1 Elevation
1:100



Side 2 Elevation
1:100



External Courtyard Elevation
1:100

DRAFT

Rev	Date	By	Remarks
P05	18.12.23		Revised in line with client comments.
P04	13.12.23		Revised in line with clients comments from DTM.
P03	06.12.23		Revised in line with Clients comments
P02	28.11.23		Revised in line with client comments from DTM.
P01	24.11.23		Draft Issue for Comment.

Client: Cornerstone Place

Project Name: Hornby Street, Heywood

Drawing Name: Proposed Block Elevations

Drawing Purpose: **Preliminary**

Dwg no	Project	Origin	Vol/Sys	Level	Type	Role	Number

TRI no.	Project Number:	TRI dwg no:	Revision
	23-031	21	P05

Status	Scale @ A1	Drawn	Checked	Date
	1 : 100	JH	AJD	Dec 2023

TRIANGLE ARCHITECTS

Tel: 0161 272 3500
E-mail: studio@trianglearchitects.co.uk
Web: www.trianglearchitects.co.uk
Twitter: @TriangleArch

Lower Ground Floor,
4 Jordan Street,
Manchester,
M15 4PY

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Appendix B Exploratory Hole Logs: Boreholes

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Key to legends

Composite materials, soils and lithology							
	Topsoil		Made Ground		Boulders		Chalk
	Clay		Coal		Cobbles		Concrete
	Gravel		Limestone		Mudstone		Peat
	Sand		Sandstone		Silt		Siltstone

Note: Composite soil types are signified by combined symbols.

Key to 'test results' and 'sample/core recovery' columns

Test result	
Depth	Records depth that the test was carried out (i.e.: at 2.10m or between 2.10m and 2.55m)
Result	PP – Pocket penetrometer result reported as an equivalent undrained shear strength (kN/m^2) by applying a factor of 50. SV – Hand held shear vane result reported as an undrained shear strength (kN/m^2). Where multiple readings are taken at the same level the average value is shown on the log. * Signifies that instrument limit reached.
	SPT – Standard Penetration Test result (N value) (uncorrected)[1,2,3] SPT(c) – Standard Penetration Test result (solid cone) (N value) (uncorrected)[1,2,3]
	UT – Undisturbed sample 100mm diameter sampler with number of blows of driving equipment required to obtain sample

Sample/core recovery	
Run No.	Records depth and number of the abstracted core[3]
Total Core Recovery (TCR) %	Ratio of core recovered (solid and non-intact) to length of core run
Solid Core Recovery (SCR) %	Ratio of solid, cylindrical, pieces of rock core recovered to length of core run
Rock Quality Designation (RQD) %	Ratio of core pieces longer than 100mm to length of core run
Fracture Index (FI)	Inverse of fracture spacing, per metre, over arbitrary length

Note 1: Seating blows recorded in brackets.

Note 2: Casing depth records depth of casing.

Note 3: The depths of open holing will be recorded in the notes. Method of lubrication of and diameter of drilling tools will be recorded on the log, together with location of circulation loss during drilling.

Water observations

Described at foot of log and shown in the 'water strike' column.

Water level observed after specified delay in drilling

Water strike

Installation details

	Gravel filter		Bentonite
	Slotted pipe		Unslotted pipe
	Arisings		Grout
	Extensometer magnet		Vibrating wire piezometer

soiltechnics

environmental ▪ geotechnical ▪ building fabric

INSTALL	STRATA: DESCRIPTION	DEPTH (m)	REDUCED LVL (mOD)	LEGEND	WATER STRIKES	CORING: DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	SPT TESTING: TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	OTHER IN SITU TESTING: TYPE / DEPTH (m)	RESULT	SAMPLING: FROM (m)	TO (m)	TYPE
	Grass onto dark brown slightly sandy CLAY with frequent rootlets. (TOPSOIL)	0.20															0.30	9.00	ES
	Dark brownish grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to rounded brick, sandstone and clinker with occasional fragments of plastic and timber. (MADE GROUND)	0.90															0.60		ES
											S 1.20	(0) 1					1.10		D
	Firm dark grey slightly sandy amorphous PEAT. (PEAT)	1.60															1.80		D
	Soft grey slightly gravelly SILT. (GLACIOFLUVIAL DEPOSITS)	2.00									S 2.00	(0) 3					2.20		D
	Soft dark brown pseudo-fibrous PEAT. (PEAT)	2.30															2.50		D
	Soft light grey sandy SILT. (GLACIOFLUVIAL DEPOSITS)	3.20									S 3.00	(2) 6							
	Firm brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to subrounded coal and sandstone. (GLACIOFLUVIAL DEPOSITS)														PP 3.70	PP 75	3.70		D
											S 4.00	(14) 37			PP 3.90	PP 50	4.00	4.45	D
	NO RECOVERY assumed clay/sand/gravel (GLACIOFLUVIAL DEPOSITS)	4.00				4.00 - 5.50	0	0	0										
											S 5.50	(15) 39	3.00				5.50	5.90	D
						5.50 - 7.00	0	0	0										
	Extremely weak to weak thinly laminated grey MUDSTONE. Discontinuities are very closely spaced rough subhorizontal and occasionally infilled with clay. (PENNINE LOWER COAL MEASURES FORMATION)	7.00															7.00	7.45	D
						7.00 - 8.50	50	35	0	20									
		8.50									S 8.50	(10) 50*	4.00						
						8.50 - 10.00	55	35	0								8.70	8.80	B

CONTINUED ON NEXT SHEET.

Notes
Inspection pit excavated to 1.2m depth. Borehole dynamic sampled between 1.2m and 4.0m depth. Borehole cored between 4.0m and 11.2m depth. Borehole open hole drilled between 11.2m and 30.0m depth. Terminated at scheduled depth

Groundwater observations
Groundwater encountered at 4.0m depth, rising to 3.9m depth in 20 minutes, Recorded at 3.1m on completion of borehole.

Title
Borehole record

Date(s)
16/07/2024 - 19/07/2024

Method
Rotary Water Flush

Plant used
Rotary Rig

Sheet number
Sheet 1 of 4

Level (m OD)
-

Logged by
CB

Revision
A

Co-ordinates
-

Checked by
JP

RBH101

soiltechnics
environmental ▪ geotechnical ▪ building fabric

INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (mOD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Very weak to medium strong thinly laminated dark grey organic MUDSTONE. Discontinuities are very closely to closely spaced rough subhorizontal and occasionally infilled with clay. (PENNINE LOWER COAL MEASURES FORMATION)					8.50 - 10.00	55	35	0	20	S 10.00	(25)* 50*	8.50				9.00 9.54	9.45 9.60	D C
										NI									
						10.00 - 11.20	80	80	10	18							10.50 10.50 10.90	10.95 10.60 11.00	D B B
	Dark grey MUDSTONE. (PENNINE LOWER COAL MEASURES FORMATION)	11.20																	

CONTINUED ON NEXT SHEET.

Notes
Inspection pit excavated to 1.2m depth. Borehole dynamic sampled between 1.2m and 4.0m depth. Borehole cored between 4.0m and 11.2m depth. Borehole open hole drilled between 11.2m and 30.0m depth. Terminated at scheduled depth

Groundwater observations
Groundwater encountered at 4.0m depth, rising to 3.9m depth in 20 minutes, Recorded at 3.1m on completion of borehole.

Title
Borehole record

Date(s)
16/07/2024 - 19/07/2024

Method
Rotary Water Flush

Plant used
Rotary Rig

Sheet number
Sheet 2 of 4

Level (m OD)
-

Logged by
CB

Revision
A

Co-ordinates
-

Checked by
JP

RBH101

soiltechnics
environmental ▪ geotechnical ▪ building fabric

INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (mOD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Light grey MUDSTONE. (PENNINE LOWER COAL MEASURES FORMATION)	21.00																	

CONTINUED ON NEXT SHEET.

Notes
Inspection pit excavated to 1.2m depth. Borehole dynamic sampled between 1.2m and 4.0m depth. Borehole cored between 4.0m and 11.2m depth. Borehole open hole drilled between 11.2m and 30.0m depth. Terminated at scheduled depth

Groundwater observations
Groundwater encountered at 4.0m depth, rising to 3.9m depth in 20 minutes, Recorded at 3.1m on completion of borehole.

Title
Borehole record

Date(s)
16/07/2024 - 19/07/2024

Method
Rotary Water Flush

Plant used
Rotary Rig

Sheet number
Sheet 3 of 4

Level (m OD)
-

Logged by
CB

Revision
A

Co-ordinates
-

Checked by
JP

RBH101

soiltechnics

environmental ▪ geotechnical ▪ building fabric

INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (mOD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	BOREHOLE TERMINATED AT 30.00m	30.00																	

Notes
Inspection pit excavated to 1.2m depth. Borehole dynamic sampled between 1.2m and 4.0m depth. Borehole cored between 4.0m and 11.2m depth. Borehole open hole drilled between 11.2m and 30.0m depth. Terminated at scheduled depth

Groundwater observations
Groundwater encountered at 4.0m depth, rising to 3.9m depth in 20 minutes, Recorded at 3.1m on completion of borehole.

Title
Borehole record

Date(s)
16/07/2024 - 19/07/2024

Method
Rotary Water Flush

Plant used
Rotary Rig

Sheet number
Sheet 4 of 4

Level (m OD)
-

Logged by
CB

Revision
A

Co-ordinates
-

Checked by
JP

RBH101

Hornby Street, Heywood

STW6573

soiltechnics
environmental ▪ geotechnical ▪ building fabric

INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (mOD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Grass onto dark brown very clayey fine SAND with frequent rootlets. (TOPSOIL)	0.15															0.10	0.10	ES
	Light brown gravelly fine SAND. Gravel is fine to coarse angular to subrounded coal and quartzite. (GLACIOFLUVIAL DEPOSITS)																0.30	1.00	B
	Yellow SAND. (GLACIOFLUVIAL DEPOSITS)	1.20																	
	Yellow/brown clayey SAND. (GLACIOFLUVIAL DEPOSITS)	1.80																	
	Brown sandy CLAY. (GLACIOFLUVIAL DEPOSITS)	4.00									S 4.00	(1) 1	1.20						
											S 5.50	(1) 4	4.00						
	Brown CLAY with gravels. (GLACIOFLUVIAL DEPOSITS)	7.00									S 7.00	(7) 24	5.50						
	Weathered grey MUDSTONE. (PENNINE LOWER COAL MEASURES FORMATION)	8.00																	
	Light grey MUDSTONE. (PENNINE LOWER COAL MEASURES FORMATION)	8.50									S 8.50	(8) 50*	7.00						

CONTINUED ON NEXT SHEET.

Notes
Inspection pit excavated to 1.2m depth. Borehole open hole drilled to 10.0m depth.

Groundwater observations
Groundwater encountered at 2.8m depth upon completion of borehole.

Title
Borehole record

Date(s)
19/07/2024

Method
Rotary Water Flush

Plant used
Rotary Rig

Sheet number
Sheet 1 of 2

Level (m OD)
-

Logged by
VW

Revision
A

Co-ordinates
-

Checked by
JP

RBH102

Hornby Street, Heywood

STW6573

soiltechnics

environmental ▪ geotechnical ▪ building fabric

INSTALL	STRATA				WATER STRIKES	CORING					SPT TESTING				OTHER IN SITU TESTING		SAMPLING		
	DESCRIPTION	DEPTH (m)	REDUCED LVL (mOD)	LEGEND		DEPTH (m)	TCR (%)	SCR (%)	RQD (%)	FI	TYPE / DEPTH (m)	RESULT	CASING DEPTH (m)	WATER LEVEL (m)	TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	BOREHOLE TERMINATED AT 10.00m	10.00									S 10.00	(25)* 50*	8.50						

Notes Inspection pit excavated to 1.2m depth. Borehole open hole drilled to 10.0m depth.	**Title** Borehole record	**Date(s)** 19/07/2024
	Method Rotary Water Flush	**Plant used** Rotary Rig	**Sheet number** Sheet 2 of 2
Groundwater observations Groundwater encountered at 2.8m depth upon completion of borehole.	**Level (m OD)** -	**Logged by** VW	**Revision** A
	Co-ordinates -	**Checked by** JP	**RBH102**

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Key to legends

Composite materials, soils and lithology							
	Topsoil		Made Ground		Boulders		Chalk
	Clay		Coal		Cobbles		Concrete
	Gravel		Limestone		Mudstone		Peat
	Sand		Sandstone		Silt		Siltstone

Note: Composite soil types are signified by combined symbols.

Key to 'test results' and 'sampling' columns

Test result		
Depth		Records depth that the test was carried out (i.e.: at 2.10m or between 2.10m and 2.55m)
Result		PP – Pocket penetrometer result reported as an equivalent undrained shear strength (kN/m^2) by applying a factor of 50. SV – Hand held shear vane result reported as an undrained shear strength (kN/m^2). Where multiple readings are taken at the same level the average value is shown on the log. * Signifies that instrument limit reached.
		SPT – Standard Penetration Test result (N value) (uncorrected)[1,2,3] SPT(c) – Standard Penetration Test result (solid cone) (N value) (uncorrected)[1,2,3]
		UT – Undisturbed sample 100mm diameter sampler with number of blows of driving equipment required to obtain sample

Sampling		
From (m) To (m)		Records depth of sampling
Type	D	Disturbed sample
	B	Bulk disturbed sample
	ES	Environmental sample
	W	Water sample
	U	Undisturbed thick-walled sample 100mm diameter sampler
	UT	Undisturbed thin walled sample 100mm diameter sampler
	UTF	Failed undisturbed sample

Water observations

Described at foot of log and shown in the 'water strike' column.

Water level observed after specified delay in drilling

Water strike

Installation details

	Gravel filter		Bentonite
	Slotted pipe		Unslotted pipe
	Arisings		Grout
	Extensometer magnet		Vibrating wire piezometer

Density

Density recorded in brackets determined by qualitative field assessment or inferred from density testing and soil descriptions from across the site (i.e.: [Medium dense]).

soiltechnics
environmental ▪ geotechnical ▪ building fabric

INSTALL	STRATA: DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING: TYPE / DEPTH (m)	SPT TESTING: RESULT	SPT TESTING: CASING DEPTH (m)	SPT TESTING: WATER LEVEL (m)	OTHER IN SITU TESTING: TYPE / DEPTH (m)	OTHER IN SITU TESTING: RESULT	SAMPLING: FROM (m)	SAMPLING: TO (m)	SAMPLING: TYPE
	Grass onto firm dark brown slightly sandy CLAY with occasional rootlets. (TOPSOIL)	0.20										0.30	0.70	B
	Firm dark grey and brown slightly sandy slightly gravelly CLAY. Gravel is fine to coarse angular to subangular brick, glass, ash, clinker and plastic. (MADE GROUND)	0.80										0.30	0.70	ES
	Firm dark brown plastic slightly sandy amorphous PEAT. (PEAT)					S 1.00 - 1.45	(4) 8					1.40	1.70	D
	Very soft to soft dark brown plastic slightly sandy pseudo fibrous PEAT. (PEAT)	1.80				S 2.00 - 2.45	(4) 1					1.80	2.00	D
	Soft brown plastic slightly sandy amorphous PEAT. (PEAT)	2.35										2.50	2.60	D
	Soft yellowish brown sandy SILT. (GLACIOFLUVIAL DEPOSITS)	2.70										2.80	3.00	D
	Soft brown sandy SILT. (GLACIOFLUVIAL DEPOSITS)	3.10				S 3.00 - 3.45	(4) 2							
	Very soft to soft greyish brown slightly sandy silty CLAY. (GLACIOFLUVIAL DEPOSITS)	3.30										3.50	3.70	D
	Soft brown slightly gravelly sandy SILT. Gravel is fine to medium angular to subangular coal. (GLACIOFLUVIAL DEPOSITS)	4.10				S 4.00 - 4.45	(0) 3					4.10	5.00	B
						S 5.00 - 5.45	(4) 4							
	BOREHOLE TERMINATED AT 5.45m	5.45												

Notes
Borehole terminated at scheduled depth.

Groundwater observations
No groundwater encountered.

Title
Dynamic Windowless Sampling record

Recovery details: Range (m)	Recovery details: Recovery (%)
1.00 - 2.00	70
2.00 - 3.00	70
3.00 - 4.00	100
4.00 - 5.00	100

Method
Windowless sampler

Logged by
CB

Level (m OD)
-

Compiled by
KD

Co-ordinates
-

Checked by
DH

Date(s)
27/11/2023

Sheet number
Sheet 1 of 1

Revision
A

WS01

soiltechnics
environmental ▪ geotechnical ▪ building fabric

INSTALL	STRATA DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING TYPE / DEPTH (m)	SPT TESTING RESULT	SPT TESTING CASING DEPTH (m)	SPT TESTING WATER LEVEL (m)	OTHER IN SITU TESTING TYPE / DEPTH (m)	OTHER IN SITU TESTING RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Grass onto firm dark brown slightly sandy CLAY with occasional rootlets. (TOPSOIL)	0.25												
	Firm dark grey slightly sandy slightly gravelly CLAY. Gravel is fine to medium angular to subrounded brick, clinker, glass and wood. (MADE GROUND)									PP 0.40	PP=58	0.30	0.60	ES
										PP 0.80	PP=50			
	Medium dense brown gravelly silty SAND. Gravel is fine to medium angular to subangular quartz and sandstone. (GLACIOFLUVIAL DEPOSITS)	0.90				S 1.00 - 1.45	(4) 11							
												1.40	1.60	D
	Firm dark grey spongey amorphous PEAT. (PEAT)	1.65										1.70	1.90	D
	Firm brown clayey SILT. (GLACIOFLUVIAL DEPOSITS)	2.00				S 2.00 - 2.45	(6) 15							
	Stiff brown mottled grey slightly sandy slightly gravelly silty CLAY. Gravel is fine to medium angular to subrounded quartz, sandstone and coal. (GLACIOFLUVIAL DEPOSITS)	2.15								PP 2.20	PP=75			
												2.50	2.70	D
										PP 2.80	PP=75			
	Medium dense becoming very dense brown very silty fine to medium SAND. (GLACIOFLUVIAL DEPOSITS)	3.10				S 3.00 - 3.45	(6) 13							
												3.60	4.00	D
	BOREHOLE TERMINATED AT 4.50m	4.50												

Notes
Borehole terminated due to obstruction at 4.50m.

Groundwater observations
Groundwater encountered at 4.5m depth, filling borehole to 1.4m on completion of borehole.

Title
Dynamic Windowless Sampling record

Date(s)
27/11/2023

Recovery details		Method	Logged by	Sheet number
Range (m)	Recovery (%)	Windowless sampler	CB	Sheet 1 of 1
1.00 - 2.00	60	**Level (m OD)**	**Compiled by**	**Revision**
2.00 - 3.00	90	-	KD	A
3.00 - 4.00	35	**Co-ordinates**	**Checked by**	**WS02**
4.00 - 4.50	0	-	DH	

soiltechnics
environmental ▪ geotechnical ▪ building fabric

INSTALL	STRATA DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING TYPE / DEPTH (m)	SPT TESTING RESULT	SPT TESTING CASING DEPTH (m)	SPT TESTING WATER LEVEL (m)	OTHER IN SITU TESTING TYPE / DEPTH (m)	OTHER IN SITU TESTING RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Grass onto dark brown slightly sandy CLAY. (TOPSOIL)	0.20										0.10	0.20	ES
	Soft to firm light brown slightly gravelly sandy SILT. Gravel is fine to coarse angular to subrounded quartz, sandstone, mudstone and coal. (GLACIOFLUVIAL DEPOSITS)	0.45												
	Light brown slightly silty fine to medium SAND. (GLACIOFLUVIAL DEPOSITS)					S 1.00 - 1.45	(8) 16					0.70	0.90	B
	Soft to firm light brown slightly sandy slightly gravelly SILT. Gravel is fine to medium angular to subrounded quartz, mudstone, coal and sandstone. (GLACIOFLUVIAL DEPOSITS)	1.30								PP 1.50	PP=8	1.50	2.00	B
										PP 1.80	PP=0			
						S 2.00 - 2.45	(2) 4					2.00	3.00	B
										PP 2.50	PP=8			
										PP 2.80	PP=0			
						S 3.00 - 3.45	(2) 8					3.00	4.00	B
	Firm to stiff light brown and grey sandy SILT. (GLACIOFLUVIAL DEPOSITS)	3.10												
	Firm to stiff light brown sandy SILT with occasional bands of clayey sand. (GLACIOFLUVIAL DEPOSITS)	3.35												
	...at 3.35m depth, 150mm band of clayey sand.													
						S 4.00 - 4.45	(4) 8					4.00	5.00	B
						S 5.00 - 5.45	(4) 8							
	Firm to stiff brown sandy SILT. (GLACIOFLUVIAL DEPOSITS)	5.30												
	BOREHOLE TERMINATED AT 5.45m	5.45												

Notes
Infiltration testing performed.

Groundwater observations
No groundwater encountered.

Title
Dynamic Windowless Sampling record

Date(s)
27/11/2023

Recovery details		Method	Logged by	Sheet number
Range (m)	Recovery (%)	Windowless sampler	CB	Sheet 1 of 1
1.00 - 2.00	90	Level (m OD)	Compiled by	Revision
2.00 - 3.00	65	-	KD	A
3.00 - 4.00	100	Co-ordinates	Checked by	**WS03**
4.00 - 5.00	100	-	DH	

soiltechnics
environmental ▪ geotechnical ▪ building fabric

INSTALL	STRATA DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING TYPE / DEPTH (m)	SPT TESTING RESULT	SPT TESTING CASING DEPTH (m)	SPT TESTING WATER LEVEL (m)	OTHER IN SITU TESTING TYPE / DEPTH (m)	OTHER IN SITU TESTING RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Grass onto firm dark brown slightly sandy CLAY with frequent rootlets. (TOPSOIL)													
	Light brown sandy fine to medium angular to rounded GRAVEL of quartz, sandstone and coal. (MADE GROUND)	0.30										0.40 0.40	0.80 0.80	B ES
						S 1.00 - 1.45	(2) 8							
	Stiff light brown slightly gravelly sandy SILT. Gravel is fine to medium angular to subrounded sandstone, quartz and coal. (GLACIOFLUVIAL DEPOSITS)	1.30								PP 1.40	PP=79	1.40	1.90	B
	...at 1.7m depth, cobble of quartz									PP 1.80	PP=75			
						S 2.00 - 2.45	(6) 12							
	Stiff becoming firm light brown sandy SILT with occasional bands of gravel. Gravel is fine to medium subangular to subrounded quartz, sandstone and coal. (GLACIOFLUVIAL DEPOSITS)	2.40										2.50	3.00	B
						S 3.00 - 3.45	(6) 14							
												3.50	3.90	B
						S 4.00 - 4.45	(2) 7							
												4.70	4.90	B
						S 5.00 - 5.45	(4) 8							
	Firm to stiff brown sandy SILT. (GLACIOFLUVIAL DEPOSITS)	5.20												
	BOREHOLE TERMINATED AT 5.45m	5.45												

Notes
Borehole terminated at scheduled depth.

Groundwater observations
Groundwater encountered at 2.3m depth, filling borehole to 1.9m in 20 minutes.

Title
Dynamic Windowless Sampling record

Recovery details	
Range (m)	Recovery (%)
1.00 - 2.00	100
2.00 - 3.00	100
3.00 - 4.00	60
4.00 - 5.00	30

Method
Windowless sampler

Level (m OD)
-

Co-ordinates
-

Logged by
CB

Compiled by
KD

Checked by
DH

Date(s)
27/11/2023

Sheet number
Sheet 1 of 1

Revision
A

WS04

23-510 Hornby Street, Heywood
STV6299

soiltechnics
environmental ▪ geotechnical ▪ building fabric

INSTALL	STRATA DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND	WATER STRIKES	SPT TESTING TYPE / DEPTH (m)	SPT TESTING RESULT	SPT TESTING CASING DEPTH (m)	SPT TESTING WATER LEVEL (m)	OTHER IN SITU TESTING TYPE / DEPTH (m)	OTHER IN SITU TESTING RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Grass onto firm dark brown slightly sandy CLAY with frequent rootlets. (TOPSOIL)											0.10	0.20	ES
	Firm light brown slightly gravelly sandy SILT. Gravel is fine to medium subangular to subrounded quartz and sandstone. (GLACIOFLUVIAL DEPOSITS)	0.25										0.40	0.60	B
										PP 0.50	PP=29	0.40	0.60	ES
										PP 0.90	PP=29			
						S 1.00 - 1.45	(4) 12							
	Stiff light brown mottled grey slightly sandy slightly gravelly silty CLAY. Gravel is fine to medium angular to subrounded sandstone, quartz and coal. (GLACIOFLUVIAL DEPOSITS)	1.50												
										PP 1.70	PP=225	1.70	1.90	D
										PP 1.90	PP=225			
						S 2.00 - 2.45	(4) 12							
	...between 2.15m and 2.4m depth, band of sand.											2.15	2.40	D
										PP 2.50	PP=225	2.50	2.70	D
						S 3.00 - 3.45	(2) 6							
												3.20	3.40	D
										PP 3.40	PP=71			
	Stiff light brown sandy SILT with occasional cobble sized pockets of fine quartz gravel. (GLACIOFLUVIAL DEPOSITS)	3.70												
						S 4.00 - 4.45	(4) 10					4.00	5.00	B
										PP 4.40	PP=54			
										PP 4.80	PP=21			
						S 5.00 - 5.45	(4) 8							
	BOREHOLE TERMINATED AT 5.45m	5.45												

Notes
Borehole terminated at scheduled depth.

Groundwater observations
No groundwater encountered.

Title
Dynamic Windowless Sampling record

Recovery details

Range (m)	Recovery (%)
1.00 - 2.00	60
2.00 - 3.00	90
3.00 - 4.00	90
4.00 - 5.00	100

Method
Windowless sampler

Logged by
CB

Level (m OD)
-

Compiled by
KD

Co-ordinates
-

Checked by
DH

Date(s)
27/11/2023

Sheet number
Sheet 1 of 1

Revision
A

WS05

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Appendix C Photographic Records



Photograph 1 – Looking north from the southeast corner of the site



Photograph 2 – Looking southwest from the northeast corner of the site



Photograph 3 - Photograph looking northwest from the southeast corner of the site.



Photograph 4 – Looking west into the southern corner of the site



Photograph 1 - Photograph of RBH01 1.2m – 2.0m depth



Photograph 2 - Photograph of RBH101 2.0m – 3.0m depth



Photograph 1 - Photograph of RBH01 1.2m – 2.0m depth



Photograph 2 - Photograph of RBH101 2.0m – 3.0m depth



Photograph 1 - Photograph of RBH01 1.2m – 2.0m depth



Photograph 2 - Photograph of RBH101 2.0m – 3.0m depth



Photograph 3 - Photograph of RBH101 3.0m – 4.0m depth



Photograph 4 - Photograph of RBH101 7m – 8.5m and 8.5-10.0m



Photograph 5 - Photograph of RBH101 10.0m – 11.2m depth

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Appendix D In Situ Test Results

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Table summarising Pocket Penetrometer results

** Instrument limit reached.*

Location	Start Depth (m)	Results 1-3	Average	Undrained Shear Strength (kN/m^2)
RBH101	3.70	1.25/1.75/1.5	1.50	75
RBH101	3.90	1/0.75/1.25	1.00	50
WS02	0.40	1/1.25/1.25	1.17	58
WS02	0.80	1/1/1	1.00	50
WS02	2.20	1.5/1.5/1.5	1.50	75
WS02	2.80	1.5/1.5/1.5	1.50	75
WS03	1.50	0.25/0.25/0	0.17	8
WS03	1.80	0/0/0	0.00	0
WS03	2.50	0.25/0.25/0	0.17	8
WS03	2.80	0/0/0	0.00	0
WS04	1.40	1.75/1.5/1.5	1.58	79
WS04	1.80	1.5/1.5/1.5	1.50	75
WS05	0.50	0.5/0.5/0.75	0.58	29
WS05	0.90	1/0.5/0.25	0.58	29
WS05	1.70	4.5/4.5/4.5	4.50	225
WS05	1.90	4.5/4.5/4.5	4.50	225
WS05	2.50	4.5/4.5/4.5	4.50	225
WS05	3.40	1.25/1.5/1.5	1.42	71
WS05	4.40	1/1.75/0.5	1.08	54
WS05	4.80	0.5/0.5/0.25	0.42	21

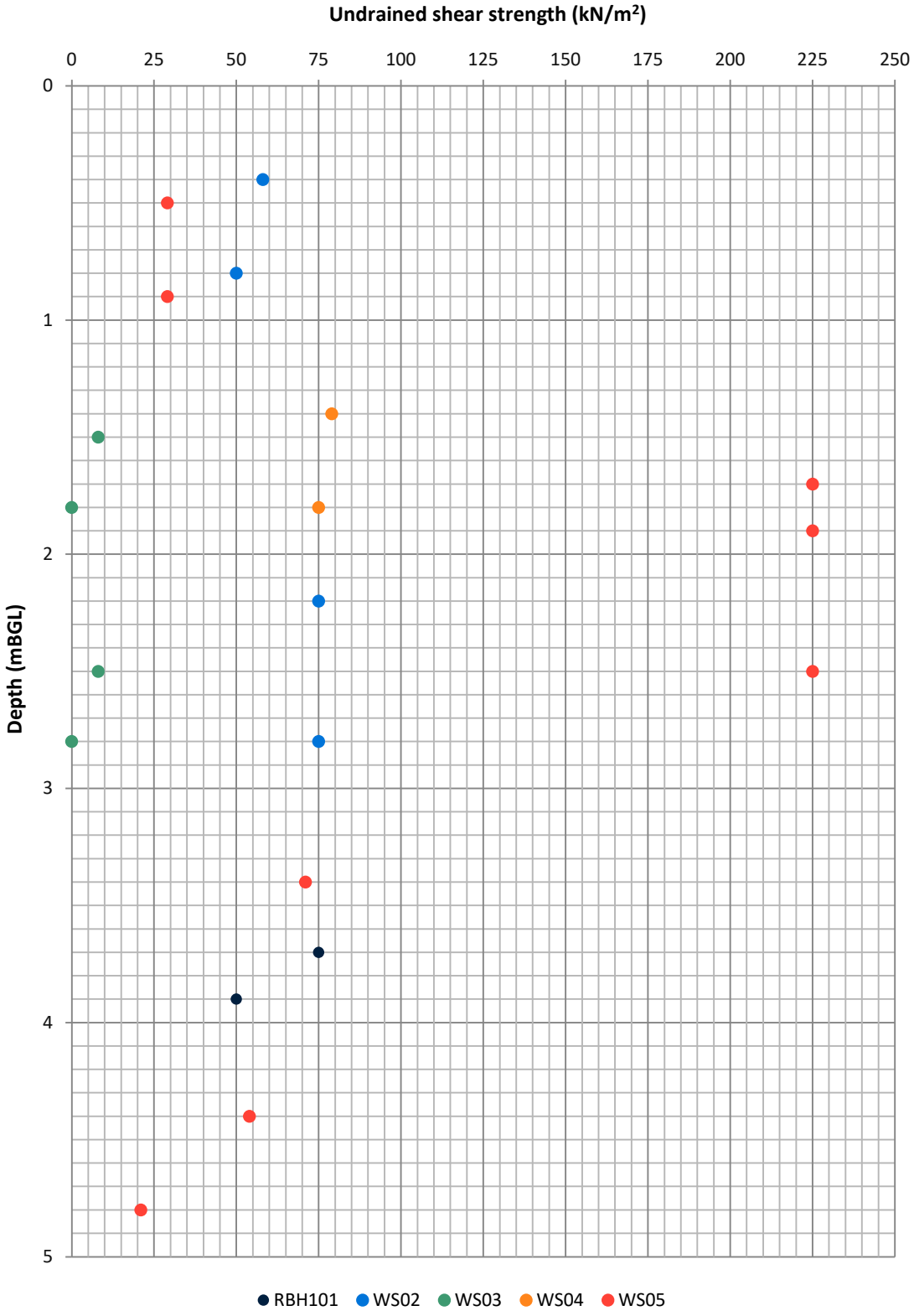
soiltechnics
environmental ▪ geotechnical ▪ building fabric

Table summarising Standard Penetration Test (SPT) results

Location	Start Depth (m)	Penetration (mm)					
		Seating 1-2	Main 1-4	Total Seating	Total Main	Total Seating	Total Main
RBH101	10.00	25	50	25	50	50	50
RBH101	1.20	0/0	0/0/0/1	0	1	150	300
RBH101	8.50	4/6	20/9/12/9	10	50	150	265
RBH101	5.50	7/8	9/9/10/11	15	39	150	300
RBH101	4.00	6/8	9/9/9/10	14	37	150	300
RBH101	3.00	1/1	1/1/2/2	2	6	150	300
RBH101	2.00	0/0	0/1/1/1	0	3	150	300
RBH102	10.00	25	50	25	50	65	50
RBH102	4.00	0/1	0/0/1/0	1	1	150	300
RBH102	8.50	3/5	7/11/21/11	8	50	150	270
RBH102	7.00	3/4	4/7/5/8	7	24	150	300
RBH102	5.50	0/1	1/1/1/1	1	4	150	300
WS01	5.00	2/2	1/1/1/1	4	4	150	300
WS01	3.00	2/2	1/1/0/0	4	2	150	300
WS01	4.00	0/0	0/1/1/1	0	3	150	300
WS01	2.00	2/2	1/0/0/0	4	1	150	300
WS01	1.00	2/2	2/2/2/2	4	8	150	300
WS02	3.00	3/3	4/3/3/3	6	13	150	300
WS02	2.00	3/3	3/4/4/4	6	15	150	300
WS02	1.00	2/2	2/3/3/3	4	11	150	300
WS03	4.00	2/2	2/2/2/2	4	8	150	300
WS03	3.00	1/1	2/2/2/2	2	8	150	300
WS03	1.00	4/4	4/4/4/4	8	16	150	300
WS03	2.00	1/1	1/1/1/1	2	4	150	300
WS03	5.00	2/2	2/2/2/2	4	8	150	300
WS04	5.00	2/2	2/2/2/2	4	8	150	300
WS04	2.00	3/3	3/3/3/3	6	12	150	300
WS04	1.00	1/1	2/2/2/2	2	8	150	300
WS04	4.00	1/1	1/2/2/2	2	7	150	300
WS04	3.00	3/3	4/4/3/3	6	14	150	300
WS05	5.00	2/2	2/2/2/2	4	8	150	300
WS05	1.00	2/2	3/3/3/3	4	12	150	300
WS05	4.00	2/2	2/2/3/3	4	10	150	300
WS05	3.00	1/1	1/1/2/2	2	6	150	300
WS05	2.00	2/2	3/3/3/3	4	12	150	300

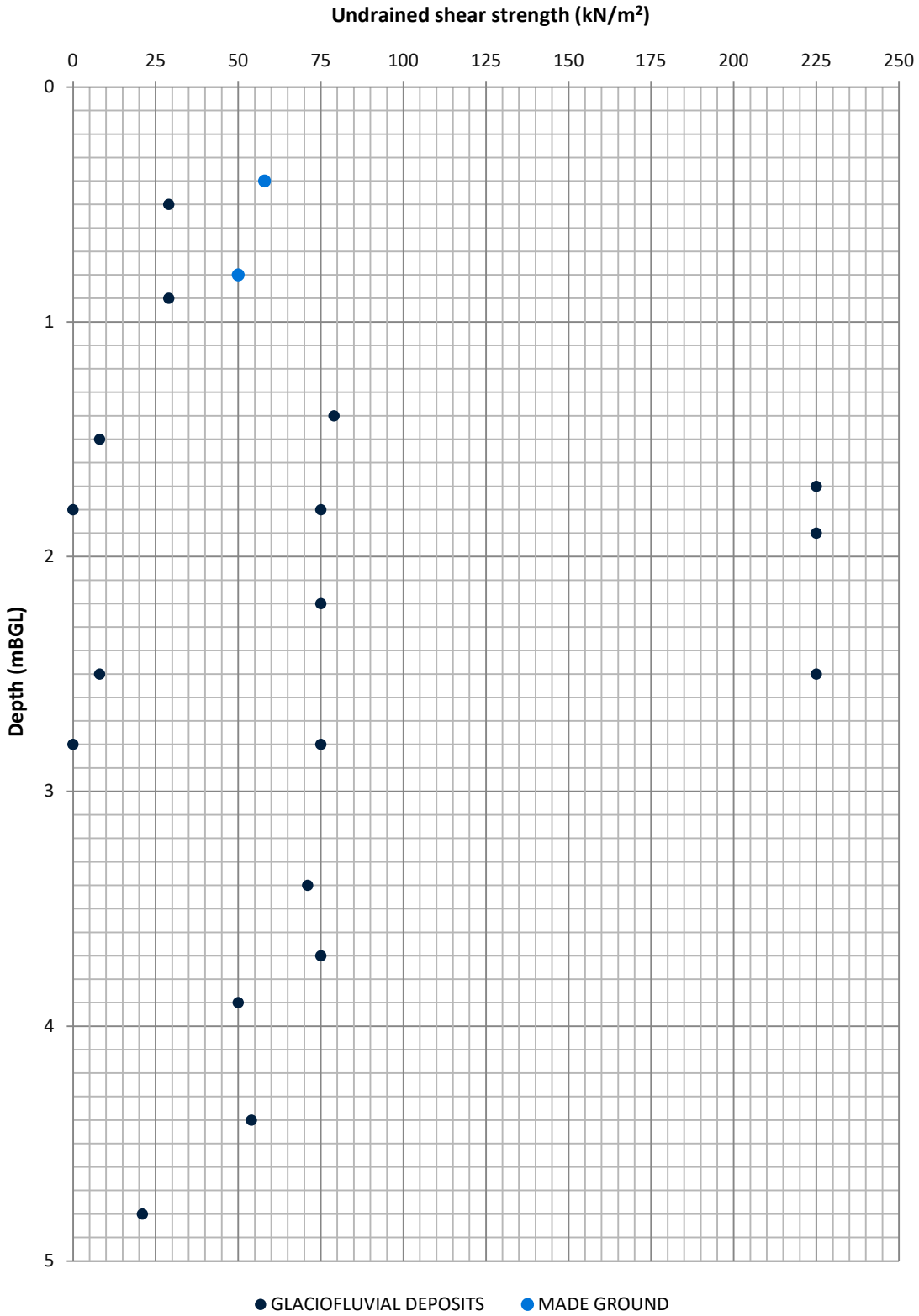
soiltechnics
environmental ▪ geotechnical ▪ building fabric

Plot summarising Pocket Penetrometer results versus depth filtered by location



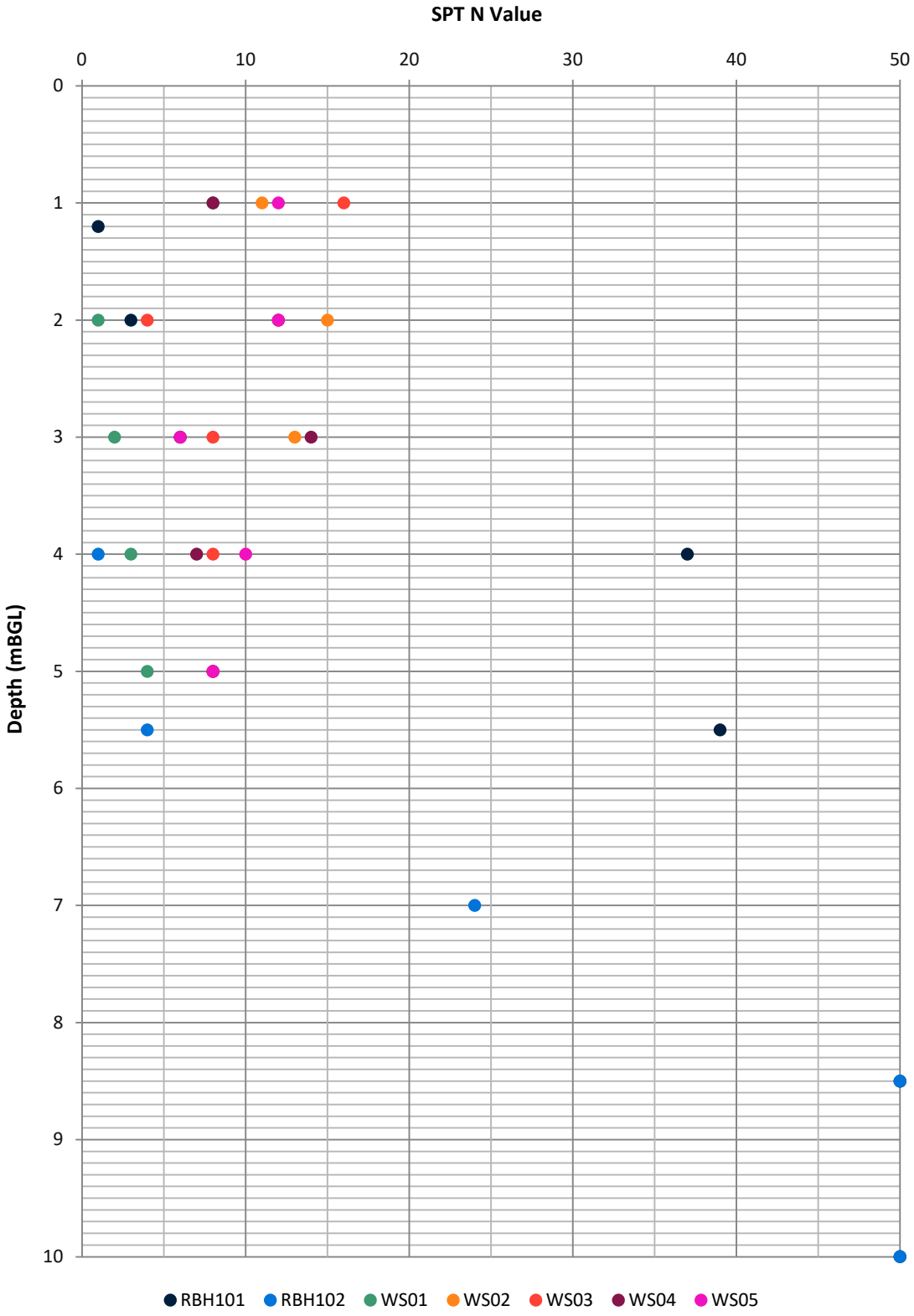
soiltechnics
environmental ▪ geotechnical ▪ building fabric

Plot summarising Pocket Penetrometer results versus depth filtered by geology



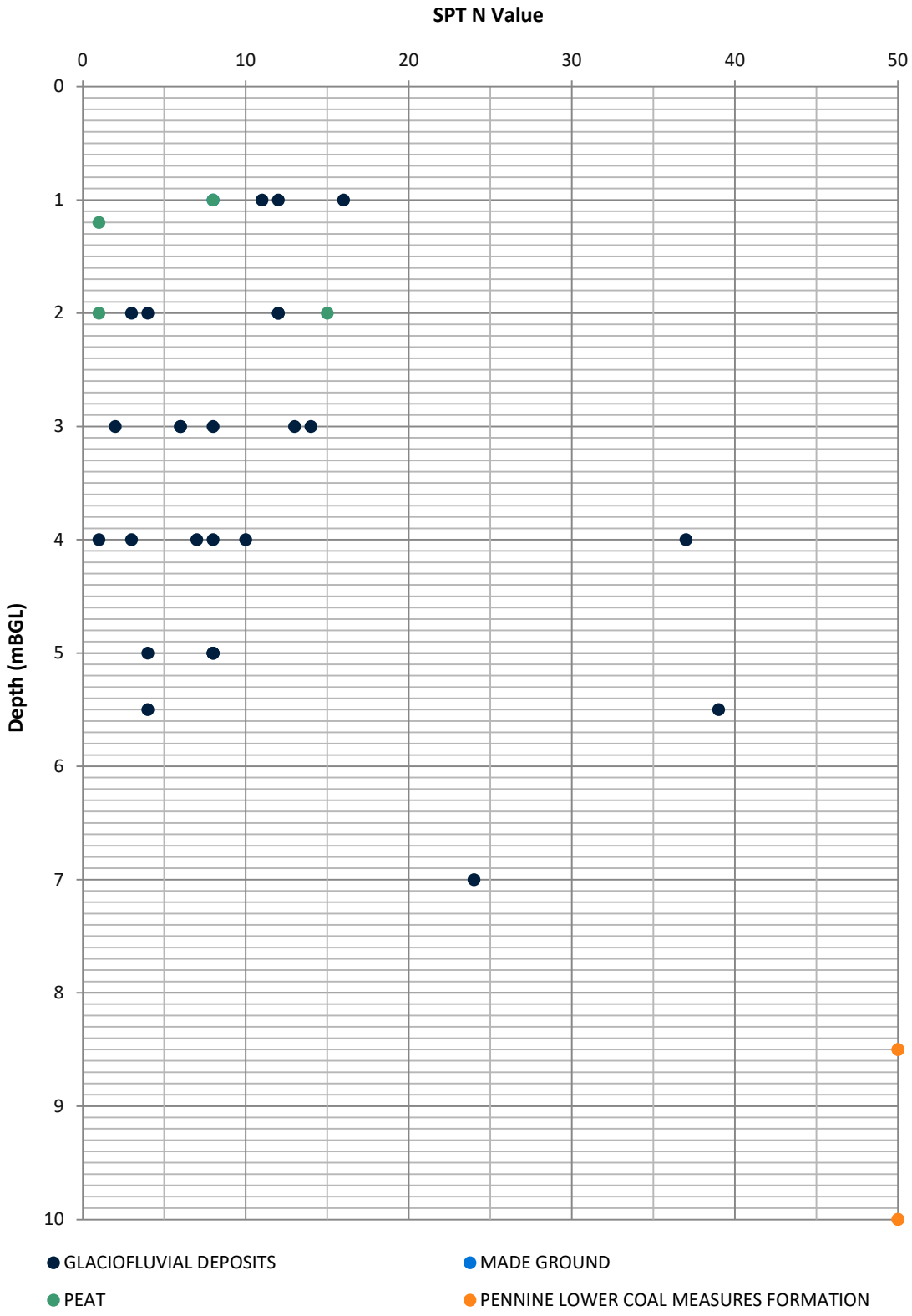
soiltechnics
environmental ▪ geotechnical ▪ building fabric

Plot summarising Standard Penetration Test (SPT) results versus depth filtered by location



soiltechnics
environmental ▪ geotechnical ▪ building fabric

Plot summarising Standard Penetration Test (SPT) results versus depth filtered by geology



soiltechnics
environmental ▪ geotechnical ▪ building fabric

Appendix E In situ Permeability Testing Results

soiltechnics
environmental ▪ geotechnical ▪ building fabric

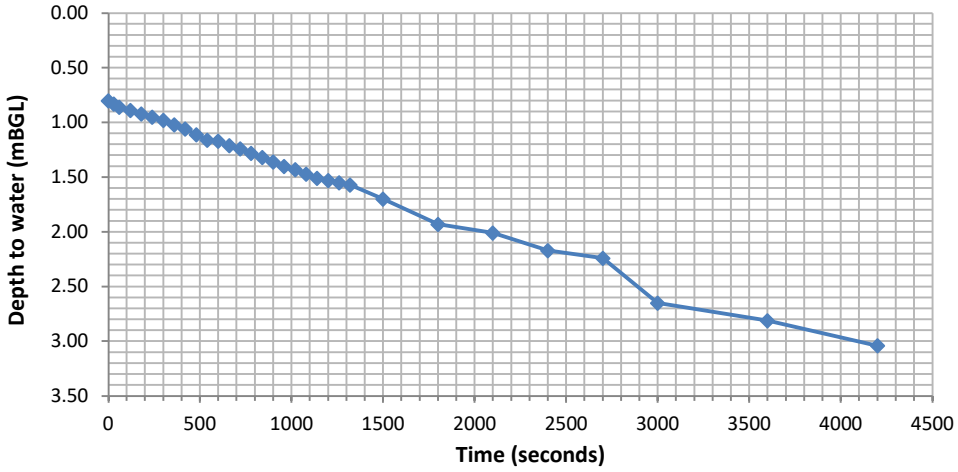
Permeability test in a borehole using open systems (BS EN ISO 22282-2:2012)

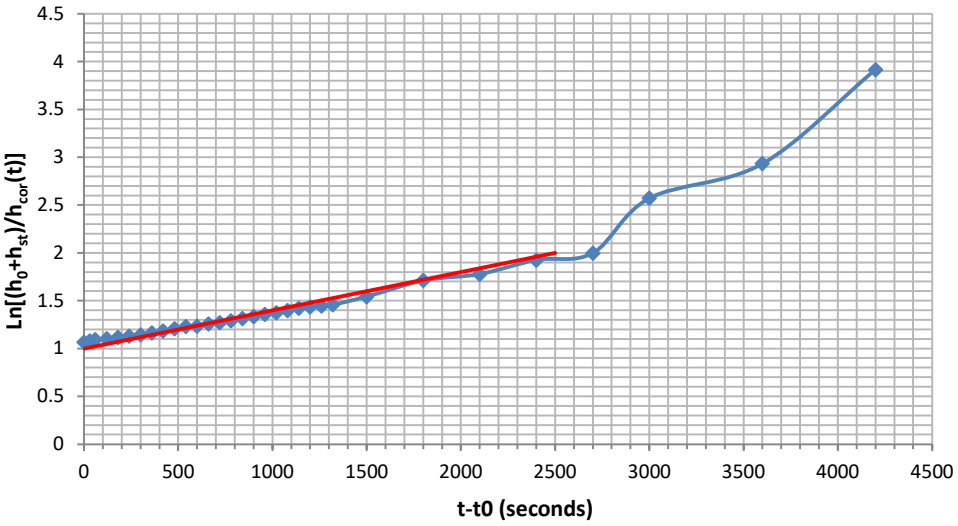
Location	Test number	Test method	Test system	Test date
WS03	1	Falling head	Open borehole	27/11/2023

Top of test section (m)	Bottom of test section (m)	Test section length (m)	Test diameter (m)
0.80	5.45	4.65	0.1

Variables at start of test

Groundwater (mBGL)	Water after injection (mBGL)	Change in head (m)
Dry	0.8	4.65





F	Shape factor according BS EN ISO 22282-1:2012	6.446 m
S	Cross sectional area of measurement tube	0.0079 m^2
h_{st}	Corrective term to initial static level	2.27E+00 m
α	Gradient of line alpha	4.00E-04 s^{-1}
k	**Permeability (α S / F)**	**4.87E-07 m/s**

soiltechnics
environmental ▪ geotechnical ▪ building fabric

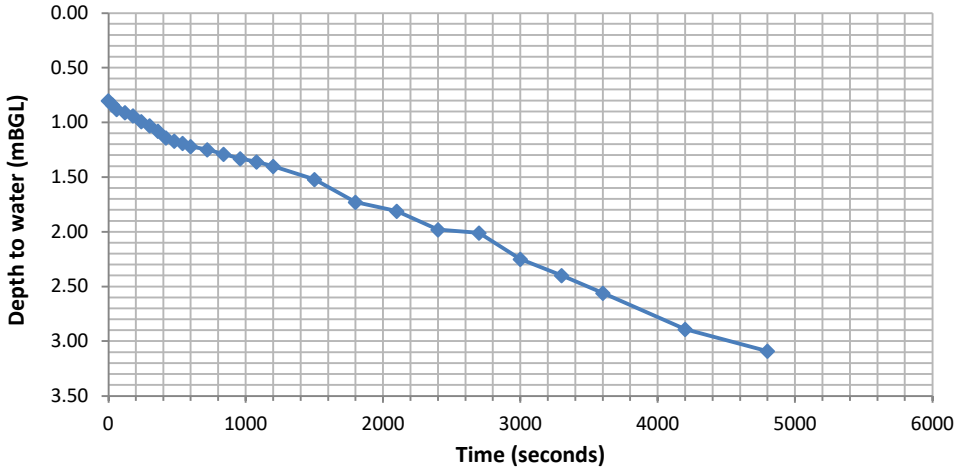
Permeability test in a borehole using open systems (BS EN ISO 22282-2:2012)

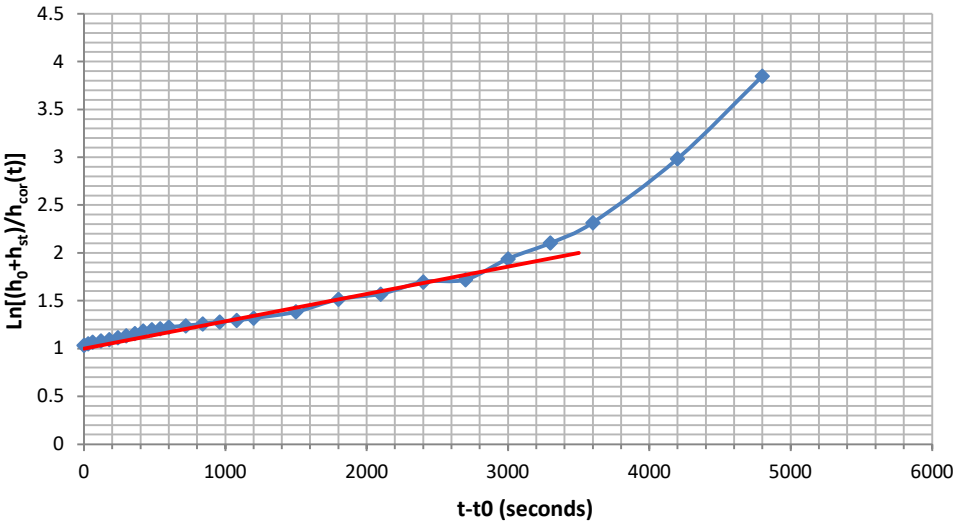
Location	Test number	Test method	Test system	Test date
WS03	2	Falling head	Open borehole	27/11/2023

Top of test section (m)	Bottom of test section (m)	Test section length (m)	Test diameter (m)
0.80	5.45	4.65	0.1

Variables at start of test

Groundwater (mBGL)	Water after injection (mBGL)	Change in head (m)
Dry	0.8	4.65





F	Shape factor according BS EN ISO 22282-1:2012	6.446 m
S	Cross sectional area of measurement tube	0.0079 m^2
h_{st}	Corrective term to initial static level	2.21E+00 m
α	Gradient of line alpha	2.86E-04 s^{-1}
k	**Permeability (α S / F)**	**3.48E-07 m/s**

soiltechnics
environmental ▪ geotechnical ▪ building fabric

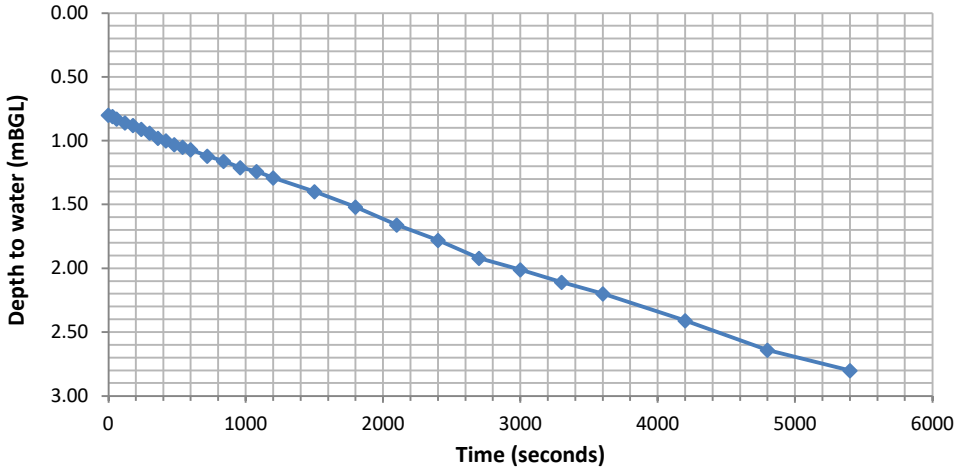
Permeability test in a borehole using open systems (BS EN ISO 22282-2:2012)

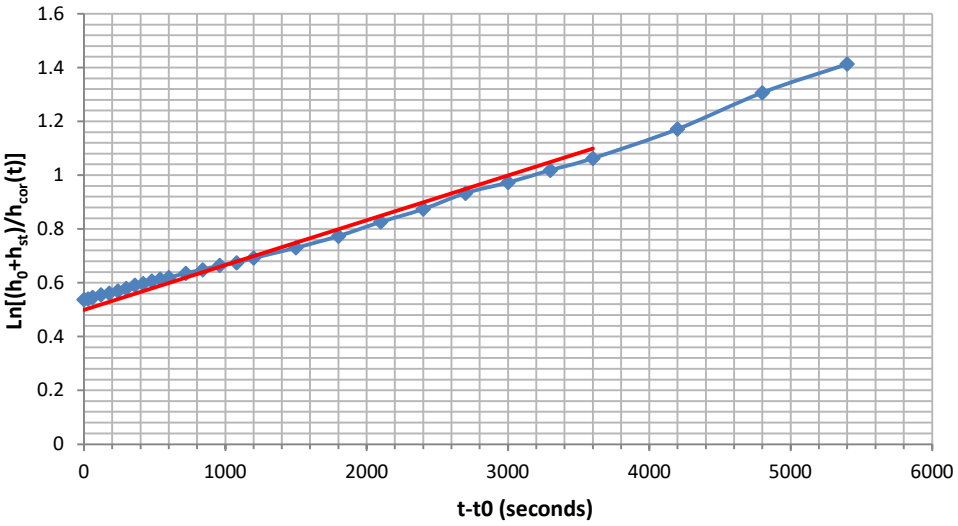
Location	Test number	Test method	Test system	Test date
WS03	3	Falling head	Open borehole	27/11/2023

Top of test section (m)	Bottom of test section (m)	Test section length (m)	Test diameter (m)
0.80	5.45	4.65	0.1

Variables at start of test

Groundwater (mBGL)	Water after injection (mBGL)	Change in head (m)
Dry	0.8	4.65





F	Shape factor according BS EN ISO 22282-1:2012	6.446 m
S	Cross sectional area of measurement tube	0.0079 m^2
h_{st}	Corrective term to initial static level	1.22E+00 m
α	Gradient of line alpha	1.67E-04 s^{-1}
k	**Permeability (α S / F)**	**2.03E-07 m/s**

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Appendix F Geotechnical Laboratory Test Results

TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with:BS 1377-2:1990:Clause 4.4 and 5

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

4041

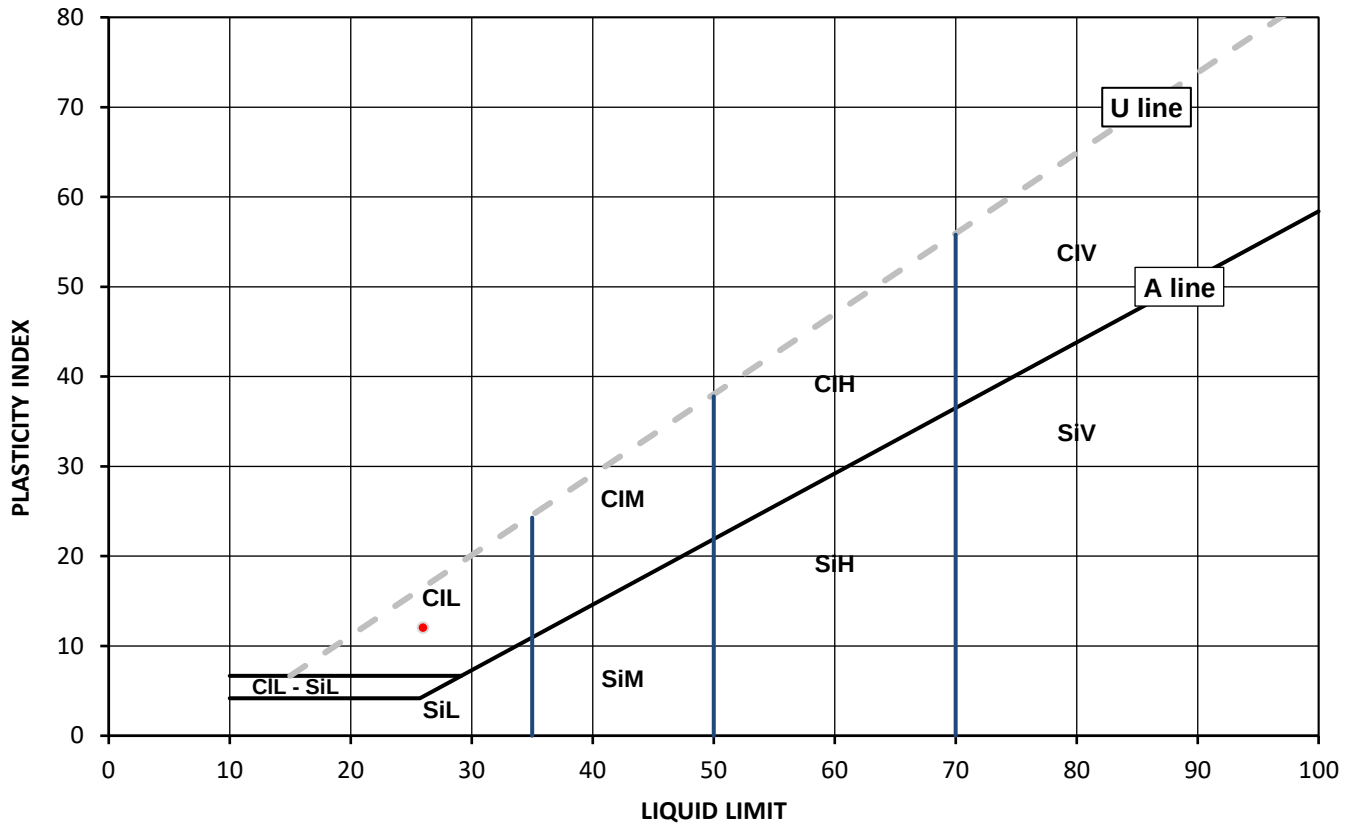
Client:	Soiltechnics Limited	Client Reference:	STV6299
Client Address:	Cedar Barn, White Lodge, Walgrave, Northampton, NN6 9PY	Job Number:	23-72181-1
		Date Sampled:	27/11/2023
		Date Received:	30/11/2023
Contact:	Admin	Date Tested:	08/12/2023
Site Address:	23-510 Hornby Street, Heywood	Sampled By:	Not Given

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

Test Results:

Laboratory Reference:	2895798	Depth Top [m]:	1.70
Hole No.:	WS05	Depth Base [m]:	1.90
Sample Reference:	WS051.703	Sample Type:	D
Sample Description:	Brownish grey slightly gravelly very sandy CLAY		
Sample Preparation:	Tested after >425 µm removed by hand		

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
18	26	14	12	95



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 1377-2: 1990: Clause 3.2

Remarks:

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.

Signed:

Monika Janoszek
PL Environmental & Geotechnical Lab Production Specialist
for and on behalf of i2 Analytical Ltd

Date Reported: 18/12/2023

GF 232.13

SUMMARY REPORT

DETERMINATION OF WATER CONTENT

Tested in Accordance with: BS 1377-2: 1990: Clause 3.2

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

4041

Client: Soiltechnics Limited

Client Address: Cedar Barn, White Lodge,
Walgrave, Northampton,
NN6 9PY

Contact: Admin

Site Address: 23-510 Hornby Street, Heywood

Client Reference: STV6299
Job Number: 23-72181-1
Date Sampled: 27/11/2023
Date Received: 30/11/2023
Date Tested: 08/12/2023
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	WC	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type			%				
2895798	WS05	WS051.703	1.70	1.90	D	Brownish grey slightly gravelly very sandy CLAY		18	Sample was quartered, oven dried at 106.1 °C			

Comments:

Signed:

Monika Janoszek
PL Environmental & Geotechnical Lab Production Specialist
for and on behalf of i2 Analytical Ltd

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.

Date Reported: 18/12/2023

GF 099.17

TEST CERTIFICATE

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

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

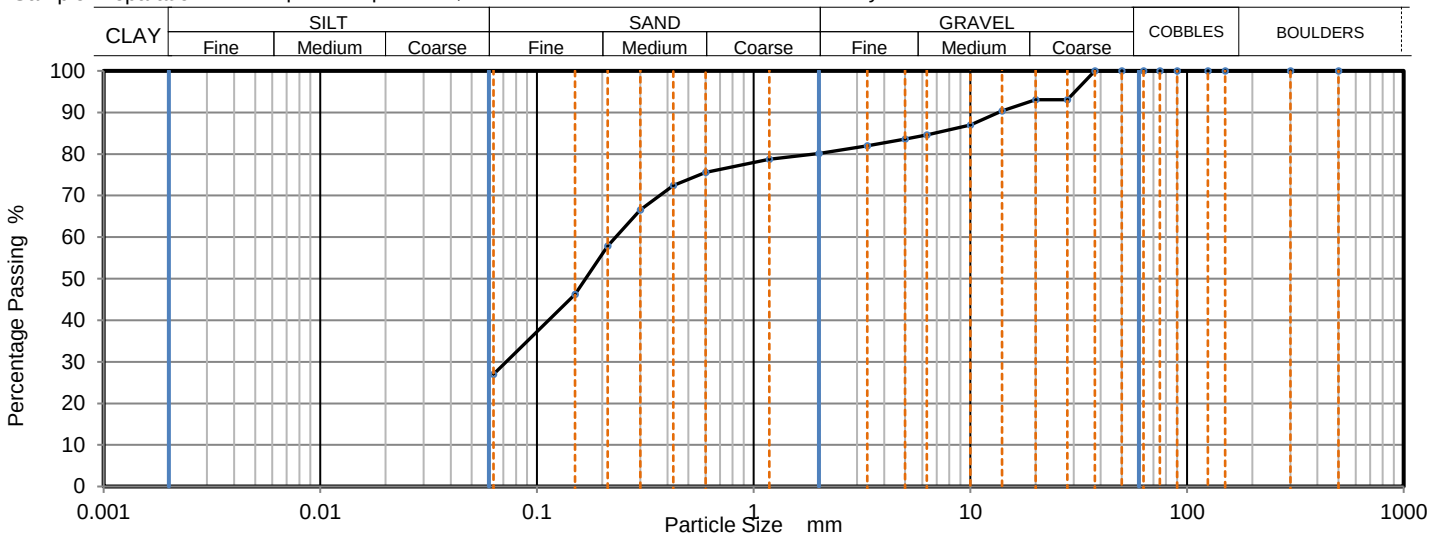
4041

Client:	Soiltechnics Limited	Client Reference:	STV6299
Client Address:	Cedar Barn, White Lodge, Walgrave, Northampton, NN6 9PY	Job Number:	23-72181-1
		Date Sampled:	27/11/2023
		Date Received:	30/11/2023
Contact:	Admin	Date Tested:	08/12/2023
Site Address:	23-510 Hornby Street, Heywood	Sampled By:	Not Given

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

Test Results:

Laboratory Reference:	2895796	Depth Top [m]:	0.70
Hole No.:	WS03	Depth Base [m]:	0.90
Sample Reference:	WS030.702	Sample Type:	B
Sample Description:	Brown gravelly clayey SAND		
Sample Preparation:	Sample was quartered, oven dried at 106.1 °C and broken down by hand.		



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	93		
20	93		
14	90		
10	87		
6.3	85		
5	84		
3.35	82		
2	80		
1.18	79		
0.6	76		
0.425	72		
0.3	67		
0.212	58		
0.15	46		
0.063	27		

Sample Proportions	% dry mass
Very coarse	0
Gravel	20
Sand	53
Fines <0.063mm	27

Grading Analysis		
D100	mm	37.5
D60	mm	0.23
D30	mm	0.0714
D10	mm	
Uniformity Coefficient		> 3.7
Curvature Coefficient		

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.

Signed:

Monika Janoszek
PL Environmental & Geotechnical Lab Production Specialist
for and on behalf of i2 Analytical Ltd

Date Reported: 18/12/2023

GF 100.23

TEST CERTIFICATE

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

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

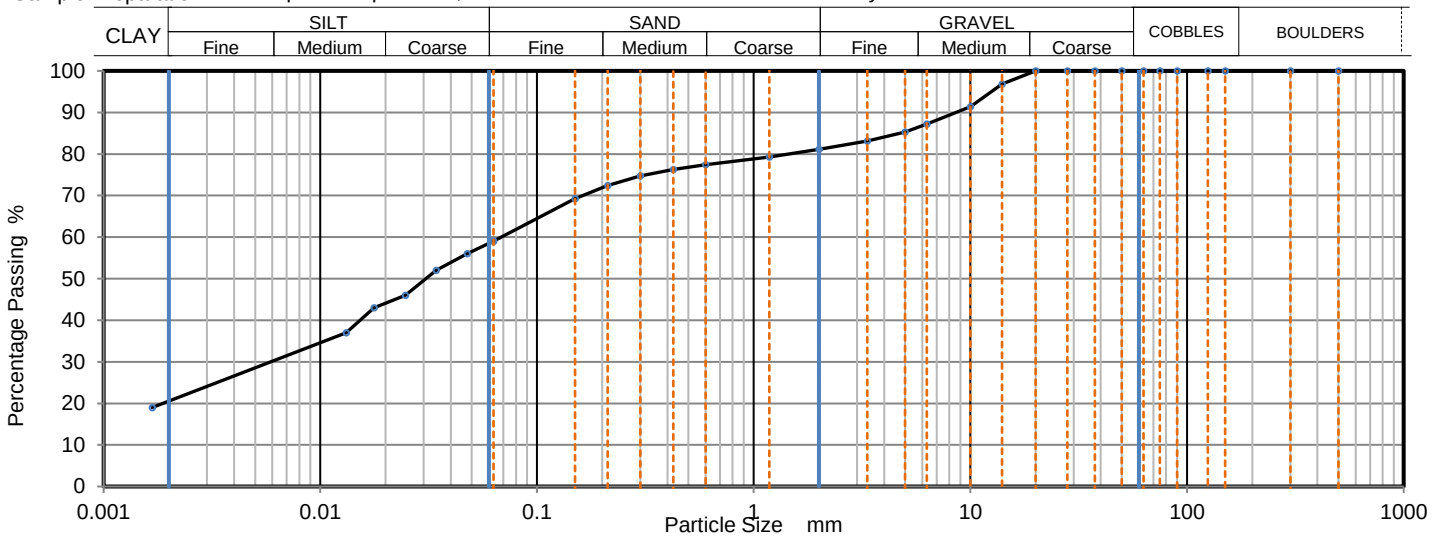
4041

Client:	Soiltechnics Limited	Client Reference:	STV6299
Client Address:	Cedar Barn, White Lodge, Walgrave, Northampton, NN6 9PY	Job Number:	23-72181-1
		Date Sampled:	27/11/2023
		Date Received:	30/11/2023
Contact:	Admin	Date Tested:	08/12/2023
Site Address:	23-510 Hornby Street, Heywood	Sampled By:	Not Given

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

Test Results:

Laboratory Reference:	2895797	Depth Top [m]:	1.40
Hole No.:	WS04	Depth Base [m]:	1.90
Sample Reference:	WS041.403	Sample Type:	B
Sample Description:	Brown sandy CLAY		
Sample Preparation:	Sample was quartered, oven dried at 106.1 °C and broken down by hand.		



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100	0.0630	59
300	100	0.0477	56
150	100	0.0342	52
125	100	0.0247	46
90	100	0.0177	43
75	100	0.0132	37
63	100	0.0017	19
50	100		
37.5	100		
28	100		
20	100		
14	97		
10	91		
6.3	87		
5	85		
3.35	83	Particle density	(assumed)
2	81	2.65	Mg/m3
1.18	79		
0.6	77		
0.425	76		
0.3	75		
0.212	72		
0.15	69		
0.063	59		

Sample Proportions	% dry mass
Very coarse	0
Gravel	19
Sand	22
Silt	39
Clay	20

Grading Analysis		
D100	mm	20
D60	mm	0.0675
D30	mm	0.00603
D10	mm	
Uniformity Coefficient		> 40
Curvature Coefficient		

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clauses 9.2 and 9.5

Remarks:

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.

Signed:

Monika Janoszek
PL Environmental & Geotechnical Lab Production Specialist
for and on behalf of i2 Analytical Ltd

Date Reported: 18/12/2023

GF 100.23

TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS EN ISO 17892-12:2018+A2:2022, cl 5.3.14, 5.5, Fall Cone Method, 1 Pt Test, BS 1377-2:2022, cl 5.3, 6

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

4041

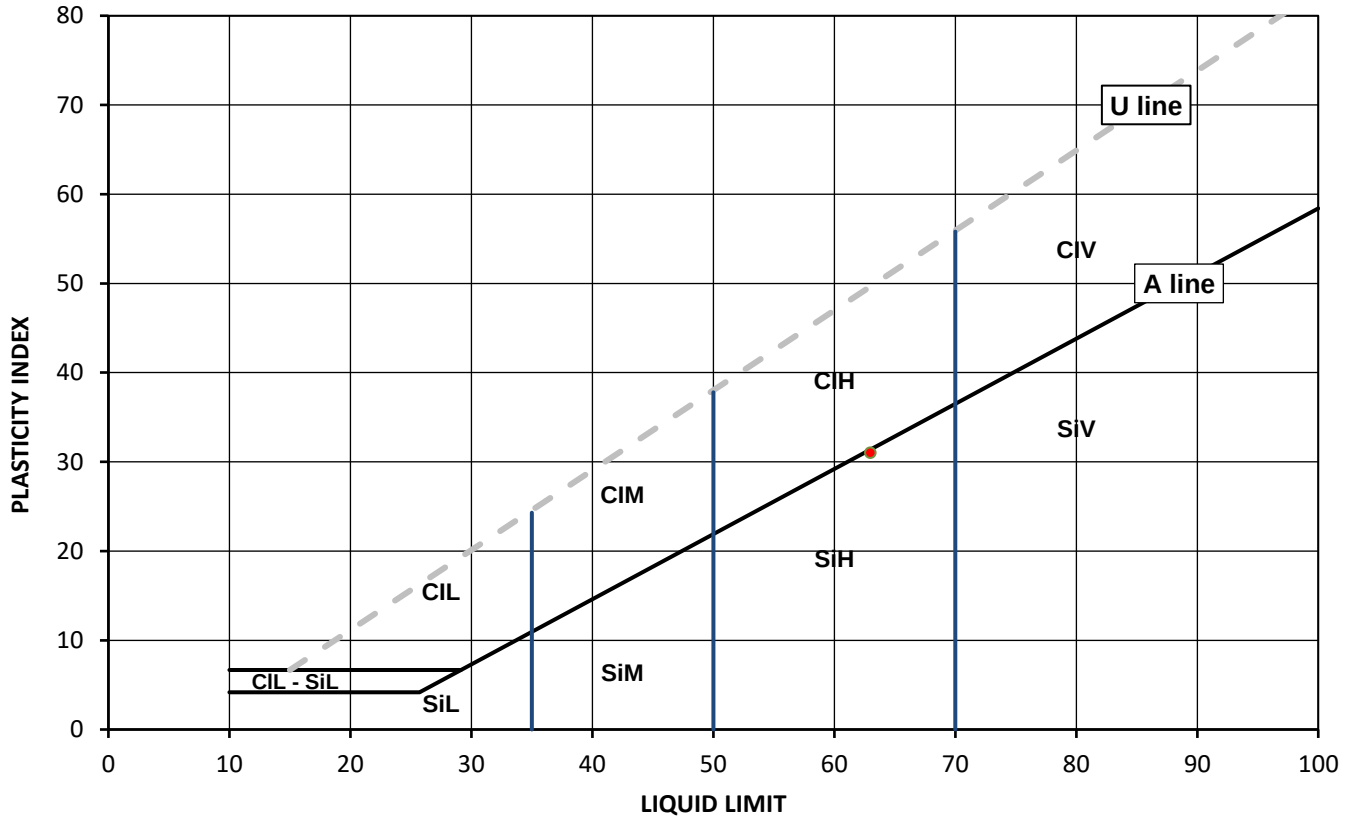
Client:	Soiltechnics Limited	Client Reference:	STW6573
Client Address:	Cedar Barn, White Lodge, Walgrave, Northampton, NN6 9PY	Job Number:	24-032070-1
		Date Sampled:	17/07/2024
		Date Received:	23/07/2024
Contact:	Admin	Date Tested:	30/07/2024
Site Address:	Hornby Street, Heywood	Sampled By:	Not Given

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

Test Results:

Laboratory Reference:	264618	Depth Top [m]:	1.80
Hole No.:	RBH101	Depth Base [m]:	Not Given
Sample Reference:	RBH01-1.8-4	Sample Type:	D
Sample Description:	Brown slightly gravelly slightly organic CLAY		
Sample Preparation:	Tested after >0.425 mm removed by hand;		
Cone Type:	80g/30deg		

As Received Water Content [W] %	Corrected Liquid Limit [WL] %	Correlation Factor	Plastic Limit [Wp] %	Plasticity Index [Ip] %	Liquidity index [IL] % #	Consistency index [IC] % #	% Passing 425µm BS Test Sieve
65.4	63	1.002	32	31	0.87	0.13	98



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; Correlation Factor by Clayton C.R.I and Jukes A.W (1978); # Non accredited

Remarks:

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.

Signed: Monika Siewior

Monika Siewior
Reporting Specialist

for and on behalf of i2 Analytical Ltd

Date Reported: 08/08/2024

GF 360.12

TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS EN ISO 17892-12:2018+A2:2022, cl 5.3.14, 5.5, Fall Cone Method, 1 Pt Test, BS 1377-2:2022, cl 5.3, 6

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

4041

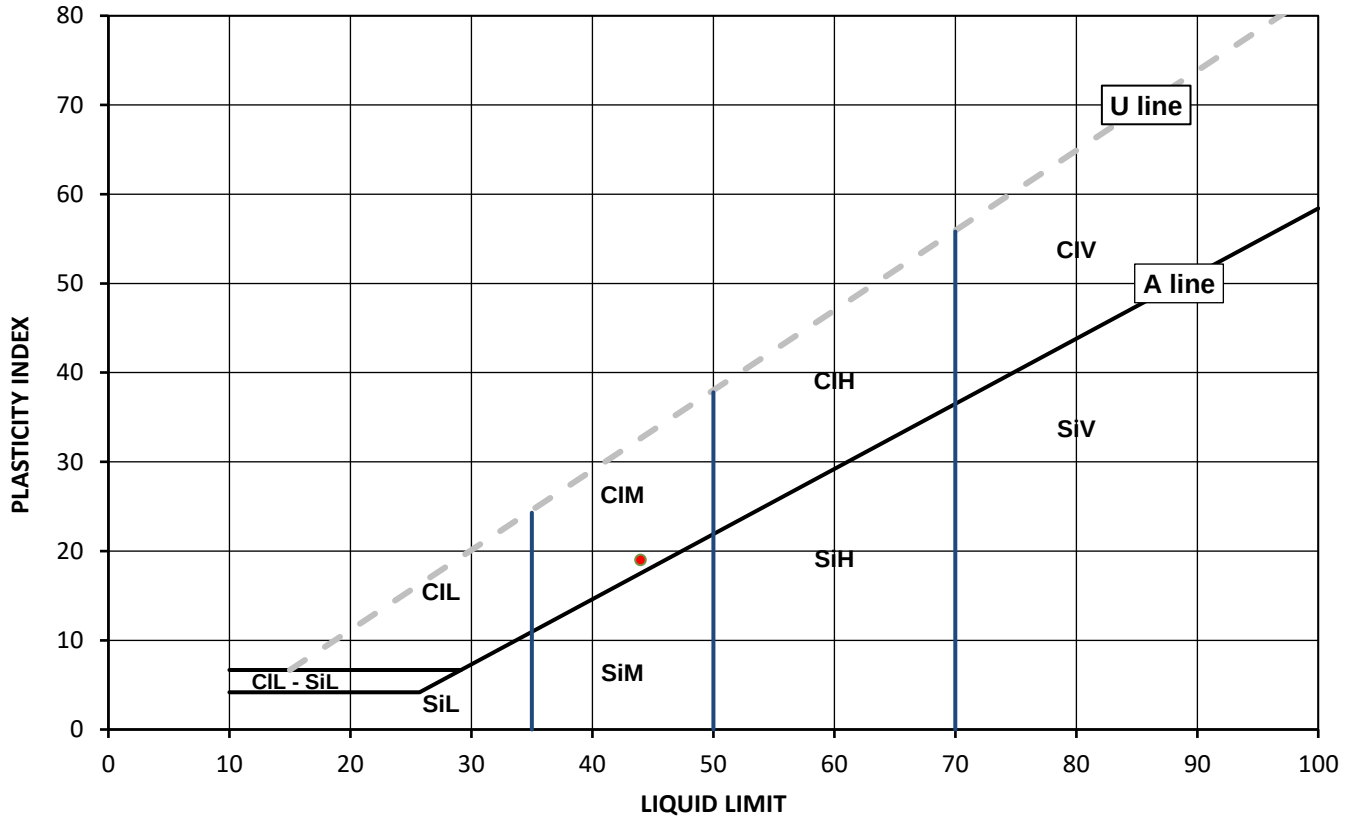
Client:	Soiltechnics Limited	Client Reference:	STW6573
Client Address:	Cedar Barn, White Lodge, Walgrave, Northampton, NN6 9PY	Job Number:	24-032070-1
		Date Sampled:	17/07/2024
		Date Received:	23/07/2024
Contact:	Admin	Date Tested:	30/07/2024
Site Address:	Hornby Street, Heywood	Sampled By:	Not Given

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

Test Results:

Laboratory Reference:	264619	Depth Top [m]:	2.50
Hole No.:	RBH101	Depth Base [m]:	Not Given
Sample Reference:	RBH01-2.5-6	Sample Type:	D
Sample Description:	Brown slightly gravelly sandy CLAY		
Sample Preparation:	Tested after >0.425 mm removed by hand;		
Cone Type:	80g/30deg		

As Received Water Content [W] %	Corrected Liquid Limit [WL] %	Correlation Factor	Plastic Limit [Wp] %	Plasticity Index [Ip] %	Liquidity index [IL] % #	Consistency index [IC] % #	% Passing 425µm BS Test Sieve
43.9	44	0.999	25	19	4.11	-3.11	98



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; Correlation Factor by Clayton C.R.I and Jukes A.W (1978); # Non accredited

Remarks:

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.

Signed: Monika Siewior

Monika Siewior
Reporting Specialist

for and on behalf of i2 Analytical Ltd

Date Reported: 08/08/2024

GF 360.12

SUMMARY REPORT

SUMMARY OF CLASSIFICATION TEST RESULTS

Tested in Accordance with:

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

4041

Client: Soiltechnics Limited

Client Address: Cedar Barn, White Lodge, Walgrave, Northampton, NN6 9PY

Contact: Admin

Site Address: Hornby Street, Heywood

BS EN ISO 17892-12:2018+A2:2022, cl 5.3.14, 5.5, Fall Cone Method, 1 Pt Test, BS 1377-2:2022, cl 5.3, 6. Correlation Factor by Clayton C.R.I and Jukes A.W (1978). W by BS EN ISO 17892-1:2014+A1:2022.

Client Reference: STW6573
Job Number: 24-032070-1
Date Sampled: 17/07/2024
Date Received: 23/07/2024
Date Tested: 30/07/2024
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
264618	RBH101	RBH01-1.8-4	1.80	Not Given	D	Brown slightly gravelly slightly organic CLAY	Atterberg 1 Point	65.4	98	63	1.002	32	31	80g/30 deg	R			
264619	RBH101	RBH01-2.5-6	2.50	Not Given	D	Brown slightly gravelly sandy CLAY	Atterberg 1 Point	43.9	98	44	0.999	25	19	80g/30 deg	R			

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; * - One point liquid limit corrected as per the report Correlation Factor by Clayton C.R.I and Jukes A.W (1978)

Comments:

Signed: Monika Siewior

Monika Siewior
Reporting Specialist

for and on behalf of i2 Analytical Ltd

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.

Date Reported: 08/08/2024 **GF 361.14**

SUMMARY REPORT

DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

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

4041

Client: Soiltechnics Limited

Client Address: Cedar Barn, White Lodge,
Walgrave, Northampton, NN6 9PY

Contact: Admin

Site Address: Hornby Street, Heywood

Client Reference: STW6573
Job Number: 24-032070-1
Date Sampled: 22/07/2024
Date Received: 23/07/2024
Date Tested: 06/08/2024
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 (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P	Equivalent diameter, De	Point Load Strength Index	
		Reference	Depth Top	Depth Base	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne	W	Dps	Dps'			Is	Is(50)
			m	m								mm	mm	mm	mm	kN	mm	MPa	MPa
264620	RBH101	RBH01-9.54-7	9.54	9.60	C	Dark grey SILTSTONE	WC = 4.1%	1	A	U	YES	-	82.1	63.0	53.0	3.0	74.4	0.53	0.64
264622	RBH101	RBH01-10.5-9	10.50	10.60	C	Dark grey SILTSTONE	WC = 4.3%	1	A	U	YES	-	84.1	59.0	22.0	3.1	48.5	1.29	1.28
264621	RBH101	RBH01-10.9-8	10.90	11.00	C	Dark grey SILTSTONE	WC = 3.8%	1	A	U	YES	-	81.0	62.0	32.0	2.5	57.4	0.74	0.79

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;
Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 15/03/2024 - 15/03/2025

Comments:

Signed: Monika Siewior
Reporting Specialist

for and on behalf of i2 Analytical Ltd

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.

Date Reported: 08/08/2024 **GF 134.16**

Soiltechnics Limited
Cedar Barn
White Lodge
Walgrave, Northampton
NN6 9PY

e: admin@soiltechnics.net

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 : 24-032071

Project / Site name:	Hornby Street, Heywood	**Samples received on:**	23/07/2024
Your job number:	STW6573	**Samples instructed on/ Analysis started on:**	23/07/2024
Your order number:	POR019293	**Analysis completed by:**	31/07/2024
Report Issue Number:	1	**Report issued on:**	31/07/2024
Samples Analysed:	3 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.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 24-032071
Project / Site name: Hornby Street, Heywood
Your Order No: POR019293

Lab Sample Number				264623	264624	264625
Sample Reference				RBH101	RBH101	RBH101
Sample Number				RBH01-2.2-5	RBH01-5.5-9	RBH101-8.7-10
Depth (m)				2.20-0.00	5.50-5.90	8.70-8.80
Date Sampled				17/07/2024	18/07/2024	22/07/2024
Time Taken				1519	1521	1216
Analytical Parameter (Soil Analysis)	**Units**	**Test Limit of detection**	**Test Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	22.3	< 0.1
Moisture Content	%	0.01	NONE	74	13	2.1
Total mass of sample received	kg	0.1	NONE	1.1	1.1	0.4
General Inorganics						
pH (L099)	pH Units	N/A	MCERTS	6.5	8.1	7.8
Total Sulphate as SO_4	%	0.005	MCERTS	0.212	0.012	0.061
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	500	50	550
Water Soluble SO_4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	252	25	274
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	6.1	1.8	3.5
Total Sulphur	mg/kg	50	MCERTS	3700	99	530
Total Sulphur	%	0.005	MCERTS	0.369	0.01	0.053
Water Soluble Nitrate (2:1) as N	mg/kg	2	NONE	< 2.0	< 2.0	< 2.0
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	< 2.0	< 2.0
Heavy Metals / Metalloids						
Magnesium (leachate equivalent)	mg/l	2.5	NONE	7	5.7	15
Magnesium (water soluble)	mg/kg	5	NONE	14	11	31

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

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 24-032071
Project / Site name: Hornby Street, Heywood

* 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 *
264623	RBH101	RBH01-2.2-5	2.20-0.00	Black clay and loam
264624	RBH101	RBH01-5.5-9	5.50-5.90	Brown sand with gravel and stones
264625	RBH101	RBH101-8.7-10	8.70-8.80	Brown clay

Analytical Report Number : 24-032071
Project / Site name: Hornby Street, Heywood

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
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
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES	In-house method	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES	In-house method	L038B	D	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
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

Admin
Soiltechnics Limited
Cedar Barn
White Lodge
Walgrave
Northampton
NN6 9PY

e: admin@soiltechnics.net

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 : 24-79647

Project / Site name:	23-510 Hornby Street, Heywood	**Samples received on:**	24/01/2024
Your job number:	STV6299	**Samples instructed on/ Analysis started on:**	24/01/2024
Your order number:	POR017600	**Analysis completed by:**	07/02/2024
Report Issue Number:	1	**Report issued on:**	14/02/2024
Samples Analysed:	3 soil samples		

Signed:

Adam Fenwick
Technical Reviewer
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.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 24-79647
Project / Site name: 23-510 Hornby Street, Heywood
Your Order No: POR017600

Lab Sample Number				2936153	2936154	2936155
Sample Reference				WS01	WS02	WS05
Sample Number				WS010.302	WS021.402	WS050.403
Depth (m)				0.30-0.70	1.40-1.60	0.40-0.60
Date Sampled				23/01/2024	23/01/2024	23/01/2024
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	31	12
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.9	6.7	6.6
Total Sulphate as SO4	%	0.005	MCERTS	0.074	0.041	0.012
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0324	0.0707	0.002
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	32.4	70.7	2
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	1.7	2.3	1.2
Total Sulphur	%	0.005	MCERTS	0.04	0.029	0.009
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	2.1	< 2.0	< 2.0

Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	< 5.0	5.6	< 5.0
Magnesium (leachate equivalent)	mg/l	2.5	NONE	< 2.5	2.8	< 2.5

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

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 24-79647
Project / Site name: 23-510 Hornby Street, Heywood

* 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 *
2936153	WS01	WS010.302	0.30-0.70	Brown loam and clay with gravel and vegetation.
2936154	WS02	WS021.402	1.40-1.60	Brown clay and loam with gravel and vegetation.
2936155	WS05	WS050.403	0.40-0.60	Brown sand with gravel.

Analytical Report Number : 24-79647
Project / Site name: 23-510 Hornby Street, Heywood

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
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	L038-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphate in soil as %	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total Sulphur in soil as %	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
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.	L078-PL	W	NONE
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser.	In house method.	L082-PL	D	MCERTS
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

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.

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Appendix G Post Fieldwork Monitoring

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Ground gas and groundwater monitoring results

Notes

1) The instrument limit of detection has been adopted where no gas flows or concentrations have been recorded (indicated in grey italics).
2) Atmospheric temperature (*) data sourced from local weather station data.
3) CH4 = methane; CO2 = carbon dioxide; O2 = oxygen; PPM = parts per million CO = carbon monoxide; H2S = hydrogen sulphide.
4) Gas Screening Values (GSVs) are rounded to 3 decimal places.

							Worst case scenario	0.7	0.2	0.2	3.9	3.7	14.6	14.7	0	0	0.00	0.00	0.03	0.03	GREEN	GREEN	ONE			
							Average scenario	0.3	0.1	0.1	2.0	1.7	18.4	18.7	0	0	0.00	0.00	0.01	0.01	GREEN	GREEN	ONE			
Date	Time	Location	Install Reference	Install Response Zone		Atmospheric Pressure (mB)	Atmospheric Temperature (°C) *	Depth to Water (m)	Gas Steady Flow	CH_4 (%v/v)		CO_2 (%v/v)		O_2 (%v/v)		Other Gases (PPM)		GSV (CH_4)		GSV (CO_2)		Indicative NHBC Guideline		Indicative (steady) CIRIA Characteristic Situation	Notes	
				Response Zone (mBGL)	Flooded				l/Hr	Peak	Steady	Peak	Steady	Minimum	Average	CO	H_2S	Peak	Steady	Peak	Steady	Peak	Steady			
08/12/2023	14:54	WS01	1	1.00 - 4.00	No	986	9	2.70	0.1	0.2	0.2	3.9	3.7	14.6	14.7	0	0	0.000	0.000	0.003	0.003	GREEN	GREEN	CS-1		
20/12/2023	15:59	WS01	1	1.00 - 4.00	No	997	9	1.15	0.2	0.2	0.2	2.2	0.4	17.5	20.0	0	0	0.000	0.000	0.004	0.001	GREEN	GREEN	CS-1		
08/01/2024	12:54	WS01	1	1.00 - 4.00	No	1023	2	1.17	0.6	0.1	0.0	2.3	0.7	18.2	20.6	0	0	0.001	0.000	0.012	0.004	GREEN	GREEN	CS-1		
18/01/2024	09:32	WS01	1	1.00 - 4.00	No	995	5	1.40	0.5	0.2	0.2	1.3	1.3	20.5	20.6	0	0	0.001	0.001	0.005	0.005	GREEN	GREEN	CS-1		
01/02/2024	10:47	WS01	1	1.00 - 4.00	Yes	1019	5	0.46	0.2	0.1	0.1	0.7	0.7	20.2	20.2	0	0	0.000	0.000	0.001	0.001	GREEN	GREEN	CS-1		
16/02/2024	10:18	WS01	1	1.00 - 4.00	Yes	1012	10	0.60	0.2	0.1	0.1	0.5	0.5	20.5	20.5	0	0	0.000	0.000	0.001	0.001	GREEN	GREEN	CS-1		
08/12/2023	14:44	WS03	1	1.00 - 4.00	Yes	987	9	0.60	0.2	0.2	0.2	3.1	3.1	17.0	17.0	0	0	0.000	0.000	0.005	0.005	GREEN	GREEN	CS-1		
20/12/2023	15:48	WS03	1	1.00 - 4.00	No	997	9	2.55	0.2	0.2	0.2	2.5	2.4	17.0	17.2	0	0	0.000	0.000	0.004	0.004	GREEN	GREEN	CS-1		
08/01/2024	13:14	WS03	1	1.00 - 4.00	No	1023	2	2.95	0.7	0.0	0.0	3.3	3.3	16.2	16.2	0	0	0.000	0.000	0.019	0.019	GREEN	GREEN	CS-1		
18/01/2024	09:45	WS03	1	1.00 - 4.00	No	994	5	2.70	0.6	0.1	0.1	0.9	0.9	20.9	20.9	0	0	0.001	0.001	0.005	0.005	GREEN	GREEN	CS-1		
01/02/2024	10:55	WS03	1	1.00 - 4.00	No	1019	6	2.81	0.2	0.1	0.1	3.2	3.1	16.3	16.4	0	0	0.000	0.000	0.005	0.005	GREEN	GREEN	CS-1		
16/02/2024	10:29	WS03	1	1.00 - 4.00	No	1013	11	2.58	0.3	0.2	0.2	1.4	1.3	19.2	19.4	0	0	0.001	0.001	0.004	0.003	GREEN	GREEN	CS-1		
08/12/2023	14:36	WS05	1	1.00 - 4.00	No	987	9	4.00	0.1	0.1	0.1	0.7	0.5	19.5	19.7	0	0	0.000	0.000	0.001	0.000	GREEN	GREEN	CS-1		
20/12/2023	15:39	WS05	1	1.00 - 4.00	No	997	9	3.75	0.3	0.2	0.2	1.1	1.0	19.0	19.0	0	0	0.001	0.001	0.003	0.003	GREEN	GREEN	CS-1		
08/01/2024	13:04	WS05	1	1.00 - 4.00	No	1023	2	2.95	0.7	0.0	0.0	1.7	1.7	19.9	20.0	0	0	0.000	0.000	0.010	0.010	GREEN	GREEN	CS-1		
18/01/2024	10:01	WS05	1	1.00 - 4.00	No	994	5	DRY	0.5	0.2	0.1	0.7	0.7	19.6	19.7	0	0	0.001	0.000	0.003	0.003	GREEN	GREEN	CS-1		
01/02/2024	11:06	WS05	1	1.00 - 4.00	No	1020	6	DRY	0.3	0.2	0.1	2.8	2.8	17.7	17.7	0	0	0.001	0.000	0.007	0.007	GREEN	GREEN	CS-1		
16/02/2024	10:38	WS05	1	1.00 - 4.00	No	1012	11	DRY	0.3	0.2	0.2	3.1	3.0	17.5	17.6	0	0	0.001	0.001	0.008	0.008	GREEN	GREEN	CS-1		

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Appendix H Geoenvironmental Laboratory Test Results

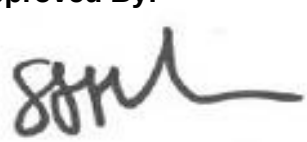
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	23-39726-1
Initial Date of Issue:	06-Dec-2023
Re-Issue Details:	
Client	Soiltechnics Limited
Client Address:	1st Floor Unit 9 Westpoint Enterprise Park Clarence Avenue Trafford Park Manchester M17 1QS
Contact(s):	Admin
Project	23-510 Hornby Street, Heywood STV6299

Quotation No.:		**Date Received:**	30-Nov-2023
Order No.:	POR017240	**Date Instructed:**	30-Nov-2023
No. of Samples:	6		
Turnaround (Wkdays):	5	**Results Due:**	06-Dec-2023
Date Approved:	06-Dec-2023		

Approved By:



Details: Stuart Henderson, Technical Manager

Results - Soil

Project: 23-510 Hornby Street, Heywood STV6299

Client: Soiltechnics Limited			**Chemtest Job No.:**		23-39726	23-39726	23-39726	23-39726	23-39726	23-39726
Quotation No.:			**Chemtest Sample ID.:**		1738854	1738855	1738856	1738857	1738858	1738859
Order No.: POR017240			Client Sample Ref.:		1	1	1	1	1	3
			Client Sample ID.:		WS010.301	WS020.301	WS030.101	WS040.401	WS050.101	WS050.403
			Sample Location:		WS01	WS02	WS03	WS04	WS05	WS05
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.30	0.30	0.10	0.40	0.10	0.40
			Bottom Depth (m):		0.70	0.60	0.20	0.80	0.20	0.60
			Date Sampled:		27-Nov-2023	27-Nov-2023	27-Nov-2023	27-Nov-2023	27-Nov-2023	27-Nov-2023
			Asbestos Lab:		NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	
Determinand	**Accred.**	**SOP**	**Units**	**LOD**						
ACM Type	U	2192		N/A	-	-	-	-	-	
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	
Moisture	N	2030	%	0.020	29	30	29	30	39	13
Stones and Removed Materials	N	2030	%	0.020	< 0.020	< 0.020				< 0.020
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots
Soil Texture	N	2040		N/A	Clay	Clay	Clay	Clay	Clay	Clay
pH at 20C	M	2010		4.0	9.0	7.6	7.1	8.0	7.3	7.1
Boron (Hot Water Soluble)	M	2120	mg/kg	0.40	< 0.40	1.2	< 0.40	< 0.40	0.69	
Magnesium (Water Soluble)	N	2120	g/l	0.010	< 0.010	< 0.010				< 0.010
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	< 0.010	0.050				< 0.010
Chloride (Water Soluble)	M	2220	g/l	0.010	< 0.010	< 0.010				< 0.010
Nitrate (Water Soluble)	N	2220	g/l	0.010	< 0.010	< 0.010				< 0.010
Cyanide (Complex)	M	2300	mg/kg	0.50	0.90	0.80	0.80	< 0.50	0.60	
Cyanide (Free)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.80	
Cyanide (Total)	M	2300	mg/kg	0.50	0.90	0.80	0.80	< 0.50	1.4	
Ammonium (Extractable)	M	2425	mg/kg	0.50	2.2	3.3				2.7
Sulphate (Total)	U	2430	%	0.010	0.14	0.11				0.16
Sulphate (Acid Soluble)	U	2430	%	0.010	0.093	0.074				0.016
Arsenic	M	2455	mg/kg	0.5	21	17	8.9	15	16	
Beryllium	U	2455	mg/kg	0.5	1.3	1.1	0.6	1.3	0.8	
Cadmium	M	2455	mg/kg	0.10	0.43	0.34	0.15	0.88	0.32	
Chromium	M	2455	mg/kg	0.5	37	11	18	43	16	
Copper	M	2455	mg/kg	0.50	100	93	26	150	46	
Mercury	M	2455	mg/kg	0.05	0.19	0.15	0.10	0.20	1.1	
Nickel	M	2455	mg/kg	0.50	36	18	16	30	18	
Lead	M	2455	mg/kg	0.50	1200	2100	85	3900	360	
Selenium	M	2455	mg/kg	0.25	1.1	0.86	0.90	0.94	0.98	
Vanadium	U	2455	mg/kg	0.5	27	25	23	27	27	
Zinc	M	2455	mg/kg	0.50	500	100	75	630	120	
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
LOI	M	2610	%	0.10	8.7	6.3	5.9	14	14	
Organic Matter	M	2625	%	0.40	9.1	9.0	4.7	12	13	
TPH >C5-C6	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	

Results - Soil

Project: 23-510 Hornby Street, Heywood STV6299

Client: Soiltechnics Limited			**Chemtest Job No.:**		23-39726	23-39726	23-39726	23-39726	23-39726	23-39726
Quotation No.:			**Chemtest Sample ID.:**		1738854	1738855	1738856	1738857	1738858	1738859
Order No.: POR017240			Client Sample Ref.:		1	1	1	1	1	3
			Client Sample ID.:		WS010.301	WS020.301	WS030.101	WS040.401	WS050.101	WS050.403
			Sample Location:		WS01	WS02	WS03	WS04	WS05	WS05
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.30	0.30	0.10	0.40	0.10	0.40
			Bottom Depth (m):		0.70	0.60	0.20	0.80	0.20	0.60
			Date Sampled:		27-Nov-2023	27-Nov-2023	27-Nov-2023	27-Nov-2023	27-Nov-2023	27-Nov-2023
			Asbestos Lab:		NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	
Determinand	**Accred.**	**SOP**	**Units**	**LOD**						
TPH >C6-C7	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TPH >C7-C8	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TPH >C8-C10	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TPH >C10-C12	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TPH >C12-C16	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TPH >C16-C21	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
TPH >C21-C35	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	
Total TPH >C5-C35	N	2670	mg/kg	10	< 10	< 10	< 10	< 10	< 10	
Naphthalene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.27	0.27	
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Acenaphthene	M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.15	0.60	
Fluorene	M	2800	mg/kg	0.10	0.12	< 0.10	< 0.10	< 0.10	0.40	
Phenanthrene	M	2800	mg/kg	0.10	0.45	0.49	0.28	1.3	3.7	
Anthracene	M	2800	mg/kg	0.10	0.19	< 0.10	< 0.10	0.29	0.81	
Fluoranthene	M	2800	mg/kg	0.10	0.82	0.70	0.50	3.1	6.3	
Pyrene	M	2800	mg/kg	0.10	0.76	0.68	0.42	2.7	5.3	
Benzo[a]anthracene	M	2800	mg/kg	0.10	0.38	0.36	0.22	1.3	2.6	
Chrysene	M	2800	mg/kg	0.10	0.45	0.39	0.22	1.4	2.6	
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	0.57	< 0.10	< 0.10	2.0	3.4	
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	0.37	< 0.10	< 0.10	0.87	1.6	
Benzo[a]pyrene	M	2800	mg/kg	0.10	0.37	< 0.10	< 0.10	1.4	2.6	
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	0.32	< 0.10	< 0.10	0.95	1.6	
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	0.25	< 0.10	< 0.10	< 0.10	0.43	
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	0.39	< 0.10	< 0.10	0.94	1.5	
Total Of 16 PAH's	N	2800	mg/kg	2.0	5.4	2.6	< 2.0	17	34	
Total Phenols	M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH at 20°C	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2220	Water soluble Chloride in Soils	Chloride	Aqueous extraction and measurememrnt by 'Aquakem 600' Discrete Analyser using ferric nitrate / mercuric thiocyanate.
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2425	Extractable Ammonium in soils	Ammonium	Extraction with potassium chloride solution / analysis by 'Aquakem 600' Discrete Analyser using sodium salicylate and sodium dichloroisocyanurate.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	24-23486-1
Initial Date of Issue:	05-Aug-2024
Re-Issue Details:	
Client	Soiltechnics Limited
Client Address:	1st Floor Unit 9 Westpoint Enterprise Park Clarence Avenue Trafford Park Manchester M17 1QS
Contact(s):	Admin
Project	STW6573 Hornby Street

Quotation No.:		**Date Received:**	24-Jul-2024
Order No.:	POR019292	**Date Instructed:**	24-Jul-2024
No. of Samples:	3		
Turnaround (Wkdays):	7	**Results Due:**	01-Aug-2024
Date Approved:	05-Aug-2024		

Approved By:



Details: David Smith, Technical Director

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project: STW6573 Hornby Street

Client: Soiltechnics Limited				**Chemtest Job No.:**		24-23486	24-23486	24-23486
Quotation No.:				**Chemtest Sample ID.:**		1839884	1839885	1839886
Order No.: POR019292				Client Sample Ref.:		1	2	1
				Client Sample ID.:		RBH01-0.3-1	RBH01-0.6-2	RBH02-0.1-1
				Sample Location:		RBH101	RBH101	RBH102
				Sample Type:		SOIL	SOIL	SOIL
				Top Depth (m):		0.30	0.60	0.00
				Bottom Depth (m):		9,99	0.00	0.10
				Date Sampled:		17-Jul-2024	17-Jul-2024	17-Jul-2024
				Time Sampled:		15:07	15:08	15:13
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
Moisture		N	2030	%	0.020	15	16	17

Results - 2 Stage WAC

Project: STW6573 Hornby Street

							Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-23486								
Chemtest Sample ID:	1839884								
Sample Ref:	1								
Sample ID:	RBH01-0.3-1								
Sample Location:	RBH101								
Top Depth(m):	0.30								
Bottom Depth(m):	9,99								
Sampling Date:	17-Jul-2024								
Determinand	**SOP**	**Accred.**	**Units**				**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	M	%			4.1	3	5	6
Loss On Ignition	2610	M	%			0.47	--	--	10
Total BTEX	2760	M	mg/kg			< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg			< 0.10	1	--	--
TPH Total WAC	2670	M	mg/kg			74	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg			23	100	--	--
pH at 20C	2010	M				7.9	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg			0.010	--	To evaluate	To evaluate
Eluate Analysis			**2:1 mg/l**	**8:1 mg/l**	**2:1 mg/kg**	**Cumulative mg/kg 10:1**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0005	0.0011	0.0011	0.011	0.5	2	25
Barium	1455	U	0.013	0.005	0.025	0.059	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0092	0.0089	0.018	0.010	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0002	0.0004	0.0005	0.0041	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	0.0061	0.018	0.012	0.16	0.5	10	50
Antimony	1455	U	0.0010	0.0006	0.0019	0.0063	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	< 0.003	< 0.003	4	50	200
Chloride	1220	U	< 1.0	< 1.0	< 10	< 10	800	15000	25000
Fluoride	1220	U	0.13	0.17	< 1.0	1.7	10	150	500
Sulphate	1220	U	< 1.0	1.5	< 10	13	1000	20000	50000
Total Dissolved Solids	1020	N	20	13	40	130	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	4.4	5.6	< 50	54	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	15

Leachate Test Information	
Leachant volume 1st extract/l	0.319
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.190

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: STW6573 Hornby Street

							Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-23486								
Chemtest Sample ID:	1839885								
Sample Ref:	2								
Sample ID:	RBH01-0.6-2								
Sample Location:	RBH101								
Top Depth(m):	0.60								
Bottom Depth(m):	0.00								
Sampling Date:	17-Jul-2024								
Determinand	**SOP**	**Accred.**	**Units**				**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	M	%			3.8	3	5	6
Loss On Ignition	2610	M	%			6.8	--	--	10
Total BTEX	2760	M	mg/kg			< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg			< 0.10	1	--	--
TPH Total WAC	2670	M	mg/kg			100	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg			18	100	--	--
pH at 20C	2010	M				7.2	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg			0.015	--	To evaluate	To evaluate
Eluate Analysis			**2:1 mg/l**	**8:1 mg/l**	**2:1 mg/kg**	**Cumulative mg/kg 10:1**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0006	0.0010	0.0011	0.0097	0.5	2	25
Barium	1455	U	0.013	0.023	0.025	0.22	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0048	0.0049	0.0094	0.0044	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0005	0.0009	0.0011	0.0090	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	0.013	0.023	0.026	0.22	0.5	10	50
Antimony	1455	U	0.0017	0.0012	0.0034	0.012	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	0.005	< 0.003	0.047	4	50	200
Chloride	1220	U	< 1.0	< 1.0	< 10	< 10	800	15000	25000
Fluoride	1220	U	0.16	0.20	< 1.0	2.0	10	150	500
Sulphate	1220	U	3.9	2.1	< 10	23	1000	20000	50000
Total Dissolved Solids	1020	N	23	23	46	230	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	4.3	6.5	< 50	63	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	16

Leachate Test Information	
Leachant volume 1st extract/l	0.316
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.161

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: STW6573 Hornby Street

							Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	24-23486								
Chemtest Sample ID:	1839886								
Sample Ref:	1								
Sample ID:	RBH02-0.1-1								
Sample Location:	RBH102								
Top Depth(m):	0.00								
Bottom Depth(m):	0.10								
Sampling Date:	17-Jul-2024								
Determinand	**SOP**	**Accred.**	**Units**				**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	M	%			2.1	3	5	6
Loss On Ignition	2610	M	%			7.8	--	--	10
Total BTEX	2760	M	mg/kg			< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg			< 0.10	1	--	--
TPH Total WAC	2670	M	mg/kg			< 10	500	--	--
Total (Of 17) PAH's	2800	N	mg/kg			< 2.0	100	--	--
pH at 20C	2010	M				6.1	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg			0.0060	--	To evaluate	To evaluate
Eluate Analysis			**2:1 mg/l**	**8:1 mg/l**	**2:1 mg/kg**	**Cumulative mg/kg 10:1**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	< 0.005	< 0.005	< 0.0005	< 0.0005	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0033	0.0008	0.0064	0.0037	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	0.0008	< 0.0005	0.0015	0.0009	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	0.009	< 0.003	0.076	4	50	200
Chloride	1220	U	< 1.0	< 1.0	< 10	< 10	800	15000	25000
Fluoride	1220	U	0.10	0.095	< 1.0	< 1.0	10	150	500
Sulphate	1220	U	7.2	35	14	320	1000	20000	50000
Total Dissolved Solids	1020	N	25	56	48	530	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	5.8	3.6	< 50	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	17

Leachate Test Information	
Leachant volume 1st extract/l	0.313
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.197

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity at 25°C and Total Dissolved Solids (TDS) in Waters	Conductivity Meter	
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	
2010	pH Value of Soils	pH at 20°C	pH Meter	
2015	Acid Neutralisation Capacity	Acid Reserve	Titration	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS. Reported PCB 101 results may contain contributions from PCB 90 due to inseparable chromatography.	
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	
650	Characterisation of Waste (Leaching WAC)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

DW - Drinking Water
GW - Ground Water
LE - Land Leachate
NA - Not Applicable

Report Information

PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Appendix I Contamination Assessment Screening

soiltechnics
environmental ▪ geotechnical ▪ building fabric

GQRA Screening

Assessments	Status	Date	Created by	Reviewed By
Acute human health risk - Soils	Completed	22.01.2023	DH	SCD
Chronic human health risk - Soils	Completed	22.01.2023	DH	SCD
Chronic human health risk - Groundwater vapour	*Not undertaken*			
Controlled waters risk - Surface water	*Not undertaken*			
Controlled waters risk - Drinking water	*Not undertaken*			
Controlled waters - Free phase indicator	*Not undertaken*			
Phytotoxicity	*Not undertaken*			
Ecotoxicity	*Not undertaken*			

Key

Assessment	Abbr.	GQRA Source (in order of preference)	Last Update
All	NGA	No guideline value available	-
Acute human health risk - Soils	AGAC	Acute Generic Assessment Criteria (SoBRA)	April 2019
	sat.	Contaminant poses a low acute risk unless the soil saturation limit is exceeded and a free oil phase is present.	April 2019
Chronic human health risk - Soils	C4SL	Category 4 Screening Levels (DEFRA)	May 2021
	S4UL	Suitable 4 Use Levels (LQM)	August 2015
	ATK	Atrisk Soil Screening Values (Atkins)	June 2017
	CL:AIRE	Generic Assessment Criteria (CL:AIRE)	Jan 2010

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Chronic human health risk (soils)

Scenario	
End user	Proposed site user
Receptor	Residential without homegrown produce
SOM	1.00%
GAC Preference	C4SLs over S4ULs

Contaminant	Guideline source	Guideline value (mg/kg)	Max value (mg/kg)	Location	WS01	WS02	WS03	WS04	WS05
				Depth (m)	0.30 - 0.70	0.30 - 0.60	0.10 - 0.20	0.40 - 0.80	0.10 - 0.20
				Date	27/11/23	27/11/23	27/11/23	27/11/23	27/11/23
Inorganics - Metals									
Arsenic	C4SL	40	21		21	17	8.9	15	16
Beryllium	S4UL	1.7	1.3		1.3	1.1	0.6	1.3	0.8
Boron	S4UL	11000	1.2		< 0.40	1.2	< 0.40	< 0.40	0.69
Cadmium	C4SL	150	0.88		0.43	0.34	0.15	0.88	0.32
Chromium (III)	S4UL	910	43		37	11	18	43	16
Chromium (VI)	C4SL	21	<LoD		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Copper	S4UL	7100	150		100	93	26	150	46
Cyanide - Free	ATK	34	0.8		< 0.50	< 0.50	< 0.50	< 0.50	0.8
Lead	C4SL	310	3900		1200	2100	85	3900	360
Mercury	S4UL	56	1.1		0.19	0.15	0.1	0.2	1.1
Nickel	S4UL	180	36		36	18	16	30	18
Selenium	S4UL	430	1.1		1.1	0.86	0.9	0.94	0.98
Vanadium	S4UL	1200	27		27	25	23	27	27
Zinc	S4UL	40000	630		500	100	75	630	120
Inorganics - Asbestos									
Asbestos Type		N/A			-	-	-	-	-
Asbestos Screen		N/A			No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Inorganics - Soil Parameters									
Organic matter		N/A					4.7	12	13
Organics - PAH & Phenol									
Acenaphthene	S4UL	3000	0.6		< 0.10	< 0.10	< 0.10	0.15	0.6
Acenaphthylene	S4UL	2900	<LoD		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	S4UL	31000	0.81		0.19	< 0.10	< 0.10	0.29	0.81
Benzo(a)anthracene	S4UL	11	2.6		0.38	0.36	0.22	1.3	2.6
Benzo(a)pyrene	C4SL	5.3	2.6		0.37	< 0.10	< 0.10	1.4	2.6
Benzo(b)fluoranthene	S4UL	3.9	3.4		0.57	< 0.10	< 0.10	2	3.4
Benzo(ghi)perylene	S4UL	360	1.5		0.39	< 0.10	< 0.10	0.94	1.5
Benzo(k)fluoranthene	S4UL	110	1.6		0.37	< 0.10	< 0.10	0.87	1.6
Chrysene	S4UL	30	2.6		0.45	0.39	0.22	1.4	2.6
Dibenz(a,h)anthracene	S4UL	0.31	0.43		0.25	< 0.10	< 0.10	< 0.10	0.43
Fluoranthene	S4UL	1500	6.3		0.82	0.7	0.5	3.1	6.3
Fluorene	S4UL	2800	0.4		0.12	< 0.10	< 0.10	< 0.10	0.4
Indeno(1,2,3-cd)pyrene	S4UL	45	1.6		0.32	< 0.10	< 0.10	0.95	1.6
Naphthalene	S4UL	2.3	0.27		< 0.10	< 0.10	< 0.10	0.27	0.27
Phenanthrene	S4UL	1300	3.7		0.45	0.49	0.28	1.3	3.7
Phenol	S4UL	440	<LoD		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	S4UL	3700	5.3		0.76	0.68	0.42	2.7	5.3
Organics - Banded TPH (unspeciated)									
EC >5-EC6 (unspeciated)	S4UL	42	<LoD		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
EC >6-EC7 (unspeciated)	S4UL	100	<LoD		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
EC >7-EC8 (unspeciated)	S4UL	100	<LoD		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
EC >08-EC10 (unspeciated)	S4UL	27	<LoD		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
EC >10-EC12 (unspeciated)	S4UL	130	<LoD		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
EC >12-EC16 (unspeciated)	S4UL	1100	<LoD		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
EC >16-EC21 (unspeciated)	S4UL	1900	<LoD		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
EC >21-EC35 (unspeciated)	S4UL	1900	<LoD		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Acute human health risk (soils)

Scenario	Public exposure
Critical receptor	Young female child (1 to 2 years old)
Oral exposure	Ingestion of a single 5g bolus of soil whilst playing on site
Demal exposure	Soil being left on the skin for several hours
Inhalation exposure	30 mins exposure to a child off-site, from dusts and vapours generated during excavation

Contaminant	Guideline source	Principal pathway	Guideline value (mg/kg)	Max value (mg/kg)	Location	WS01	WS02	WS03	WS04	WS05
					Depth (m)	0.30 - 0.70	0.30 - 0.60	0.10 - 0.20	0.40 - 0.80	0.10 - 0.20
					Date	27/11/23	27/11/23	27/11/23	27/11/23	27/11/23
Inorganics										
Arsenic	AGAC	Oral	80	21		21	17	8.9	15	16
Cadmium	AGAC	Oral	140	0.88		0.43	0.34	0.15	0.88	0.32
Cyanide - Free	AGAC	Oral	24	0.8		*< 0.50*	*< 0.50*	*< 0.50*	*< 0.50*	0.8
Organics										
Phenol	AGAC	Oral	2,000	<LoD		*< 0.10*	*< 0.10*	*< 0.10*	*< 0.10*	*< 0.10*

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Appendix J Waste Characterisation Analysis

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Waste Classification Assessment Summary

Waste population	Made Ground
Hazard assessment	Hazardous waste*
List of waste code	17-05-03*
List of waste description	Soil and stones containing hazardous substances

Hazard property	Assessment
HP1 - Explosive	Not hazardous by HP1
HP2 - Oxidising	Not hazardous by HP2
HP3 - Flammable	Not hazardous by HP3
HP4 - Irritant	Not hazardous by HP4
HP5 - STOT & aspiration toxicity	Hazardous by HP5
HP6 - Acute toxicity	Not hazardous by HP6
HP7 - Carcinogenic	Not hazardous by HP7
HP8 - Corrosive	Not hazardous by HP8
HP9 - Infectious	Not hazardous by HP9
HP10 - Toxic for reproduction	Hazardous by HP10
HP11 - Mutagenic	Not hazardous by HP11
HP12 - Release of an acute toxic gas	Not hazardous by HP12
HP13 - Sensitising	Not hazardous by HP13
HP14 - Ecotoxic	Hazardous by HP14

Waste classification

Overall assessment	
Waste population	Made Ground
Hazard assessment	Hazardous waste*
List of Waste code	17-05-03*
List of waste description	Soil and stones containing hazardous substances
Is the statistical approach non-parametric method B utilised?	No
Moisture content correction factor	No Correction Made

Asbestos assessment		
Query	Value	Assessment
Are bulk ACMs visually identifiable?	No	Non-hazardous
Have free fibres been detected?	No	Non-hazardous
What is the free fibre concentration (%)?	N/A	Non-hazardous

Flammability assessment	
Comment	Assessment
The waste is not considered flammable as it is a solid waste without a free draining liquid phase, and the TPH concentration and composition is not consdiered to present a likely flammable hazard.	Non-hazardous

Hydrocarbon assessment	
Query	Assessment
Is the origin of the oil contamination known?	Unknown oil
B(a)P : TPH ratio (%)	Not required
B(a)P marker assessment	Not required

pH assessment		
Query	Value	Assessment
Are all substances present in the waste known?	No	See pH assessment below
pH - Min	6.10	Non-hazardous
pH - Max	8.00	Non-hazardous

Oxidising assessment	
Comment	Assessment
Cr (VI) is the only compound with an oxidising hazard statement (H271). On review, the concentration is considered too low to present a viable oxidising hazard in a waste soil	Non-hazardous

Ecotoxic assessment			
Equation	Sum	Criteria	Assessment
WM3. Eq. 2	0.57%	25%	Non-hazardous
WM3 Eq. 3	57.08%	25%	HP14
WM3 Eq. 4	0.57%	25%	Non-hazardous

Compound hazard assessments

					Hazard Property Description	Irritant			Specific Target Organ Toxicity / Aspiration Toxicity			
					Hazard Property	HP4			HP5			
					Hazard Statement	H314	H315 and/or H319	H318	H304	H335	H372	H373
Contaminant	Max. concentration (mg/kg)	Realistic worst case compound	Mass conversion factor	MC applied?	Hazard Class / Compound concentration (%)	Skin Corr.1A	Skin Irrit.2 Eye Irrit.2	Eye Dam.1	Asp.Tox.1	STOT SE.3	STOT RE.1	STOT RE.2
Cyanide - Total	1.4	Salts of hydrogen cyanide, using sodium cyanide	1.88	N/A	0.000							
Arsenic	21.0	Nickel diarsenide	1.78	N	0.004						0.004	
Arsenic (secondary)	21.0	Arsenic trioxide	1.32	N	0.003	0.003						
Beryllium	1.3	Beryllium oxide	2.78	N	0.000		0.000			0.000	0.000	
Cadmium	0.9	Cadmium sulfide	1.29	N	0.000						See specific assessment	See specific assessment
Cadmium (secondary)	0.9	Cadmium oxide	1.14	N	0.000							
Chromium (III)	43.0	Chromium (III) oxide	1.46	N	0.006		0.006					
Chromium (VI)	0.5	Chromium (VI) trioxide	1.92	N/A	0.000	0.000				See specific assessment	0.000	
Copper	150.0	Copper (I) oxide	1.25	N	0.019							
Copper (secondary)	150.0	Copper(II) oxide	1.13	N	0.017			0.017				
Lead	3900.0	Lead compounds, using lead sulphate	1.46	N	0.571							See specific assessment
Mercury	1.1	Mercury dichloride	1.35	N	0.000	0.000					0.000	
Nickel	36.0	Nickel carbonate	2.02	N	0.007		0.007				0.007	
Selenium	1.1	Selenium compounds, using selenium dioxide	1.41	N	0.000							0.000
Zinc	630.0	Zinc sulphide	1.49	N	0.094		0.094					
Vanadium	27.0	Vanadium pentoxide	1.79	N	0.005					0.005	0.005	
Naphthalene	0.3	Naphthalene	1	N/A	0.000							
Acenaphthylene	0.1	Acenaphthylene	1	N/A	0.000		0.000			0.000		
Acenaphthene	0.6	Acenaphthene	1	N/A	0.000		0.000					
Fluorene	0.4	Fluorene	1	N/A	0.000		0.000			0.000		
Phenanthrene	3.7	Phenanthrene	1	N/A	0.000							
Anthracene	0.8	Anthracene	1	N/A	0.000		0.000			0.000		
Fluoranthene	6.3	Fluoranthene	1	N/A	0.001		0.001					
Pyrene	5.3	Pyrene	1	N/A	0.001		0.001			0.001		
Benzo(a)anthracene	2.6	Benzo(a)anthracene	1	N/A	0.000							
Chrysene	2.6	Chrysene	1	N/A	0.000							
Benzo(b)fluoranthene	3.4	Benzo(b)fluoranthene	1	N/A	0.000							
Benzo(k)fluoranthene	1.6	Benzo(k)fluoranthene	1	N/A	0.000							
Benzo(a)pyrene	2.6	Benzo(a)pyrene	1	N/A	0.000							
Indeno(1,2,3-cd)pyrene	1.6	Indeno(1,2,3-cd)pyrene	1	N/A	0.000							
Dibenz(a,h)anthracene	0.4	Dibenz(a,h)anthracene	1	N/A	0.000							
Benzo(ghi)perylene	1.5	Benzo(ghi)perylene	1	N/A	0.000							
Total TPH	10.0	Unknown oil	1	N/A	0.001				0.001			0.001
Benzene		Benzene	1	N/A								
Toluene		Toluene	1	N/A								
Ethylbenzene		Ethylbenzene	1	N/A								
Xylenes		Xylenes	1	N/A								
Note:												
					Cut-off value (%)	1%	1%	1%	N/A	N/A	N/A	N/A
					Total (or greatest)	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**(0%)**	**(0.01%)**	**(0%)**
					Hazard threshold	1%	20%	10%	10%	20%	1%	10%
					Hazardous	N	N	N	N	N	N	N

Hazard Property Description	Acute Toxicity									
Hazard Property	HP6									
Hazard Statement	H300	H301	H302	H310	H311	H312	H330	H330	H331	H332
Contaminant	Acute Tox.2 (Oral)	Acute Tox.3 (Oral)	Acute Tox.4 (Oral)	Acute Tox.1 (Dermal)	Acute Tox.3 (Dermal)	Acute Tox.4 (Dermal)	Acute Tox.1 (Inhal.)	Acute Tox.2 (Inhal)	Acute Tox.3 (Inhal)	Acute Tox.4 (Inhal)
Cyanide - Total	0.000			0.000			0.000	0.000		
Arsenic										
Arsenic (secondary)	0.003									
Beryllium		0.000					0.000	0.000		
Cadmium			0.000							
Cadmium (secondary)							0.000	0.000		
Chromium (III)			0.006							
Chromium (VI)		0.000			0.000		0.000	0.000		
Copper										
Copper (secondary)			0.017							0.017
Lead			0.571							0.571
Mercury	0.000									
Nickel			0.007							0.007
Selenium		0.000							0.000	
Zinc										
Vanadium			0.005							0.005
Naphthalene			0.000							
Acenaphthylene			0.000	0.000			0.000	0.000		
Acenaphthene										
Fluorene										
Phenanthrene			0.000							
Anthracene										
Fluoranthene			0.001							
Pyrene										
Benzo(a)anthracene										
Chrysene										
Benzo(b)fluoranthene										
Benzo(k)fluoranthene										
Benzo(a)pyrene										
Indeno(1,2,3-cd)pyrene										
Dibenz(a,h)anthracene										
Benzo(ghi)perylene										
Total TPH										
Benzene										
Toluene										
Ethylbenzene										
Xylenes										
Cut-off value (%)	0.1%	0.1%	1%	0.1%	0.1%	1%	0.1%	0.1%	0.1%	1%
Total (or greatest)	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**
Hazard threshold	0.25%	5%	25%	0.25%	15%	55%	0.1%	0.5%	3.5%	22.5%
Hazardous	N	N	N	N	N	N	N	N	N	N

Hazard Property Description	Carcinogenic		Corrosive	Toxic for reproduction		Mutagenic	
Hazard Property	HP7		HP8	HP10		HP11	
Hazard Statement	H350	H351	H314	H360	H361	H340	H341
Contaminant	Carc.1A Carc.1B	Carc.2	Skin Corr.1A Skin Corr.1B	Repr.1A Repr.1B	Repr.2	Muta.1A Muta.1B	Muta 2.
Cyanide - Total							
Arsenic	0.004						
Arsenic (secondary)			0.003				
Beryllium	0.000						
Cadmium	0.000				0.000		0.000
Cadmium (secondary)							
Chromium (III)				0.006			
Chromium (VI)	0.000		0.000		0.000	0.000	
Copper							
Copper (secondary)							
Lead		0.571		0.571	See specific assessment		
Mercury			0.000		0.000		0.000
Nickel	0.007			0.007			0.007
Selenium							
Zinc							
Vanadium					0.005		0.005
Naphthalene		0.000					
Acenaphthylene							
Acenaphthene							
Fluorene							
Phenanthrene							
Anthracene							
Fluoranthene							
Pyrene							
Benzo(a)anthracene	0.000						
Chrysene	0.000						0.000
Benzo(b)fluoranthene	0.000						
Benzo(k)fluoranthene	0.000						
Benzo(a)pyrene	See specific assessment			0.000		0.000	
Indeno(1,2,3-cd)pyrene		0.000					
Dibenz(a,h)anthracene	See specific assessment						
Benzo(ghi)perylene							
Total TPH	See specific assessment				0.001	See specific assessment	
Benzene							
Toluene							
Ethylbenzene							
Xylenes							
Cut-off value (%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total (or greatest)	**(0.01%)**	**(0.57%)**	**0.00%**	**(0.57%)**	**(0%)**	**(0%)**	**(0.01%)**
Hazard threshold	0.1%	1%	5%	0.3%	3%	0.1%	1%
Hazardous	N	N	N	HP10	N	N	N

Hazard Property Description	Sensitising		Ecotoxic				Substance specific concentration limits: STOT				Carc.	Repr.
Hazard Property	HP13		HP14				HP5				HP7	HP10
Hazard Statement	H317	H334	H400	H410	H411	H413	H335 (CrO3)	H372 (CdS)	H373 (CdS)	H373 (PbSO4)	H350 (BaP) (Da,hA)	H361 (PbSO4)
Contaminant	Skin Sens.1	Resp. Sens. 1	Aquatic Acute.1	Aquatic Chronic.1	Aquatic Chronic.2	Aquatic Chronic.4	STOT SE.3	STOT RE.1	STOT RE.2	STOT RE.2	Carc.1B	Repr.2
Cyanide - Total			0.000	0.000								
Arsenic	0.004		0.004	0.004								
Arsenic (secondary)												
Beryllium	0.000											
Cadmium						0.000		0.000	0.000			
Cadmium (secondary)			0.000	0.000								
Chromium (III)	0.006	0.006				0.006						
Chromium (VI)	0.000	0.000	0.000	0.000			0.000					
Copper			0.019	0.019								
Copper (secondary)												
Lead			0.571	0.571						0.571		0.571
Mercury			0.000	0.000								
Nickel	0.007	0.007	0.007	0.007								
Selenium			0.000	0.000								
Zinc	0.094	0.094		0.094								
Vanadium					0.005							
Naphthalene			0.000	0.000								
Acenaphthylene												
Acenaphthene			0.000	0.000								
Fluorene			0.000	0.000								
Phenanthrene			0.000	0.000								
Anthracene	0.000		0.000	0.000								
Fluoranthene			0.001	0.001								
Pyrene			0.001	0.001								
Benzo(a)anthracene			0.000	0.000								
Chrysene			0.000	0.000								
Benzo(b)fluoranthene			0.000	0.000								
Benzo(k)fluoranthene			0.000	0.000								
Benzo(a)pyrene	0.000		0.000	0.000							0.000	
Indeno(1,2,3-cd)pyrene												
Dibenz(a,h)anthracene			0.000	0.000							0.000	
Benzo(ghi)perylene			0.000	0.000								
Total TPH					0.001							
Benzene												
Toluene												
Ethylbenzene												
Xylenes												
Cut-off value (%)	N/A	N/A	0.1%	0.1%	1%	1%	N/A	N/A	N/A	N/A	N/A	N/A
Total (or greatest)	**(0.09%)**	**(0.09%)**	**0.57%**	**0.57%**	**0.00%**	**0.00%**	**(0%)**	**(0%)**	**(0%)**	**(0.57%)**	**(0%)**	**(0.57%)**
Hazard threshold	10%	10%	WM3 eq.2	WM3 eq.3 & eq.4		WM3 eq.4	1.0%	10.0%	0.1%	0.5%	0.01%	2.5%
Hazardous	N	N	N	HP14		N	N	N	N	HP5	N	N

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Waste acceptance

Parameter	Inert waste landfill	Stable non-reactive hazardous waste in a non-hazardous landfill cell (SNRHW)	Hazardous waste landfill	Location	RBH101	RBH101
				Depth (m)	0.30 - 9.00	0.60 - 0.00
				Date	)24-07-17T15:(	)24-07-17T15:(
Parameters determined on the waste						
Total organic carbon	3	5	6		4.1	3.8
Loss on ignition			10		0.47	6.8
BTEX	6				< 0.010	< 0.010
PCBs (7 congeners)	1				< 0.10	< 0.10
Mineral oil	500				74	100
PAH (17 congeners)	100				23	18
pH		6			7.9	7.2
Acid neutralisation capacity (pH 6)		To be evaluated	To be evaluated		0.01	0.015
Limit values (mg kg^{-1}) for compliance test using BN 12457-3 at L/S 10 l						
Arsenic	0.5	2	25		0.011	0.0097
Barium	20	100	300		0.059	0.22
Cadmium	0.04	1	5		< 0.00011	< 0.00011
Chromium (III)	0.5	10	70		< 0.0005	< 0.0005
Copper	2	50	100		0.01	0.0044
Mercury	0.01	0.2	2		< 0.00005	< 0.00005
Molybdenum	0.5	10	30		0.0041	0.009
Nickel	0.4	10	40		< 0.0005	< 0.0005
Lead	0.5	10	50		0.16	0.22
Antimony	0.06	0.7	5		0.0063	0.012
Selenium	0.1	0.5	7		< 0.0005	< 0.0005
Zinc	4	50	200		< 0.003	0.047
Chloride	800	15,000	25,000		< 10	< 10
Fluoride	10	150	500		1.7	2
Sulphate	1,000	20,000	50,000		13	23
Total dissolved solids	4,000	60,000	100,000		130	230
Phenol	1				< 0.50	< 0.50
Dissolved organic carbon	500	800	1000		54	63
Classifications						
Waste classification					**Hazardous**	**Hazardous**
Landfill type					SNRHW	SNRHW

Key Notes:

1) The values for total dissolved solids (TDS) can be used alternatively to the values for sulphate and chloride.

2) Soils with TOC values over the limit value may still be accepted provided the DOC value falls are below it's respective limit value.

3) In a hazardous waste, either the TOC or LOI must be used.

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Waste Classification Assessment Summary

Waste population	Topsoil
Hazard assessment	Non-hazardous waste
List of waste code	17-05-04
List of waste description	Soil and stones other than those mentioned in 17-05-03

Hazard property	Assessment
HP1 - Explosive	Not hazardous by HP1
HP2 - Oxidising	Not hazardous by HP2
HP3 - Flammable	Not hazardous by HP3
HP4 - Irritant	Not hazardous by HP4
HP5 - STOT & aspiration toxicity	Not hazardous by HP5
HP6 - Acute toxicity	Not hazardous by HP6
HP7 - Carcinogenic	Not hazardous by HP7
HP8 - Corrosive	Not hazardous by HP8
HP9 - Infectious	Not hazardous by HP9
HP10 - Toxic for reproduction	Not hazardous by HP10
HP11 - Mutagenic	Not hazardous by HP11
HP12 - Release of an acute toxic gas	Not hazardous by HP12
HP13 - Sensitising	Not hazardous by HP13
HP14 - Ecotoxic	Not hazardous by HP14

soiltechnics
environmental • geotechnical • building fabric

Waste classification

Overall assessment	
Waste population	Topsoil
Hazard assessment	Non-hazardous waste
List of Waste code	17-05-04
List of waste description	Soil and stones other than those mentioned in 17-05-03
Is the statistical approach non-parametric method B utilised?	No
Moisture content correction factor	No Correction Made

Asbestos assessment		
Query	Value	Assessment
Are bulk ACMs visually identifiable?	No	Non-hazardous
Have free fibres been detected?	No	Non-hazardous
What is the free fibre concentration (%)?	N/A	Non-hazardous

Flammability assessment	
Comment	Assessment
The waste is not considered flammable as it is a solid waste without a free draining liquid phase, and the TPH concentration and composition is not consdiered to present a likely flammable hazard.	Non-hazardous

Hydrocarbon assessment	
Query	Assessment
Is the origin of the oil contamination known?	Unknown oil
B(a)P : TPH ratio (%)	Not required
B(a)P marker assessment	Not required

pH assessment		
Query	Value	Assessment
Are all substances present in the waste known?	No	See pH assessment below
pH - Min	6.10	Non-hazardous
pH - Max	8.00	Non-hazardous

Oxidising assessment	
Comment	Assessment
Cr (VI) is the only compound with an oxidising hazard statement (H271). On review, the concentration is considered too low to present a viable oxidising hazard in a waste soil	Non-hazardous

Ecotoxic assessment			
Equation	Sum	Criteria	Assessment
WM3. Eq. 2	0.00%	25%	Non-hazardous
WM3 Eq. 3	0.00%	25%	Non-hazardous
WM3 Eq. 4	0.00%	25%	Non-hazardous

Compound hazard assessments

					Hazard Property Description	Irritant			Specific Target Organ Toxicity / Aspiration Toxicity				Acute Toxicity									
					Hazard Property	HP4			HP5				HP6									
					Hazard Statement	H314	H315 and/or H319	H318	H304	H335	H372	H373	H300	H301	H302	H310	H311	H312	H330	H330	H331	H332
Contaminant	Max. concentration (mg/kg)	Realistic worst case compound	Mass conversion factor	MC applied?	Hazard Class / Compound concentration (%)	Skin Corr.1A	Skin Irrit.2 Eye Irrit.2	Eye Dam.1	Asp.Tox.1	STOT SE.3	STOT RE.1	STOT RE.2	Acute Tox.2 (Oral)	Acute Tox.3 (Oral)	Acute Tox.4 (Oral)	Acute Tox.1 (Dermal)	Acute Tox.3 (Dermal)	Acute Tox.4 (Dermal)	Acute Tox.1 (Inhal.)	Acute Tox.2 (Inhal)	Acute Tox.3 (Inhal)	Acute Tox.4 (Inhal)
Cyanide - Total	1.4	Salts of hydrogen cyanide, using sodium cyanide	1.88	N/A	0.000								0.000			0.000			0.000	0.000		
Arsenic	16.0	Nickel diarsenide	1.78	N	0.003						0.003											
Arsenic (secondary)	16.0	Arsenic trioxide	1.32	N	0.002	0.002							0.002									
Beryllium	0.8	Beryllium oxide	2.78	N	0.000		0.000			0.000	0.000			0.000					0.000	0.000		
Cadmium	0.3	Cadmium sulfide	1.29	N	0.000						See specific assessment	See specific assessment			0.000							
Cadmium (secondary)	0.3	Cadmium oxide	1.14	N	0.000														0.000	0.000		
Chromium (III)	18.0	Chromium (III) oxide	1.46	N	0.003		0.003								0.003							
Chromium (VI)	18.0	Chromium (VI) trioxide	1.92	N/A	0.003	0.003				See specific assessment	0.003			0.003			0.003		0.003	0.003		
Copper	46.0	Copper (I) oxide	1.25	N	0.006																	
Copper (secondary)	46.0	Copper(II) oxide	1.13	N	0.005			0.005							0.005							0.005
Lead	360.0	Lead compounds, using lead sulphate	1.46	N	0.053							See specific assessment			0.053							0.053
Mercury	1.1	Mercury dichloride	1.35	N	0.000	0.000					0.000		0.000									
Nickel	18.0	Nickel carbonate	2.02	N	0.004		0.004				0.004				0.004							0.004
Selenium	1.0	Selenium compounds, using selenium dioxide	1.41	N	0.000							0.000		0.000							0.000	
Zinc	120.0	Zinc sulphide	1.49	N	0.018		0.018															
Vanadium	120.0	Vanadium pentoxide	1.79	N	0.021					0.021	0.021				0.021							0.021
Naphthalene	0.3	Naphthalene	1	N/A	0.000										0.000							
Acenaphthylene	<0.1	Acenaphthylene	1	N/A	#VALUE!		#VALUE!			#VALUE!					#VALUE!	#VALUE!			#VALUE!	#VALUE!		
Acenaphthene	0.6	Acenaphthene	1	N/A	0.000		0.000															
Fluorene	6.3	Fluorene	1	N/A	0.001		0.001			0.001												
Phenanthrene	3.7	Phenanthrene	1	N/A	0.000										0.000							
Anthracene	0.6	Anthracene	1	N/A	0.000		0.000			0.000												
Fluoranthene	6.3	Fluoranthene	1	N/A	0.001		0.001								0.001							
Pyrene	5.3	Pyrene	1	N/A	0.001		0.001			0.001												
Benzo(a)anthracene	2.6	Benzo(a)anthracene	1	N/A	0.000																	
Chrysene	2.6	Chrysene	1	N/A	0.000																	
Benzo(b)fluoranthene	3.4	Benzo(b)fluoranthene	1	N/A	0.000																	
Benzo(k)fluoranthene	1.6	Benzo(k)fluoranthene	1	N/A	0.000																	
Benzo(a)pyrene	2.6	Benzo(a)pyrene	1	N/A	0.000																	
Indeno(1,2,3-cd)pyrene	1.6	Indeno(1,2,3-cd)pyrene	1	N/A	0.000																	
Dibenz(a,h)anthracene	0.4	Dibenz(a,h)anthracene	1	N/A	0.000																	
Benzo(ghi)perylene	1.5	Benzo(ghi)perylene	1	N/A	0.000																	
Total TPH	10.0	Unknown oil	1	N/A	0.001				0.001			0.001										
Benzene		Benzene	1	N/A																		
Toluene		Toluene	1	N/A																		
Ethylbenzene		Ethylbenzene	1	N/A																		
Xylenes		Xylenes	1	N/A																		
Note:																						
					Cut-off value (%)	1%	1%	1%	N/A	N/A	N/A	N/A	0.1%	0.1%	1%	0.1%	0.1%	1%	0.1%	0.1%	0.1%	1%
					Total (or greatest)	0.00%	0.00%	0.00%	0.00%	#VALUE!	(0.02%)	(0%)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
					Hazard threshold	1%	20%	10%	10%	20%	1%	10%	0.25%	5%	25%	0.25%	15%	55%	0.1%	0.5%	3.5%	22.5%
					Hazardous	N	N	N	N	#VALUE!	N	N	N	N	N	N	N	N	N	N	N	N

Contaminant	Max. concentration (mg/kg)	Realistic worst case compound	Mass conversion factor	MC applied?	Hazard Class / Compound concentration (%)	Carcinogenic		Corrosive	Toxic for reproduction		Mutagenic		Sensitising		Ecotoxic				Substance specific concentration limits: STOT				Carc.	Repr.
					Hazard Property	HP7		HP8	HP10		HP11		HP13		HP14				HP5				HP7	HP10
					Hazard Statement	H350	H351	H314	H360	H361	H340	H341	H317	H334	H400	H410	H411	H413	H335 (CrO3)	H372 (CdS)	H373 (CdS)	H373 (PbSO4)	H350 (BaP) (Da,hA)	H361 (PbSO4)
						Carc.1A Carc.1B	Carc.2	Skin Corr.1A Skin Corr.1B	Repr.1A Repr.1B	Repr.2	Muta.1A Muta.1B	Muta 2.	Skin Sens.1	Resp. Sens. 1	Aquatic Acute.1	Aquatic Chronic.1	Aquatic Chronic.2	Aquatic Chronic.4	STOT SE.3	STOT RE.1	STOT RE.2	STOT RE.2	Carc.1B	Repr.2
Cyanide - Total	1.4	Salts of hydrogen cyanide, using sodium cyanide	1.88	N/A	0.000										0.000	0.000								
Arsenic	16.0	Nickel diarsenide	1.78	N	0.003	0.003							0.003		0.003	0.003								
Arsenic (secondary)	16.0	Arsenic trioxide	1.32	N	0.002			0.002																
Beryllium	0.8	Beryllium oxide	2.78	N	0.000	0.000							0.000											
Cadmium	0.3	Cadmium sulfide	1.29	N	0.000	0.000				0.000		0.000						0.000		0.000	0.000			
Cadmium (secondary)	0.3	Cadmium oxide	1.14	N	0.000										0.000	0.000								
Chromium (III)	18.0	Chromium (III) oxide	1.46	N	0.003				0.003				0.003	0.003				0.003						
Chromium (VI)	18.0	Chromium (VI) trioxide	1.92	N/A	0.003	0.003		0.003		0.003	0.003		0.003	0.003	0.003	0.003			0.003					
Copper	46.0	Copper (I) oxide	1.25	N	0.006										0.006	0.006								
Copper (secondary)	46.0	Copper(II) oxide	1.13	N	0.005																			
Lead	360.0	Lead compounds, using lead sulphate	1.46	N	0.053		0.053		0.053	See specific assessment					0.053	0.053						0.053		0.053
Mercury	1.1	Mercury dichloride	1.35	N	0.000			0.000		0.000		0.000			0.000	0.000								
Nickel	18.0	Nickel carbonate	2.02	N	0.004	0.004			0.004			0.004	0.004	0.004	0.004	0.004								
Selenium	1.0	Selenium compounds, using selenium dioxide	1.41	N	0.000										0.000	0.000								
Zinc	120.0	Zinc sulphide	1.49	N	0.018								0.018	0.018		0.018								
Vanadium	120.0	Vanadium pentoxide	1.79	N	0.021					0.021		0.021					0.021							
Naphthalene	0.3	Naphthalene	1	N/A	0.000		0.000								0.000	0.000								
Acenaphthylene	<0.1	Acenaphthylene	1	N/A	#VALUE!																			
Acenaphthene	0.6	Acenaphthene	1	N/A	0.000										0.000	0.000								
Fluorene	6.3	Fluorene	1	N/A	0.001										0.001	0.001								
Phenanthrene	3.7	Phenanthrene	1	N/A	0.000										0.000	0.000								
Anthracene	0.6	Anthracene	1	N/A	0.000								0.000		0.000	0.000								
Fluoranthene	6.3	Fluoranthene	1	N/A	0.001										0.001	0.001								
Pyrene	5.3	Pyrene	1	N/A	0.001										0.001	0.001								
Benzo(a)anthracene	2.6	Benzo(a)anthracene	1	N/A	0.000	0.000									0.000	0.000								
Chrysene	2.6	Chrysene	1	N/A	0.000	0.000						0.000			0.000	0.000								
Benzo(b)fluoranthene	3.4	Benzo(b)fluoranthene	1	N/A	0.000	0.000									0.000	0.000								
Benzo(k)fluoranthene	1.6	Benzo(k)fluoranthene	1	N/A	0.000	0.000									0.000	0.000								
Benzo(a)pyrene	2.6	Benzo(a)pyrene	1	N/A	0.000	See specific assessment			0.000		0.000		0.000		0.000	0.000							0.000	
Indeno(1,2,3-cd)pyrene	1.6	Indeno(1,2,3-cd)pyrene	1	N/A	0.000		0.000																	
Dibenz(a,h)anthracene	0.4	Dibenz(a,h)anthracene	1	N/A	0.000	See specific assessment									0.000	0.000							0.000	
Benzo(ghi)perylene	1.5	Benzo(ghi)perylene	1	N/A	0.000										0.000	0.000								
Total TPH	10.0	Unknown oil	1	N/A	0.001	See specific assessment				0.001	See specific assessment						0.001							
Benzene		Benzene	1	N/A																				
Toluene		Toluene	1	N/A																				
Ethylbenzene		Ethylbenzene	1	N/A																				
Xylenes		Xylenes	1	N/A																				
Note:																								
					Cut-off value (%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.1%	0.1%	1%	1%	N/A	N/A	N/A	N/A	N/A	N/A
					Total (or greatest)	(0%)	(0.05%)	0.01%	(0.05%)	(0.02%)	(0%)	(0.02%)	(0.02%)	(0.02%)	0.00%	0.00%	0.00%	0.00%	(0%)	(0%)	(0%)	(0.05%)	(0%)	(0.05%)
					Hazard threshold	0.1%	1%	5%	0.3%	3%	0.1%	1%	10%	10%	WM3 eq.2	WM3 eq.3 & eq.4		WM3 eq.4	1.0%	10.0%	0.1%	0.5%	0.01%	2.5%
					Hazardous	N	N	N	N	N	N	N	N	N	N	N		N	N	N	N	N	N	N

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Waste acceptance

Parameter	Inert waste landfill	Stable non-reactive hazardous waste in a non-hazardous landfill cell (SNRHW)	Hazardous waste landfill	Location	RBH102
				Depth (m)	0.10 - 0.10
				Date	024-07-17T15:1
Parameters determined on the waste					
Total organic carbon	3	5	6		2.1
Loss on ignition			10		7.8
BTEX	6				< 0.010
PCBs (7 congeners)	1				< 0.10
Mineral oil	500				< 10
PAH (17 congeners)	100				< 2.0
pH		6			6.1
Acid neutralisation capacity (pH 6)		To be evaluated	To be evaluated		0.006
Limit values (mg kg^{-1}) for compliance test using BN 12457-3 at L/S 10 l					
Arsenic	0.5	2	25		< 0.0002
Barium	20	100	300		< 0.0005
Cadmium	0.04	1	5		< 0.00011
Chromium (III)	0.5	10	70		< 0.0005
Copper	2	50	100		0.0037
Mercury	0.01	0.2	2		< 0.00005
Molybdenum	0.5	10	30		< 0.0002
Nickel	0.4	10	40		< 0.0005
Lead	0.5	10	50		0.0009
Antimony	0.06	0.7	5		< 0.0005
Selenium	0.1	0.5	7		< 0.0005
Zinc	4	50	200		0.076
Chloride	800	15,000	25,000		< 10
Fluoride	10	150	500		< 1.0
Sulphate	1,000	20,000	50,000		320
Total dissolved solids	4,000	60,000	100,000		530
Phenol	1				< 0.50
Dissolved organic carbon	500	800	1000		< 50
Classifications					
Waste classification					**Non-hazardous**
Landfill type					Inert

Key Notes:
1) The values for total dissolved solids (TDS) can be used alternatively to the values for sulphate and chloride.

2) Soils with TOC values over the limit value may still be accepted provided the DOC value falls are below it's respective limit value.

3) In a hazardous waste, either the TOC or LOI must be used.

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Appendix K Consultants Coal Mining Report

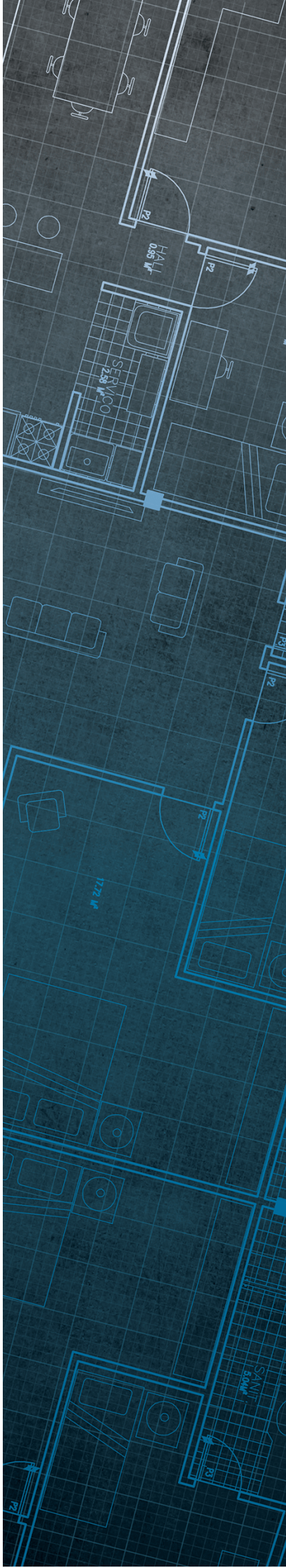
The Coal Authority

Consultants

Coal Mining Report

Hornby Street
Heywood
Rochdale
OL10 1AB

Date of enquiry:	**16 November 2023**
Date enquiry received:	**16 November 2023**
Issue date:	**16 November 2023**
Our reference:	**51003389841001**
Your reference:	**STV6299**



Consultants

Coal Mining Report

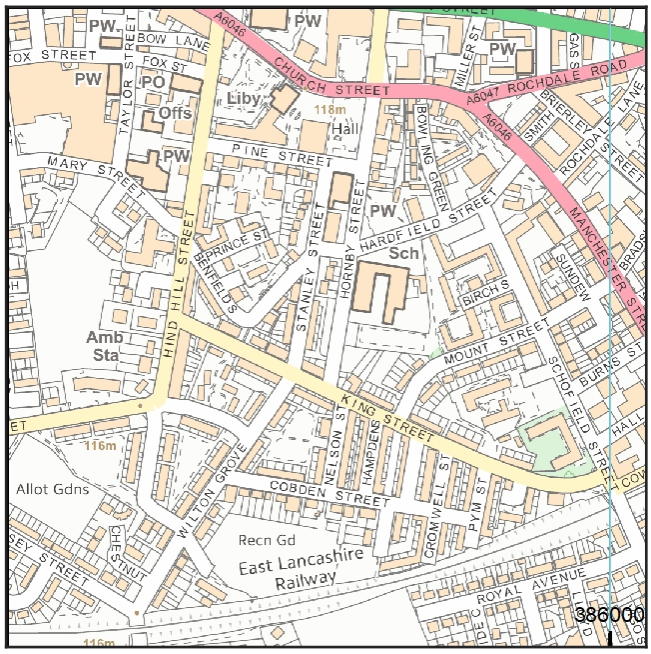
This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

Client name

Soiltechnics Limited

Enquiry address

Hornby Street
Heywood
Rochdale
OL10 1AB



Approximate position of property

Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright and database right 2018. All rights reserved.

Ordnance Survey Licence number: 100020315

How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

www.groundstability.com

@coalauthority
/company/the-coal-authority
/thecoalauthority
/thecoalauthority

Section 1 – Mining activity and geology

Past underground mining
No past mining recorded.

Probable unrecorded shallow workings
Yes.

Spine roadways at shallow depth
No spine roadway recorded at shallow depth.

Mine entries
None recorded within 100 metres of the enquiry boundary.

Abandoned mine plan catalogue numbers
The following abandoned mine plan catalogue numbers intersect with some, or all, of the enquiry boundary:

16820		

Please contact us on 0345 762 6848 to determine the exact abandoned mine plans you require based on your needs.

Outcrops

Seam name	Mineral	Seam workable	Distance to outcrop (m)	Direction to outcrop	Bearing of outcrop
UNNAMED 4	Coal	Yes	Within	N/A	323

Geological faults, fissures and breaklines
No faults, fissures or breaklines recorded.

Opencast mines
None recorded within 500 metres of the enquiry boundary.

Coal Authority managed tips
None recorded within 500 metres of the enquiry boundary.

Copyright © 2023 The Coal Authority

Section 2 – Investigative or remedial activity

Please refer to the 'Summary of findings' map (on separate sheet) for details of any activity within the area of the site boundary.

Site investigations
None recorded within 50 metres of the enquiry boundary.

Remediated sites
None recorded within 50 metres of the enquiry boundary.

Coal mining subsidence
The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

Mine gas
None recorded within 500 metres of the enquiry boundary.

Mine water treatment schemes
None recorded within 500 metres of the enquiry boundary.

Copyright © 2023 The Coal Authority

Section 3 – Licensing and future mining activity

Future underground mining
None recorded.

Coal mining licensing
None recorded within 200 metres of the enquiry boundary.

Court orders
None recorded.

Section 46 notices
No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

Withdrawal of support notices
The property is not in an area where a notice to withdraw support has been given.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

Payments to owners of former copyhold land
The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Copyright © 2023 The Coal Authority

Section 4 – Further information

Based on the responses in this report, no further information has been highlighted.

Future development

If development proposals are being considered, technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before beginning work on site. All proposals should apply specialist engineering practice required for former mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or coal mines without first obtaining the permission of the Coal Authority.

MINE GAS: Please note, if there are no recorded instances of mine gas within 500m of the enquiry boundary, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded. Developers should be aware that the investigation of coal seams, mine workings or mine entries may have the potential to generate and/or displace underground gases. Associated risks both to the development site and any neighbouring land or properties should be fully considered when undertaking any ground works. The need for effective measures to prevent gases migrating onto any land or into any properties, either during investigation or remediation work, or after development must also be assessed and properly addressed. In these instances, the Coal Authority recommends that a more detailed Gas Risk Assessment is undertaken by a competent assessor.

Copyright © 2023 The Coal Authority

Section 5 – Data definitions

The datasets used in this report have limitations and assumptions within their results. For more guidance on the data and the results specific to the enquiry boundary, please **call us on 0345 762 6848** or **email us at groundstability@coal.gov.uk.**

Past underground coal mining

Details of all recorded underground mining relative to the enquiry boundary. Only past underground workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination, will be included.

Probable unrecorded shallow workings

Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep).

Spine roadways at shallow depth

Connecting roadways either, working to working, or, surface to working, both in-seam and cross measures that exist at or close to the surface (less than 30 metres deep), either within or within 10 metres of the enquiry boundary.

Mine entries

Details of any shaft or adit either within, or within 100 metres of the enquiry boundary including approximate location, brief treatment details where known, the mineral worked from the mine entry and conveyance details where the mine entry has previously been sold by the Authority or its predecessors British Coal or the National Coal Board.

Abandoned mine plan catalogue numbers

Plan numbers extracted from the abandoned mines catalogue containing details of coal and other mineral abandonment plans deposited via the Mines Inspectorate in accordance with the Coal Mines Regulation Act and Metalliferous Mines Regulation Act 1872. A maximum of 9 plan extents that intersect with the enquiry boundary will be included. This does not infer that the workings and/or mine entries shown on the abandonment plan will be relevant to the site/property boundary.

Outcrops

Details of seam outcrops will be included where the enquiry boundary intersects with a conjectured or actual seam outcrop location (derived by either the British Geological Survey or the Coal Authority) or intersects with a defined 50 metres buffer on the coal (dip) side of the outcrop. An indication of whether the Coal Authority believes the seam to be of sufficient thickness and/or quality to have been worked will also be included.

Geological faults, fissures and breaklines

Geological disturbances or fractures in the bedrock. Surface fault lines (British Geological Survey derived data) and fissures and breaklines (Coal Authority derived data) intersecting with the enquiry boundary will be included. In some circumstances faults, fissures or breaklines have been known to contribute to surface subsidence damage as a consequence of underground coal mining.

Copyright © 2023 The Coal Authority

Opencast mines
Opencast coal sites from which coal has been removed in the past by opencast (surface) methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area.

Coal Authority managed tips
Locations of disused colliery tip sites owned and managed by the Coal Authority, located within 500 metres of the enquiry boundary.

Site investigations
Details of site investigations within 50 metres of the enquiry boundary where the Coal Authority has received information relating to coal mining risk investigation and/or remediation by third parties.

Remediated sites
Sites where the Coal Authority has undertaken remedial works either within or within 50 metres of the enquiry boundary following report of a hazard relating to coal mining under the Coal Authority's Emergency Surface Hazard Call Out procedures.

Coal mining subsidence
Details of alleged coal mining subsidence claims made since 31 October 1994 either within or within 50 metres of the enquiry boundary. Where the claim relates to the enquiry boundary confirmation of whether the claim was accepted, rejected or whether liability is still being determined will be given. Where the claim has been discharged, whether this was by repair, payment of compensation or a combination of both, the value of the claim, where known, will also be given.

Details of any current 'Stop Notice' deferring remedial works or repairs affecting the property/site, and if so the date of the notice.

Details of any request made to execute preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991. If yes, whether any person withheld consent or failed to comply with any request to execute preventative works.

Mine gas
Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission. Please note, if there are no recorded instances of mine gas reported, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded.

Copyright © 2023 The Coal Authority

Mine water treatment schemes
Locations where the Coal Authority has constructed or operates assets that remove pollutants from mine water prior to the treated mine water being discharged into the receiving water body.

These schemes are part of the UK's strategy to meet the requirements of the Water Framework Directive. Schemes fall into 2 basic categories: Remedial – mitigating the impact of existing pollution or Preventative – preventing a future pollution incident.

Mine water treatment schemes generally consist of one or more primary settlement lagoons and one or more reed beds for secondary treatment. A small number are more specialised process treatment plants.

Future underground mining
Details of all planned underground mining relative to the enquiry boundary. Only those future workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination will be included.

Coal mining licensing
Details of all licenses issued by the Coal Authority either within or within 200 metres of the enquiry boundary in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification.

Court orders
Orders in respect of the working of coal under the Mines (Working Facilities and Support) Acts of 1923 and 1966 or any statutory modification or amendment thereof.

Section 46 notices
Notice of proposals relating to underground coal mining operations that have been given under section 46 of the Coal Mining Subsidence Act 1991.

Withdrawal of support notices
Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

Payment to owners of former copyhold land
Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.

Copyright © 2023 The Coal Authority

The Coal Authority

Summary of findings

Reproduced by permission of Ordnance Survey on behalf of HMSO.
© Crown copyright and database right 2018. All rights reserved.
Ordnance Survey Licence number: 100020315

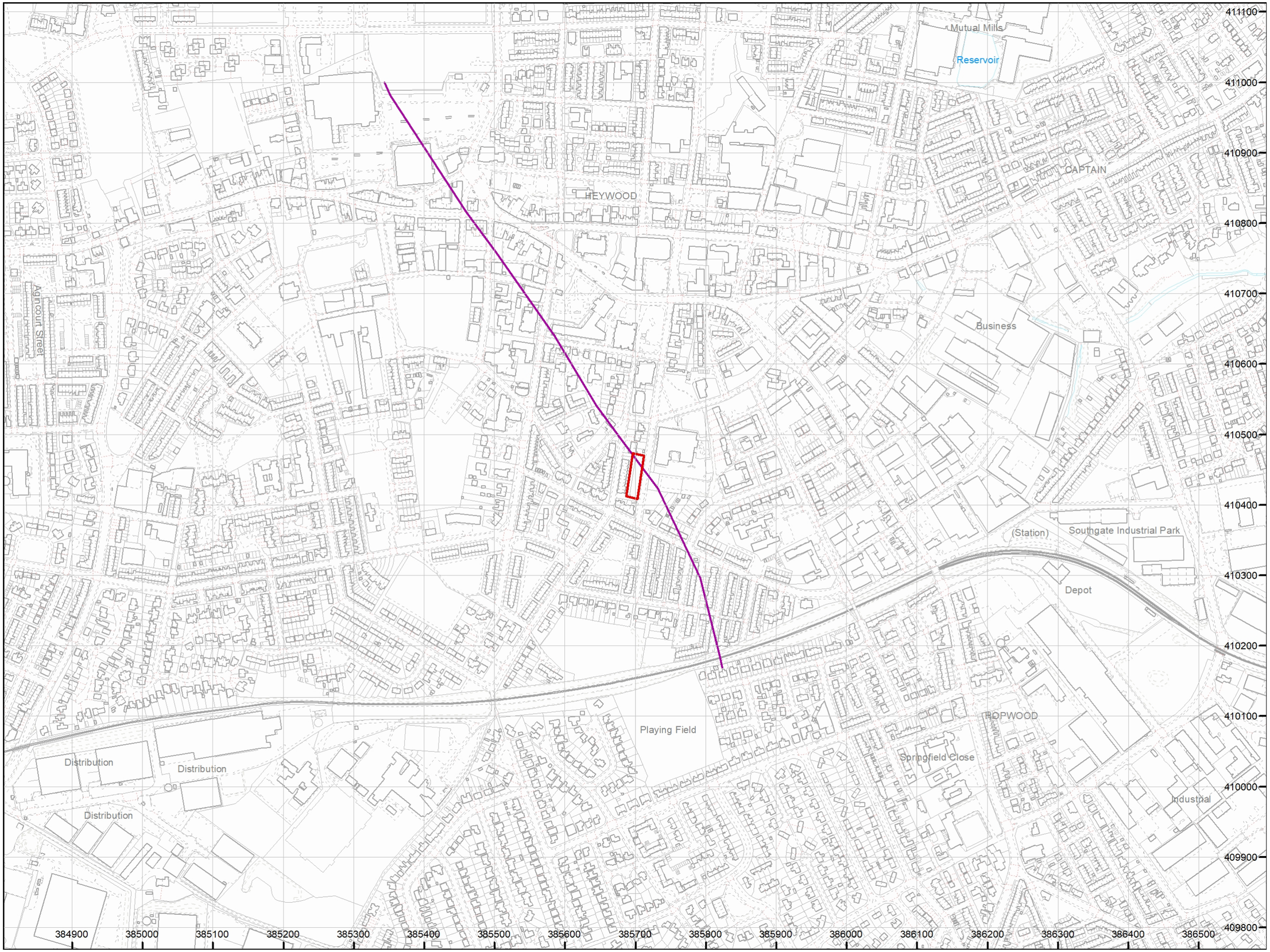
Map data

The map highlights any specific surface or subsurface features within or near to the boundary of the site.

Key

Approximate position of the enquiry boundary shown

Outcrop (Proven)



How to contact us
0345 762 6848 (UK)
+44 (0)1623 637 000 (International)
www.groundstability.com

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Appendix L Utility Service Plans

United Utilities
Water for the North West

How to contact us:

United Utilities Water Limited
Property Searches
Haweswater House
Lingley Mere Business Park
Great Sankey
Warrington
WA5 3LP

Telephone: 0370 7510101

E-mail: propertysearches@uuplc.co.uk

Your Ref: STV6299
Our Ref: UUPS-ORD-581471
Date: 26/06/2024

Soiltechnics

Soiltechnics
Cedar Barn,
Walgrave,
NN6 9PY

FAO:

Dear Sirs

Location: 5 HORNBY STREET, HEYWOOD, OL10 1AA

I acknowledge with thanks your request dated 25/06/2024 for information on the location of our services.

Please find enclosed plans showing the approximate position of United Utilities' apparatus known to be in the vicinity of this site.

The enclosed plans are being provided to you subject to the United Utilities terms and conditions for both the wastewater and water distribution plans which are shown attached.

If you are planning works anywhere in the North West, please read United Utilities' access statement before you start work to check how it will affect our network. http://www.unitedutilities.com/work-near-asset.aspx .

I trust the above meets with your requirements and look forward to hearing from you should you need anything further.

If you have any queries regarding this matter please contact us .

Yours Faithfully,

Karen McCormack
Property Searches Manager

United Utilities Water Limited
Registered In England & Wales No. 2366678
Registered Office Haweswater House, Lingley Mere Business Park,
Lingley Green Avenue, Great Sankey, Warrington, WA5 3LP

Water for the North West

TERMS AND CONDITIONS - WASTEWATER AND WATER DISTRIBUTION PLANS

These provisions apply to the public sewerage, water distribution and telemetry systems (including sewers which are the subject of an agreement under Section 104 of the Water Industry Act 1991 and mains installed in accordance with the agreement for the self construction of water mains) (UUWL apparatus) of United Utilities Water Limited "(UUWL)".

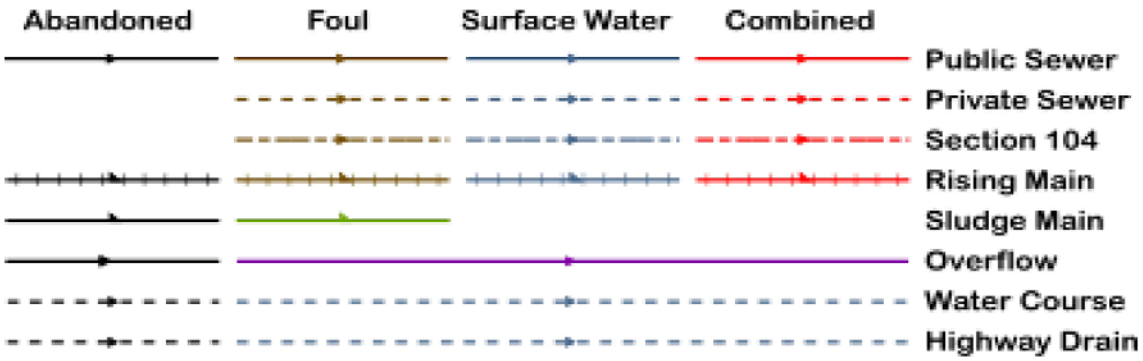
TERMS AND CONDITIONS:

- This Map and any information supplied with it is issued subject to the provisions contained below, to the exclusion of all others and no party relies upon any representation, warranty, collateral contract or other assurance of any person (whether party to this agreement or not) that is not set out in this agreement or the documents referred to in it.
- This Map and any information supplied with it is provided for general guidance only and no representation, undertaking or warranty as to its accuracy, completeness or being up to date is given or implied.
- In particular, the position and depth of any UUWL apparatus shown on the Map are approximate only. UUWL strongly recommends that a comprehensive survey is undertaken in addition to reviewing this Map to determine and ensure the precise location of any UUWL apparatus. The exact location, positions and depths should be obtained by excavation trial holes.
- The location and position of private drains, private sewers and service pipes to properties are not normally shown on this Map but their presence must be anticipated and accounted for and you are strongly advised to carry out your own further enquiries and investigations in order to locate the same.
- The position and depth of UUWL apparatus is subject to change and therefore this Map is issued subject to any removal or change in location of the same. The onus is entirely upon you to confirm whether any changes to the Map have been made subsequent to issue and prior to any works being carried out.
- This Map and any information shown on it or provided with it must not be relied upon in the event of any development, construction or other works (including but not limited to any excavations) in the vicinity of UUWL apparatus or for the purpose of determining the suitability of a point of connection to the sewerage or other distribution systems.
- No person or legal entity, including any company shall be relieved from any liability howsoever and whensoever arising for any damage caused to UUWL apparatus by reason of the actual position and/or depths of UUWL apparatus being different from those shown on the Map and any information supplied with it.
- If any provision contained herein is or becomes legally invalid or unenforceable, it will be taken to be severed from the remaining provisions which shall be unaffected and continue in full force and affect.
- This agreement shall be governed by English law and all parties submit to the exclusive jurisdiction of the English courts, save that nothing will prevent UUWL from bringing proceedings in any other competent jurisdiction, whether concurrently or otherwise.

United Utilities Water Limited
Registered In England & Wales No. 2366678
Registered Office Haweswater House, Lingley Mere Business Park,
Lingley Green Avenue, Great Sankey, Warrington, WA5 3LP

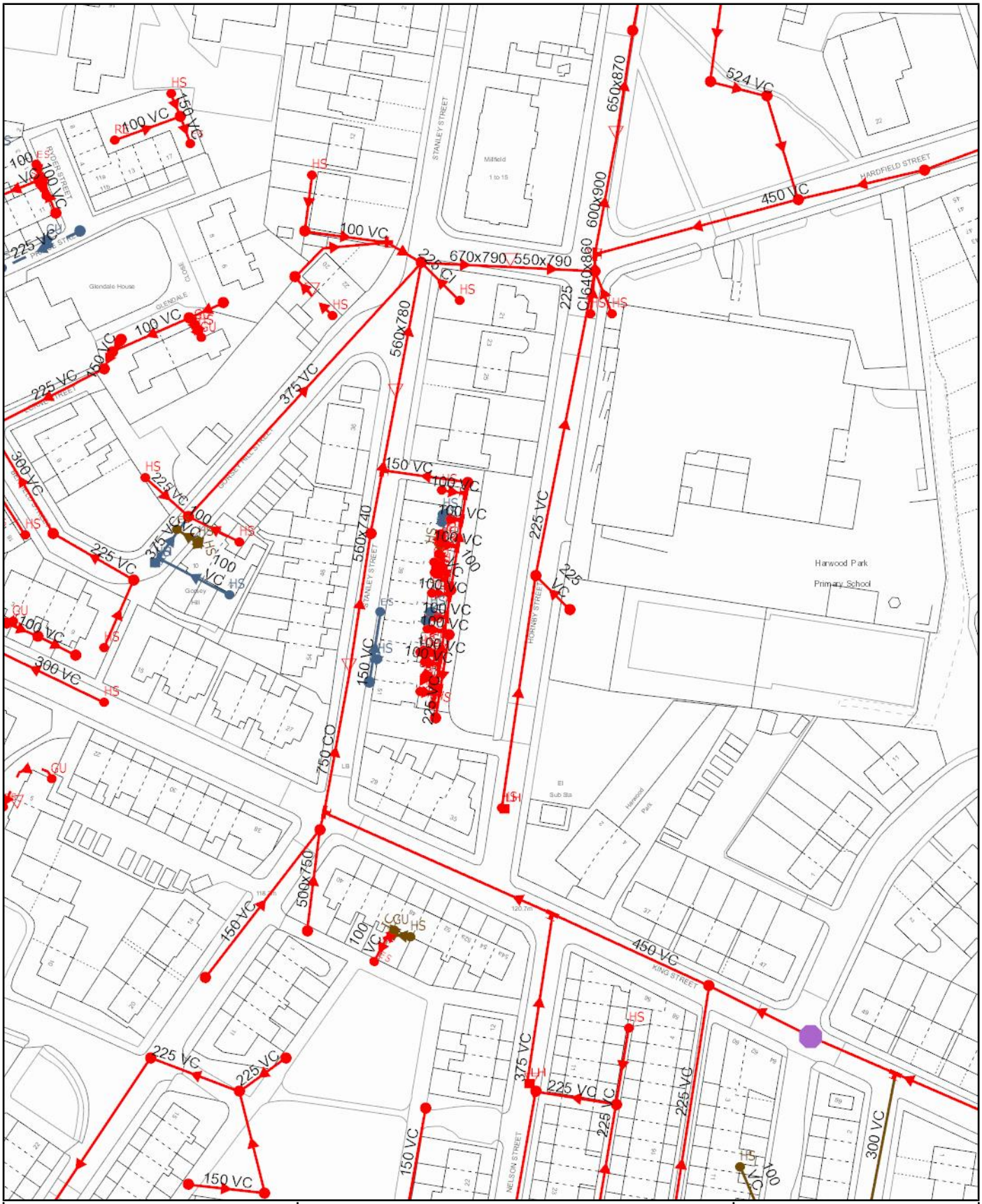
United Utilities
Water for the North West

Wastewater Symbology



All point assets follow the standard colour convention: red – combined, brown - foul, blue – surface water, purple - overflow

- Manhole
- HS Head of System
- ES Extent of Survey
- RE Rodding Eye
- IN Inlet
- DP Discharge Point
- HY Vortex
- PE Penstock
- WO Washout Chamber
- VA Valve
- AV Air Valve
- NRV Non Return Valve
- SO Soakaway
- GU Gully
- CA Cascade
- FM Flow Meter
- HA Hatch Box
- OI Oil Interceptor
- SM Summit
- DS Drop Shaft
- OP Orifice Plate
- Side Entry Manhole
- Outfall
- Screen Chamber
- IC Inspection Chamber
- Bifurcation Chamber
- LH Lamp Hole
- T Junction / Saddle
- CA Catchpit
- VC Valve Chamber
- Vent Column
- Vortex Chamber
- Penstock Chamber
- T Network Storage Tank
- V Sewer Overflow
- WwTW Ww Treatment Works
- Ww Pumping Station
- Septic Tank
- CK Control Kiosk
- DNM Network Monitoring Point
- Change of Characteristic



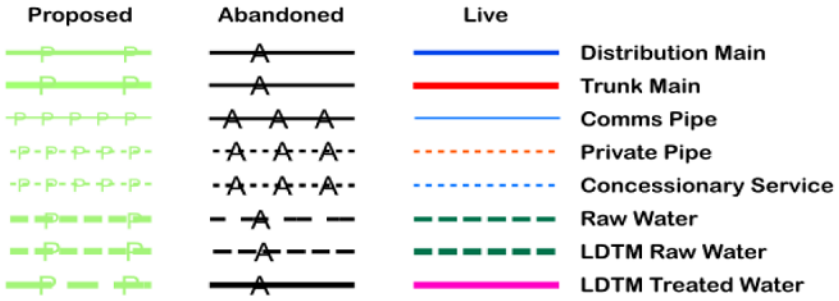
Scale:	1:1250	**SEWER RECORDS**	United Utilities Water for the North West
Date:	26/06/2024		
Address or Site Reference:	5 HORNBY STREET, HEYWOOD, OL10 1AA		
Printed by:	Property Searches		

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown.

Crown copyright and database rights 2023 Ordnance Survey 100022432. Unauthorised reproduction will infringe these copyrights.

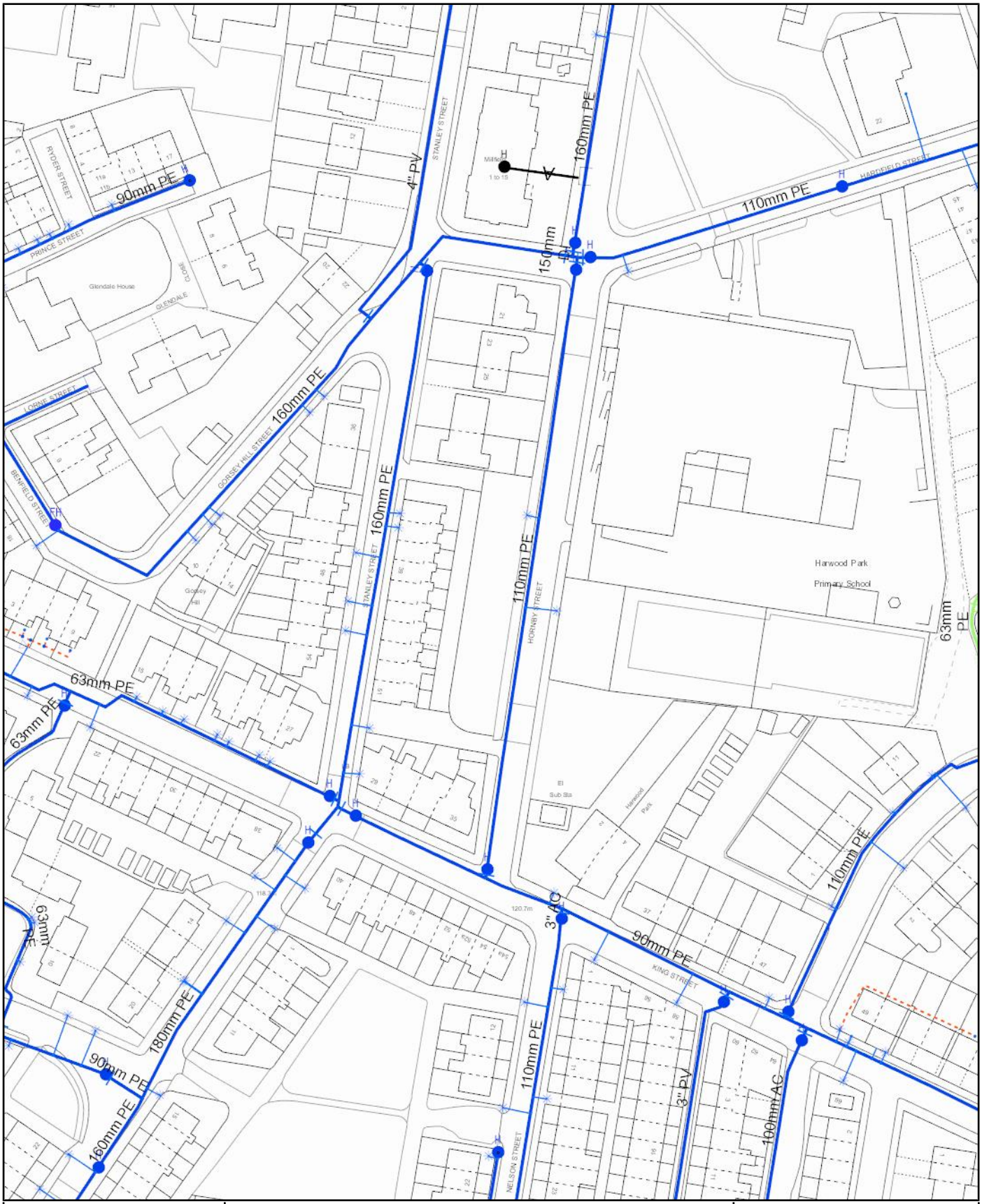
United Utilities
Water for the North West

Clean Water Symbology





Symbology for proposed assets is the same as above, but shown in green
Symbology for abandoned assets is the same as above, but shown in black



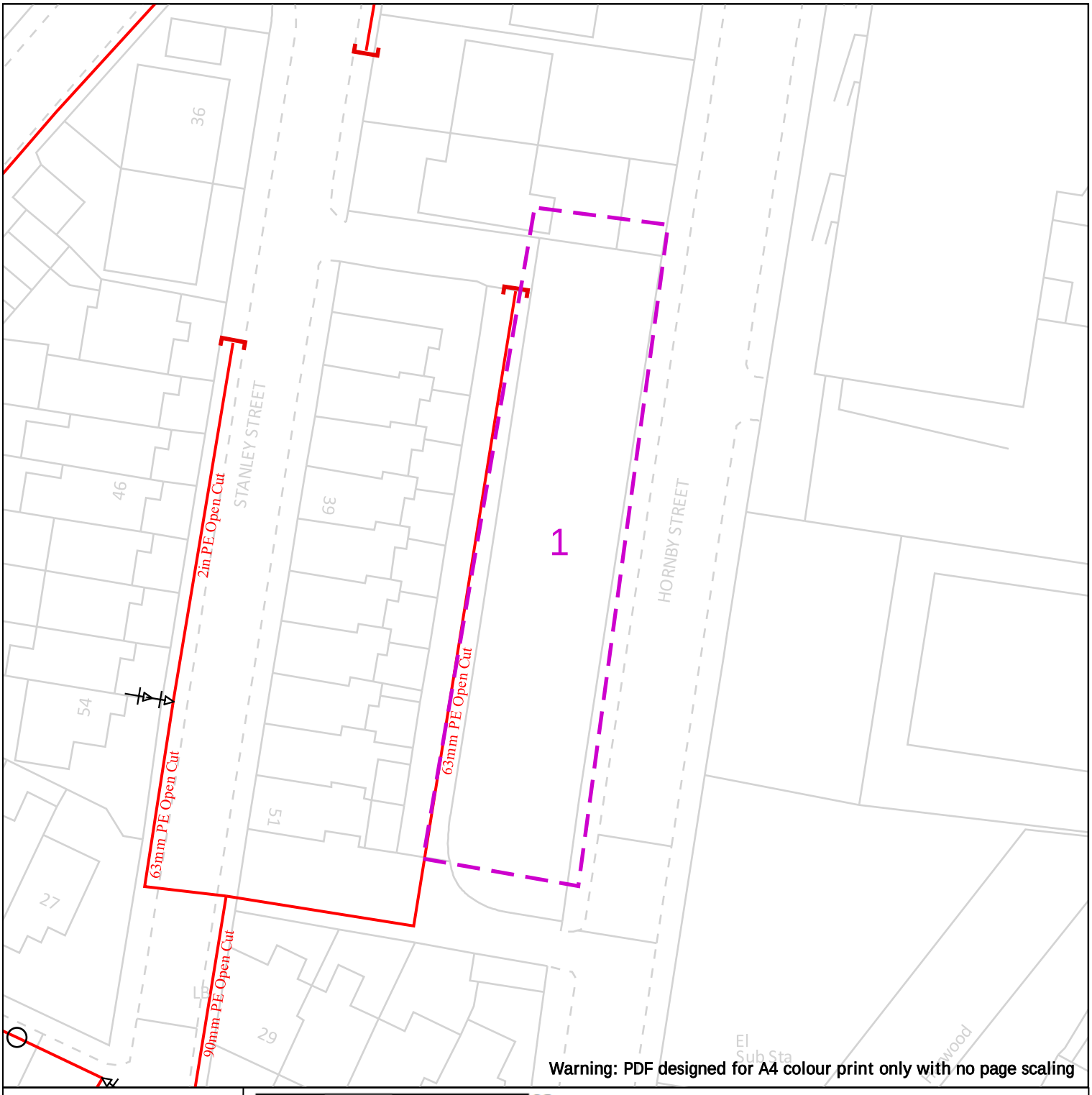
Scale:	1:1250	**WATER MAINS RECORDS**	United Utilities Water for the North West
Date:	26/06/2024		

Address or Site Reference: 5 HORNBY STREET, HEYWOOD, OL10 1AA

Printed by: Property Searches

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown.

Crown copyright and database rights 2023 Ordnance Survey 100022432. Unauthorised reproduction will infringe these copyrights.



Warning: PDF designed for A4 colour print only with no page scaling

25m

Dig Sites Area: Line:

LP Mains
MP Mains
IP Mains
LHP Mains

Valve
Depth of cover
Syphon

Diameter Change
Material Change
Out of Standard Service

Where an out-of-standard service is present please contact plant protection 0800 688 588 for further information.
Out-of-standard service symbology may be used to indicate one or more of the following:
- Identification of shallow services
- Identification of dual services
- Recording of non-perpendicular services

A perpendicular service/connection is laid in a straight line from the entry point at the property to the connection at the main – this includes a pipe that has a perpendicular connection and is not straight but does not deviate more than 1m off centre line.

Cadent
Your Gas Network

Date Requested: 25/06/2024
Job Reference: 33846439
Site Location: 385705 410412
Requested by: Miss Lauren Wenham
Your Scheme/Reference: STV6299

View extent: 100m, 100m

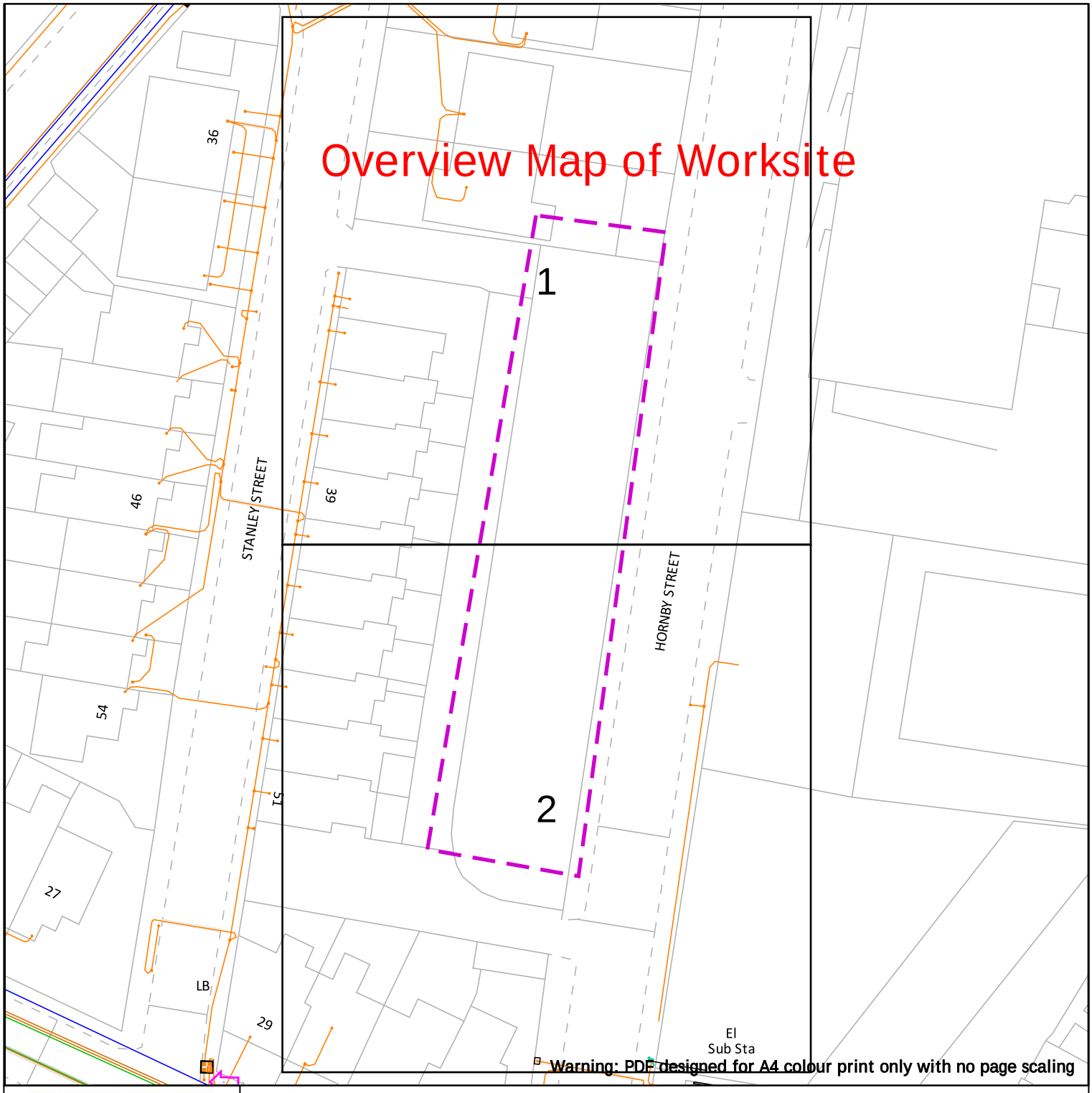
Scale: 1:500 (When plotted at A4)

IMPORTANT NOTICES

This plan shows these pipes owned by Cadent Gas Limited in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GT's or otherwise privately owned may be present in this area. Information with regards to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections etc. are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Cadent Gas Limited or their agents, servants or contractors for any errors or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

In case of emergency call - 0800 111 999

Crown Copyright © - This plan is reproduced from or based on the OS map by Cadent Gas Limited, with the sanction of the controller of HM Stationary Office. Crown Copyright Reserved. Ordnance Survey Licence number 100024886



Warning: PDF designed for A4 colour print only with no page scaling

electricity north west
Bringing energy to your door

Electricity North West
Borron Street
Portwood, Stockport
Cheshire, SK1 2 JD
Phone: 0800 195 4141
Email: planrequest@enwl.co.uk

Date Requested: 25/06/2024
Job Reference: 33846439
Site Location: 385705 410412
Requested by: Miss Lauren Wenham

Your Scheme/Reference: STV6299

Scale: 1:512 (When plotted at A4)

Operating Voltage	Colour Code	Line Colour
132kV	Black	
33kV	Green	
22kV-25kV	Yellow	
11kV	Red	
6kV-6.6kV	Blue	
1kV-6kV	Violet	
LV	Orange	
Unknown Voltage	Brown	

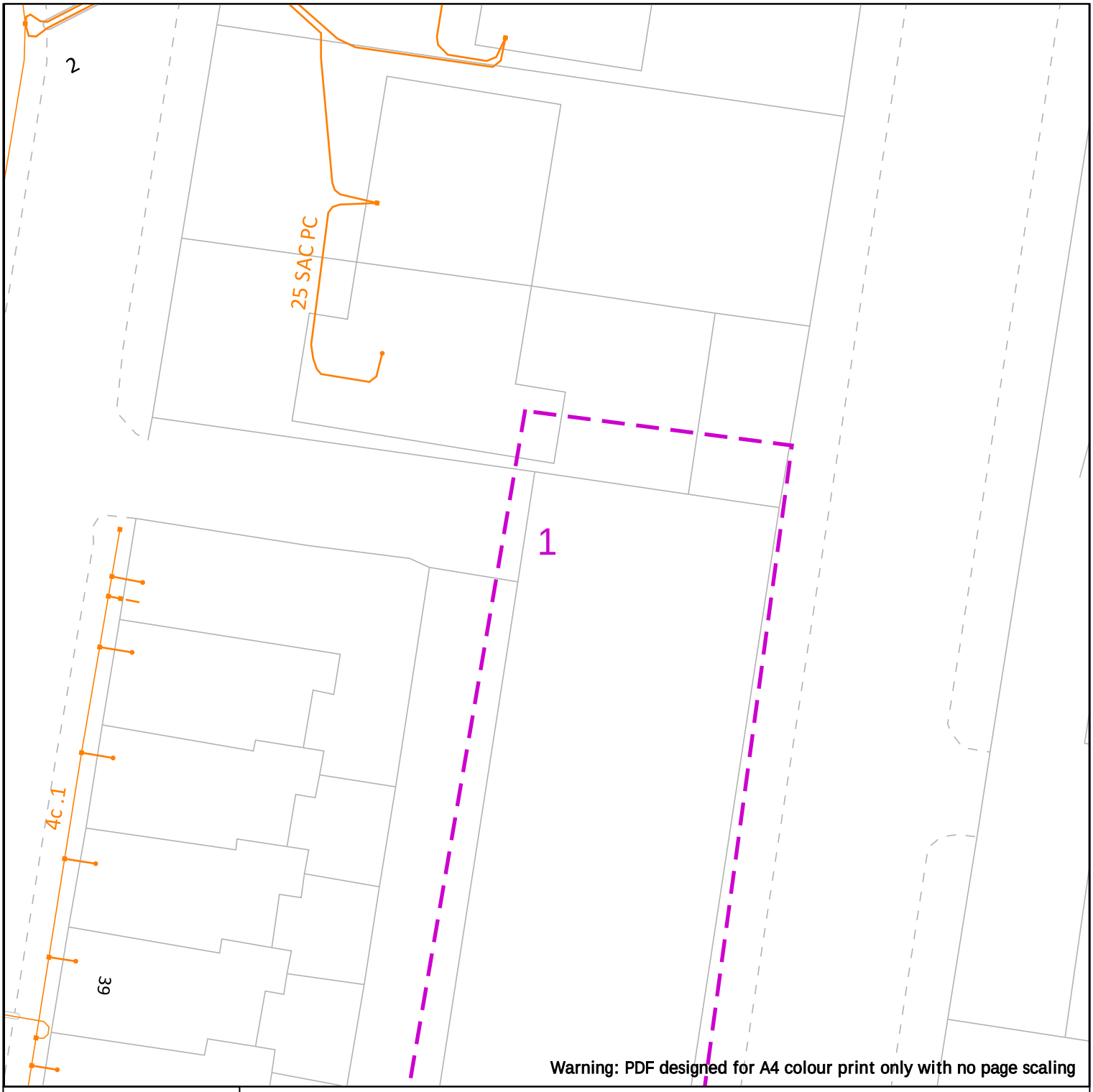
In an emergency call 105, 24 hours a day

Dig Sites
Line:
Area:

IMPORTANT INFO

Unless otherwise indicated the depth of Electricity North West Limited cables are in accordance with NJUG (450mm for Low Voltage & 600mm for 11kV cables) 33kV and 132kV cables are laid at depths as marked. The depth and positions of Electricity North West Limited equipment was accurate as shown when the equipment was installed. However third parties may have altered the level & other reference data. Therefore Electricity North West Limited accept no responsibility for the position of Electricity North West Limited equipment being different from shown. No person, body or company, shall be relieved from liability for damage caused to Electricity North West Limited equipment by reason of being located differently to the indications on this drawing or from any regulatory loss of income or incentive, or expense, which may be suffered by Electricity North West Limited and which is caused or contributed to by any loss of supply as a result of any damage caused to Electricity North West Limited's equipment. Service cables are not necessarily shown but must be assumed to exist to all premises, streetlights and signs. There may be other Electricity North West Limited apparatus in the vicinity which is not indicated on the cable records. Other apparatus may also be present which is owned by a third party other than Electricity North West Limited.
Reference should be made to HSE Guidance, HS(G)47 "Avoiding Danger from Underground Services" and GS6 "Avoiding Danger from Overhead Power Lines".
Electricity North West Limited, Borron Street, Portwood, Stockport, Cheshire, SK1 2JD Registered in England and Wales. Registered No 02366949

Reproduced from or based upon Ordnance Survey's map with the permission of His Majesty's Stationary Office. Crown Copyright Reserved. LICENCE No. 100017892. Unauthorised reproduction may lead to Prosecution or Civil Proceedings.



Warning: PDF designed for A4 colour print only with no page scaling

electricity north west
Bringing energy to your door

Electricity North West
Borron Street
Portwood, Stockport
Cheshire, SK1 2 JD
Phone: 0800 195 4141
Email: planrequest@enwl.co.uk

Date Requested: 25/06/2024
Job Reference: 33846439
Site Location: 385705 410412
Requested by: Miss Lauren Wenham

Your Scheme/Reference: STV6299

Scale: 1:250 (When plotted at A4)

Operating Voltage	Colour Code	Line Colour
132kV	Black	
33kV	Green	
22kV-25kV	Yellow	
11kV	Red	
6kV-6.6kV	Blue	
1kV-6kV	Violet	
LV	Orange	
Unknown Voltage	Brown	

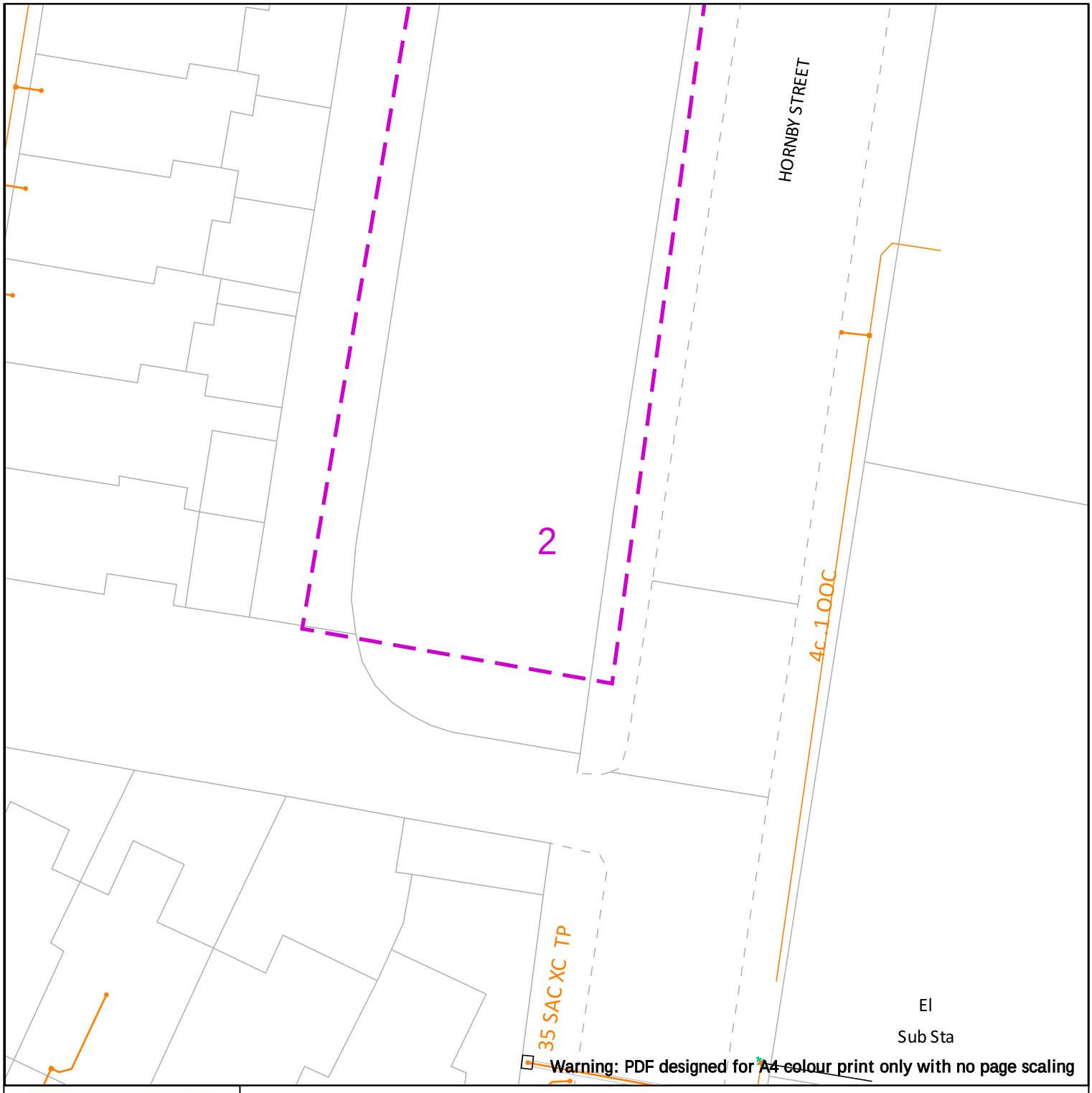
In an emergency call 105, 24 hours a day

Dig Sites
Line:
Area:

IMPORTANT INFO

Unless otherwise indicated the depth of Electricity North West Limited cables are in accordance with NJUG (450mm for Low Voltage & 600mm for 11kV cables) 33kV and 132kV cables are laid at depths as marked. The depth and positions of Electricity North West Limited equipment was accurate as shown when the equipment was installed. However third parties may have altered the level & other reference data. Therefore Electricity North West Limited accept no responsibility for the position of Electricity North West Limited equipment being different from shown. No person, body or company, shall be relieved from liability for damage caused to Electricity North West Limited equipment by reason of being located differently to the indications on this drawing or from any regulatory loss of income or incentive, or expense, which may be suffered by Electricity North West Limited and which is caused or contributed to by any loss of supply as a result of any damage caused to Electricity North West Limited's equipment. Service cables are not necessarily shown but must be assumed to exist to all premises, streetlights and signs. There may be other Electricity North West Limited apparatus in the vicinity which is not indicated on the cable records. Other apparatus may also be present which is owned by a third party other than Electricity North West Limited.
Reference should be made to HSE Guidance, HS(G)47 "Avoiding Danger from Underground Services" and GS6 "Avoiding Danger from Overhead Power Lines".
Electricity North West Limited, Borron Street, Portwood, Stockport, Cheshire, SK1 2JD Registered in England and Wales. Registered No 02366949

Reproduced from or based upon Ordnance Survey's map with the permission of His Majesty's Stationary Office. Crown Copyright Reserved. LICENCE No. 100017892. Unauthorised reproduction may lead to Prosecution or Civil Proceedings.



Warning: PDF designed for A4 colour print only with no page scaling

electricity north west
Bringing energy to your door

Electricity North West
Borron Street
Portwood, Stockport
Cheshire, SK1 2 JD
Phone: 0800 195 4141
Email: planrequest@enwl.co.uk

Date Requested: 25/06/2024
Job Reference: 33846439
Site Location: 385705 410412
Requested by: Miss Lauren Wenham

Your Scheme/Reference: STV6299

Scale: 1:250 (When plotted at A4)

Operating Voltage	Colour Code	Line Colour
132kV	Black	
33kV	Green	
22kV-25kV	Yellow	
11kV	Red	
6kV-6.6kV	Blue	
1kV-6kV	Violet	
LV	Orange	
Unknown Voltage	Brown	

In an emergency call 105, 24 hours a day

Dig Sites
Line:
Area:

IMPORTANT INFO

Unless otherwise indicated the depth of Electricity North West Limited cables are in accordance with NJUG (450mm for Low Voltage & 600mm for 11kV cables) 33kV and 132kV cables are laid at depths as marked. The depth and positions of Electricity North West Limited equipment was accurate as shown when the equipment was installed. However third parties may have altered the level & other reference data. Therefore Electricity North West Limited accept no responsibility for the position of Electricity North West Limited equipment being different from shown. No person, body or company, shall be relieved from liability for damage caused to Electricity North West Limited equipment by reason of being located differently to the indications on this drawing or from any regulatory loss of income or incentive, or expense, which may be suffered by Electricity North West Limited and which is caused or contributed to by any loss of supply as a result of any damage caused to Electricity North West Limited's equipment. Service cables are not necessarily shown but must be assumed to exist to all premises, streetlights and signs. There may be other Electricity North West Limited apparatus in the vicinity which is not indicated on the cable records. Other apparatus may also be present which is owned by a third party other than Electricity North West Limited.
Reference should be made to HSE Guidance, HS(G)47 "Avoiding Danger from Underground Services" and GS6 "Avoiding Danger from Overhead Power Lines".
Electricity North West Limited, Borron Street, Portwood, Stockport, Cheshire, SK1 2JD Registered in England and Wales. Registered No 02366949

Reproduced from or based upon Ordnance Survey's map with the permission of His Majesty's Stationary Office. Crown Copyright Reserved. LICENCE No. 100017892. Unauthorised reproduction may lead to Prosecution or Civil Proceedings.

Lara Henwood

From: ESP@safedigs.co.uk
Sent: 25 June 2024 09:38
To: Admin
Subject: ESP Utilities Group (ESP) Enquiry Ref Job No. 33846439

Categories: Yellow Category

ESP Utilities Group Ltd

Bluebird House

Mole Business Park

Leatherhead

Surrey

KT22 7BA

Date: 25 Jun 2024

To: Miss Lauren Wenham

Please DO NOT SEND A REPLY to this email as it has been automatically generated and replies are not monitored.

We acknowledge with thanks your LSBUD request (referenced below) dated 25 Jun 2024 09:36 AM for information on the location of our assets.

LSBUD REFERENCE:	33846439
YOUR REFERENCE:	STV6299

An assessment has been carried out with respect to ESP apparatus and the proposed work location. Based on the search area entered in the LSBUD system for assessment the search area has been found to not affect any ESP apparatus.

WARNING: When working in the vicinity of ESP's assets you have a legal *Duty of Care* that must be observed.

ESP are continually laying new gas, electricity and water networks and this notification is valid for 90 days from the date of this letter. If your proposed works start after this period of time, please re-submit your enquiry.

Please do not hesitate to contact us for further assistance.

Yours sincerely,

ESP Utilities Group Ltd

ESP Utilities Group Ltd can be contacted at:
Office Tel: 01372 587500
Email: PlantResponses@espug.com

Important Notice

This enquiry response, including any associated documentation, has been assessed and compiled from the information detailed within the LSBUD enquiry outlined above. **Please ensure that the LSBUD enquiry details and this response accurately reflect your proposed works.**

This response is intended for use only by the addressee. If you have received the enquiry response in error, please let us know by telephone and delete all copies; you are advised that copying, distributing, disclosing or otherwise acting in reliance on the response is expressly prohibited. Full terms can be found at www.lsbud.co.uk

Disclaimer: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither ESP Utilities Group Ltd nor PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms. Full terms can be found at www.lsbud.co.uk

If you are unable to launch any of the files for viewing and printing, you may need to download and install free viewing and printing software such as Adobe Acrobat Reader (for PDF files)

Enquiry Confirmation

LSBUD Ref: 33846439

Date of enquiry: 25/06/2024
Time of enquiry: 09:33

Enquirer

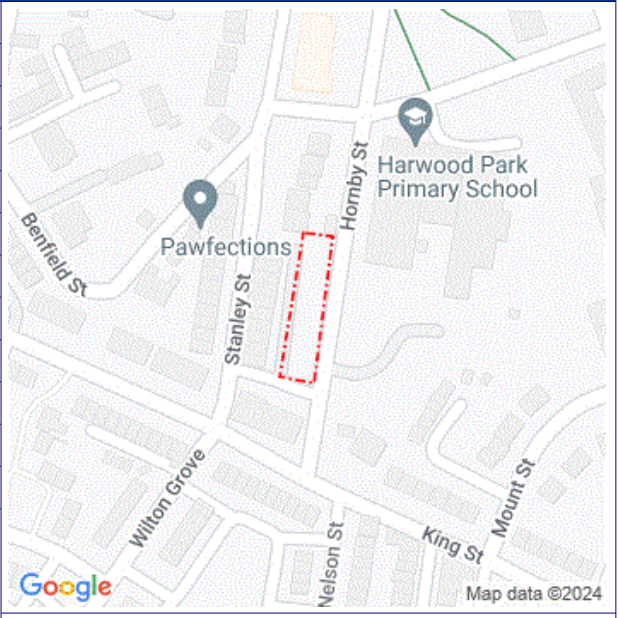
Name	Miss Lauren Wenham	Phone	01604 781877
Company	Soiltechnics Ltd	Mobile	Not Supplied
Address	Cedar Barn White Lodge Walgrave NTH NN6 9PY		
Email	admin@soiltechnics.net		

Enquiry Details

Enquiry type	Planned Works
Work category	Development Projects
Work type	Piling
Work type buffer*	150 metres
Start date	26/06/2024
End date	26/06/2024
Scheme/Reference	STV6299
Search location	OL101AA
Confirmed location	385705 410412
Site size	0 metres square
Site Contact Name	Admin Soiltechnics
Site Phone No.	01604781877
Description of Works	Boreholes

* The WORK TYPE BUFFER is a distance added to your search area based on the Work type you have chosen.

Site Map



Please note that the above map only displays the location of the proposed work site and will not display any of the Members' pipes and cables. It is imperative that this area accurately reflects the proposed work site.

Affected LSBUD members

(LSBUD Members who have assets registered on LSBUD within the vicinity of your search area.)

Do not proceed until all Members listed below have confirmed that your works can continue.

Asset Owner	Phone/Email	Emergency Only	Status
Cadent Gas	0800688588	0800111999	Await response
Electricity North West Limited	08001954141	08001954141	Await response
ESP Utilities Group	01372227560	01372227560	Await response

Status explanation

Await Response means that the asset owner will contact you. This is typically by sending the plan response but they may ask for further information before being able to do so, particularly if any payments or authorisations are required.

Email Additional Info means that the asset owner needs further information about your works to assess your enquiry before providing a response. Please provide any details you have available including plans, method statements etc. if available.

Enquiry Confirmation
LSBUD Ref: 33846439

Date of enquiry: 25/06/2024
Time of enquiry: 09:33

Important notices

It is very important that you correctly understand what the service does and the procedures in order for you to work safely. Please refer to the LSBUD Support Page (www.lsbud.co.uk/linesearchbeforeudig-support) for further guidance.
This information includes how to provide additional information to the LSBUD Members who request it to provide a response to your enquiry.
Validity and search criteria. The results of this enquiry are based on the confirmed information you entered and are valid only as at the date and time of the enquiry. It is your responsibility to ensure that the Enquiry Details are correct, and LinesearchbeforeUdig (LSBUD) accepts no responsibility for any errors or omissions in the Enquiry Details or any consequences thereof. LSBUD Members update their asset information on a regular basis so you are advised to consider this when undertaking any works. It is your responsibility to choose the period of time after which you need to resubmit any enquiry but the maximum time (after which your enquiry will no longer be dealt with by the LSBUD Helpdesk and LSBUD Members) is 28 days. If any details of the enquiry change, particularly including, but not limited to, the location of the work, then a further enquiry must be made.
Terms and Conditions. Please note that this enquiry is subject always to our standard terms and conditions available at www.lsbud.co.uk ("Terms of Use") and the disclaimer at the end of this document. Please note that in the event of any conflict or ambiguity between the terms of this Enquiry Confirmation and the Terms of Use, the Terms of Use shall take precedence.

List of not affected LSBUD members
(LSBUD Members who do not have assets registered on the LSBUD service within the vicinity of your search area.)

Angus Energy	AWE Pipeline	B & D Energy Limited
Balfour Beatty Investments Limited	BOC Limited (A Member of the Linde Group)	Box Broadband
BP Exploration Operating Company Limited	BPA	Cambridge Water
Cambridgeshire County Council Climate Change and Energy Services	CATS Pipeline c/o Wood Group PSN	Cemex
Centrica Storage Ltd	CNG Services Ltd	Concept Solutions People Ltd
ConocoPhillips (UK) Teesside Operator Ltd	D.S.Smith	Diamond Transmission Corporation
DIO (MOD Live Pipelines)	Drax Power Limited	E.ON UK CHP Limited
EDF Energy Renewables Ltd	EirGrid	Eleclink Limited
Energy Assets Networks	ENI & Himor c/o Penspen Ltd	EnQuest NNS Limited
EP Langage Limited	ESB CCGT Power station (Carrington Gas Pipeline)	ESSAR
Esso Petroleum Company Limited	euNetworks Fiber UK Ltd	EXA Infrastructure
Exolum Pipeline System	Fulcrum Electricity Assets Limited	Fulcrum Pipelines Limited
Gamma	Gas Networks Ireland (UK)	Gateshead Energy Company
Gigaclear Ltd	Harbour Energy	Heathrow Airport LTD
Humbly Grove Energy	IGas Energy	INEOS FPS Pipelines
INEOS Manufacturing (Scotland and TSEP)	INOVYN ChlorVinyls Limited	INOVYN Enterprises Limited
Intergen (Coryton Energy or Spalding Energy)	Jurassic Fibre Ltd	Kensa Utilities
Last Mile	Mainline Pipelines Limited	Manchester Jetline Limited
Manx Cable Company	Marchwood Power Ltd (Gas Pipeline)	Melbourn Solar Limited
MUA Group Limited	National Gas Transmission	National Grid Electricity Distribution
National Grid Electricity Transmission	National Grid Ventures	Neos Networks
Northern Gas Networks Limited	Northumbrian Water Group	NPower CHP Pipelines
NTT Global Data Centers EMEA UK Ltd	NYnet Ltd	Ogi
Oikos Storage Limited	Ørsted	Palm Paper Ltd
Perenco UK Limited (Purbeck Southampton Pipeline)	Petroineos	Phillips 66
Portsmouth Water	Premier Transmission Ltd (SNIP)	Redundant Pipelines - LPDA
RWE - Great Yarmouth Pipeline (Bacton to Great Yarmouth Power Station)	RWEnpower (Little Barford and South Haven)	SABIC UK Petrochemicals
SAS Utility Services Ltd	Scottish and Southern Electricity Networks	Scottish Power Generation
Seabank Power Ltd	SES Water	SGN
Shell	Shell NOP	South Staffs Water
SP Energy Networks	Spring Fibre Limited	Squire Energy Networks
SSE Generation Ltd	SSE Transmission	SSE Utility Solutions Limited

Enquiry Confirmation
LSBUD Ref: 33846439

Date of enquiry: 25/06/2024
Time of enquiry: 09:33

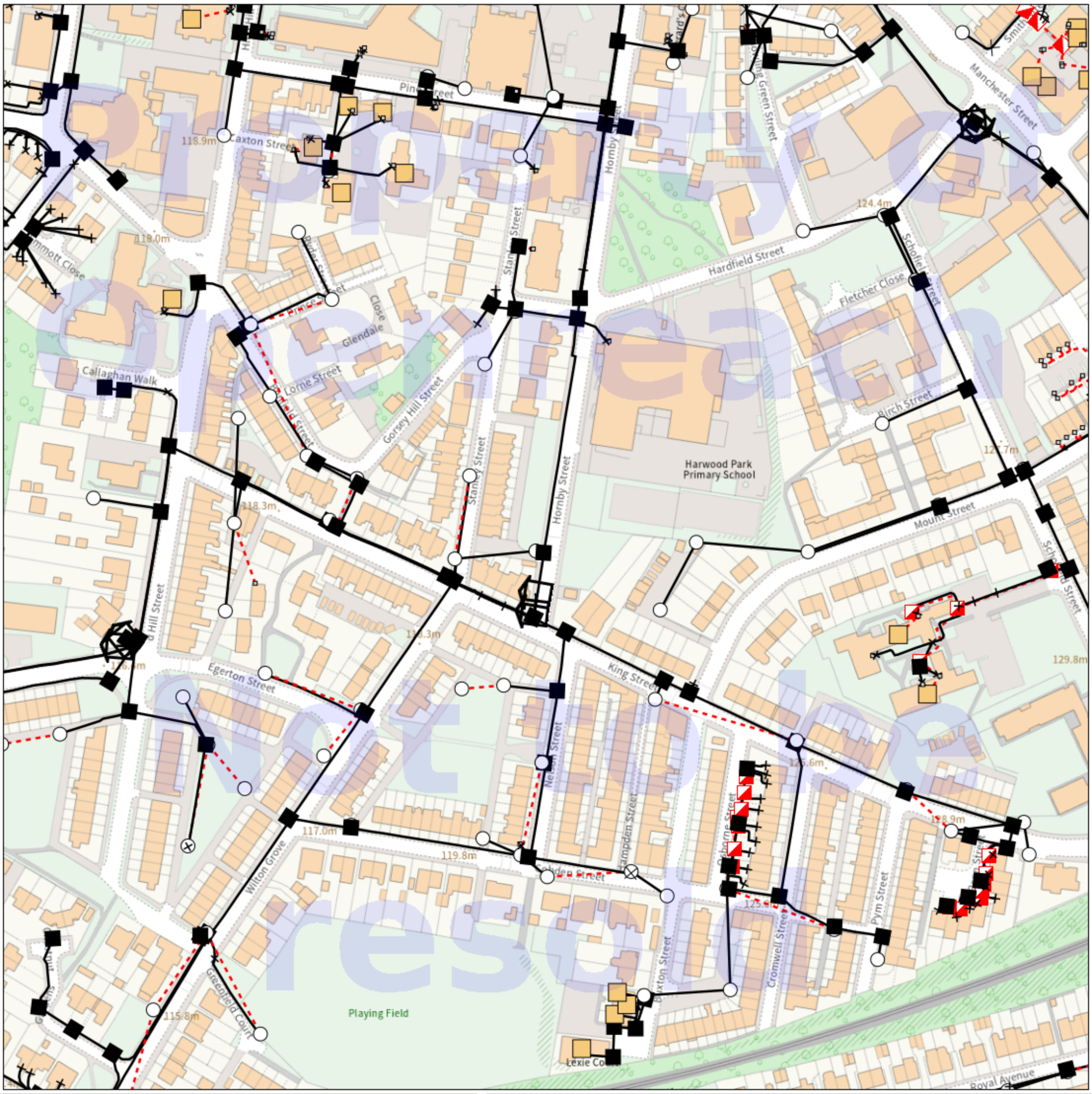
Storengy	Tata Communications (c/o JSM Construction Ltd)	TfL – London Underground HV Cables (Road Side Cables)
toob Limited	Total Colnbrook Pipelines	Total Finaline Pipelines
Transmission Capital	Trojan Energy Limited	UK Power Networks
Uniper UK Ltd	University of Cambridge Granta Backbone Network	Vattenfall
Veolia ES SELCHP Limited	Veolia ES Sheffield Ltd	Voneus Limited
VPI Power Limited	Wales and West Utilities	Welsh Power
West of Duddon Sands Transmission Ltd	West Sussex OpenNetwork (Cooperative National Infrastructure)	Westminster City Council
Zayo Group UK Ltd c/o JSM Group Ltd		

Non-LSBUD members (Asset owners not registered on LSBUD)
(The following Non-LSBUD Members may have assets in your search area. It is YOUR RESPONSIBILITY to contact them before proceeding.
Please be aware this list is not exhaustive and it is your responsibility to identify and contact all asset owners within your search area.)

Asset Owner	Preferred contact method	Phone	Status
BT	https://www.swns.bt.com/pls/mbe/welcome.home	08000232023	Not Notified
CityFibre	asset.team@cityfibre.com	033 3150 7282	Not Notified
Colt	plantenquiries@catelecomuk.com	01227768427	Not Notified
Equans	nrswa.uk@equans.com	0800 130 3600	Not Notified
GTC	https://pe.gtc-uk.co.uk/PlantEnqMembership	01359240363	Not Notified
Lumen Technologies	plantenquiries@ocugroup.com	02087314613	Not Notified
Mobile Broadband Network Limited	mbnl.plant.enquiries@turntown.com	01212 621 100	Not Notified
Sky UK Limited	nrswa@sky.uk	02070323234	Not Notified
Sota	sota.plantenquiries@ocugroup.com		Not Notified
United Utilities	WastewaterDeveloperServices@uuplc.co.uk	08707510101	Not Notified
Utility assets Ltd	assetrecords@utilityassets.co.uk		Not Notified
Verizon Business	osp-team@uk.verizonbusiness.com	01293611736	Not Notified
Virgin Media	http://www.digdat.co.uk	08708883116	Not Notified
Vodafone	osm.enquiries@atkinsglobal.com	01454662881	Not Notified

Disclaimer
Please refer to LSBUD's Terms of Use for full terms of use available at www.lsbud.co.uk
The results of this Enquiry are personal to the Enquirer and shall not be shared with or relied upon by any other party. The asset information on which the Enquiry results are based has been provided by LSBUD Members, therefore LSBUD will provide no guarantee that such information is accurate or reliable nor does it monitor such asset information for accuracy and reliability going forward. There may also be asset owners which do not participate in the enquiry service operated by LSBUD, including but not exclusively those set out above. Therefore, LSBUD cannot make any representation or give any guarantee or warranty as to the completeness of the information contained in the enquiry results or accept any responsibility for the accuracy of the mapping images used. LSBUD and its employees, agents and consultants accept no liability (save that nothing in this Enquiry Confirmation excludes or limits our liability for death or personal injury arising from our negligence, or our fraud or fraudulent misrepresentation, or any other liability that cannot be excluded or limited by English law) arising in respect thereof or in any other way for errors or omissions including responsibility to any person by reason of negligence.

Maps on Demand Plant Information Reply



IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made newar to BT apparatus which may exist at various depths and may deviate from the marked route.

openreach

CLICK BEFORE YOU DIG

FOR PROFESSIONAL FREE ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING LOCATE AND MARKING SERVICE

email nnhc@openreach.co.uk

ADVANCE NOTICE REQUIRED
(Office hours: Monday - Friday 08.00 to 17.00)
www.openreach.co.uk/cbyd

Accidents happen

If you do damage any Openreach equipment please let us know by calling 0800 023 2023 (opt 1 + opt 1) and we can get it fixed ASAP

© Crown copyright 2023 OS 100028040. You are permitted to use this data solely to enable you to respond to, or interact with, the organisation that provided you with the data. You are not permitted to copy, sub-license, distribute or sell any of this data to third parties in any form.

KEY TO BT SYMBOLS

	Planned	*Live*
PCP		
Pole		
Box		
Manhole		
Cabinet		

Change Of State	+	Hatchings	
Split Coupling	×	Built	
Duct Tee	▲	Planned	
Building		Inferred	
Kiosk	K	Duct	

Other proposed plant is shown using dashed lines.
BT Symbols not listed above may be disregarded.
Existing BT Plant may not be recorded.
Information valid at time of preparation. Maps are only valid for 90 days after the date of publication.

	Pending Add	*In Place*	*Pending Remove*	*Not In Use*
Power Cable				
Power Duct				N/A

BT Ref : TTP09506E
Map Reference : (centre) SD8570510412
Easting/Northing : (centre) 385705,410412
Scale : 1:500
Issued : 25/06/2024 09:50:31

WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Appendix M Envirocheck Report

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Envirocheck® Report:

Datasheet

Order Details:

Order Number:
325164398_1_1

Customer Reference:
STV6299

National Grid Reference:
385700, 410440

Slice:
A

Site Area (Ha):
0.11

Search Buffer (m):
1000

Site Details:

Hornby Street
Heywood

Client Details:

Ms S Ltd
Soiltechnics Limited
Cedar Barn
White Lodge
Walgrave
Northampton
NN6 9PY

Landmark INFORMATION GROUP

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Contents

Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	16
Hazardous Substances	-
Geological	26
Industrial Land Use	31
Sensitive Land Use	75
Data Currency	76
Data Suppliers	83
Useful Contacts	84

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

© Landmark Information Group Limited 2023. The Copyright on the information and data and its format as contained in this Envirocheck® Report ("Report") is the property of Landmark Information Group Limited ("Landmark") and several other Data Providers, including (but not limited to) Ordnance Survey, British Geological Survey, the Environment Agency/Natural Resources Wales and Natural England, and must not be reproduced in whole or in part by photocopying or any other method. The Report is supplied under Landmark's Terms and Conditions accepted by the Customer.
A copy of Landmark's Terms and Conditions can be found with the Index Map for this report. Additional copies of the Report may be obtained from Landmark, subject to Landmark's charges in force from time to time. The Copyright, design rights and any other intellectual rights shall remain the exclusive property of Landmark and /or other Data providers, whose Copyright material has been included in this Report.
© Environment Agency & United Kingdom Research and Innovation 2023. © Natural Resources Wales & United Kingdom Research and Innovation 2023.

Natural England Copyright Notice

Site of Special Scientific Interest, National Nature Reserve, Ramsar, Special Protection Area, Special Conservation Area, Marine Nature Reserve data (derived from Ordnance Survey 1:10000 raster) is provided by, and used with the permission of, Natural England who retain the copyright and Intellectual Property Rights for the data.

Scottish Natural Heritage Copyright

Contains SNH information licensed under the Open Government Licence v3.0.

Ove Arup Copyright Notice

The Mining Instability data was obtained on licence from Ove Arup & Partners Limited (for further information, contact mining.review@arup.com). No reproduction or further use of such Data is to be made without the prior written consent of Ove Arup & Partners Limited. The supplied Mining Instability data is derived from publicly available records and other third party sources and neither Ove Arup & Partners nor Landmark warrant the accuracy or completeness of such information or data.

Stantec Copyright Notice

The cavity data presented has been extracted from the PBA (now Stantec UK Ltd) enhanced version of the original DEFRA national cavity databases. Stantec UK Ltd retain the copyright & intellectual property rights in the data. Whilst all reasonable efforts are made to check that the information contained in the cavity databases is accurate we do not warrant that the data is complete or error free. The information is based upon our own researches and those collated from a number of external sources and is continually being augmented and updated by Stantec UK Ltd. In no event shall Stantec UK Ltd or Landmark be liable for any loss or damage including, without limitation, indirect or consequential loss or damage arising from the use of this data.

Radon Potential dataset Copyright Notice

Information supplied from a joint dataset compiled by The British Geological Survey and Public Health England.

Natural Resources Wales Copyright Notice

Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Contains Ordnance Survey Data. Ordnance Survey Licence number 100019741. Crown Copyright and Database Right. Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Some features of this information are based on digital spatial data licensed from the Centre for Ecology & Hydrology © NERC (CEH). Defra, Met Office and DARD Rivers Agency © Crown copyright. © Cranfield University. © James Hutton Institute. Contains OS data © Crown copyright and database right 2023. Land & Property Services © Crown copyright and database right.

Report Version v53.0

soiltechnics
environmental ▪ geotechnical ▪ building fabric

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 3				4
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 4			4	6
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 6			Yes	
Pollution Incidents to Controlled Waters	pg 6		1		1
Prosecutions Relating to Authorised Processes	pg 6			1	
Registered Radioactive Substances					
River Quality	pg 6			1	
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 6				8 (*18)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 13	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 13	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 13	Yes	n/a	n/a	n/a
Source Protection Zones					
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 13			3	9

soiltechnics
environmental ▪ geotechnical ▪ building fabric

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 16				2
Historical Landfill Sites	pg 16				3
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)	pg 17				7
Local Authority Landfill Coverage	pg 18	1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 18		1	2	11
Potentially Infilled Land (Water)	pg 19		8	12	43
Registered Landfill Sites	pg 22				3
Registered Waste Transfer Sites	pg 24				2
Registered Waste Treatment or Disposal Sites	pg 24				2
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

soiltechnics
environmental ▪ geotechnical ▪ building fabric

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 26	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 26	Yes	Yes	Yes	Yes
BGS Recorded Mineral Sites	pg 28		1	2	5
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas	pg 30	Yes	n/a	n/a	n/a
Mining Instability	pg 30	Yes	n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 30	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 30	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 30	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 30		Yes	n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 31		16	101	143
Fuel Station Entries	pg 53		1	2	1
Points of Interest - Commercial Services	pg 54		2	30	62
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 61		8	61	67
Points of Interest - Public Infrastructure	pg 73			6	7
Points of Interest - Recreational and Environmental	pg 74				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 75				1
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (SE)	0	1	385700 410440
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (N)	0	1	385700 410450
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SW (SW)	71	1	385650 410350
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (E)	88	1	385800 410440
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (E)	140	1	385850 410440
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SE (S)	208	1	385700 410200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (S)	208	1	385700 410200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SW (S)	214	1	385650 410200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (S)	214	1	385750 410200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (SE)	230	1	385800 410200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SE (S)	263	1	385750 410150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (N)	278	1	385700 410750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (N)	278	1	385700 410750
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	287	1	385900 410200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13SW (SW)	295	1	385550 410150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	297	1	385850 410150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	299	1	385950 410650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A8NE (S)	312	1	385750 410100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (SW)	321	1	385500 410150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (S)	323	1	385600 410100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (S)	323	1	385800 410100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	328	1	385700 410800

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 (N)	331	1	385650 410800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (NE)	331	1	385950 410700
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SW (N)	342	1	385600 410800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14NW (E)	347	1	386050 410550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A8NW (S)	362	1	385650 410050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14NW (NE)	362	1	386050 410600
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (SW)	363	1	385500 410100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A18SE (N)	378	1	385700 410850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (S)	386	1	385550 410050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (S)	387	1	385850 410050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14NW (E)	388	1	386100 410450
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SW (N)	390	1	385600 410850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (SW)	391	1	385450 410100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14NW (E)	396	1	386100 410550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A8NE (S)	408	1	385700 410000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (S)	412	1	385650 410000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (S)	420	1	385800 410000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (SW)	426	1	385350 410150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A18SW (N)	431	1	385650 410900
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (SW)	432	1	385450 410050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (S)	433	1	385550 410000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (S)	434	1	385850 410000

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	A14NW (E)	438	1	386150 410450
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SW (N)	439	1	385600 410900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14SW (E)	439	1	386150 410440
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (SW)	441	1	385300 410200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (SW)	451	1	385500 410000
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NE (SE)	453	1	385900 410000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (S)	468	1	385800 409950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (S)	469	1	385600 409950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A19SW (NE)	473	1	386050 410800
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NE (SE)	477	1	385950 410000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (S)	481	1	385850 409950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14SW (E)	493	1	386200 410400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A7NE (SW)	496	1	385300 410100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A18SW (N)	500	1	385550 410950
1	**Discharge Consents** Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Heywood Sso, John Street/Willow Street, Heywood, Greater Manchester Authority: Environment Agency, North West Region Catchment Area: Not Given Reference: 016950219 Permit Version: 1 Effective Date: 31st July 1981 Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: Millers Brook **Status:** **Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A18SE (N)	545	2	385840 411000

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	**Discharge Consents** Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: John Street Cso 35020 31 John Street, ., Heywood, Greater Manchester, Ol10 4ll Authority: Environment Agency, North West Region Catchment Area: Roch Reference: 016993768 Permit Version: 2 Effective Date: 4th June 2018 Issued Date: 4th June 2018 Revocation Date: Not Supplied Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: Millers Brook Via Sws **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A18SE (N)	549	2	385835 411005
1	**Discharge Consents** Operator: United Utilities Water Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: John Street Cso 35020 31 John Street, ., Heywood, Greater Manchester, Ol10 4ll Authority: Environment Agency, North West Region Catchment Area: Roch Reference: 01ROC0034 Permit Version: 1 Effective Date: 1st January 1995 Issued Date: 1st January 1995 Revocation Date: 19th January 2006 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: Millers Brook **Status: Consent revoked or revised: New Consent issued (Section 37(1))** Positional Accuracy: Located by supplier to within 100m	A18SE (N)	553	2	385830 411010
2	**Discharge Consents** Operator: United Utilities Water Plc (?) Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: John Street Cso 35020 31 John Street, ., Heywood, Greater Manchester, Ol10 4ll Authority: Environment Agency, North West Region Catchment Area: Roch Reference: 016993768 Permit Version: 1 Effective Date: 20th January 2006 Issued Date: 20th January 2006 Revocation Date: 3rd June 2018 Discharge Type: Public Sewage: Storm Sewage Overflow Discharge Environment: Freshwater Stream/River Receiving Water: Millers 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	A18NE (N)	684	2	385890 411130
3	**Local Authority Pollution Prevention and Controls** Name: Sylvester Litton Ltd Location: Roeacre Tannery, Bradshaw Street, HEYWOOD, Lancashire, OL10 1PN Authority: Rochdale Metropolitan Borough Council, Environmental Health Department Permit Reference: 28 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/21 Hide and skin processes **Status: Authorised** Positional Accuracy: Manually positioned to the road within the address or location	A14NW (E)	350	3	386051 410558
4	**Local Authority Pollution Prevention and Controls** Name: Castleton Service StationStar Texaco Location: Manchester Road, ROCHDALE, Lancashire, OL10 2DZ Authority: Rochdale Metropolitan Borough Council, Environmental Health Department Permit Reference: Not Given Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station **Status: Authorised** Positional Accuracy: Manually positioned to the address or location	A14SW (E)	355	3	386064 410427

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	**Local Authority Pollution Prevention and Controls** Name: Johnsons Dry Cleaners Location: 28 Market Place, Heywood, OL10 Authority: Rochdale Metropolitan Borough Council, Environmental Health Department Permit Reference: Not Supplied Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/46 Dry cleaning **Status: Application Not Yet Authorised** Positional Accuracy: Manually positioned to the address or location	A18SW (NW)	391	3	385520 410821
6	**Local Authority Pollution Prevention and Controls** Name: Tesco Petrol Station Location: York Street, Heywood, ROCHDALE, Lancashire, OL10 4HQ Authority: Rochdale Metropolitan Borough Council, Environmental Health Department Permit Reference: P12/09 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station **Status: Permitted** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	410	3	385984 410776
7	**Local Authority Pollution Prevention and Controls** Name: Pete Cordwell Ltd Location: Silvester House, Roe Acre Tannery, Heywood, ROCHDALE, Lancashire, OL10 1PN Authority: Rochdale Metropolitan Borough Council, Environmental Health Department Permit Reference: Not Given Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: Part B - General Waste Disposal Process (No Specific Reference) **Status: Authorised** Positional Accuracy: Manually positioned to the address or location	A14NW (NE)	549	3	386225 410664
7	**Local Authority Pollution Prevention and Controls** Name: Pgc Demolition And Skip Hire Location: Roe Acre Tannery, Bradshaw Street, Rochdale Authority: Rochdale Metropolitan Borough Council, Environmental Health Department Permit Reference: 131/09 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG3/16 Mobile screening and crushing processes **Status: Authorised** Positional Accuracy: Manually positioned to the address or location	A14NW (NE)	549	3	386225 410664
8	**Local Authority Pollution Prevention and Controls** Name: Morrisons Petrol Station Location: Dawson Street, Heywood, ROCHDALE, Lancashire, OL10 4PU Authority: Rochdale Metropolitan Borough Council, Environmental Health Department Permit Reference: 93/09 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station **Status: Authorised** Positional Accuracy: Manually positioned to the address or location	A18SW (NW)	591	3	385449 411008
9	**Local Authority Pollution Prevention and Controls** Name: Tarmac Topmix Location: Green Lane, HEYWOOD, Lancashire, OL10 2DY Authority: Rochdale Metropolitan Borough Council, Environmental Health Department Permit Reference: 8 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG3/1Blending, packing, loading and use of bulk cement **Status: Authorised** Positional Accuracy: Automatically positioned to the address	A14SE (E)	871	3	386570 410325
10	**Local Authority Pollution Prevention and Controls** Name: Reeve (Derby) LtdPentagon Vauxhall Location: Green Lane, Heywood, ROCHDALE, Lancashire, OL10 2EP Authority: Rochdale Metropolitan Borough Council, Environmental Health Department Permit Reference: 59/10 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/34 Respraying of road vehicles **Status: Authorised** Positional Accuracy: Manually positioned to the address or location	A9NE (SE)	884	3	386512 410052

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
11	**Local Authority Pollution Prevention and Controls** Name: S. Carlick & Sons Ltd Location: River Street, Heywood, Lancashire, OL10 4AB Authority: Rochdale Metropolitan Borough Council, Environmental Health Department Permit Reference: 129/08 Dated: Not Supplied Process Type: Local Authority Air Pollution Control Description: PG6/33 Wood coating **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A18NW (N)	982	3	385568 411446
	Nearest Surface Water Feature	A14NW (NE)	459	-	386098 410719
12	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: None Affected; Chemical Spill Incident Date: 21st December 1996 Incident Reference: 96622570 Catchment Area: Roch Receiving Water: Not Given Cause of Incident: Fire Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A13NW (NW)	101	2	385600 410500
13	**Pollution Incidents to Controlled Waters** Property Type: Not Given Location: Greater Manchester Authority: Environment Agency, North West Region Pollutant: Unknown Note: None Affected; None Pollution Found Incident Date: 31st October 1996 Incident Reference: 96622265 Catchment Area: Roch Receiving Water: Not Given Cause of Incident: Other Incident/Unknown Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18NE (N)	754	2	385900 411200
14	**Prosecutions Relating to Authorised Processes** Location: Land At Silvester House, Rose Acre Tannery, Bradshaw Street, Heywood, Lancashire, Ol10 Prosecution Text: Operating an unlicensed waste disposal facility Prosecution Act: Epa90 S33(1)(A) Hearing Date: 2nd August 2005 Verdict: Guilty Fine: 3000 Costs: 2100 Positional Accuracy: Manually positioned to the road within the address or location	A14NW (NE)	467	2	386134 410669
	River Quality Name: Millers Bk GQA Grade: River Quality B Reach: Qsl At Roeacre Lodge To Roch Estimated Distance (km): 1.3 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A19SW (NE)	500	2	386092 410795
15	**Water Abstractions** Operator: G. S. Cold Storage And Warehousing Ltd. Licence Number: 2569002082 Permit Version: 102 Location: Boreholes (2) At Premises, Roeacre Tannery, Heywood, L$97 Authority: Environment Agency, North West 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: Premises, Roeacre Tannery, Heywood Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 22nd December 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A14NW (E)	505	2	386200 410600

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	**Water Abstractions** Operator: Litton Ltd Licence Number: 2569002082 Permit Version: 101 Location: Boreholes (2) At Premises, Roeacre Tannery, Heywood, L$97 Authority: Environment Agency, North West Region Abstraction: Textiles And Leather: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 0 Yearly Rate (m3): 0 Details: Premises, Roeacre Tannery, Heywood Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 22nd June 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A14NW (E)	505	2	386200 410600
16	**Water Abstractions** Operator: Roe Acre Dyeing & Felting Co. Ltd. Licence Number: 2569002022 Permit Version: Not Supplied Location: Reservoir Fed By Roe Acre Brook, Roe Acre Dam, HEYWOOD Authority: Environment Agency, North West Region Abstraction: Boiler Feed & Manufacturing Abstraction Type: Not Supplied Source: River Daily Rate (m3): 2309 Yearly Rate (m3): 340950 Details: Additional Purpose: Boiler feed; Licence 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	A14NW (NE)	538	2	386200 410695
16	**Water Abstractions** Operator: G. S. Cold Storage And Warehousing Ltd. Licence Number: 2569002082 Permit Version: 102 Location: Boreholes (2) At Premises, Roeacre Tannery, Heywood Authority: Environment Agency, North West 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: Premises, Roeacre Tannery, Heywood Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 22nd December 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A14NW (NE)	540	2	386200 410700
16	**Water Abstractions** Operator: Litton Ltd Licence Number: 2569002082 Permit Version: 101 Location: Boreholes (2) At Premises, Roeacre Tannery, Heywood Authority: Environment Agency, North West Region Abstraction: Textiles And Leather: Process Water Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 546 Yearly Rate (m3): 134016 Details: Premises, Roeacre Tannery, Heywood Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 22nd June 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A14NW (NE)	540	2	386200 410700

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
17	**Water Abstractions** Operator: Mutual Mills Ltd Licence Number: 2569002124 Permit Version: Not Supplied Location: Millers Brook, HEYWOOD, Lancashire Authority: Environment Agency, North West Region Abstraction: Boiler Feed & Drinking; Cooking; Sanitary; Washing For Industrial Premises Abstraction Type: Not Supplied Source: River Daily Rate (m3): 0 Yearly Rate (m3): 0 Details: Additional Purpose: Domestic - industrial; Licence 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	A18NE (N)	785	2	386000 411200
18	**Water Abstractions** Operator: Oak Brewing Company Ltd Licence Number: 2569002029 Permit Version: 100 Location: Borehole At Premises, Green Lane, Heywood Authority: Environment Agency, North West Region Abstraction: Food And Drink: General Cooling (Existing Licences Only) (Low Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 218 Yearly Rate (m3): 79646 Details: Premises At Green Lane, Heywood Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 15th November 1990 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A9NE (SE)	855	2	386500 410100
19	**Water Abstractions** Operator: Mutual Mills Ltd Licence Number: 2569002124 Permit Version: Not Supplied Location: Two Reservoirs & Millers Brook, HEYWOOD, Lancashire Authority: Environment Agency, North West Region Abstraction: Boiler Feed & Drinking; Cooking; Sanitary; Washing For Industrial Premises Abstraction Type: Not Supplied Source: River Daily Rate (m3): 45 Yearly Rate (m3): 7274 Details: Additional Purpose: Domestic - industrial; Licence 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	A19NW (NE)	878	2	386200 411200
	Water Abstractions Operator: Tarmac Topmix Ltd Licence Number: 2569002257 Permit Version: 100 Location: Borehole At Green Lane,Heywood Authority: Environment Agency, North West Region Abstraction: Construction: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 35 Yearly Rate (m3): 10000 Details: Land & Prems-Green Lane,Heywood Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 28th June 1993 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A14SE (E)	1019	2	386700 410200

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Roe Acre Dyeing & Finishing Co Ltd Licence Number: 2569002266 Permit Version: Not Supplied Location: Crimble Mill, Crimble Lane, HEYWOOD, Lancashire, OL10 4DJ Authority: Environment Agency, North West Region Abstraction: Industrial Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): 455 Yearly Rate (m3): 118300 Details: Unnamed Tributary Of River Roch; Textiles; Type: Abstraction; Status: Current 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	A19NE (NE)	1357	2	386700 411400
	Water Abstractions Operator: Roe Acre Dyeing & Felting Co Ltd Licence Number: 2569002270 Permit Version: 100 Location: River Roch At Heywood Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Boiler Feed Abstraction Type: Water may be abstracted from a river or stream reach, or a row of wellpoints Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land At Crimble Mill, Heywood Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th June 1999 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A24SE (NE)	1373	2	386620 411500
	Water Abstractions Operator: Roe Acre Dyeing & Felting Co Ltd Licence Number: 2569002270 Permit Version: 100 Location: River Roch At Heywood Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Process Water Abstraction Type: Water may be abstracted from a river or stream reach, or a row of wellpoints Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Land At Crimble Mill, Heywood Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th June 1999 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A24SE (NE)	1373	2	386620 411500
	Water Abstractions Operator: Roe Acre Dyeing & Finishing Co Ltd Licence Number: 2569002028 Permit Version: Not Supplied Location: River Roch, Crimble Mills, HEYWOOD Authority: Environment Agency, North West Region Abstraction: Boiler Feed Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): 55 Yearly Rate (m3): 18184 Details: Licence 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	A24SE (NE)	1377	2	386505 411595

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: K.Shaw & Company Ltd. Licence Number: 2569002037 Permit Version: 100 Location: Borehole At Premises, Crimble Mills,Heywood Authority: Environment Agency, North West Region Abstraction: Textiles & Leather: Boiler Feed Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 873 Yearly Rate (m3): 227304 Details: Crimble Mills, Heywood Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st October 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A24SE (NE)	1378	2	386500 411600
	Water Abstractions Operator: K.Shaw & Company Ltd. Licence Number: 2569002037 Permit Version: 100 Location: Borehole At Premises, Crimble Mills,Heywood Authority: Environment Agency, North West 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: Crimble Mills, Heywood Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st October 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A24SE (NE)	1378	2	386500 411600
	Water Abstractions Operator: Devon Valley Limited Licence Number: 2569002255 Permit Version: 103 Location: Naden Brook At Simpson Clough, Heywood Authority: Environment Agency, North West Region Abstraction: Paper And Printing: 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: Simpson Clough Mill, Heywood, Lancs. Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 3rd May 2023 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(N)	1790	2	385360 412230
	Water Abstractions Operator: Union Papertech Limited Licence Number: 2569002255 Permit Version: 102 Location: Naden Brook At Simpson Clough, Heywood Authority: Environment Agency, North West Region Abstraction: Paper And Printing: 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: Simpson Clough Mill, Heywood, Lancs. Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 13th August 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(N)	1790	2	385360 412230

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: J R Crompton Ltd Licence Number: 2569002255 Permit Version: 101 Location: Naden Brook At Simpson Clough, Heywood Authority: Environment Agency, North West Region Abstraction: Paper And Printing: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 0 Yearly Rate (m3): 0 Details: Simpson Clough Mill, Heywood, Lancs. Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 10th October 2000 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(N)	1790	2	385360 412230
	Water Abstractions Operator: James Swallow Ltd Licence Number: 2569002217 Permit Version: 100 Location: Borehole At Butterworth Fold Farm Bamford Rochdale Authority: Environment Agency, North West Region Abstraction: General Agriculture; General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 91 Yearly Rate (m3): 33186 Details: Butterworth Fold Farm, Bamford Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(N)	1931	2	385800 412400
	Water Abstractions Operator: Devon Valley Limited Licence Number: 2569002166 Permit Version: 102 Location: Cheesden Brook At Simpson Clough Heywood Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Process Water Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises At Simpson Clough, Heywood Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 3rd May 2023 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(N)	1968	2	385300 412400
	Water Abstractions Operator: Devon Valley Limited Licence Number: 2569002166 Permit Version: 102 Location: Cheesden Brook At Simpson Clough Heywood Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: 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: Premises At Simpson Clough, Heywood Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 3rd May 2023 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(N)	1968	2	385300 412400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: Union Papertech Limited Licence Number: 2569002166 Permit Version: 101 Location: Cheesden Brook At Simpson Clough Heywood Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: 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: Premises At Simpson Clough, Heywood Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 13th August 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(N)	1968	2	385300 412400
	Water Abstractions Operator: Union Papertech Limited Licence Number: 2569002166 Permit Version: 101 Location: Cheesden Brook At Simpson Clough Heywood Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Process Water Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises At Simpson Clough, Heywood Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 13th August 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(N)	1968	2	385300 412400
	Water Abstractions Operator: J R Crompton Ltd Licence Number: 2569002166 Permit Version: 100 Location: Cheesden Brook At Simpson Clough Heywood Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Boiler Feed Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 6219 Yearly Rate (m3): 2136620 Details: Premises At Simpson Clough, Heywood Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 21st May 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(N)	1968	2	385300 412400
	Water Abstractions Operator: J R Crompton Ltd Licence Number: 2569002166 Permit Version: 100 Location: Cheesden Brook At Simpson Clough Heywood Authority: Environment Agency, North West Region Abstraction: Other Industrial/Commercial/Public Services: Process Water Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Premises At Simpson Clough, Heywood Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 21st May 2001 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(N)	1968	2	385300 412400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: North West Water Ltd Licence Number: 2569002263 Permit Version: Not Supplied Location: Cheesden Brook, Simpson Clough, HEYWOOD Authority: Environment Agency, North West Region Abstraction: Not Supplied Abstraction Type: Not Supplied Source: Unknown Daily Rate (m3): 0 Yearly Rate (m3): 0 Details: Licence Status: Cancelled 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)	1991	2	385200 412400
	Groundwater Vulnerability Map Combined Classification: Secondary Superficial Aquifer - Low Vulnerability Combined Vulnerability: Low Combined Aquifer: Productive Bedrock Aquifer, Productive Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: >550 mm/year Baseflow Index: <40% Superficial Patchiness: >90% Superficial Thickness: 3-10m Superficial Recharge: High	A13SE (SE)	0	4	385700 410440
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13SE (SE)	0	4	385700 410440
	Superficial Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13SE (SE)	0	4	385700 410440
	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				
20	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 16.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Millers Brook Catchment Name: Mersey Primacy: 1	A14NW (NE)	461	5	386099 410719
21	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 539.1 Watercourse Level: Underground Permanent: True Watercourse Name: Millers Brook Catchment Name: Mersey Primacy: 1	A14NW (NE)	461	5	386099 410719

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
22	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 159.5 Watercourse Level: Underground Permanent: True Watercourse Name: Millers Brook Catchment Name: Mersey Primacy: 1	A14NW (NE)	463	5	386110 410706
23	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 20.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Millers Brook Catchment Name: Mersey Primacy: 1	A14NW (E)	586	5	386264 410665
24	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 33.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Millers Brook Catchment Name: Mersey Primacy: 1	A14NW (E)	602	5	386284 410658
25	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 73.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Millers Brook Catchment Name: Mersey Primacy: 1	A14NW (E)	602	5	386312 410525
26	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 84.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Roeacre Brook Catchment Name: Mersey Primacy: 1	A14NW (E)	628	5	386315 410648
27	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 59.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Millers Brook Catchment Name: Mersey Primacy: 1	A14NW (E)	628	5	386328 410595
28	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 560.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Millers Brook Catchment Name: Mersey Primacy: 1	A18NE (N)	688	5	385892 411134
29	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 206.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Roeacre Brook Catchment Name: Mersey Primacy: 1	A14NE (E)	712	5	386398 410660
30	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 18.0 Watercourse Level: Underground Permanent: True Watercourse Name: Roeacre Brook Catchment Name: Mersey Primacy: 1	A14NE (E)	908	5	386582 410727

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
31	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 433.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Roeacre Brook Catchment Name: Mersey Primacy: 1	A14NE (E)	925	5	386600 410728

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
32	**BGS Recorded Landfill Sites** Site Name: Rochdale Canal Location: Green Lane, HEYWOOD, Lancs 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: Manually positioned to the address or location Boundary Accuracy: Derived	A14SW (E)	570	-	386242 410225
33	**BGS Recorded Landfill Sites** Site Name: Rear of Mutual St Location: HEYWOOD, Lancs 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: Manually positioned to the address or location Boundary Accuracy: Derived	A19NW (NE)	824	-	386110 411191
34	**Historical Landfill Sites** Licence Holder: Roe Acre Dye and Finishing Company Limited Location: Rochdale Road East, Heywood, Greater Manchester Name: Roe Acre Mill Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD15793 First Input Date: 1st May 1972 Last Input Date: 31st August 1992 Specified Waste Type: Deposited Waste included Inert and Commercial Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: 518 Other Ref: D121, 0786	A14NW (NE)	533	2	386183 410718
35	**Historical Landfill Sites** Licence Holder: Gort Bank Sand Pits Limited Location: Green Lane, Heywood, Bury, Greater Manchester Name: Brook Bank Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD15794 First Input Date: Not Supplied Last Input Date: Not Supplied Specified Waste Type: Deposited Waste included Inert and Industrial Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: Not Supplied Other Ref: D043, D15461, RD/LIC/193/80	A14NE (E)	773	2	386467 410637
36	**Historical Landfill Sites** Licence Holder: Mutual Mills Limited Location: Heywood Name: Mutual Street Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD15775 First Input Date: 31st December 1882 Last Input Date: 31st December 1986 Specified Waste Type: Deposited Waste included Inert Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: 4200/9127 BGS Ref: 135 Other Ref: D053, RD/LIC/323/83	A19NW (NE)	824	2	386110 411191

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
37	**Licensed Waste Management Facilities (Locations)** Licence Number: 120078 Location: Silvester House, Bradshaw Street, Heywood, OL10 1PN Operator Name: ROCHDALE SKIP HIRE LTD Operator Location: Not Supplied Authority: Environment Agency - North West Region, South Area Site Category: Inert & Excavation WTS with treatment **Licence Status: Issued** Issued: 10th June 2019 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	A14NW (NE)	529	2	386198 410678
37	**Licensed Waste Management Facilities (Locations)** Licence Number: 100414 Location: Silvester House, Roe Acre Tannery, Bradshaw Street, Heywood, Lancashire, OL10 1PN Operator Name: P G C Demolition Limited Operator Location: Not Supplied Authority: Environment Agency - North West Region, South Area Site Category: Household, Commercial And Industrial Transfer Stations **Licence Status: Revoked** Issued: 24th November 2008 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: 12th January 2018 Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A14NW (NE)	533	2	386197 410690
38	**Licensed Waste Management Facilities (Locations)** Licence Number: 50455 Location: Rochdale Metropolitan Borough Council, Green Lane, Heywood, Rochdale, Lancashire, OL10 2DY Operator Name: Rochdale Metropolitan Borough Council Operator Location: Not Supplied Authority: Environment Agency - North West Region, South Area Site Category: Household, Commercial And Industrial Transfer Stations **Licence Status: Issued** Issued: 1st June 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	A14SE (E)	836	2	386538 410340
38	**Licensed Waste Management Facilities (Locations)** Licence Number: 54005 Location: Green Lane, Heywood, Lancashire, OL10 2DY Operator Name: North West Water Ltd Operator Location: Great Sankey, Warrington, Cheshire, WA5 3LW Authority: Environment Agency - North West Region, South Area Site Category: Special Waste Transfer Stations **Licence Status: Surrendered** Issued: 7th January 2000 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: 27th June 2001 IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A14SE (E)	870	2	386570 410325

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
38	**Licensed Waste Management Facilities (Locations)** Licence Number: 53420 Location: Green Lane, Heywood, Lancashire, OL10 2DY Operator Name: North West Water Ltd Operator Location: Not Supplied Authority: Environment Agency - North West Region, South Area Site Category: Special Waste Transfer Stations **Licence Status: Surrendered** Issued: 7th January 2000 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: 27th June 2001 IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A14SE (E)	870	2	386570 410325
39	**Licensed Waste Management Facilities (Locations)** Licence Number: 53486 Location: Scrap Yard, Britannia Street, Heywood, Lancashire, OL10 4PL Operator Name: Britannia Marine Stores Ltd Operator Location: Scrap Yard, Britannia Street, Heywood, Lancashire, OL10 4PL Authority: Environment Agency - North West Region, South Area Site Category: Metal Recycling Sites (Mixed) **Licence Status: Issued** Issued: 11th September 1998 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	A17SW (NW)	852	2	384951 410882
39	**Licensed Waste Management Facilities (Locations)** Licence Number: 53486 Location: Britannia Street, Off Georges Street, Heywood, Rochdale, Lancashire, OL10 4PL Operator Name: Rochdale Borough Council Operator Location: Not Supplied Authority: Environment Agency - North West Region, South Area Site Category: Metal Recycling Sites (Mixed) **Licence Status: Surrendered** Issued: 11th September 1998 Last Modified: 27th March 2003 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: 13th March 2019 IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	864	2	384938 410884
	Local Authority Landfill Coverage Name: Rochdale Metropolitan Borough Council - Has no landfill data to supply		0	3	385700 410440
40	**Potentially Infilled Land (Non-Water)** Bearing Ref: SW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1993	A13SW (SW)	199	-	385512 410317
41	**Potentially Infilled Land (Non-Water)** Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1993	A13NW (W)	331	-	385376 410549
42	**Potentially Infilled Land (Non-Water)** Bearing Ref: W Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1993	A12SE (W)	401	-	385292 410345
43	**Potentially Infilled Land (Non-Water)** Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1993	A19SW (NE)	543	-	386053 410893
44	**Potentially Infilled Land (Non-Water)** Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1993	A19SW (NE)	603	-	386197 410828

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
45	**Potentially Infilled Land (Non-Water)** Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1993	A19SW (NE)	680	-	386305 410802
46	**Potentially Infilled Land (Non-Water)** Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1993	A19SW (NE)	695	-	386291 410855
47	**Potentially Infilled Land (Non-Water)** Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1993	A14NE (NE)	741	-	386388 410772
48	**Potentially Infilled Land (Non-Water)** Bearing Ref: E Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1993	A14NE (E)	790	-	386487 410624
49	**Potentially Infilled Land (Non-Water)** Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1993	A19SW (NE)	829	-	386354 410995
50	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1993	A9NE (SE)	855	-	386497 410092
51	**Potentially Infilled Land (Non-Water)** Bearing Ref: SW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1983	A7NW (SW)	900	-	384977 409859
52	**Potentially Infilled Land (Non-Water)** Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1993	A19SE (NE)	928	-	386407 411084
53	**Potentially Infilled Land (Non-Water)** Bearing Ref: E Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1993	A14SE (E)	976	-	386685 410395
54	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1910	A13NW (N)	27	-	385694 410499
55	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A13NW (NW)	58	-	385660 410517
56	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A13NE (N)	123	-	385746 410588
57	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A13NE (NE)	127	-	385829 410517
58	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1932	A13SE (SE)	145	-	385834 410347
59	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A13NE (NE)	154	-	385788 410604
60	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1932	A13SE (E)	218	-	385917 410373
61	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A13NE (E)	219	-	385924 410524
62	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A13SW (S)	300	-	385630 410116

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
63	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A13SW (SW)	302	-	385519 410160
64	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A13SE (E)	309	-	386008 410358
65	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1932	A13NW (NW)	349	-	385427 410693
66	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A18SE (N)	384	-	385771 410849
67	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A12NE (W)	399	-	385291 410459
68	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A18SE (NE)	418	-	385968 410800
69	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A12NE (W)	428	-	385271 410513
70	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A18SW (N)	445	-	385591 410904
71	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1910	A8NE (SE)	447	-	385922 410019
72	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A18SE (NE)	486	-	385922 410908
73	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A18SE (NE)	497	-	385904 410928
74	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A18SE (N)	503	-	385854 410952
75	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A18SE (N)	503	-	385704 410975
76	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A12SE (W)	512	-	385178 410356
77	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A18SW (NW)	517	-	385424 410911
78	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1932	A12NE (W)	527	-	385165 410478
79	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A14SW (E)	543	-	386223 410256
80	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A14NW (E)	548	-	386251 410569
81	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1932	A18SW (NW)	551	-	385455 410967
82	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A14NW (E)	554	-	386265 410512
83	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A14SW (E)	571	-	386281 410429

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
84	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A8NW (S)	591	-	385629 409822
85	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A18SE (N)	598	-	385824 411057
86	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A18SE (NE)	604	-	385962 411019
87	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A17SE (NW)	612	-	385312 410948
88	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A14SW (E)	617	-	386324 410396
89	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A12NE (W)	621	-	385068 410455
90	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A8NW (S)	635	-	385501 409804
91	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A18NW (N)	650	-	385655 411121
92	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A12SW (W)	671	-	385021 410328
93	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1932	A12NE (NW)	673	-	385088 410756
94	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A12SW (W)	692	-	384997 410372
95	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A9NW (SE)	705	-	386069 409805
96	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A8SE (S)	723	-	385801 409692
97	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A12NW (W)	727	-	384981 410592
98	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1932	A14SE (E)	742	-	386447 410367
99	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A8SW (S)	743	-	385429 409714
100	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A12SW (W)	750	-	384938 410366
101	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1932	A12NW (W)	757	-	384977 410705
102	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A12NW (W)	768	-	384962 410694
103	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A9NW (SE)	770	-	386168 409795
104	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A12NW (W)	787	-	384906 410504

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
105	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A9SW (SE)	792	-	386145 409752
106	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A17SW (NW)	810	-	384963 410812
107	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A17SW (NW)	875	-	384965 410951
108	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A9SW (SE)	880	-	386287 409750
109	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1932	A12SW (W)	882	-	384805 410398
110	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A19SE (NE)	900	-	386520 410866
111	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1956	A19NW (NE)	917	-	386227 411229
112	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1932	A17SW (NW)	918	-	384892 410914
113	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A12NW (W)	930	-	384786 410657
114	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A8SW (S)	932	-	385444 409512
115	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1894	A17NE (NW)	947	-	385227 411294
116	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1851	A12NW (W)	962	-	384750 410640
117	**Registered Landfill Sites** Licence Holder: Roe Acre Dyeing & Finishing Co Ltd Licence Reference: 00786/T01 Site Location: Roe Acre Mill, Rochdale Road East, Heywood, Lancashire Licence Easting: 386300 Licence Northing: 410660 Operator Location: Crimble Mill, Crimble Lane, Heywood, Rochdale, Lancashire Authority: Environment Agency - North West Region, South Area Site Category: Landfill Max Input Rate: Very Large (Equal to or greater than 250,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 1st July 1995 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: Max.Waste Permitted By Licence Uncontam. Soil, Clay, Sand Prohibited Waste: Asbestos Filter Material Sand Foundry Sand Liquid Wastes Sludge Wastes Special Wastes Waste In Drums Waste In Skips Waste N.O.S. Whether/Not Pre-Tr'T/Pack	A14NW (E)	618	2	386300 410660

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
118	**Registered Landfill Sites** Licence Holder: Gort Bank Sand Pits Ltd Licence Reference: 00193/80/M2 Site Location: Brook Bank, Green Lane, Heywood, Lancashire Licence Easting: 386600 Licence Northing: 410650 Operator Location: As Site Address Authority: Environment Agency - North West Region, South 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: 22nd September 1983 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the road within the address or location Boundary Accuracy: Not Applicable Authorised Waste: Construction And Demolition Wastes Biodegradable/Putrescible Waste Paper/Cardboard Waste Prohibited Waste	A14NE (E)	906	2	386600 410650
119	**Registered Landfill Sites** Licence Holder: Mutual Mills Ltd Licence Reference: 00323/83 Site Location: Mutual Street (Reservoir), Heywood, Lancashire Licence Easting: 386230 Licence Northing: 411230 Operator Location: Aspinall Street, Heywood, ROCHDALE, Lancashire, OL10 4HP Authority: Environment Agency - North West Region, South Area Site Category: Landfill Max Input Rate: Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 3rd May 1984 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: Ceramic Waste Constr'N/Demol. Inert/Non-Haz/Non-Tox Fibreglass Glass/Cullet Metal Scrap Non Leachate Forming Waste Plastic/Polythene (Including Sacks) Soil,Clay,Sand Stone,Brick,Concrete,Slate Wood Waste/Timber Prohibited Waste: Carcasses And Flesh Chemical Wastes Food Waste Liquid Wastes Paper/Cardboard Waste Plasterboard Sawdust/Bark Sludge Wastes Textiles, Rag,Wool,Cloth,Hessian Etc Vegetable/Processing Waste Waste Forming Polluting Leachate	A19NW (NE)	920	2	386230 411230

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
120	**Registered Waste Transfer Sites** Licence Holder: North West Water Ltd Licence Reference: 01131 Site Location: Green Lane Depot, Green Lane, HEYWOOD, Lancashire, OL10 2DY Operator Location: PO Box 14, 410 Birchwood Boulevard, WARRINGTON, Cheshire, WA3 7GA Authority: Environment Agency - North West Region, South Area Site Category: Transfer Max Input Rate: Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) Waste Source Restrictions: Waste produced/controlled by licence holder Licence Status: Licence has completion certificateSurrendered Dated: 1st January 2000 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Cement Bonded Asbestos Pipe & Fittings Ferrous & Non-Ferrous Pipe & Fittings Maximum Waste Permitted By Licence Non-Hazardous Uncontam. Industrial Waste - Comprising Plastic Pipe & Fittings Uncontam. Brick, Stone, Concrete Uncontam. Excavated Soil, Clay, Silt, Sand Uncontam. Tarmacadam Prohibited Waste: Other Waste/Waste Not Otherwise Specified	A14SE (E)	876	2	386580 410355
121	**Registered Waste Transfer Sites** Licence Holder: Quickmix Ltd Licence Reference: 00087/77/M2 Site Location: Green Lane, Heywood, Lancashire Operator Location: RMC House, High Street, Feltham, HOUNSLOW, Middlesex, TW13 4HA Authority: Environment Agency - North West Region, South Area Site Category: Transfer Max Input Rate: Very Small (Less than 10,000 tonnes per year) Waste Source Restrictions: Waste produced/controlled by licence holder Licence Status: Licence lapsed/cancelled/defunct/not applicable/surrenderedCancelled Dated: 22nd September 1983 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Approximate location provided by supplier Boundary Quality: Not Supplied Authorised Waste: Concrete Waste	A9NE (SE)	896	2	386501 410001
122	**Registered Waste Treatment or Disposal Sites** Licence Holder: Usher Walker Licence Reference: 00759/92 Site Location: Seymour Street, Heywood, Lancashire Operator Location: As Site Address Authority: Environment Agency - North West Region, South Area Site Category: Treatment Max Input Rate: Undefined Waste Source Restrictions: No known restriction on source of waste Licence Status: Site exempt from licenceExempt Dated: 1st June 1993 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Licenced Wastes Not To Hand	A12SW (W)	667	2	385020 410400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Registered Waste Treatment or Disposal Sites				
123	Licence Holder: Britannia Marine Stores Ltd Licence Reference: 80054 Site Location: Britannia Street, George Street, HEYWOOD, Lancashire, OL10 4PL Operator Location: 337/341 Chapel Street, Salford, MANCHESTER, Greater Manchester, M3 5JY Authority: Environment Agency - North West Region, South Area Site Category: Scrapyard Max Input Rate: Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) Waste Source Restrictions: No known restriction on source of waste Licence Status: Operational as far as is knownOperational Dated: 1st September 1998 Preceded By Licence: Not Given Superseded By Licence: Not Given Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Any Non-Haz. Ferrous Metal Scrap Any Non-Haz. Non-Ferrous Metal Scrap Clean Drums Max.Waste Permitted By Licence Scrap Vehicles Prohibited Waste: Spec.Waste (Epa'90:S62/1996 Regs)N.O.S Waste N.O.S.	A17SW (NW)	861	2	384950 410900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Pennine Lower Coal Measures Formation And South Wales Lower Coal Measures Formation (Undifferentiated)	A13SE (SE)	0	1	385700 410440
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment 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 (SE)	0	1	385700 410440
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: 1.8 - 2.2 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13NE (N)	28	1	385700 410500
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment 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	A13SE (SE)	79	1	385754 410346
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: 1.8 - 2.2 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SE (E)	288	1	386000 410440
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: 2.2 - 3.0 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13NE (E)	290	1	386000 410500
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: 1.8 - 2.2 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13SE (E)	298	1	386000 410383

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 and Sediment 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	A8NE (S)	408	1	385700 410000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: 1.8 - 2.2 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A18SW (N)	564	1	385500 411000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment 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	A18SW (NW)	592	1	385389 410978
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: <15 mg/kg Cadmium Concentration: 1.8 - 2.2 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A18SW (NW)	595	1	385422 411000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment 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)	687	1	385000 410440
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment 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	A12SW (W)	688	1	385000 410387

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: Sediment Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: 2.2 - 3.0 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A14SE (E)	788	1	386500 410440
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Sediment Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: 2.2 - 3.0 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A19NW (NE)	819	1	386060 411211
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: 1.8 - 2.2 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A9NE (SE)	847	1	386445 410000
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil and Sediment Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: 2.2 - 3.0 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: 100 - 200 mg/kg Nickel Concentration: 15 - 30 mg/kg	A9NE (SE)	896	1	386500 410000
124	**BGS Recorded Mineral Sites** Site Name: Pot Hall Sand Pit Location: Heywood, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96534 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Quaternary Geology: Glaciofluvial Deposits, Devensian Commodity: Sand Positional Accuracy: Located by supplier to within 10m	A13SW (SW)	201	1	385505 410327
125	**BGS Recorded Mineral Sites** Site Name: Long Field Brick Field Location: Heywood, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96535 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Common Clay and Shale Positional Accuracy: Located by supplier to within 10m	A12NE (W)	395	1	385316 410575

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
126	**BGS Recorded Mineral Sites** Site Name: Pot Hall Gravel Pit Location: Heywood, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96533 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Quaternary Geology: Glaciofluvial Deposits, Devensian Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A12SE (W)	407	1	385284 410358
127	**BGS Recorded Mineral Sites** Site Name: Captain Fold Sand Pit Location: Heywood, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96530 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Quaternary Geology: Glaciofluvial Deposits, Devensian Commodity: Sand Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	603	1	386192 410834
128	**BGS Recorded Mineral Sites** Site Name: Heywood Brick Field Location: Heywood, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96532 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Common Clay and Shale Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	623	1	386074 410977
129	**BGS Recorded Mineral Sites** Site Name: Captain Fold Sand Pit Location: Heywood, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 96531 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Quaternary Geology: Glaciofluvial Deposits, Devensian Commodity: Sand Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	663	1	386284 410805
130	**BGS Recorded Mineral Sites** Site Name: Off Green Lane Sand Pit Location: Captain Fold, Heywood, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 15319 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Quaternary Geology: Glaciofluvial Deposits, Devensian Commodity: Sand Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	848	1	386475 410840
131	**BGS Recorded Mineral Sites** Site Name: Wilderness Sandpit Location: Heywood, Rochdale, Lancashire Source: British Geological Survey, National Geoscience Information Service Reference: 3822 Type: Opencast **Status: Ceased** Operator: P. Casey Enviro Ltd. Operator Location: Not Supplied Periodic Type: Quaternary Geology: Glacial Commodity: Sand and Gravel Positional Accuracy: Located by supplier to within 10m	A14NE (E)	926	1	386620 410650

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available				
	Coal Mining Affected Areas Description: In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report.	A13SE (SE)	0	6	385700 410440
	Mining Instability Mining Evidence: Inconclusive Coal Mining Source: Ove Arup & Partners Boundary Quality: As Supplied	A13SE (SE)	0	-	385700 410440
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	385700 410440
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	385700 410440
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	385700 410440
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	385700 410440
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	385700 410440
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	0	1	385700 410440
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SE (S)	37	1	385724 410377
	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	A13SE (SE)	0	1	385700 410440
	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 (SE)	0	1	385700 410440

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
132	**Contemporary Trade Directory Entries** Name: York Street Washing Machines Ltd Location: 19, Nelson Street, Heywood, Lancashire, OL10 1BN Classification: Washing Machines - Servicing & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SE (S)	101	-	385722 410309
132	**Contemporary Trade Directory Entries** Name: York Street Washing Machines Location: 19, Nelson Street, Heywood, Lancashire, OL10 1BN Classification: Washing Machines - Servicing & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SE (S)	101	-	385722 410309
132	**Contemporary Trade Directory Entries** Name: A & E Electrical (Manchester) Ltd Location: 62-64, King Street, Heywood, Lancashire, OL10 1BW Classification: Electric Motor Sales & Service **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SE (SE)	102	-	385766 410328
133	**Contemporary Trade Directory Entries** Name: Dalton Properties Location: The Old Mission,Hardfield Street, Heywood, Lancashire, OL10 1DG Classification: Damp & Dry Rot Control **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A13NE (NE)	121	-	385816 410532
134	**Contemporary Trade Directory Entries** Name: Honnor Marine Ltd Location: Caxton Street, Heywood, Lancashire, OL10 1AL Classification: Boatbuilders & Repairers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NW (NW)	148	-	385589 410573
134	**Contemporary Trade Directory Entries** Name: Honnor Marine Ltd Location: 1, Caxton Street, Heywood, Lancashire, OL10 1AL Classification: Boatbuilders & Repairers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NW (NW)	179	-	385576 410604
135	**Contemporary Trade Directory Entries** Name: H M Coroner'S Office Location: Phoenix Centre, Church Street, Heywood, Lancashire, OL10 1LR Classification: Medical & Dental Laboratories **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NW (N)	200	-	385642 410665
135	**Contemporary Trade Directory Entries** Name: Pennine Care N H S Foundation Trust Within Phoenix Centre Location: Phoenix Centre, Church Street, Heywood, Lancashire, OL10 1LR Classification: Hospitals **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NW (N)	200	-	385642 410665
136	**Contemporary Trade Directory Entries** Name: Brownroyd Motors Location: Hardfield Garage, 34, Manchester Street, Heywood, OL10 1DL Classification: Car Dealers - Used **Status: Active** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	211	-	385865 410615
136	**Contemporary Trade Directory Entries** Name: F.Kempster & Sons Ltd Location: Hardfield Garage, 34, Manchester Street, Heywood, Lancashire, OL10 1DL Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	213	-	385865 410617
136	**Contemporary Trade Directory Entries** Name: Kempsters Of Heywood Location: Hardfield Garage, 34, Manchester Street, Heywood, Lancashire, OL10 1DL Classification: Car Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	213	-	385865 410617
136	**Contemporary Trade Directory Entries** Name: Crawford Domestic Appliances Ltd Location: 36-38, MANCHESTER STREET, HEYWOOD, OL10 1DL Classification: Domestic Appliances - Servicing, Repairs & Parts **Status: Active** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	219	-	385896 410588

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
137	**Contemporary Trade Directory Entries** Name: Internetvoipphone Location: 22, Hind Hill Street, Heywood, Lancashire, OL10 1AQ Classification: Telecommunications Equipment & Systems **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NW (NW)	240	-	385542 410655
138	**Contemporary Trade Directory Entries** Name: Industrial Latex Compounds Ltd Location: Burns Mill, Manchester Street, Heywood, Lancashire, OL10 1DN Classification: Foam Products - Rubber & Plastics **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (E)	243	-	385954 410486
138	**Contemporary Trade Directory Entries** Name: Industrial Latex Compounds Location: Burns Mill, Manchester Street, Heywood, Lancashire, OL10 1DN Classification: Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (E)	243	-	385954 410486
139	**Contemporary Trade Directory Entries** Name: Ken Brogden Ltd Location: 52-52A, MANCHESTER STREET, HEYWOOD, OL10 1DL Classification: Metal Products - Fabricated **Status: Active** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	247	-	385935 410575
139	**Contemporary Trade Directory Entries** Name: Lord'S Motors Location: Russell Street, Heywood, Lancashire, OL10 1NY Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	287	-	385981 410570
139	**Contemporary Trade Directory Entries** Name: M & P Engineering Ltd Location: Bradshaw Street, Heywood, Lancashire, OL10 1PA Classification: Engineers - General **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (E)	312	-	386012 410556
139	**Contemporary Trade Directory Entries** Name: M & L Tyres Location: Bradwell Works,Bradshaw St, Heywood, Lancashire, OL10 1NZ Classification: Tyre Dealers **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A13NE (E)	312	-	386012 410556
139	**Contemporary Trade Directory Entries** Name: M & L Used Tyres Location: Marlor Works, Russell Street, Heywood, Lancashire, OL10 1NX Classification: Tyre Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	326	-	386020 410575
139	**Contemporary Trade Directory Entries** Name: M & L Tyres Location: Marlor Works, Russell Street, Heywood, Lancashire, OL10 1NX Classification: Tyre Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	326	-	386020 410575
140	**Contemporary Trade Directory Entries** Name: John Lloyds Ltd Location: Longford House, Hall Street, Heywood, Lancashire, OL10 1DP Classification: Asphalt & Coated Macadam Laying Contractors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SE (E)	292	-	385990 410357
140	**Contemporary Trade Directory Entries** Name: Clifton Precision Engineering (Heywood) Ltd Location: Hall Street, Heywood, Lancashire, OL10 1DP Classification: Engineers - General **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SE (E)	327	-	386026 410361
140	**Contemporary Trade Directory Entries** Name: Green Lane Auto Engineers Location: Unit 6, Hall Street, Heywood, OL10 1DP Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A13SE (E)	338	-	386033 410336

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
141	**Contemporary Trade Directory Entries** Name: Formula One Autocentres Heywood Location: York Street, Heywood, Lancashire, OL10 4NS Classification: Garage Services **Status: Active** Positional Accuracy: Manually positioned to the address or location	A13NE (N)	299	-	385790 410758
141	**Contemporary Trade Directory Entries** Name: Equipe Tyre & Autocare Location: York Street, Heywood, OL10 4NS Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (N)	304	-	385795 410762
141	**Contemporary Trade Directory Entries** Name: Euronics Location: 61 York Street, Heywood, Lancashire, OL10 4NR Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (N)	338	-	385795 410797
142	**Contemporary Trade Directory Entries** Name: Rhino Haulage Location: 83, Manchester Street, Heywood, Lancashire, OL10 1PB Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (E)	301	-	386008 410524
142	**Contemporary Trade Directory Entries** Name: Atlantic Executive Travel Ltd Location: 34 Bradshaw Street, Heywood, Lancashire, OL10 1NZ Classification: Bus & Coach Operators & Stations **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A13NE (E)	330	-	386035 410536
142	**Contemporary Trade Directory Entries** Name: Celsius Air Conditioning Location: 1, Well Street, Heywood, Lancashire, OL10 1NT Classification: Air Conditioning & Refrigeration Contractors **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NW (E)	336	-	386046 410505
142	**Contemporary Trade Directory Entries** Name: Curtis Engineers Ltd Location: Bradshaw St, Heywood, Lancashire, OL10 1PL Classification: Engineers - General **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A14NW (E)	341	-	386044 410548
142	**Contemporary Trade Directory Entries** Name: Bradson Automotive Location: Russell St, Heywood, Lancashire, OL10 1NX Classification: Garage Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A14NW (E)	378	-	386089 410493
143	**Contemporary Trade Directory Entries** Name: Fence & Gate Design Location: Unit 3, Hall Street, Heywood, Lancashire, OL10 1DP Classification: Fencing Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A13SE (SE)	311	-	385998 410313
143	**Contemporary Trade Directory Entries** Name: M D Recovery Uk Location: Unit 3, Hall Street, Heywood, Lancashire, OL10 1DP Classification: Car Breakdown & Recovery Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SE (SE)	311	-	385998 410313
143	**Contemporary Trade Directory Entries** Name: A B Cylinder Head Services Location: Unit 1, Hall Street, Heywood, OL10 1DP Classification: Engine Rebuilding & Reconditioning **Status: Active** Positional Accuracy: Automatically positioned to the address	A13SE (SE)	319	-	386006 410310
143	**Contemporary Trade Directory Entries** Name: Busy Bins Location: UNIT 4, COWBURN STREET, HEYWOOD, OL10 2AJ Classification: Waste Disposal Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A13SE (SE)	319	-	386006 410310

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
143	**Contemporary Trade Directory Entries** Name: M D Autos Location: Unit 3, Hall Street, Heywood, OL10 1DP Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SE (SE)	319	-	386006 410310
144	**Contemporary Trade Directory Entries** Name: Hutson & Amro Print Ltd Location: Unit 5, Cowburn Street, Heywood, OL10 2AJ Classification: Printers **Status: Active** Positional Accuracy: Automatically positioned to the address	A13SE (SE)	332	-	386015 410294
144	**Contemporary Trade Directory Entries** Name: Bamford Print Ltd Location: Unit 5, Cowburn Street, Heywood, Lancashire, OL10 2AJ Classification: Printers **Status: Active** Positional Accuracy: Automatically positioned to the address	A13SE (SE)	332	-	386015 410294
144	**Contemporary Trade Directory Entries** Name: Hillside Bodyshop Location: Unit 1-2, Cowburn Street, Heywood, Lancashire, OL10 2AJ Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (E)	371	-	386060 410308
144	**Contemporary Trade Directory Entries** Name: L C Motor Engineers Location: Unit 1, Cowburn Street, Heywood, Lancashire, OL10 2AJ Classification: Tyre Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (E)	371	-	386060 410308
144	**Contemporary Trade Directory Entries** Name: D A Fitton Location: Cowburn Street, Heywood, Lancashire, OL10 2AJ Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (E)	371	-	386060 410308
145	**Contemporary Trade Directory Entries** Name: William West & Son (Ilkeston) Ltd Location: Back Brierley St, Heywood, Lancashire, OL10 1PE Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A13NE (NE)	340	-	386009 410635
145	**Contemporary Trade Directory Entries** Name: Glenfield Designs Ltd Location: 40, Rochdale Road, Heywood, Lancashire, OL10 1LE Classification: Textile Manufacturing **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	366	-	385998 410699
145	**Contemporary Trade Directory Entries** Name: Rapide Components & Alloys Ltd Location: Vale Street, Heywood, Lancashire, OL10 1PQ Classification: Engineering Materials **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	380	-	386033 410672
146	**Contemporary Trade Directory Entries** Name: T U S Location: York House, 15-17, York Street, Heywood, Lancashire, OL10 4NN Classification: Meter Manufacturers & Suppliers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A18SW (N)	340	-	385647 410808
147	**Contemporary Trade Directory Entries** Name: East Lancashire Services Ltd Location: 81, York Street, Heywood, OL10 4NR Classification: Commercial Cleaning Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A18SE (NE)	352	-	385848 410794
147	**Contemporary Trade Directory Entries** Name: East Lancs Cleaning Services Location: 81, York Street, Heywood, OL10 4NR Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (NE)	352	-	385848 410794

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
147	**Contemporary Trade Directory Entries** Name: East Lancashire Services Ltd Location: 81, York Street, Heywood, Lancashire, OL10 4NR Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (NE)	352	-	385848 410794
148	**Contemporary Trade Directory Entries** Name: S R B Plant Hire Ltd Location: The Transport Yard,Brierley Street, Heywood, Lancashire, OL10 1PH Classification: Road Haulage Services **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A14NW (NE)	356	-	386042 410604
148	**Contemporary Trade Directory Entries** Name: Gilwood Fabricators Co Ltd Location: Bradshaw Street, Heywood, Lancashire, OL10 1PL Classification: Machine Shops **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	389	-	386085 410579
148	**Contemporary Trade Directory Entries** Name: Frazer Nash Location: Bradshaw St, Heywood, Lancashire, OL10 1PL Classification: Industrial Engineers **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A14NW (E)	389	-	386085 410579
148	**Contemporary Trade Directory Entries** Name: Gilwood Fabricators Co Ltd Location: Bradshaw Street, Heywood, OL10 1PL Classification: Machine Shops **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NW (E)	390	-	386092 410557
149	**Contemporary Trade Directory Entries** Name: E-Equipment Location: 8-10 Market Pl, Heywood, Lancashire, OL10 4NL Classification: Catering Equipment **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A18SW (N)	357	-	385575 410808
149	**Contemporary Trade Directory Entries** Name: Direct Photos Location: 20, Market Place, Heywood, Lancashire, OL10 4NL Classification: Photographic Processors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (NW)	369	-	385545 410809
150	**Contemporary Trade Directory Entries** Name: Shocka Sports Location: 88-92, York Street, Heywood, Lancashire, OL10 4NS Classification: Leisure & Sportswear Manufacturers & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	367	-	385952 410747
150	**Contemporary Trade Directory Entries** Name: Birtwistles M O T Service & Repairs Location: 135, York Street, Heywood, Lancashire, OL10 4NS Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	408	-	385991 410767
150	**Contemporary Trade Directory Entries** Name: Esso Location: At Tesco York Street, Heywood, Lancashire, OL10 4HQ Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A18SE (NE)	410	-	385982 410778
150	**Contemporary Trade Directory Entries** Name: Roe Acre Service Station Location: York Street, Heywood, Lancashire, OL10 4NR Classification: Petrol Filling Stations - 24 Hour **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	410	-	385984 410776
150	**Contemporary Trade Directory Entries** Name: Tesco Petrol Station Location: York Street, Heywood, OL10 4NS Classification: Petrol Filling Stations **Status: Active** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	410	-	385984 410776

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
150	**Contemporary Trade Directory Entries** Name: Esso Location: York Street, Heywood, Lancashire, OL10 4HQ Classification: Petrol Filling Stations **Status: Active** Positional Accuracy: Manually positioned to the address or location	A18SE (NE)	411	-	385981 410781
151	**Contemporary Trade Directory Entries** Name: Cars4people (Mcr) Ltd Location: 123, Manchester Street, Heywood, Lancashire, OL10 1NL Classification: Mot Testing Centres **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	373	-	386084 410444
151	**Contemporary Trade Directory Entries** Name: Norden Car Sales Location: 123, Manchester Street, Heywood, Lancashire, OL10 1NL Classification: Car Dealers - Used **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	373	-	386084 410444
152	**Contemporary Trade Directory Entries** Name: Hamilton Logistics Manchester Ltd Location: 1b, Market Street, Heywood, Lancashire, OL10 1HT Classification: Road Haulage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A18SW (NW)	381	-	385487 410790
152	**Contemporary Trade Directory Entries** Name: Hamilton Logistics Location: 1b, Market Street, Heywood, Lancashire, OL10 1HT Classification: Freight Forwarders **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (NW)	381	-	385487 410790
152	**Contemporary Trade Directory Entries** Name: Spares Centre Location: 3, Market Street, Heywood, Lancashire, OL10 1HT Classification: Domestic Appliances - Servicing, Repairs & Parts **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (NW)	389	-	385481 410796
152	**Contemporary Trade Directory Entries** Name: Spares Centre Location: 3, Market Street, Heywood, Lancashire, OL10 1HT Classification: Electrical Appliance Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (NW)	389	-	385481 410796
152	**Contemporary Trade Directory Entries** Name: Klick Photopoint Location: 28, Market Place, Heywood, Lancashire, OL10 4NL Classification: Photographic Processors **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (NW)	390	-	385521 410821
153	**Contemporary Trade Directory Entries** Name: Aquatec Builders (Northwest) Location: Lloyd St, Heywood, Lancashire, OL10 2BP Classification: Fascias and Soffits **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A13SE (SE)	399	-	385976 410118
153	**Contemporary Trade Directory Entries** Name: Varley Smith Emmott Ltd Location: Springfield Works, Lloyd Street, Heywood, Lancashire, OL10 2BP Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (SE)	414	-	385967 410089
153	**Contemporary Trade Directory Entries** Name: Jola Ltd Location: Springfield Works, Lloyd Street, Heywood, Lancashire, OL10 2BP Classification: Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (SE)	414	-	385967 410089
154	**Contemporary Trade Directory Entries** Name: Good As New Cleaning Ltd Location: Independence House, Adelaide Street, Heywood, Lancashire, OL10 4HF Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (NE)	407	-	385917 410822

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
154	**Contemporary Trade Directory Entries** Name: A To Z Solutions Centre Ltd Location: Independence House, Adelaide Street, Heywood, Lancashire, OL10 4HF Classification: Energy Efficient Products and Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (NE)	407	-	385917 410822
155	**Contemporary Trade Directory Entries** Name: Ravenfield Designs Ltd Location: Russell Street, Heywood, Lancashire, OL10 1NX Classification: Engineers - General **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	412	-	386124 410476
155	**Contemporary Trade Directory Entries** Name: Unique Moulds Uk Ltd Location: Unique Moulds, Russell Street, Heywood, OL10 1NX Classification: Tool Design, Manufacturers & Makers **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NW (E)	424	-	386136 410464
155	**Contemporary Trade Directory Entries** Name: Juts Discount Tyre Bay Ltd Location: Juts Tyre Bay, Russell Street, Heywood, OL10 1NX Classification: Tyre Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (E)	428	-	386139 410439
155	**Contemporary Trade Directory Entries** Name: H & B Commercial Services Location: H and B Commercial Services, Russell Street, Heywood, OL10 1NX Classification: Commercial Vehicle Servicing, Repairs, Parts & Accessories **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (E)	428	-	386139 410439
156	**Contemporary Trade Directory Entries** Name: Carters Appliance Care Location: 4, Market Street, Heywood, Lancashire, OL10 4LY Classification: Domestic Appliances - Servicing, Repairs & Parts **Status: Active** Positional Accuracy: Automatically positioned to the address	A18SW (NW)	418	-	385473 410825
156	**Contemporary Trade Directory Entries** Name: Dyson Doctor Location: 18-20, Market Street, Heywood, OL10 4LY Classification: Domestic Appliances - Servicing, Repairs & Parts **Status: Active** Positional Accuracy: Automatically positioned to the address	A18SW (NW)	449	-	385423 410828
156	**Contemporary Trade Directory Entries** Name: P & P Law Ltd Location: 18-20, Market Street, Heywood, Lancashire, OL10 4LY Classification: Domestic Appliances - Servicing, Repairs & Parts **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (NW)	449	-	385423 410828
156	**Contemporary Trade Directory Entries** Name: Johnson Cleaners Uk Ltd Location: 28, Market Street, Heywood, Lancashire, OL10 4LY Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A18SW (NW)	482	-	385379 410834
157	**Contemporary Trade Directory Entries** Name: Sealtight Roofing Location: 40, Vigo Street, Heywood, Lancashire, OL10 2BT Classification: Fascias and Soffits **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13SE (SE)	418	-	386011 410126
157	**Contemporary Trade Directory Entries** Name: Aquarius Washers Location: 26, Walton Street, Heywood, Lancashire, OL10 2BS Classification: Washing Machines - Servicing & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (SE)	450	-	386030 410100
157	**Contemporary Trade Directory Entries** Name: Gasfix Location: Heywood, Lancashire, Ol10 2bs Classification: Boilers - Servicing, Replacements & Repairs **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A9NW (SE)	483	-	386060 410083

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
158	**Contemporary Trade Directory Entries** Name: Associated Cleaning Management Ltd Location: 43, Coomassie Street, Heywood, Lancashire, OL10 3AQ Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NE (W)	420	-	385269 410449
159	**Contemporary Trade Directory Entries** Name: Auto Mobile Services Location: Unit 6 Mission St, Heywood, Lancashire, OL10 1HY Classification: Car Engine Tuning & Diagnostic Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A13NW (NW)	420	-	385392 410760
159	**Contemporary Trade Directory Entries** Name: C & J Autos Location: Mission Street Garage, Mission Street, Heywood, OL10 1HY Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A13NW (NW)	432	-	385375 410760
159	**Contemporary Trade Directory Entries** Name: Heywood Tyre & Exhaust Location: Mission Street Garage, Mission Street, Heywood, Lancashire, OL10 1HY Classification: Tyre Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A13NW (NW)	432	-	385375 410760
159	**Contemporary Trade Directory Entries** Name: Gadget In Budget Ltd Location: 43, Market Street, Heywood, OL10 1HX Classification: Electrical Goods Sales, Manufacturers & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (NW)	460	-	385372 410797
160	**Contemporary Trade Directory Entries** Name: Lindsey Alderson Location: 75, Newhouse Road, Heywood, Lancashire, OL10 2NX Classification: Jewellery Manufacturers & Repairers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (SW)	422	-	385485 410040
161	**Contemporary Trade Directory Entries** Name: North West Cleaning Supplies Location: Queens Park Road, Heywood, Lancashire, OL10 4HA Classification: Cleaning Materials & Equipment **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A18SE (N)	433	-	385703 410905
162	**Contemporary Trade Directory Entries** Name: O'Neill'S Decorating Centre Location: 1, Adelaide Street, Heywood, Lancashire, OL10 4HQ Classification: Wallpapers & Wall Coverings **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (NE)	444	-	385976 410827
162	**Contemporary Trade Directory Entries** Name: Heywood Discount Wallpapers Location: 1, Adelaide Street, Heywood, OL10 4HQ Classification: Wallpapers & Wall Coverings **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (NE)	445	-	385986 410821
163	**Contemporary Trade Directory Entries** Name: Robert Scott Location: Millersbrook Mill, Miller Street, Heywood, OL10 4HJ Classification: Cleaning Materials & Equipment **Status: Active** Positional Accuracy: Automatically positioned to the address	A18SE (N)	445	-	385855 410891
163	**Contemporary Trade Directory Entries** Name: L M Scaffolding M C R Ltd Location: Unit 2 Miller Street, Heywood, Lancashire, OL10 4HX Classification: Scaffolding & Work Platforms **Status: Active** Positional Accuracy: Manually positioned to the road within the address or location	A18SE (NE)	448	-	385894 410879
164	**Contemporary Trade Directory Entries** Name: Becketts Bakery Engineers Ltd Location: Fir Street, Heywood, Lancashire, OL10 1NP Classification: Bakery Equipment Manufacturers & Suppliers **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NW (E)	449	-	386157 410526

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
164	**Contemporary Trade Directory Entries** Name: R & M Royster Bakery Engineers Location: Fir Street, Heywood, Lancashire, OL10 1NP Classification: Bakery Equipment Manufacturers & Suppliers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	449	-	386157 410526
164	**Contemporary Trade Directory Entries** Name: William Lusty Ltd Location: Fir Street, Heywood, Lancashire, OL10 1NW Classification: Food Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	449	-	386157 410526
165	**Contemporary Trade Directory Entries** Name: Ibex Marina Ropes Location: Cartridge Ropery, Brunswick Street, Heywood, Lancashire, OL10 1HA Classification: Ropes & Hawsers **Status: Active** Positional Accuracy: Automatically positioned to the address	A12NE (NW)	454	-	385284 410660
166	**Contemporary Trade Directory Entries** Name: Heywood Reclaimed Building Materials Location: 102, Newhouse Road, Heywood, Lancashire, OL10 2NU Classification: Reclamation Centres **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NW (S)	462	-	385572 409963
167	**Contemporary Trade Directory Entries** Name: Sharpe Printing Location: 163, York Street, Heywood, Lancashire, OL10 4NX Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	464	-	386075 410758
167	**Contemporary Trade Directory Entries** Name: Sky Dental Ceramics Location: 165, York Street, Heywood, Lancashire, OL10 4NX Classification: Medical & Dental Laboratories **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	468	-	386079 410759
168	**Contemporary Trade Directory Entries** Name: Quarry Manufacturing Location: Willow Street Mill, Willow Street, Heywood, OL10 4LJ Classification: Textile Manufacturing **Status: Active** Positional Accuracy: Automatically positioned to the address	A18SE (N)	464	-	385753 410932
169	**Contemporary Trade Directory Entries** Name: K E Engineering Uk Ltd Location: 5 Broadfield,Seymour St, Heywood, Lancashire, OL10 3AJ Classification: Engineers - General **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A12SE (W)	467	-	385220 410404
170	**Contemporary Trade Directory Entries** Name: Crease Lightning Location: 4, Prospect Street, Heywood, Lancashire, OL10 2BB Classification: Ironing & Home Laundry Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8NE (SE)	468	-	385994 410042
171	**Contemporary Trade Directory Entries** Name: Ice Kings Ltd Location: Roeacre Tannery,Bradshaw St, Heywood, Lancashire, OL10 1PN Classification: Air Conditioning & Refrigeration Contractors **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A14NW (NE)	470	-	386133 410678
172	**Contemporary Trade Directory Entries** Name: Window Plas Ltd Location: Unit 5, Roeacre Business Park, Bradshaw Street, Heywood, Lancashire, OL10 1PN Classification: Window Frame Manufacturers **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	471	-	386154 410632

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
172	**Contemporary Trade Directory Entries** Name: Grange Power Ltd Location: Unit 1, Roeacre Business Park, Bradshaw Street, HEYWOOD, Lancashire, OL10 1PN Classification: Generators - Sales & Service **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	471	-	386154 410632
172	**Contemporary Trade Directory Entries** Name: West Yorkshire Metals Ltd Location: Unit 2/B, Roeacre Business Park, Bradshaw Street, HEYWOOD, Lancashire, OL10 1PN Classification: Non-Ferrous Metals **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	471	-	386154 410632
172	**Contemporary Trade Directory Entries** Name: Flog It 2 Us Location: Unit 4a Roeacre Business Park, Bradshaw Street, Heywood, Lancashire, OL10 1PN Classification: Office Furniture & Equipment **Status:** **Active** Positional Accuracy: Manually positioned to the address or location	A14NW (E)	488	-	386179 410610
173	**Contemporary Trade Directory Entries** Name: Nwasfleetcare Location: Quay St, Heywood, Lancashire, OL10 2JH Classification: Garage Services **Status:** **Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A14SW (E)	477	-	386163 410284
173	**Contemporary Trade Directory Entries** Name: Heywood Auto Tints Location: Quay st, Heywood, Lancashire, OL10 2JH Classification: Window Tinting **Status:** **Inactive** Positional Accuracy: Manually positioned within the geographical locality	A14SW (E)	488	-	386173 410279
173	**Contemporary Trade Directory Entries** Name: Spanners Garage Location: Quay Street, Heywood, Lancashire, OL10 2JH Classification: Garage Services **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (E)	488	-	386173 410279
173	**Contemporary Trade Directory Entries** Name: Clough Road M.O.T Centre (Heywood) Quay Street Location: Quay St, Heywood, Lancashire, OL10 2JH Classification: Tyre Dealers **Status:** **Inactive** Positional Accuracy: Manually positioned within the geographical locality	A14SW (E)	488	-	386173 410279
174	**Contemporary Trade Directory Entries** Name: Mcm2 Cladding Systems Ltd Location: Unit 11, Roeacre Business Park, Bradshaw Street, Heywood, OL10 1PN Classification: Manufacturers **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	490	-	386190 410578
175	**Contemporary Trade Directory Entries** Name: L & R Polishing Location: 19, Bamford Road, Heywood, Lancashire, OL10 4TA Classification: Spraying - Paint & Coatings **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (NW)	491	-	385456 410899
175	**Contemporary Trade Directory Entries** Name: Mike Goldrick Window Blinds Ltd Location: The Services, Dawson Street, Heywood, Lancashire, OL10 4ND Classification: Blinds, Awnings & Canopies **Status:** **Active** Positional Accuracy: Automatically positioned to the address	A18SW (NW)	493	-	385445 410895
176	**Contemporary Trade Directory Entries** Name: Adams Furnishers Location: 53, Market Street, Heywood, Lancashire, OL10 1HZ Classification: Bed & Mattress Manufacturers **Status:** **Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	505	-	385322 410809

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
176	**Contemporary Trade Directory Entries** Name: Rothwells Super Travel Location: 60, Market Street, Heywood, OL10 4LY Classification: Bus & Coach Operators & Stations **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	529	-	385314 410837
177	**Contemporary Trade Directory Entries** Name: Lomax Reclaimations Location: Unit 2, Miller Street, Heywood, Lancashire, OL10 4HJ Classification: Builders' Merchants **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (N)	527	-	385871 410972
177	**Contemporary Trade Directory Entries** Name: Scaffold Hire In Salford Location: Unit 2 Miller Street, Heywood, Lancashire, OL10 4HX Classification: Scaffolding & Work Platforms **Status: Active** Positional Accuracy: Manually positioned to the address or location	A18SE (N)	527	-	385871 410972
178	**Contemporary Trade Directory Entries** Name: G T Recovery Location: Hilda st, Heywood, Lancashire, OL10 4JX Classification: Car Breakdown & Recovery Services **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A18SW (N)	532	-	385648 411002
178	**Contemporary Trade Directory Entries** Name: Per-Fit Windows Ltd Location: Unit 1, Langton Street, Heywood, OL10 4LH Classification: Window Frame Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	541	-	385663 411012
178	**Contemporary Trade Directory Entries** Name: Park Garage Location: Langton Street, Heywood, OL10 4LH Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A18SW (N)	553	-	385688 411025
179	**Contemporary Trade Directory Entries** Name: Chorlton Express Transport Location: Unit 8, Roeacre Business Park, Bradshaw Street, Heywood, OL10 1PN Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	548	-	386238 410623
180	**Contemporary Trade Directory Entries** Name: J & D Cleaning Service Location: 14, Halton Flats, Heywood, Lancashire, OL10 1EY Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	564	-	385231 410790
181	**Contemporary Trade Directory Entries** Name: Gibson Hire Location: Twin Mill, Gregge Street, Heywood, OL10 2ED Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (SE)	568	-	386225 410185
181	**Contemporary Trade Directory Entries** Name: Jack Gibson & Sons Location: Twin Mill, Gregge Street, Heywood, Lancashire, OL10 2ED Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (SE)	568	-	386225 410185
181	**Contemporary Trade Directory Entries** Name: Collins Bros Heywood Ltd Location: Twin Mill, Gregge Street, Heywood, Lancashire, OL10 2ED Classification: Textile Manufacturing **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (SE)	577	-	386229 410172
182	**Contemporary Trade Directory Entries** Name: Vegetable Oil Management Ltd Location: Roeacre House, Fir Street, Heywood, Lancashire, OL10 1NW Classification: Oils - Edible **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	574	-	386286 410493

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
183	**Contemporary Trade Directory Entries** Name: Morrisons Petrol Station Location: Dawson Street, Heywood, Lancashire, OL10 4PN Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A18SW (NW)	591	-	385451 411009
183	**Contemporary Trade Directory Entries** Name: Morrisons Petrol Station Location: Dawson Street, Heywood, Lancashire, OL10 4PN Classification: Petrol Filling Stations **Status: Active** Positional Accuracy: Manually positioned to the address or location	A18SW (NW)	592	-	385449 411009
184	**Contemporary Trade Directory Entries** Name: Per Fit Commercial Location: 1, Langton Street, Heywood, Lancashire, OL10 4JU Classification: Window Frame Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SW (N)	591	-	385527 411038
185	**Contemporary Trade Directory Entries** Name: Kwik Fit - Heywood Location: Bradshaw Street, Heywood, Lancashire, OL10 1PN Classification: Tyre Dealers **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NW (NE)	593	-	386250 410719
186	**Contemporary Trade Directory Entries** Name: Frank Blakeley & Sons Ltd Location: POOR PEG MILL, BUCKLEY STREET, HEYWOOD, OL10 4HZ Classification: Engineering Materials **Status: Active** Positional Accuracy: Automatically positioned to the address	A18SE (NE)	602	-	385972 411013
186	**Contemporary Trade Directory Entries** Name: Frank Blakeley & Son Ltd Location: Poor Peg Mill, Buckley Street, Heywood, Lancashire, OL10 4HZ Classification: Engineering Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (NE)	602	-	385972 411013
187	**Contemporary Trade Directory Entries** Name: Gould Design & Manufacture Ltd Location: Sefton Street, Heywood, Lancashire, OL10 2JF Classification: Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (E)	604	-	386297 410303
187	**Contemporary Trade Directory Entries** Name: Barrett'S Haulage Ltd Location: Sefton Street, Heywood, Lancashire, OL10 2JF Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (E)	604	-	386297 410303
187	**Contemporary Trade Directory Entries** Name: Fastserv Location: The Old Goods Yard, Sefton Street, Heywood, Lancashire, OL10 2JF Classification: Road Haulage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (E)	604	-	386297 410303
187	**Contemporary Trade Directory Entries** Name: Sharp Freight Int Location: Sefton Street, Heywood, Lancashire, OL10 2JF Classification: Freight Forwarders **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SW (E)	604	-	386297 410303
188	**Contemporary Trade Directory Entries** Name: Koco Cleaning Services Location: 11, Cleves Court, Heywood, Lancashire, OL10 3AR Classification: Commercial Cleaning Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A12SE (W)	608	-	385085 410331
189	**Contemporary Trade Directory Entries** Name: Crawford'S Electrical Appliances Location: 22-26, Promenade Street, Heywood, Lancashire, OL10 4EH Classification: Washing Machines - Servicing & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	614	-	386183 410865

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
190	**Contemporary Trade Directory Entries** Name: Technical Service Consultants Ltd Location: Microbiology House, Fir Street, Heywood, Lancashire, OL10 1NW Classification: Medical Equipment Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	616	-	386307 410629
190	**Contemporary Trade Directory Entries** Name: Orbotech (Uk) Ltd Location: Unit 2, The Quadrant, Green Lane, Heywood, Lancashire, OL10 1NG Classification: Printed Circuit Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	649	-	386340 410635
191	**Contemporary Trade Directory Entries** Name: Morrisons Petrol Station Location: Dawson Street, Heywood, Lancashire, OL10 4PN Classification: Petrol Filling Stations **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A17SE (NW)	621	-	385272 410924
192	**Contemporary Trade Directory Entries** Name: H B H Forgings Ltd Location: Unit 25, Southgate Industrial Estate, Cross Street, Heywood, Lancashire, OL10 1PW Classification: Blacksmiths & Forgemasters **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (E)	621	-	386327 410385
193	**Contemporary Trade Directory Entries** Name: Armourclad Coatings Location: 70, Manchester Road, Heywood, Lancashire, OL10 2AW Classification: Spraying - Paint & Coatings **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	623	-	386168 409993
194	**Contemporary Trade Directory Entries** Name: Biwater Machinery Location: Gregge Street, Heywood, Lancashire, OL10 2DX Classification: Cable & Wire Equipment Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (SE)	632	-	386280 410152
195	**Contemporary Trade Directory Entries** Name: Tyrone Brick Ltd Location: Sefton Street, Heywood, Lancashire, OL10 2JZ Classification: Brick Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A14SW (E)	643	-	386321 410233
196	**Contemporary Trade Directory Entries** Name: Digby & Son Location: DIGBY AND SON AUTO ELECTRICS, LECTRA WORKS, GORTON STREET, HEYWOOD, OL10 4ED Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	646	-	386240 410843
197	**Contemporary Trade Directory Entries** Name: Mirlo 2000 Dry Cleaners Location: Dawson Street, Heywood, Lancashire, OL10 4PU Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	650	-	385284 410975
198	**Contemporary Trade Directory Entries** Name: M G B Springs Location: Unit 4, Broadfield Industrial Estate, Seymour Street, Heywood, Lancashire, OL10 3AJ Classification: Sheet Metal Work **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SE (W)	653	-	385036 410368
198	**Contemporary Trade Directory Entries** Name: Jrb Cable Installations Ltd Location: Unit 2, Broadfield Industrial Estate, Seymour Street, Heywood, Lancashire, OL10 3AJ Classification: Cable & Wire Equipment Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SE (W)	653	-	385036 410368

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
198	**Contemporary Trade Directory Entries** Name: John Bradley Ltd Location: Unit 5, Broadfield Industrial Estate, Seymour Street, Heywood, Lancashire, OL10 3AJ Classification: Engineers - General **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SE (W)	653	-	385036 410368
198	**Contemporary Trade Directory Entries** Name: G P L Fabrication Services Ltd Location: Unit 5, Broadfield Industrial Estate, Seymour Street, Heywood, OL10 3AJ Classification: Machine Shops **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SW (W)	680	-	385009 410365
199	**Contemporary Trade Directory Entries** Name: Balmoral Offshore Engineering Location: 2 The Quadrant, Green Lane, Heywood, OL10 1NG Classification: Marine Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14NW (E)	657	-	386327 410700
200	**Contemporary Trade Directory Entries** Name: Riley & Son Electromec Ltd Location: Premier Locomotive Works,Sefton Street, Heywood, Lancashire, OL10 2JF Classification: Mechanical Engineers **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A14SW (E)	664	-	386327 410183
200	**Contemporary Trade Directory Entries** Name: Riley & Son E Ltd Location: PREMIER LOCOMOTIVE WORKS, SEFTON STREET, HEYWOOD, OL10 2JF Classification: Engineers - General **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SW (SE)	699	-	386351 410146
200	**Contemporary Trade Directory Entries** Name: Inspired Lighting Location: Sefton Street, Heywood, OL10 2JF Classification: Lighting Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SW (SE)	699	-	386351 410146
201	**Contemporary Trade Directory Entries** Name: Inter Count Truck & Van Location: Unit 7, Broadfield Distribution Park, Pilsworth Road, Heywood, OL10 2TA Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	668	-	385108 410078
202	**Contemporary Trade Directory Entries** Name: Ian Barker & Co Location: Unit 20-21, Southgate Industrial Estate, Cross Street, Heywood, OL10 1PW Classification: Meat - Wholesale **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SE (E)	672	-	386379 410386
203	**Contemporary Trade Directory Entries** Name: A & B Discount Fireplaces Location: 48, Bridge Street, Heywood, Lancashire, OL10 1JF Classification: Fireplaces & Mantelpieces **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	674	-	385140 410851
203	**Contemporary Trade Directory Entries** Name: M L Location: 6, Shepherd Street, Heywood, Lancashire, OL10 1JW Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	687	-	385134 410865
203	**Contemporary Trade Directory Entries** Name: J T Joinery Location: 58, Bridge Street, Heywood, OL10 1JF Classification: Door Manufacturers - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	689	-	385117 410844

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
203	**Contemporary Trade Directory Entries** Name: K 2 Electrical Location: 54, Bridge Street, Heywood, Lancashire, OL10 1JF Classification: Electrical Goods Sales, Manufacturers & Wholesalers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	693	-	385120 410855
204	**Contemporary Trade Directory Entries** Name: Clean Right Ultra Dry Location: 2, Salisbury Avenue, Heywood, Lancashire, OL10 2NZ Classification: Carpet, Curtain & Upholstery Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	682	-	385590 409736
204	**Contemporary Trade Directory Entries** Name: Clean Right Location: 2, Salisbury Avenue, Heywood, Lancashire, OL10 2NZ Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SW (S)	682	-	385590 409736
205	**Contemporary Trade Directory Entries** Name: H Tonge Location: 45, Bridge Street, Heywood, Lancashire, OL10 1JF Classification: Dry Cleaners **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	683	-	385103 410809
206	**Contemporary Trade Directory Entries** Name: Brassingtons Ltd Location: 12, Ann Street, Heywood, Lancashire, OL10 4JG Classification: Commercial Cleaning Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18SE (N)	684	-	385970 411103
207	**Contemporary Trade Directory Entries** Name: Harris Hart & Co Ltd Location: Gregge Street Works, Gregge Street, HEYWOOD, Lancashire, OL10 2EJ Classification: Chemicals & Allied Products **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	686	-	386297 410066
208	**Contemporary Trade Directory Entries** Name: Tom Lyons Sales Engineering Ltd Location: 30, Links Road, Heywood, Lancashire, OL10 2BY Classification: Engineers - General **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SE (S)	691	-	385852 409733
209	**Contemporary Trade Directory Entries** Name: Trench Industrial Services Ltd Location: 16, Brayshaw Close, HEYWOOD, Lancashire, OL10 3EE Classification: Plant & Machinery Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SW (W)	709	-	385010 410202
210	**Contemporary Trade Directory Entries** Name: Futuristics Location: Sherwood House, Mutual Mills, Aspinall Street, Heywood, Lancashire, OL10 4HW Classification: Distribution Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	710	-	386124 411048
211	**Contemporary Trade Directory Entries** Name: Arnold'S Location: Unit B, Gregge Street, Heywood, Lancashire, OL10 2ED Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	716	-	386296 410008
211	**Contemporary Trade Directory Entries** Name: R E M Services Location: Unit 1, Gregge Street Works, Gregge Street, Heywood, OL10 2EJ Classification: Electrical Engineers **Status: Active** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	740	-	386335 410024

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
211	**Contemporary Trade Directory Entries** Name: R E M Services Location: Unit 1, Gregge Street Works, Gregge Street, Heywood, Lancashire, OL10 2ED Classification: Electrical Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	744	-	386338 410022
212	**Contemporary Trade Directory Entries** Name: Pressed 4 You Location: 10, Ashworth Street, Heywood, Lancashire, OL10 2AZ Classification: Ironing & Home Laundry Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A8SE (SE)	726	-	386004 409748
213	**Contemporary Trade Directory Entries** Name: Diana Cowpe Ltd Location: Unit 2, Gregge Street Works, Gregge Street, Heywood, OL10 2ED Classification: Textile Manufacturing **Status: Active** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	729	-	386350 410073
214	**Contemporary Trade Directory Entries** Name: A G M Services Ltd Location: Southgate Industrial Estate,Cross Street, Heywood, Lancashire, OL10 1PW Classification: Filter Manufacturers & Suppliers **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SE (E)	741	-	386441 410338
214	**Contemporary Trade Directory Entries** Name: Junair Spraybooths Ltd Location: Unit 10-12, Southgate Industrial Estate, Cross Street, Heywood, OL10 1PW Classification: Garage Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	741	-	386441 410338
214	**Contemporary Trade Directory Entries** Name: Junair Spraybooths Ltd Location: Unit 10-12, Southgate Industrial Estate, Cross Street, Heywood, OL10 1PW Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	741	-	386441 410338
214	**Contemporary Trade Directory Entries** Name: Junair Spraybooths Ltd Location: Unit 10-12, Southgate Industrial Estate, Cross Street, Heywood, OL10 1PW Classification: Paint Spraying Equipment & Accessories **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	741	-	386441 410338
214	**Contemporary Trade Directory Entries** Name: B P M Engineering Services Ltd Location: Unit 7, Southgate Industrial Estate, Green Lane, Heywood, Lancashire, OL10 1ND Classification: Plastics - Machinery & Equipment Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	742	-	386438 410312
214	**Contemporary Trade Directory Entries** Name: Partners In Packaging Machine Systems Ltd Location: Unit 7, Southgate Industrial Estate, Green Lane, Heywood, Lancashire, OL10 1ND Classification: Packaging & Wrapping Equipment & Supplies **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SE (E)	742	-	386438 410312
214	**Contemporary Trade Directory Entries** Name: Markpoint (Uk) Ltd Location: Unit 6, Southgate Industrial Estate, Green Lane, Heywood, Lancashire, OL10 1ND Classification: Packaging & Wrapping Equipment & Supplies **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	758	-	386454 410307
214	**Contemporary Trade Directory Entries** Name: Printworks N M D Location: Unit 6, Southgate Industrial Estate, Green Lane, Heywood, OL10 1ND Classification: Printers **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SE (E)	758	-	386453 410303

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
215	**Contemporary Trade Directory Entries** Name: Scrap Tyre Solutions Location: Unit 4, Britannia Mill Industrial Estate, George Street, Heywood, Lancashire, OL10 4PW Classification: Recycling Centres **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	759	-	385022 410817
215	**Contemporary Trade Directory Entries** Name: C & B Tyres Location: Unit 4, Britannia Mill Industrial Estate, George Street, Heywood, Lancashire, OL10 4PW Classification: Tyre Dealers **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	759	-	385022 410817
215	**Contemporary Trade Directory Entries** Name: P W Motors Location: Unit 1-3, Britannia Mill Industrial Estate, George Street, Heywood, OL10 4PW Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	772	-	385005 410813
215	**Contemporary Trade Directory Entries** Name: A & B Fireplaces Location: Unit 1, Britannia Mill Industrial Estate, George Street, Heywood, Lancashire, OL10 4PW Classification: Fireplaces & Mantelpieces **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	772	-	385005 410813
215	**Contemporary Trade Directory Entries** Name: Elite Autocare Location: Unit 1, Britannia Mill Industrial Estate, George Street, Heywood, Lancashire, OL10 4PW Classification: Garage Services **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A17SW (NW)	772	-	385005 410813
215	**Contemporary Trade Directory Entries** Name: Premier Fruits Location: Unit 6/8, Britannia Mill Industrial Estate, George Street, Heywood, Lancashire, OL10 4PW Classification: Food Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	781	-	385015 410852
216	**Contemporary Trade Directory Entries** Name: J20 Mobile Pressure Cleaning Location: 11, Rivershill Drive, Heywood, Lancashire, OL10 3BJ Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SW (W)	760	-	384945 410251
217	**Contemporary Trade Directory Entries** Name: Travis Perkins Heywood Location: Brookbank Works, Green Lane, Heywood, OL10 1NG Classification: Builders' Merchants **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NE (E)	763	-	386453 410651
218	**Contemporary Trade Directory Entries** Name: Siddall Street Garage Location: Siddall Street, Heywood, Lancashire, OL10 2AS Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	764	-	386160 409796
219	**Contemporary Trade Directory Entries** Name: Antalis Ltd Location: 5, Broadfield Distribution Centre, Heywood, OL10 2TU Classification: Packaging Materials Manufacturers & Suppliers **Status: Active** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	766	-	385116 409900
220	**Contemporary Trade Directory Entries** Name: A C S Lining Ltd Location: 2, Middleton Road, Heywood, Lancashire, OL10 2HT Classification: Ventilators & Ventilation Systems **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	775	-	386249 409860

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
221	**Contemporary Trade Directory Entries** Name: Adelaide Engineering Location: Aspinall Street, Heywood, Lancashire, OL10 4HR Classification: Engineers - General **Status: Active** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	782	-	386151 411117
221	**Contemporary Trade Directory Entries** Name: Larkrose Location: Aspinall Street, Heywood, Lancashire, OL10 4HP Classification: Textile Manufacturing **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	782	-	386151 411117
221	**Contemporary Trade Directory Entries** Name: Jeno Floral Location: Aspinall Street, Heywood, Lancashire, OL10 4HP Classification: Distribution Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	782	-	386151 411117
221	**Contemporary Trade Directory Entries** Name: Adelaide Engineering Co Ltd Location: Aspinall Street, Heywood, OL10 4HR Classification: Engineers - General **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19SW (NE)	791	-	386191 411099
222	**Contemporary Trade Directory Entries** Name: Janian Architectural Services Ltd Location: 6, PILSWORTH ROAD, HEYWOOD, OL10 3EZ Classification: Ornamental Metalwork **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	792	-	384938 410698
223	**Contemporary Trade Directory Entries** Name: Armstrong Technical Services (Nw) Ltd Location: 1, Woodfield Terrace, Heywood, Lancashire, OL10 4JE Classification: Machinery - Industrial & Commercial **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A19NW (NE)	795	-	386089 411170
224	**Contemporary Trade Directory Entries** Name: T Harrison Printers Engineers Location: George Street, Heywood, Lancashire, OL10 4PW Classification: Printing Engineering Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	796	-	385048 410932
225	**Contemporary Trade Directory Entries** Name: Merrion Packaging Ltd Location: Junction 19 Industrial Park, Green Lane, Heywood, Lancashire, OL10 1NB Classification: Packaging & Wrapping Equipment & Supplies **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A14SE (E)	809	-	386506 410311
225	**Contemporary Trade Directory Entries** Name: Master Auto Glass Ltd Location: Unit 7, Junction 19 Industrial Park, Green Lane, Heywood, OL10 1NB Classification: Glass Products - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	825	-	386521 410303
225	**Contemporary Trade Directory Entries** Name: Elddis Transport Location: Junction 19 Industrial Park, Green Lane, Heywood, OL10 1NB Classification: Road Haulage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SE (E)	825	-	386521 410303
226	**Contemporary Trade Directory Entries** Name: R & B Switchgear Services Ltd Location: Switchgear House The Courtyard,Green Lane, Heywood, Lancashire, OL10 2EX Classification: Marine Engineering Equipment Manufacturers **Status: Active** Positional Accuracy: Manually positioned within the geographical locality	A9NE (SE)	814	-	386404 409995

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
226	**Contemporary Trade Directory Entries** Name: Viewsafe Location: The Courtyard,Green Lane, Heywood, Lancashire, OL10 2EX Classification: Electrical Engineers **Status: Inactive** Positional Accuracy: Manually positioned to the address or location	A9NE (SE)	815	-	386405 409995
226	**Contemporary Trade Directory Entries** Name: Oozla Leisure Wear Ltd Location: The Courtyard,Green La, Heywood, Lancashire, OL10 2EX Classification: Clothing & Fabrics - Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	819	-	386410 409995
227	**Contemporary Trade Directory Entries** Name: Bulldogs Fireworks & Displays Location: Unit 2, Southgate Industrial Estate, Green Lane, Heywood, OL10 1ND Classification: Firework Stockists **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SE (E)	815	-	386504 410258
228	**Contemporary Trade Directory Entries** Name: Howard Basford Ltd Location: Green La, Heywood, Lancashire, OL10 2EP Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A9NE (SE)	827	-	386466 410090
228	**Contemporary Trade Directory Entries** Name: Howard Basford Ltd Location: Green La, Heywood, Lancashire, OL10 2EP Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A9NE (SE)	827	-	386466 410090
228	**Contemporary Trade Directory Entries** Name: Pentagon Location: Green Lane, Heywood, Lancashire, OL10 2EP Classification: Car Body Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	849	-	386480 410067
228	**Contemporary Trade Directory Entries** Name: Korina Roba Ltd Ta Phoenix Fires Location: Phoenix Brewery, Green Lane, Heywood, Lancashire, OL10 2EP Classification: Fireplaces & Mantelpieces **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	871	-	386508 410076
228	**Contemporary Trade Directory Entries** Name: Phoenix Fires & Fireplaces Ltd Location: PHOENIX BREWERY, GREEN LANE, HEYWOOD, OL10 2EP Classification: Fireplaces & Mantelpieces **Status: Active** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	871	-	386508 410076
228	**Contemporary Trade Directory Entries** Name: Hogdoc Motorcycles Location: Green Lane, Heywood, OL10 2EP Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	871	-	386508 410076
229	**Contemporary Trade Directory Entries** Name: Mrs G'S Ironing & Alterations Service Location: 57, Omrod Road, HEYWOOD, Lancashire, OL10 1FQ Classification: Ironing & Home Laundry Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A14NE (E)	833	-	386524 410657
230	**Contemporary Trade Directory Entries** Name: Keith Wood Motors Location: Unit 6-8, Britannia Mill Industrial Estate, George Street, Heywood, Lancashire, OL10 4PW Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A17SE (NW)	840	-	385029 410982

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
231	**Contemporary Trade Directory Entries** Name: Britannia Scrap Metals Ltd Location: Scrap Yard, Britannia Street, Heywood, Lancashire, OL10 4PL Classification: Scrap Metal Merchants **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (NW)	851	-	384951 410880
232	**Contemporary Trade Directory Entries** Name: Carrokeel Seafoods Ltd Location: Junction 19 Ind Pk,Green La, Heywood, Lancashire, OL10 1NB Classification: Frozen Food Processors & Distributors **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A14SE (E)	853	-	386531 410206
233	**Contemporary Trade Directory Entries** Name: J C Location: Higher Broadfield Farm, Pilsworth Road, Heywood, OL10 2TA Classification: Garage Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A7NE (SW)	854	-	385033 409862
234	**Contemporary Trade Directory Entries** Name: J Brooks Roofing Location: 19, Agincourt Street, Heywood, OL10 3EY Classification: Woodburning Stoves **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	856	-	384865 410673
235	**Contemporary Trade Directory Entries** Name: Absolutley Steamin Location: 19, Middleton Road, Heywood, Lancashire, OL10 2HU Classification: Ironing & Home Laundry Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	868	-	386308 409787
235	**Contemporary Trade Directory Entries** Name: Westwood Horse Boxes Location: 3, Charles Street, Heywood, Lancashire, OL10 2HR Classification: Horse Boxes & Transporting **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NW (SE)	887	-	386348 409800
236	**Contemporary Trade Directory Entries** Name: Pillar Wedge Ltd Location: Green Lane, Heywood, Lancashire, OL10 2DY Classification: Corrosion Prevention & Control **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A14SE (E)	871	-	386570 410325
237	**Contemporary Trade Directory Entries** Name: Tamicare Location: Unit 4 Broadfield Business Park, Heywood, Lancashire, OL10 2TA Classification: Printers Textile **Status: Inactive** Positional Accuracy: Manually positioned within the geographical locality	A7NW (SW)	893	-	384882 410025
238	**Contemporary Trade Directory Entries** Name: Syntema (North West) Ltd Location: Unit 3, Lemon Park Industrial Estate, Green Lane, Heywood, Lancashire, OL10 2EW Classification: Coating Specialists **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	907	-	386498 409974
238	**Contemporary Trade Directory Entries** Name: Avanti Blue Ltd Location: Unit 1-3, Lemon Park Industrial Estate, Green Lane, Heywood, Lancashire, OL10 2EW Classification: Plastics - Extrusion **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	923	-	386525 409989
239	**Contemporary Trade Directory Entries** Name: Coupe & Cabriolet Location: 122, Manchester Road, HEYWOOD, Lancashire, OL10 2NN Classification: Classic Car Specialists **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A8SE (S)	925	-	385968 409522

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
240	**Contemporary Trade Directory Entries** Name: Fairfield Yarns Location: Co-operative Buildings, 131, Rochdale Road East, Heywood, Lancashire, OL10 1QU Classification: Knitting Yarn Manufacturers & Wholesalers **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	929	-	386502 410959
241	**Contemporary Trade Directory Entries** Name: Phoenix Fires Ltd Location: Green Lane, Heywood, Lancashire, OL10 2EP Classification: Fireplaces & Mantelpieces **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	929	-	386565 410062
242	**Contemporary Trade Directory Entries** Name: Expert Logistics Location: 908, Pilsworth Road, Heywood, Lancashire, OL10 2TA Classification: Distribution Services **Status: Inactive** Positional Accuracy: Automatically positioned in the proximity of the address	A7NW (SW)	930	-	384918 409889
243	**Contemporary Trade Directory Entries** Name: Washed & Vac Centre Location: 12, Broadfield Street, Heywood, Lancashire, OL10 3DT Classification: Washing Machines - Servicing & Repairs **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SW (W)	937	-	384775 410198
243	**Contemporary Trade Directory Entries** Name: Kiernan Location: 18, Broadfield Street, Heywood, Lancashire, OL10 3DT Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12SW (W)	952	-	384757 410211
244	**Contemporary Trade Directory Entries** Name: Chris Hayter Transport Ltd Location: UNIT 1, BROADFIELD DISTRIBUTION PARK, PILSWORTH ROAD, HEYWOOD, OL10 2TA Classification: Road Haulage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A7NW (SW)	939	-	384874 409942
245	**Contemporary Trade Directory Entries** Name: Proclean Heywood Location: 18, High Street, Heywood, OL10 3HJ Classification: Carpet, Curtain & Upholstery Cleaners **Status: Active** Positional Accuracy: Automatically positioned to the address	A12NW (W)	940	-	384786 410703
246	**Contemporary Trade Directory Entries** Name: T D G Location: Pilsworth Rd, Heywood, Lancashire, OL10 2TA Classification: Distribution Services **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A7NW (SW)	951	-	384816 410030
247	**Contemporary Trade Directory Entries** Name: Trust Distribution Location: Phoenix Park Industrial Estate, Park Street, Heywood, Lancashire, OL10 2AB Classification: Telecommunications Equipment & Systems **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	957	-	386495 409871
248	**Contemporary Trade Directory Entries** Name: Heywood Ironing Services Location: 24a, Barley Hall Street, HEYWOOD, Lancashire, OL10 4DD Classification: Ironing & Home Laundry Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A19SE (NE)	970	-	386441 411110
249	**Contemporary Trade Directory Entries** Name: Recycling Solutions Ltd Location: Unit 104, Phoenix Park Industrial Estate, Phoenix Close, Heywood, OL10 2JG Classification: Waste Disposal Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SE (E)	973	-	386635 410132

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
250	**Contemporary Trade Directory Entries** Name: B J Motors Location: River Street, Heywood, OL10 4AB Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NW (N)	975	-	385555 411436
250	**Contemporary Trade Directory Entries** Name: Derbyshire Motors Ltd Location: River Street, Heywood, OL10 4AB Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NW (N)	982	-	385568 411446
250	**Contemporary Trade Directory Entries** Name: March Engineering Co Location: River Street, Heywood, Lancashire, OL10 4AB Classification: Engineers - General **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NW (N)	982	-	385568 411446
250	**Contemporary Trade Directory Entries** Name: Pad Printers Ltd Location: Park Works, River Street, Heywood, Lancashire, OL10 4AB Classification: Printers **Status: Active** Positional Accuracy: Automatically positioned to the address	A18NW (N)	982	-	385568 411446
250	**Contemporary Trade Directory Entries** Name: Property Protection Services Location: River Street Works, River Street, Heywood, Lancashire, OL10 4AB Classification: Roller Shutter Manufacturers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NW (N)	982	-	385568 411446
250	**Contemporary Trade Directory Entries** Name: Riverstreet Car Sales Ltd Location: River Street Works, River Street, Heywood, Lancashire, OL10 4AB Classification: Car Dealers - Used **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A18NW (N)	982	-	385568 411446
250	**Contemporary Trade Directory Entries** Name: Heywood Location: UNIT 2,THE WORKS,River St, Heywood, Lancashire, OL10 4AB Classification: Textile Manufacturing **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A23SW (N)	998	-	385541 411458
251	**Contemporary Trade Directory Entries** Name: Arlen Hygiene Location: Arlen Way, Heywood, Lancashire, OL10 4PY Classification: Cleaning Services - Domestic **Status: Inactive** Positional Accuracy: Manually positioned to the road within the address or location	A17SW (NW)	975	-	384830 410917
252	**Contemporary Trade Directory Entries** Name: Leesonia (Uk) Location: Unit 309, Phoenix Park Industrial Estate, Phoenix Close, Heywood, Lancashire, OL10 2JG Classification: Machinery - Industrial & Commercial **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	980	-	386592 409997
252	**Contemporary Trade Directory Entries** Name: Sound Solutions (Europe) Ltd Location: Unit 309, Phoenix Park Industrial Estate, Phoenix Close, Heywood, Lancashire, OL10 2JG Classification: Distribution Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	980	-	386592 409997
252	**Contemporary Trade Directory Entries** Name: Bamford Horse Boxes Ltd Location: Unit 309, Phoenix Park Industrial Estate, Phoenix Close, Heywood, Lancashire, OL10 2JG Classification: Horse Boxes & Transporting **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	980	-	386592 409997

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
252	**Contemporary Trade Directory Entries** Name: P I Technical Services Ltd Location: Unit 310, Phoenix Park Industrial Estate, Phoenix Close, Heywood, Lancashire, OL10 2JG Classification: Electrical Engineers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	997	-	386607 409988
252	**Contemporary Trade Directory Entries** Name: Baldwin Technical Services Ltd Location: Unit 310, Phoenix Park Industrial Estate, Phoenix Close, Heywood, Lancashire, OL10 2JG Classification: Electrical Engineers **Status: Active** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	997	-	386607 409988
253	**Contemporary Trade Directory Entries** Name: Phoenix Honda Specailist Location: Unit 207, Phoenix Park Industrial Estate, Phoenix Close, Heywood, OL10 2JG Classification: Garage Services **Status: Active** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	987	-	386624 410054
253	**Contemporary Trade Directory Entries** Name: Panel Plus Location: Unit 27, Phoenix Park Industrial Estate, Phoenix Close, HEYWOOD, Lancashire, OL10 2JG Classification: Door Manufacturers - Domestic **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	987	-	386624 410054
254	**Contemporary Trade Directory Entries** Name: Townhead Chrome Specialist Metal Finishing Location: Unit 506, Phoenix Park Industrial Estate, Phoenix Close, Heywood, Lancashire, OL10 2JG Classification: Metal Finishing Services **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A9NE (SE)	991	-	386552 409897
255	**Contemporary Trade Directory Entries** Name: Manchester Galvanising Location: Green Lane, Heywood, Lancashire, OL10 2DY Classification: Coating Specialists **Status: Active** Positional Accuracy: Automatically positioned to the address	A14SE (E)	997	-	386694 410299
256	**Contemporary Trade Directory Entries** Name: Hy-Speed Tyre Service Ltd Location: 44-48, Bury Street, Heywood, Lancashire, OL10 4QG Classification: Tyre Dealers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (W)	999	-	384751 410790
256	**Contemporary Trade Directory Entries** Name: Bury Street Tyres Location: 44-48, Bury Street, Heywood, Lancashire, OL10 4QG Classification: Tyre Repairs & Retreading **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A17SW (W)	999	-	384751 410790
257	**Fuel Station Entries** Name: Kempster Ford Location: Hardfield Street , , Heywood, Greater Manchester, OL10 1DG Brand: Obsolete Premises Type: Not Applicable **Status: Obsolete** Positional Accuracy: Located by supplier to within 100m	A13NE (NE)	144	-	385769 410602
258	**Fuel Station Entries** Name: Heywood Service Station Location: Manchester Street , , Heywood, Greater Manchester, OL10 1NL Brand: Unbranded Premises Type: Not Applicable **Status: Obsolete** Positional Accuracy: Automatically positioned to the address	A14NW (E)	373	-	386084 410443
259	**Fuel Station Entries** Name: Heywood Express Location: York Street Adelaide Street, , Heywood, Greater Manchester, OL10 4HQ Brand: ESSO Premises Type: Petrol Station **Status: Open** Positional Accuracy: Automatically positioned to the address	A13NE (NE)	410	-	385984 410776

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
260	**Fuel Station Entries** Name: Morrisons Heywood Location: Bamford Road , , Heywood, Greater Manchester, OL10 4PU Brand: MORRISONS Premises Type: Hypermarket **Status: Open** Positional Accuracy: Manually positioned to the address or location	A18SW (NW)	591	-	385448 411008
261	**Points of Interest - Commercial Services** Name: Kempsters of Heywood Location: Hardfield Garage 34, Manchester Street, Heywood, OL10 1DL Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13NE (NE)	213	7	385865 410617
261	**Points of Interest - Commercial Services** Name: Kempsters of Heywood Location: Hardfield Garage 34, Manchester Street, Heywood, OL10 1DL Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13NE (NE)	213	7	385865 410617
262	**Points of Interest - Commercial Services** Name: Lord's Motors Location: Russell Street, Heywood, OL10 1NY Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13NE (NE)	287	7	385981 410570
262	**Points of Interest - Commercial Services** Name: Lord's Motors Location: Russell Street, Heywood, OL10 1NY Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13NE (NE)	287	7	385981 410570
262	**Points of Interest - Commercial Services** Name: H & B Commercial Services Location: Marlor Works, Russell Street, Heywood, OL10 1NX Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13NE (NE)	326	7	386020 410575
262	**Points of Interest - Commercial Services** Name: Finer Detailing Ltd Location: 2 Russell Street, Heywood, OL10 1NX Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A14NW (E)	340	7	386047 410525
263	**Points of Interest - Commercial Services** Name: Formula One Autocentres Location: York Street, Heywood, OL10 4NS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13NE (N)	302	7	385780 410764
263	**Points of Interest - Commercial Services** Name: Equipe Tyre & Autocare Location: York Street, Heywood, OL10 4NR Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13NE (N)	304	7	385795 410762
264	**Points of Interest - Commercial Services** Name: A B Cylinder Head Services Location: Unit 1, Hall Street, Heywood, OL10 1DP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SE (SE)	319	7	386006 410310
264	**Points of Interest - Commercial Services** Name: M D Autos Location: Unit 3, Hall Street, Heywood, OL10 1DP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SE (SE)	319	7	386006 410310
264	**Points of Interest - Commercial Services** Name: Green Lane Auto Engineers Location: Green Lane Auto Engineers, Hall Street, Heywood, OL10 1DP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SE (E)	338	7	386033 410336

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
264	**Points of Interest - Commercial Services** Name: L & G Auto Electrics Location: Unit 2, Hall Street, Heywood, OL10 1DP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SW (E)	338	7	386038 410365
264	**Points of Interest - Commercial Services** Name: Greenlane Auto Engineers Location: Hall Street, Heywood, OL10 1DP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SE (E)	341	7	386036 410338
264	**Points of Interest - Commercial Services** Name: Hillside Bodyshop Location: Units 1 and 2, Cowburn Street, Heywood, OL10 2AJ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SW (E)	371	7	386060 410308
265	**Points of Interest - Commercial Services** Name: Hamilton Logistics Location: 1 Market Street, Heywood, OL10 1HT Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18SW (NW)	381	7	385487 410790
265	**Points of Interest - Commercial Services** Name: Hamilton Logistics Manchester Ltd Location: 1b Market Street, Heywood, OL10 1HT Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18SW (NW)	389	7	385486 410799
266	**Points of Interest - Commercial Services** Name: S R B Plant Hire Ltd Location: Srb Plant Hire Ltd the Transport Yard, Brierley Street, Heywood, OL10 1PH Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14NW (NE)	386	7	386072 410609
267	**Points of Interest - Commercial Services** Name: Birtwistle's MOT Service & Repair Centre Location: 135 York Street, Heywood, OL10 4NS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13NE (NE)	408	7	385991 410767
267	**Points of Interest - Commercial Services** Name: Birtwistles M O T Service & Repairs Location: 135 York Street, Heywood, OL10 4NS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13NE (NE)	408	7	385991 410767
268	**Points of Interest - Commercial Services** Name: Bradson Automotive Location: Russell Street, Heywood, OL10 1NX Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SW (E)	426	7	386137 410439
268	**Points of Interest - Commercial Services** Name: Precision Components & Equipment Ltd Location: Railway Street, Heywood, OL10 1LX Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A14SW (E)	446	7	386150 410383
268	**Points of Interest - Commercial Services** Name: Precision Components & Equipment Ltd Location: Railway Street, Heywood, OL10 1LX Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A14SW (E)	446	7	386150 410383
269	**Points of Interest - Commercial Services** Name: C & J Autos Location: Mission Street Garage Cj Autos, Mission Street, Heywood, OL10 1HY Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13NW (NW)	432	7	385375 410760

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
269	**Points of Interest - Commercial Services** Name: C & J Autos Location: Mission Street Garage, Mission Street, Heywood, OL10 1HY Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13NW (NW)	432	7	385375 410760
269	**Points of Interest - Commercial Services** Name: C & J Autos Location: Mission Street Garage, Mission Street, Heywood, OL10 1HY Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13NW (NW)	432	7	385375 410760
269	**Points of Interest - Commercial Services** Name: Albert Jagger Ltd Location: Foxhill Works, Fox Street, Heywood, OL10 1EA Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (NW)	437	7	385322 410696
269	**Points of Interest - Commercial Services** Name: Albert Jagger Ltd Location: Foxhill Works, Fox Street, Heywood, OL10 1EA Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (NW)	437	7	385322 410696
269	**Points of Interest - Commercial Services** Name: A M S Location: 6-8 Mission Street, Heywood, OL10 1HY Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18SW (NW)	456	7	385364 410784
270	**Points of Interest - Commercial Services** Name: I M O Car Wash Location: 1 Rochdale Road East, Heywood, OL10 4DX Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A14NW (NE)	474	7	386084 410764
270	**Points of Interest - Commercial Services** Name: Imo Car Wash Location: Rochdale Road East, Heywood, OL10 4DX Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A14NW (NE)	519	7	386151 410747
271	**Points of Interest - Commercial Services** Name: Complete Technology Ltd Location: Unit 2b Roeacre Business Park, Bradshaw Street, Heywood, OL10 1PN Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A14NW (E)	487	7	386178 410610
271	**Points of Interest - Commercial Services** Name: Kwik-Fit (GB) Limited Location: Unit 1 Roeacre Business Park, Bradshaw Street, Heywood, OL10 1PN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14NW (E)	487	7	386178 410610
271	**Points of Interest - Commercial Services** Name: Motorworld Location: Unit 4 Roeacre Business Park, Bradshaw Street, Heywood, OL10 1PN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14NW (E)	567	7	386250 410649
272	**Points of Interest - Commercial Services** Name: Bridge Auto Centre Location: 19 Bamford Road, Heywood, OL10 4TA Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18SW (NW)	491	7	385456 410899
273	**Points of Interest - Commercial Services** Name: Express Valet Valeting Location: 2 Gregge Street, Heywood, OL10 2ED Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A14SW (SE)	527	7	386193 410214

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
273	**Points of Interest - Commercial Services** Name: Jack Gibson & Sons Location: Twin Mill, Gregge Street, Heywood, OL10 2ED Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SW (SE)	568	7	386225 410185
273	**Points of Interest - Commercial Services** Name: Gibson Hire Location: Twin Mill, Gregge Street, Heywood, OL10 2ED Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SW (SE)	568	7	386224 410184
274	**Points of Interest - Commercial Services** Name: Excel Shipping Location: 64-66 Market Street, Heywood, OL10 4LY Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A17SE (NW)	541	7	385302 410840
275	**Points of Interest - Commercial Services** Name: Park Garage Location: Langton Street, Heywood, OL10 4LH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18SW (N)	553	7	385688 411025
275	**Points of Interest - Commercial Services** Name: Park Garage Location: Langton Street, Heywood, OL10 4LH Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18SW (N)	553	7	385688 411025
276	**Points of Interest - Commercial Services** Name: Morrisons Heywood Location: Bamford Road, Heywood, OL10 4NR Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A18SW (NW)	591	7	385448 411008
276	**Points of Interest - Commercial Services** Name: Car Wash Location: Bamford Road, Heywood, Lancashire, OL10 4NR Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A18SW (NW)	591	7	385448 411008
276	**Points of Interest - Commercial Services** Name: Morrisons Car Wash Location: Dawson Street, Heywood, OL10 4PN Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A18SW (NW)	592	7	385449 411009
277	**Points of Interest - Commercial Services** Name: F M S Location: 64 Aspinall Street, Heywood, OL10 4HN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SW (NE)	598	7	386077 410944
278	**Points of Interest - Commercial Services** Name: Barrett's Haulage Ltd Location: Sefton Street, Heywood, OL10 2JF Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14SW (E)	604	7	386297 410303
278	**Points of Interest - Commercial Services** Name: Fastserv Location: The Old Goods Yard, Sefton Street, Heywood, OL10 2JF Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14SW (E)	604	7	386297 410303
278	**Points of Interest - Commercial Services** Name: Teknion Location: Unit 24 Southgate Industrial Estate, Cross Street, Heywood, OL10 1PW Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14SW (E)	621	7	386327 410385

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
279	**Points of Interest - Commercial Services** Name: Digby & Son Location: 1 Gorton Street, Heywood, OL10 4EA Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SW (NE)	627	7	386225 410831
279	**Points of Interest - Commercial Services** Name: Digby & Son Location: Digby and Son Auto Electrics Lectra Works, Gorton Street, Heywood, OL10 4ED Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A19SW (NE)	645	7	386239 410842
280	**Points of Interest - Commercial Services** Name: M G B Springs Location: Unit 4 Broadfield Industrial Estate, Seymour Street, Heywood, OL10 3AJ Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A12SE (W)	653	7	385036 410368
280	**Points of Interest - Commercial Services** Name: M G B Springs Location: Unit 4 Broadfield Industrial Estate, Seymour Street, Heywood, OL10 3AJ Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A12SE (W)	653	7	385036 410368
280	**Points of Interest - Commercial Services** Name: Airflow UK Ltd Location: Unit 5 Broadfield Industrial Estate, Seymour Street, Heywood, OL10 3AJ Category: Construction Services Class Code: Metalworkers Including Blacksmiths Positional Accuracy: Positioned to address or location	A12SW (W)	680	7	385009 410365
281	**Points of Interest - Commercial Services** Name: Inter Count Truck & Van Location: Unit 7 Broadfield Distribution Park, Pilsworth Road, Heywood, OL10 2TA Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NE (SW)	668	7	385108 410078
281	**Points of Interest - Commercial Services** Name: Expert Logistics Location: Broadfield Centre, Pilsworth Road, Heywood, OL10 2TA Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7NE (SW)	676	7	385103 410071
282	**Points of Interest - Commercial Services** Name: M L Motors Location: Shepherd Street, Heywood, OL10 1JW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SE (NW)	676	7	385151 410870
282	**Points of Interest - Commercial Services** Name: M L Motors Location: 6 Shepherd Street, Heywood, OL10 1JW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SE (NW)	687	7	385134 410865
283	**Points of Interest - Commercial Services** Name: W Pickup Ltd Location: 19 Green Lane, Heywood, OL10 1NQ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14NW (NE)	692	7	386335 410770
283	**Points of Interest - Commercial Services** Name: J D Components Location: 19 Green Lane, Heywood, OL10 1NQ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14NW (NE)	692	7	386335 410770
284	**Points of Interest - Commercial Services** Name: Coolfreight Ltd Location: 11 Brayshaw Close, Heywood, OL10 3EE Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A12SE (W)	693	7	385036 410174

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
285	**Points of Interest - Commercial Services** Name: Joe Sharp Freight Location: Sefton Street, Heywood, OL10 2JF Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14SW (SE)	699	7	386350 410146
286	**Points of Interest - Commercial Services** Name: Arnold's Location: Unit B, Gregge Street, Heywood, OL10 2ED Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9NW (SE)	716	7	386296 410007
287	**Points of Interest - Commercial Services** Name: Failsworth Haulage Ltd Location: 5 Pilsworth Road, Heywood, OL10 3EZ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A12NW (W)	724	7	384988 410615
288	**Points of Interest - Commercial Services** Name: Hogdoc Location: Unit 3 Britannia Mill Industrial Estate, George Street, Heywood, OL10 4PW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SW (NW)	763	7	385016 410816
288	**Points of Interest - Commercial Services** Name: P W Motors Location: Unit 1-3 Britannia Mill Industrial Estate, George Street, Heywood, OL10 4PW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SW (NW)	772	7	385005 410813
288	**Points of Interest - Commercial Services** Name: C & B Autos Location: Unit 1 Britannia Mill Industrial Estate, George Street, Heywood, OL10 4PW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SW (NW)	772	7	385005 410813
288	**Points of Interest - Commercial Services** Name: C & B Autos Location: Unit 1 Britannia Mill Industrial Estate, George Street, Heywood, OL10 4PW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SW (NW)	772	7	385005 410813
288	**Points of Interest - Commercial Services** Name: Elite Autocare Heywood Location: Unit 1-3 Britannia Mill Industrial Estate, George Street, Heywood, OL10 4PW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SW (NW)	772	7	385005 410813
289	**Points of Interest - Commercial Services** Name: Siddall Street Garage Location: Siddall Street, Heywood, OL10 2AS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9NW (SE)	764	7	386160 409796
289	**Points of Interest - Commercial Services** Name: Siddall Street Garage Location: Siddall Street, Heywood, OL10 2AS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9NW (SE)	764	7	386159 409795
290	**Points of Interest - Commercial Services** Name: Keith Wood Motors Location: Units 6 to 8 Britannia Mill Industrial Estate, George Street, Heywood, OL10 4PW Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SW (NW)	782	7	385014 410852
290	**Points of Interest - Commercial Services** Name: Scrap Yard Location: Not Supplied Category: Recycling Services Class Code: Scrap Metal Merchants Positional Accuracy: Positioned to an adjacent address or location	A17SW (NW)	859	7	384947 410890

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
291	**Points of Interest - Commercial Services** Name: O P S Environmental Services Ltd Location: Phoenix House, Green Lane, Heywood, OL10 2EP Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A9NE (SE)	842	7	386467 410056
291	**Points of Interest - Commercial Services** Name: Pentagon Location: Green Lane, Heywood, OL10 2EP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9NE (SE)	849	7	386480 410067
291	**Points of Interest - Commercial Services** Name: Pentagon Location: Green Lane, Heywood, OL10 2EP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9NE (SE)	849	7	386480 410067
291	**Points of Interest - Commercial Services** Name: Hogdoc Motorcycles Location: Unit 2 Phoenix Brewery, Green Lane, Heywood, OL10 2EP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9NE (SE)	871	7	386508 410076
292	**Points of Interest - Commercial Services** Name: U Value Insulation Ltd Location: Unit 3 Broadfield Business Park, Pilsworth Road, Heywood, OL10 2TA Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7NW (SW)	877	7	384960 409920
292	**Points of Interest - Commercial Services** Name: U Value Insulation Ltd Location: Unit 3, Pilsworth Road, Heywood, OL10 2TA Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7NW (SW)	877	7	384962 409918
292	**Points of Interest - Commercial Services** Name: P & H Contract Services Location: 1 Broadfield Distribution Centre, Heywood, OL10 2TU Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7NW (SW)	930	7	384885 409940
292	**Points of Interest - Commercial Services** Name: Chris Hayter Transport Ltd Location: Unit 1 Broadfield Distribution Park, Pilsworth Road, Heywood, OL10 2TA Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A7NW (SW)	939	7	384874 409942
293	**Points of Interest - Commercial Services** Name: J C Location: Higher Broadfield Farm, Pilsworth Road, Heywood, OL10 2TA Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NW (SW)	879	7	384985 409882
294	**Points of Interest - Commercial Services** Name: Disaster Recovery Services Ltd Location: Junction 19 Industrial Park, Green Lane, Heywood, OL10 1NB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A14SE (E)	896	7	386585 410253
295	**Points of Interest - Commercial Services** Name: Mydent Ltd Location: Unit 406 Phoenix Park Industrial Estate, Phoenix Close, Heywood, OL10 2JG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9NE (SE)	914	7	386473 409916
296	**Points of Interest - Commercial Services** Name: Manchester Mobile Valeting Ltd Location: 5 Barker Street, Heywood, OL10 3DU Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A12SW (W)	920	7	384786 410226

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
297	**Points of Interest - Commercial Services** Name: Coupe & Cabriolet Location: Letchworth 122, Manchester Road, Heywood, OL10 2NN Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8SE (S)	925	7	385968 409522
298	**Points of Interest - Commercial Services** Name: Barrett's Haulage Location: White Gate Manor 19, Heywood Hall Road, Heywood, OL10 4US Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A18NW (N)	931	7	385581 411396
298	**Points of Interest - Commercial Services** Name: B J Motors Location: River Street, Heywood, OL10 4AB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NW (N)	975	7	385554 411436
298	**Points of Interest - Commercial Services** Name: Derbyshire Motors Ltd Location: River Street Works, River Street, Heywood, OL10 4AB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NW (N)	981	7	385568 411445
298	**Points of Interest - Commercial Services** Name: Derbyshire Motors Location: River Street, Heywood, OL10 4AB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NW (N)	982	7	385568 411446
298	**Points of Interest - Commercial Services** Name: B J Motors Location: River Street, Heywood, OL10 4AB Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A18NW (N)	982	7	385568 411446
299	**Points of Interest - Commercial Services** Name: Surridge Dawson Ltd Location: Unit 104 Phoenix Park Industrial Estate, Phoenix Close, Heywood, OL10 2JG Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14SE (E)	972	7	386635 410132
299	**Points of Interest - Commercial Services** Name: Phoenix Honda Specailist Location: Unit 208 Phoenix Close Industrial Estate, Phoenix Close, Heywood, OL10 2JG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9NE (SE)	977	7	386615 410058
300	**Points of Interest - Commercial Services** Name: Aj's Professional Valeters Location: 44-48 Bury Street, Heywood, OL10 4QG Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A17SW (W)	999	7	384751 410790
300	**Points of Interest - Commercial Services** Name: Bury Street Tyres Location: 44-48 Bury Street, Heywood, OL10 4QG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SW (W)	999	7	384751 410790
300	**Points of Interest - Commercial Services** Name: Aj's Professional Valeters Location: 44-48 Bury Street, Heywood, OL10 4QG Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A17SW (W)	999	7	384751 410790
301	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A13NE (NE)	200	7	385899 410540

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
301	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (NE)	205	7	385904 410541
301	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (NE)	230	7	385922 410563
301	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (NE)	230	7	385922 410563
301	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (E)	231	7	385940 410508
301	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (NE)	238	7	385937 410546
301	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (NE)	238	7	385937 410546
301	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (NE)	289	7	385982 410573
302	**Points of Interest - Manufacturing and Production** Name: The Old Police Station Location: The Old Police Station Business Centre, Hind Hill Street, Heywood, OL10 1AQ Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A13NW (NW)	240	7	385542 410655
303	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (E)	293	7	385997 410538
304	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13SE (E)	301	7	386010 410428
304	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (E)	310	7	386014 410539
304	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (E)	310	7	386014 410539

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
304	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (E)	326	7	386036 410503
304	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	332	7	386043 410490
304	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	332	7	386043 410490
304	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	350	7	386062 410472
304	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	350	7	386062 410472
304	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	363	7	386066 410549
304	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	381	7	386088 410529
304	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	385	7	386092 410528
304	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	396	7	386105 410514
304	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	398	7	386109 410495
304	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SW (E)	398	7	386108 410430
304	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SW (E)	398	7	386108 410430

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
304	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	398	7	386109 410495
304	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	412	7	386124 410479
304	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	412	7	386124 410480
305	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A13SE (E)	306	7	386004 410356
305	**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	A13SE (E)	327	7	386027 410367
305	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A13SE (E)	331	7	386030 410363
305	**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	A14SW (E)	346	7	386038 410325
305	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SW (E)	346	7	386038 410325
305	**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	A14SW (E)	355	7	386045 410314
305	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SW (E)	355	7	386045 410314
305	**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	A14SW (E)	377	7	386067 410311
305	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SW (E)	377	7	386067 410311

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
306	**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	A13NE (NE)	323	7	385954 410683
306	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NE (NE)	323	7	385954 410683
307	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A13NW (NW)	368	7	385425 410719
308	**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)	387	7	385852 410831
308	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18SE (N)	387	7	385852 410831
308	**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 (NE)	435	7	385930 410846
308	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18SE (NE)	488	7	385960 410890
309	**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	A14NW (E)	389	7	386090 410562
309	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	390	7	386091 410563
309	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A14NW (E)	391	7	386092 410560
310	**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	A14NW (NE)	393	7	386049 410672
310	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14NW (NE)	394	7	386049 410673

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
310	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A14NW (NE)	421	7	386089 410658
310	**Points of Interest - Manufacturing and Production** Name: Tanks Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A14NW (NE)	421	7	386089 410658
310	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A14NW (NE)	426	7	386112 410617
310	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	432	7	386120 410612
310	**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	A14NW (NE)	438	7	386107 410658
310	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	443	7	386133 410607
310	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	458	7	386150 410602
311	**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	A8NE (SE)	408	7	385967 410097
311	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A8NE (SE)	408	7	385969 410099
312	**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)	435	7	385328 410702
312	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A12NE (NW)	440	7	385323 410704
312	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A12NE (NW)	452	7	385287 410661

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
312	**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)	456	7	385281 410657
313	**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	A14SW (E)	451	7	386154 410376
313	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SW (E)	451	7	386154 410376
314	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SW (E)	472	7	386180 410414
314	**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	A14SW (E)	476	7	386185 410415
314	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	517	7	386228 410451
314	**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	A14NW (E)	524	7	386235 410452
315	**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	A14SW (E)	488	7	386172 410276
315	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SW (E)	488	7	386172 410276
316	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	488	7	386188 410577
316	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	502	7	386187 410632
316	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A14NW (E)	515	7	386204 410622

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
316	**Points of Interest - Manufacturing and Production** Name: Tanks Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	515	7	386204 410622
316	**Points of Interest - Manufacturing and Production** Name: Business Park Location: OL10 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A14NW (NE)	523	7	386202 410652
316	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A14NW (NE)	524	7	386189 410687
316	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	526	7	386221 410604
316	**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	A14NW (E)	547	7	386228 410651
317	**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	A18SW (N)	517	7	385676 410989
317	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18SW (N)	517	7	385676 410989
317	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A18SW (N)	543	7	385675 411015
318	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A7NE (SW)	530	7	385256 410102
318	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A12SE (SW)	531	7	385252 410107
319	**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	A14SW (SE)	591	7	386249 410184
319	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SW (SE)	601	7	386254 410169

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
320	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A14SW (E)	629	7	386313 410257
320	**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	A14SW (SE)	680	7	386337 410163
320	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SW (SE)	680	7	386337 410164
320	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	703	7	386377 410209
321	**Points of Interest - Manufacturing and Production** Name: Southgate Industrial Park Location: OL10 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A14SW (E)	660	7	386363 410363
321	**Points of Interest - Manufacturing and Production** Name: Southgate Industrial Park Location: OL10 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	691	7	386395 410365
322	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A12SE (W)	662	7	385025 410419
322	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A12SW (W)	667	7	385020 410423
322	**Points of Interest - Manufacturing and Production** Name: Tanks Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	668	7	385019 410418
323	**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	A12SW (W)	665	7	385022 410410
323	**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	A12SW (W)	686	7	385007 410326
323	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A12SW (W)	699	7	384988 410407

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
323	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A12SW (W)	700	7	384992 410327
323	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A12SW (W)	701	7	384986 410409
324	**Points of Interest - Manufacturing and Production** Name: A & B Fireplaces Location: 48 Bridge Street, Heywood, OL10 1JF Category: Extractive Industries Class Code: Stone Quarrying and Preparation Positional Accuracy: Positioned to address or location	A17SE (NW)	674	7	385140 410851
325	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	703	7	386287 410017
325	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	706	7	386329 410082
325	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	707	7	386292 410017
325	**Points of Interest - Manufacturing and Production** Name: Gregge Street Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	712	7	386309 410035
325	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A9NW (SE)	729	7	386327 410031
325	**Points of Interest - Manufacturing and Production** Name: Tanks Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A9NW (SE)	729	7	386327 410031
326	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A17NE (NW)	744	7	385345 411127
327	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	769	7	385037 410001
328	**Points of Interest - Manufacturing and Production** Name: Britannia Mill Industrial Estate Location: OL10 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A17SW (NW)	771	7	385015 410831

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
328	**Points of Interest - Manufacturing and Production** Name: Britannia Mill Industrial Estate Location: OL10 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A17SW (NW)	776	7	385008 410828
329	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	837	7	385028 409895
330	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A19SW (NE)	840	7	386288 411081
330	**Points of Interest - Manufacturing and Production** Name: Tank Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to address or location	A19SW (NE)	842	7	386293 411079
330	**Points of Interest - Manufacturing and Production** Name: Tanks Location: OL10 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	846	7	386293 411085
331	**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)	852	7	386494 410092
331	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9NE (SE)	852	7	386494 410092
331	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9NE (SE)	857	7	386484 410056
331	**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)	860	7	386488 410057
331	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9NE (SE)	860	7	386488 410057
331	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9NE (SE)	865	7	386502 410078
331	**Points of Interest - Manufacturing and Production** Name: Lemonpark Industrial Estate Location: OL10 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A9NE (SE)	892	7	386483 409976

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
331	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9NE (SE)	892	7	386531 410077
331	**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)	896	7	386536 410078
331	**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)	908	7	386520 410014
331	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9NE (SE)	908	7	386520 410014
331	**Points of Interest - Manufacturing and Production** Name: Lemonpark Industrial Estate Location: OL10 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A9NE (SE)	919	7	386515 409978
332	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9SW (SE)	878	7	386265 409734
332	**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	A9SW (SE)	879	7	386265 409733
333	**Points of Interest - Manufacturing and Production** Name: Factory Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	905	7	385042 409776
334	**Points of Interest - Manufacturing and Production** Name: Phoenix Park Industrial Estate Location: OL10 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A9NE (SE)	949	7	386536 409954
334	**Points of Interest - Manufacturing and Production** Name: Phoenix Park Industrial Estate Location: OL10 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A9NE (SE)	962	7	386552 409957
335	**Points of Interest - Manufacturing and Production** Name: Industrial Park Location: OL10 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	950	7	386626 410187
336	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	988	7	386684 410291

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
336	**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)	993	7	386689 410292
337	**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	A23SW (N)	999	7	385566 411462
337	**Points of Interest - Manufacturing and Production** Name: Works Location: OL10 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A23SW (N)	999	7	385566 411462
338	**Points of Interest - Public Infrastructure** Name: Busy Bins Location: Unit 4, Cowburn Street, Heywood, OL10 2AJ Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to address or location	A13SE (SE)	319	7	386006 410310
339	**Points of Interest - Public Infrastructure** Name: Heywood Police Station Location: Adelaide Street, Heywood, Greater Manchester, OL10 4HA Category: Central and Local Government Class Code: Police Stations Positional Accuracy: Positioned to address or location	A18SE (N)	365	7	385724 410836
340	**Points of Interest - Public Infrastructure** Name: Esso Location: York Street, Heywood, OL10 4NS Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A13NE (NE)	405	7	385981 410773
340	**Points of Interest - Public Infrastructure** Name: Heywood Express Location: York Street, Adelaide Street, Heywood, OL10 4HQ Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A13NE (NE)	409	7	385983 410776
340	**Points of Interest - Public Infrastructure** Name: Tesco Petrol Station Location: Tesco Express Roe Acre Service Station, York Street, Heywood, OL10 4NS Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A13NE (NE)	410	7	385984 410776
340	**Points of Interest - Public Infrastructure** Name: Heywood Express Location: York Street, Heywood, OL10 4NR Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A13NE (NE)	410	7	385984 410776
341	**Points of Interest - Public Infrastructure** Name: Rothwells Super Travel Location: 60 Market Street, Heywood, OL10 4LY Category: Public Transport, Stations and Infrastructure Class Code: Bus and Coach Stations, Depots and Companies Positional Accuracy: Positioned to address or location	A17SE (NW)	529	7	385314 410837
342	**Points of Interest - Public Infrastructure** Name: Morrisons Petrol Station Location: Dawson Street, Heywood, OL10 4PN Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A18SW (NW)	591	7	385451 411009
342	**Points of Interest - Public Infrastructure** Name: Morrisons Heywood Location: Bamford Road, Heywood, OL10 4NR Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A18SW (NW)	591	7	385448 411008

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
342	**Points of Interest - Public Infrastructure** Name: Morrisons Petrol Station Location: Dawson Street, Heywood, OL10 4PN Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A18SW (NW)	592	7	385449 411009
343	**Points of Interest - Public Infrastructure** Name: Sluice Location: OL10 Category: Water Class Code: Weirs, Sluices and Dams Positional Accuracy: Positioned to an adjacent address or location	A14NW (E)	605	7	386280 410679
344	**Points of Interest - Public Infrastructure** Name: Clayton Cunningham Travel Ltd Location: 9 Sunningdale Drive, Heywood, OL10 2DB Category: Public Transport, Stations and Infrastructure Class Code: Bus and Coach Stations, Depots and Companies Positional Accuracy: Positioned to address or location	A8SE (S)	661	7	385746 409748
345	**Points of Interest - Public Infrastructure** Name: Rochdale Borough Council Environmental Management Location: Rochdale Mbc Operational Depot, Green Lane, Heywood, OL10 2DY Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to address or location	A14SE (E)	870	7	386570 410324
346	**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	A12NE (NW)	524	7	385208 410658
346	**Points of Interest - Recreational and Environmental** Name: Playground Location: West Church Street, OL10 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12NE (NW)	530	7	385201 410658
347	**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	A12NE (W)	584	7	385106 410468
347	**Points of Interest - Recreational and Environmental** Name: Playground Location: Boleyn Court, OL10 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12NE (W)	584	7	385106 410468
348	**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)	719	7	386245 410953
349	**Points of Interest - Recreational and Environmental** Name: Playground Location: OL10 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A17NE (NW)	887	7	385318 411274
349	**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	A17NE (NW)	891	7	385310 411274
350	**Points of Interest - Recreational and Environmental** Name: Play Area Location: OL10 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A9SW (SE)	959	7	386192 409583

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
351	**Areas of Adopted Green Belt** Authority: Rochdale Metropolitan Borough Council Plan Name: Rochdale Unitary Development Plan **Status: Adopted** Plan Date: 30th June 2006	A19NW (NE)	821	9	386111 411188

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Environment Agency - Head Office	June 2020	Annually
Manchester City Council - Environmental Health Department	October 2017	Annual Rolling Update
Oldham Metropolitan Borough Council - Environmental Health Department	October 2017	Annual Rolling Update
Rossendale Borough Council - Environmental Health Department	October 2017	Annual Rolling Update
Rochdale Metropolitan Borough Council - Environmental Health Department	October 2017	Annually
Bury Metropolitan Borough Council - Environmental Health Department	September 2017	Annual Rolling Update
Discharge Consents		
Environment Agency - North West Region	July 2023	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - North West Region	March 2013	
Integrated Pollution Controls		
Environment Agency - North West Region	January 2009	
Integrated Pollution Prevention And Control		
Environment Agency - North West Region	January 2023	Quarterly
Local Authority Integrated Pollution Prevention And Control		
Bury Metropolitan Borough Council - Environmental Health Department	February 2015	Variable
Rochdale Metropolitan Borough Council - Environmental Health Department	July 2014	Variable
Oldham Metropolitan Borough Council - Environmental Health Department	March 2015	Variable
Rossendale Borough Council - Environmental Health Department	May 2016	Variable
Manchester City Council - Environmental Health Department	September 2014	Variable
Local Authority Pollution Prevention and Controls		
Bury Metropolitan Borough Council - Environmental Health Department	February 2015	Not Applicable
Rochdale Metropolitan Borough Council - Environmental Health Department	July 2014	Annual Rolling Update
Oldham Metropolitan Borough Council - Environmental Health Department	March 2015	Annual Rolling Update
Rossendale Borough Council - Environmental Health Department	May 2016	Annual Rolling Update
Manchester City Council - Environmental Health Department	September 2014	Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements		
Bury Metropolitan Borough Council - Environmental Health Department	February 2015	Variable
Rochdale Metropolitan Borough Council - Environmental Health Department	July 2014	Variable
Oldham Metropolitan Borough Council - Environmental Health Department	March 2015	Variable
Rossendale Borough Council - Environmental Health Department	May 2016	Variable
Manchester City Council - Environmental Health Department	September 2014	Variable
Nearest Surface Water Feature		
Ordnance Survey	September 2023	
Pollution Incidents to Controlled Waters		
Environment Agency - North West Region	January 2000	
Prosecutions Relating to Authorised Processes		
Environment Agency - North West Region	July 2015	
Prosecutions Relating to Controlled Waters		
Environment Agency - North West Region	March 2013	
Registered Radioactive Substances		
Environment Agency - North West Region	June 2016	As notified
Environment Agency - Head Office	May 2023	Quarterly
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	

Data Currency

Agency & Hydrological	Version	Update Cycle
Substantiated Pollution Incident Register		
Environment Agency - North West Region - Central Area	July 2023	Quarterly
Environment Agency - North West Region - North Area	July 2023	Quarterly
Environment Agency - North West Region - South Area	July 2023	Quarterly
Water Abstractions		
Environment Agency - North West Region	October 2023	Quarterly
Water Industry Act Referrals		
Environment Agency - North West Region	October 2017	
Groundwater Vulnerability Map		
Environment Agency - Head Office	June 2018	As notified
Bedrock Aquifer Designations		
Environment Agency - Head Office	January 2018	As notified
Superficial Aquifer Designations		
Environment Agency - Head Office	January 2018	As notified
Source Protection Zones		
Environment Agency - Head Office	September 2022	Bi-Annually
Extreme Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	August 2023	Quarterly
Flooding from Rivers or Sea without Defences		
Environment Agency - Head Office	August 2023	Quarterly
Areas Benefiting from Flood Defences		
Environment Agency - Head Office	February 2023	Quarterly
Flood Water Storage Areas		
Environment Agency - Head Office	August 2023	Quarterly
Flood Defences		
Environment Agency - Head Office	August 2022	Quarterly
OS Water Network Lines		
Ordnance Survey	October 2023	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	July 2023	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - North West Region	January 2009	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - North West Region - Central Area	July 2023	Quarterly
Environment Agency - North West Region - North Area	July 2023	Quarterly
Environment Agency - North West Region - South Area	July 2023	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - North West Region - Central Area	January 2023	Quarterly
Environment Agency - North West Region - North Area	January 2023	Quarterly
Environment Agency - North West Region - South Area	January 2023	Quarterly
Local Authority Landfill Coverage		
Bury Metropolitan Borough Council	February 2003	Not Applicable
Lancashire County Council - Waste Management Group	February 2003	Not Applicable
Manchester City Council - Planning Department	February 2003	Not Applicable
Oldham Metropolitan Borough Council	February 2003	Not Applicable
Rochdale Metropolitan Borough Council - Environmental Health Department	February 2003	Not Applicable
Rossendale Borough Council - Environmental Health Department	February 2003	Not Applicable
Local Authority Recorded Landfill Sites		
Bury Metropolitan Borough Council	October 2018	
Lancashire County Council - Waste Management Group	October 2018	
Manchester City Council - Planning Department	October 2018	
Oldham Metropolitan Borough Council	October 2018	
Rochdale Metropolitan Borough Council - Environmental Health Department	October 2018	
Rossendale Borough Council - Environmental Health Department	October 2018	
Potentially Infilled Land (Non-Water)		
Landmark Information Group Limited	December 1999	
Potentially Infilled Land (Water)		
Landmark Information Group Limited	December 1999	
Registered Landfill Sites		
Environment Agency - North West Region - Central Area	March 2006	Not Applicable
Environment Agency - North West Region - North Area	March 2006	Not Applicable
Environment Agency - North West Region - South Area	March 2006	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - North West Region - Central Area	April 2018	
Environment Agency - North West Region - North Area	April 2018	
Environment Agency - North West Region - South Area	April 2018	
Registered Waste Treatment or Disposal Sites		
Environment Agency - North West Region - Central Area	June 2015	
Environment Agency - North West Region - North Area	June 2015	
Environment Agency - North West Region - South Area	June 2015	

Hazardous Substances	Version	Update Cycle
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	March 2023	Bi-Annually
Explosive Sites		
Health and Safety Executive	March 2017	
Notification of Installations Handling Hazardous Substances (NIHHS)		
Health and Safety Executive	August 2001	
Planning Hazardous Substance Enforcements		
Lancashire County Council	April 2023	Variable
Bury Metropolitan Borough Council	February 2016	Variable
Manchester City Council - Planning Department	February 2016	Variable
Oldham Metropolitan Borough Council	February 2016	Variable
Rochdale Metropolitan Borough Council	May 2023	Variable
Rossendale Borough Council - Planning Department	May 2023	Variable
Planning Hazardous Substance Consents		
Bury Metropolitan Borough Council	February 2016	Variable
Lancashire County Council	February 2016	Variable
Manchester City Council - Planning Department	February 2016	Variable
Oldham Metropolitan Borough Council	February 2016	Variable
Rochdale Metropolitan Borough Council	February 2016	Variable
Rossendale Borough Council - Planning Department	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	June 2023	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	February 2023	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	October 2023	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	October 2023	Annually

Data Currency

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	October 2023	Quarterly
Fuel Station Entries Catalist Ltd - Experian	August 2023	Quarterly
Gas Pipelines National Grid	October 2021	Bi-Annually
Points of Interest - Commercial Services PointX	September 2023	Quarterly
Points of Interest - Education and Health PointX	September 2023	Quarterly
Points of Interest - Manufacturing and Production PointX	September 2023	Quarterly
Points of Interest - Public Infrastructure PointX	September 2023	Quarterly
Points of Interest - Recreational and Environmental PointX	September 2023	Quarterly
Underground Electrical Cables National Grid	February 2023	Bi-Annually

Data Currency

Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural England	April 2023	Bi-Annually
Areas of Adopted Green Belt		
Bury Metropolitan Borough Council	August 2023	Quarterly
Manchester City Council	August 2023	Quarterly
Oldham Metropolitan Borough Council	August 2023	Quarterly
Rochdale Metropolitan Borough Council	August 2023	Quarterly
Rossendale Borough Council - Planning Department	August 2023	Quarterly
Areas of Unadopted Green Belt		
Bury Metropolitan Borough Council	August 2023	Quarterly
Manchester City Council	August 2023	Quarterly
Oldham Metropolitan Borough Council	August 2023	Quarterly
Rochdale Metropolitan Borough Council	August 2023	Quarterly
Rossendale Borough Council - Planning Department	August 2023	Quarterly
Areas of Outstanding Natural Beauty		
Natural England	November 2023	Bi-Annually
Environmentally Sensitive Areas		
Natural England	August 2023	
Forest Parks		
Forestry Commission	May 2023	Not Applicable
Local Nature Reserves		
Natural England	August 2023	Bi-Annually
Marine Nature Reserves		
Natural England	October 2023	Bi-Annually
National Nature Reserves		
Natural England	August 2023	Bi-Annually
National Parks		
Natural England	February 2018	Bi-Annually
Nitrate Sensitive Areas		
Natural England	April 2023	Not Applicable
Nitrate Vulnerable Zones		
Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	April 2016	
Environment Agency - Head Office	March 2023	Bi-Annually
Ramsar Sites		
Natural England	October 2023	Bi-Annually
Sites of Special Scientific Interest		
Natural England	November 2023	Bi-Annually
Special Areas of Conservation		
Natural England	October 2023	Bi-Annually
Special Protection Areas		
Natural England	October 2023	Bi-Annually

Data Suppliers

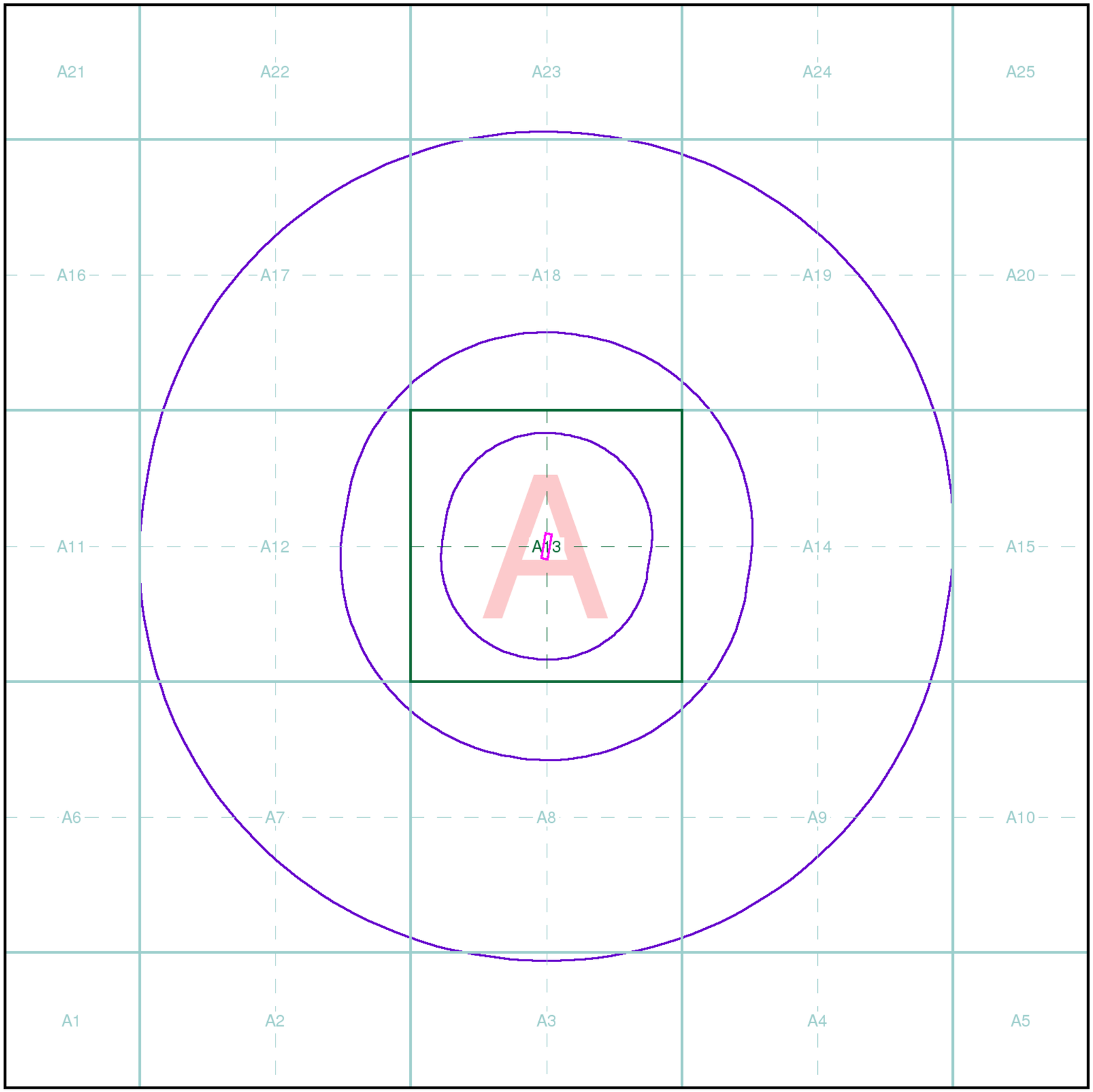
A selection of organisations who provide data within this report

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

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	**Rochdale Metropolitan Borough Council - Environmental Health Department** P O Box 32, Telegraph House, Ballie Street, Rochdale, Greater Manchester, OL16 1JH	Telephone: 01706 864139 Fax: 01706 864185 Website: www.rochdale.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	**The Coal Authority - Property Searches** 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0345 762 6848 Fax: 01623 637 338 Email: groundstability@coal.gov.uk Website: www2.groundstability.com
7	**PointX** 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
8	**Natural England** County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
9	**Rochdale Metropolitan Borough Council** PO Box 15, Town Hall, Rochdale, Greater Manchester, OL16 1AB	Telephone: 01706 647474 Fax: 01706 59475 Website: www.rochdale.gov.uk
10	**Bury Metropolitan Borough Council** Craig House, Bank Street, Bury, Lancashire, BL9 0DN	Telephone: 0161 253 5000 Fax: 0161 705 5290 Website: www.bury.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.



soiltechnics

environmental ▪ geotechnical ▪ building fabric

Index Map

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

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

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

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

A selection of organisations who provide data within this report:

Map data

British Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL

Environment Agency

NATURAL ENGLAND

Envirocheck reports are compiled from 136 different sources of data.

Client Details

Ms S Ltd, Soiltechnics Limited, Cedar Barn, White Lodge, Walgrave, Northampton, NN6 9PY

Order Details

Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Site Area (Ha):	0.11
Search Buffer (m):	1000

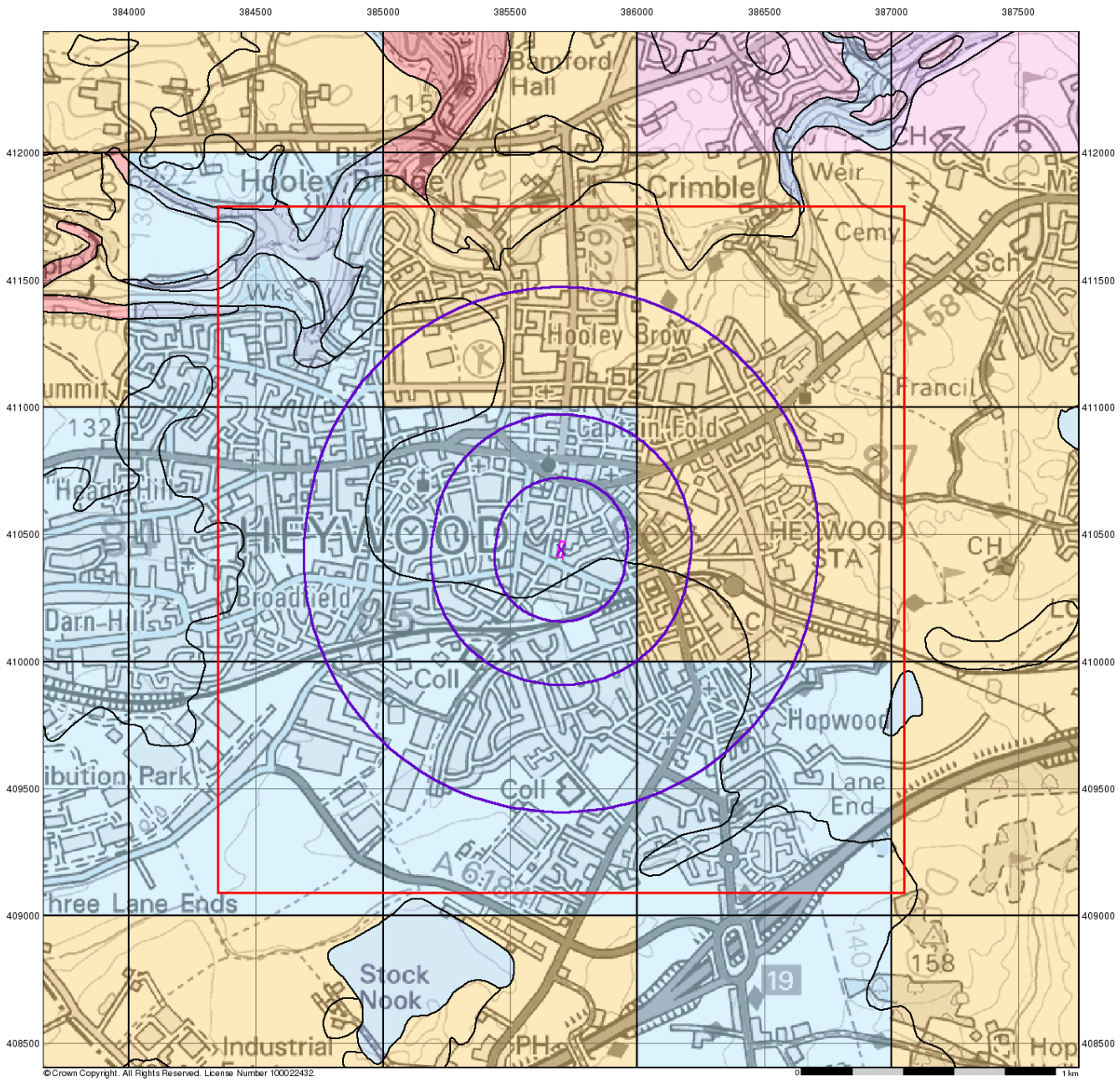
Site Details

Hornby Street, Heywood

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

Landmark® INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

Groundwater Vulnerability

General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

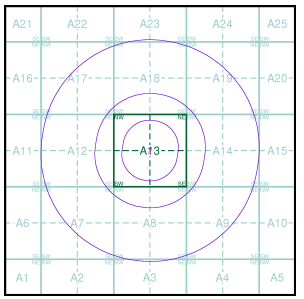
Agency and Hydrological

Bedrock Aquifers	Superficial Aquifers
High Vulnerability, Principal Aquifer	High Vulnerability, Principal Aquifer
High Vulnerability, Secondary Aquifer	High Vulnerability, Secondary Aquifer
Medium Vulnerability, Principal Aquifer	Medium Vulnerability, Principal Aquifer
Medium Vulnerability, Secondary Aquifer	Medium Vulnerability, Secondary Aquifer
Low Vulnerability, Principal Aquifer	Low Vulnerability, Principal Aquifer
Low Vulnerability, Secondary Aquifer	Low Vulnerability, Secondary Aquifer

Unproductive Aquifer

Soluble Rock

Site Sensitivity Context Map - Slice A



Order Details

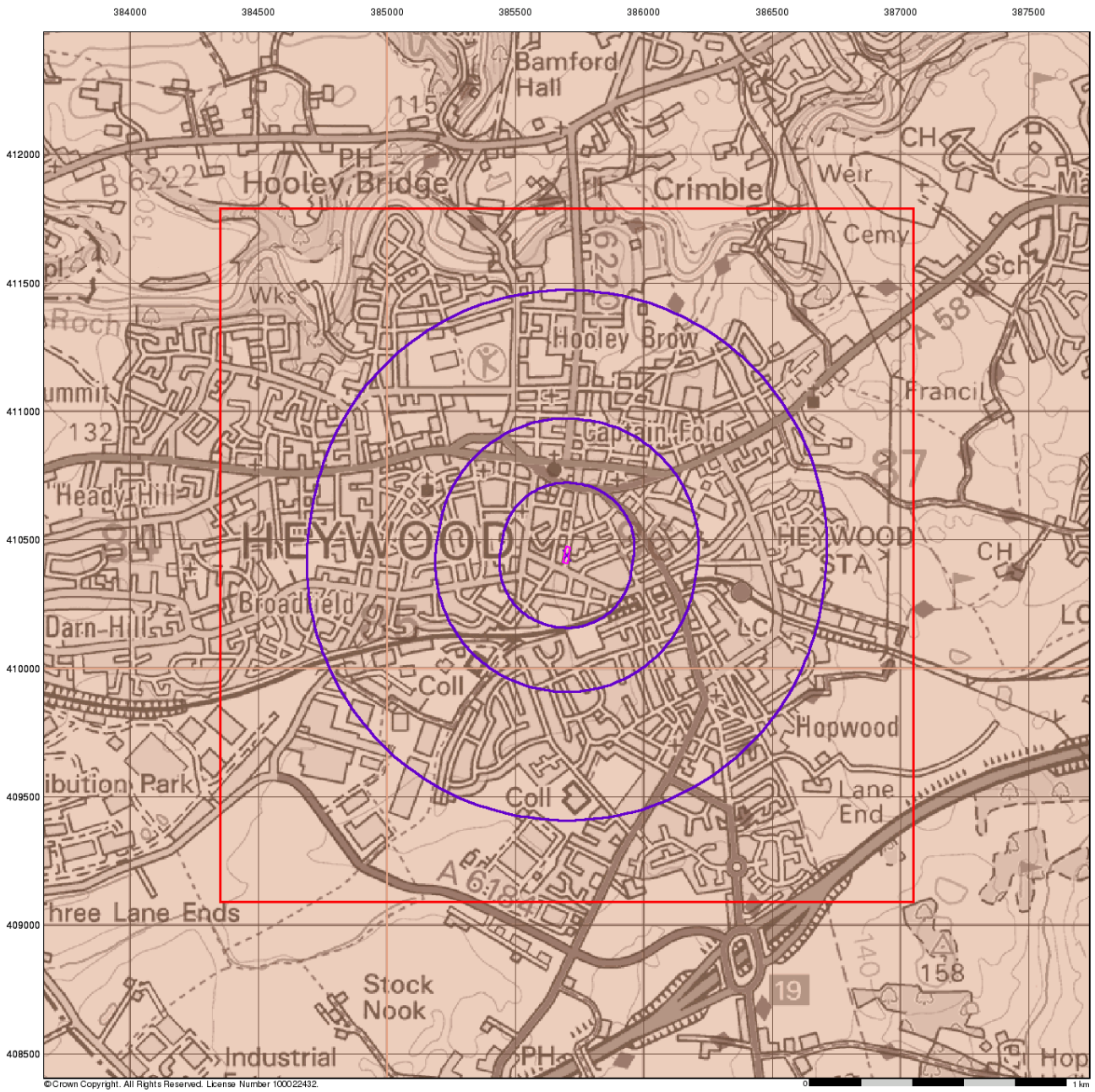
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

Bedrock Aquifer Designation

General

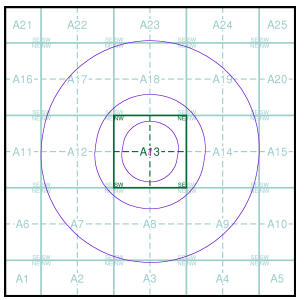
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

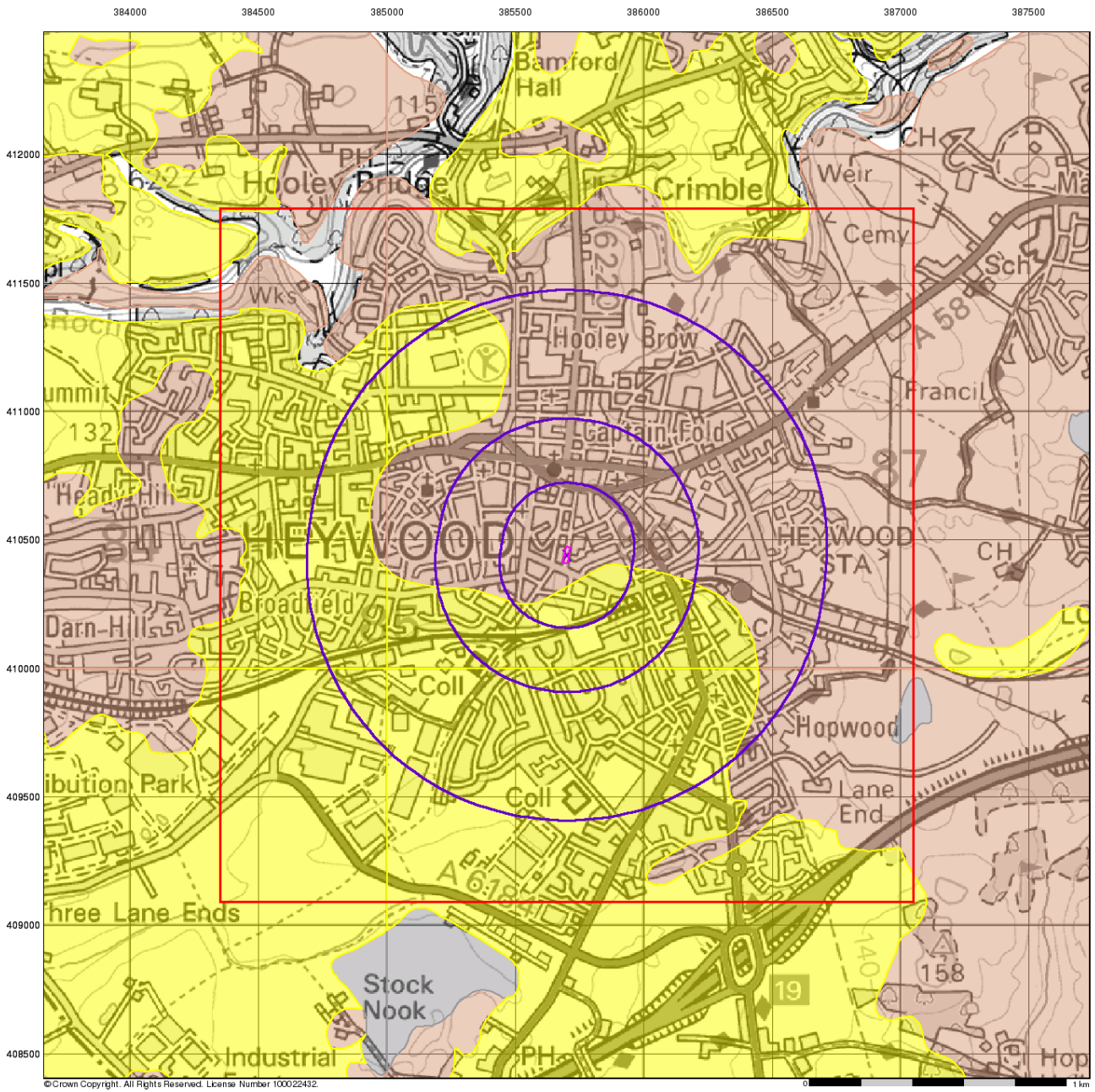
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

Superficial Aquifer Designation

General

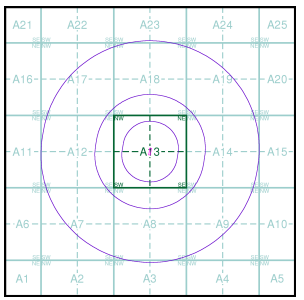
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



Order Details

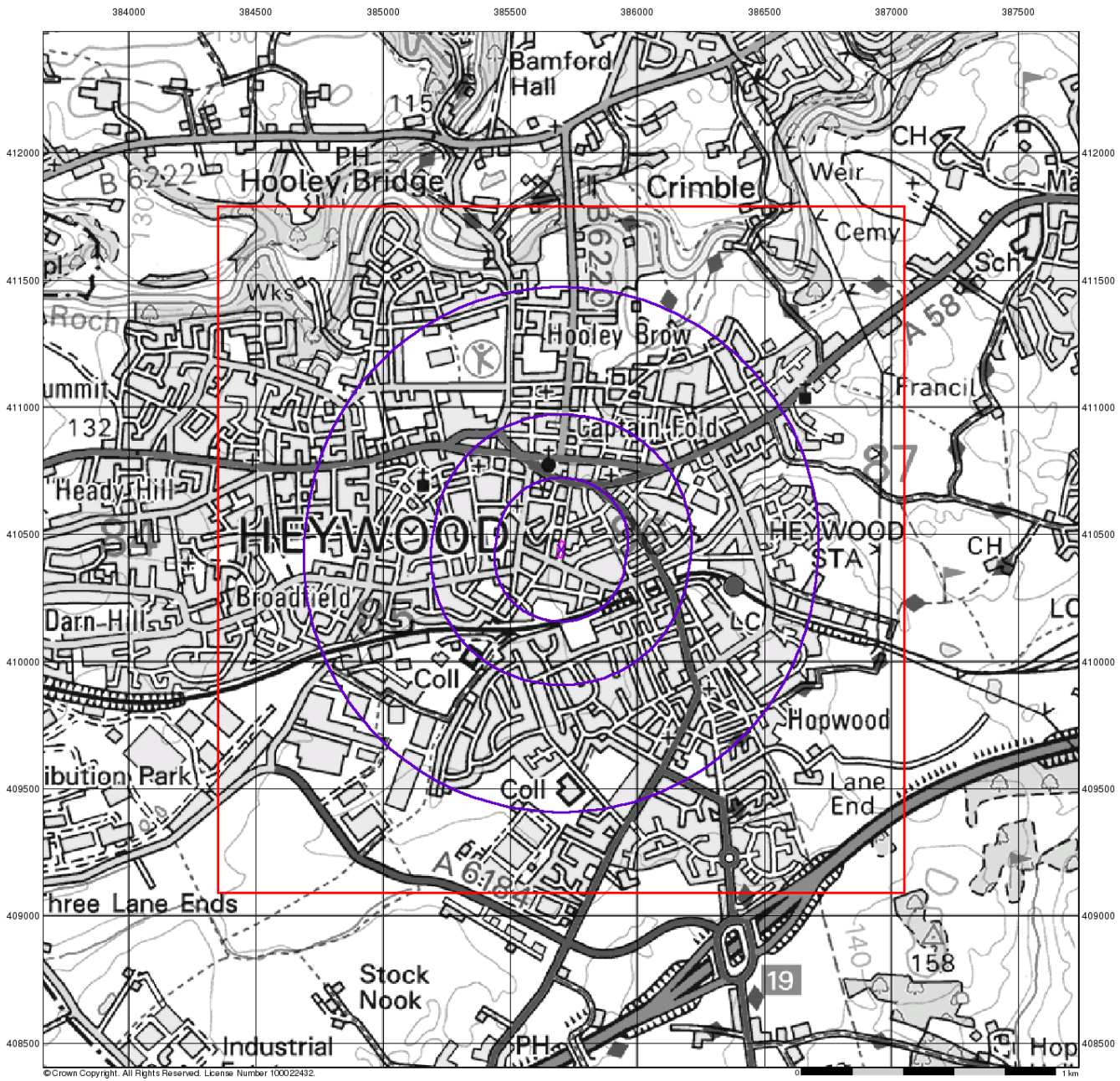
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

Source Protection Zones

General

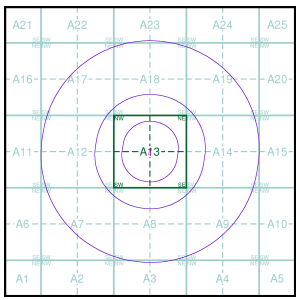
Specified Site | Specified Buffer(s) | Bearing Reference Point

Slice | Map ID

Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)

Site Sensitivity Context Map - Slice A



Order Details

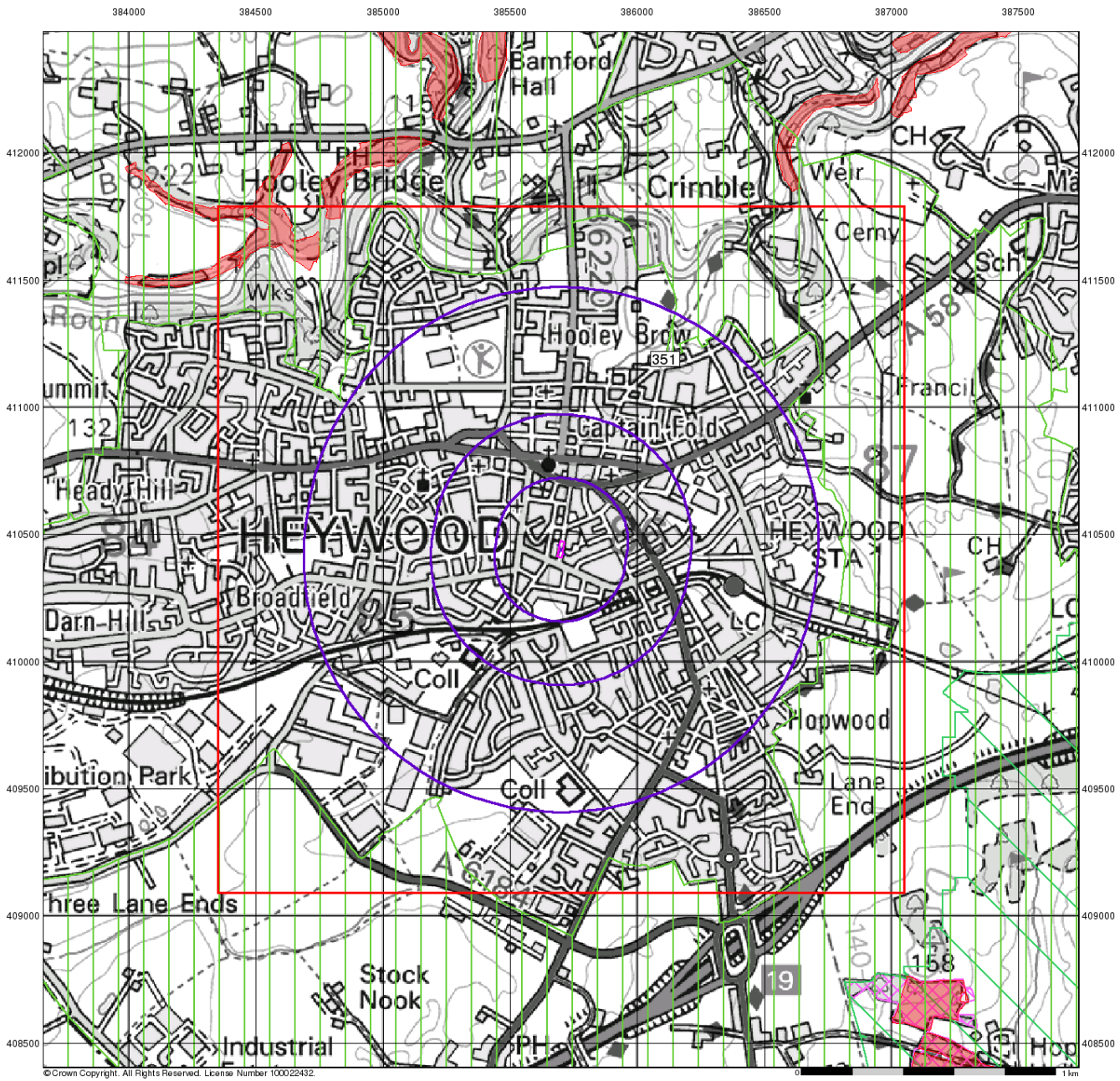
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

Sensitive Land Uses

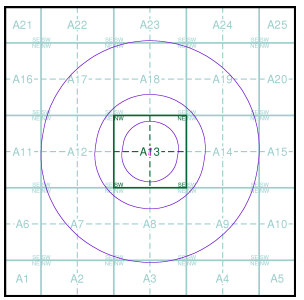
General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Sensitive Land Uses

- Ancient Woodland
- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Sites

Site Sensitivity Context Map - Slice A



Order Details

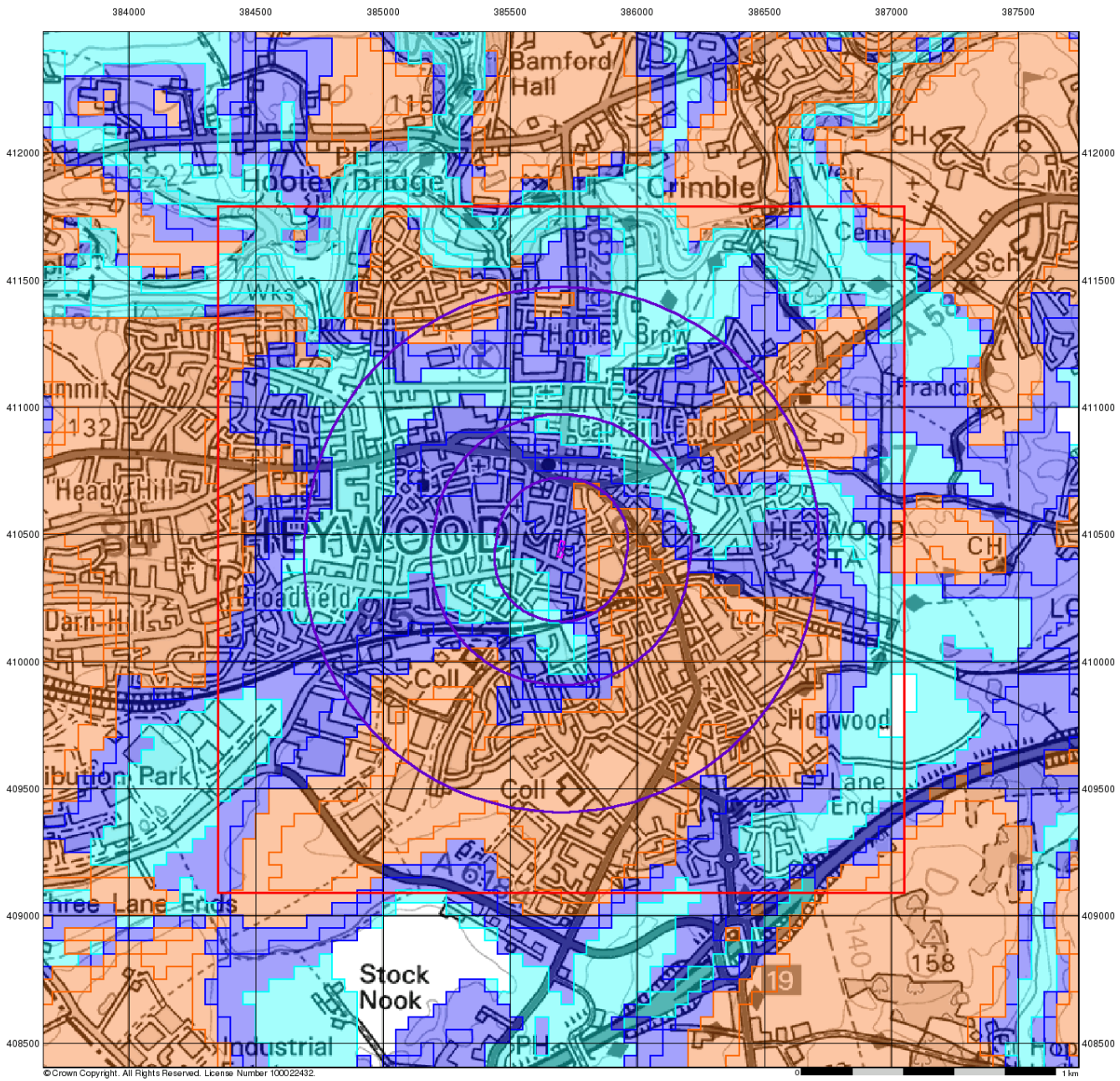
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

BGS Flood GFS Data

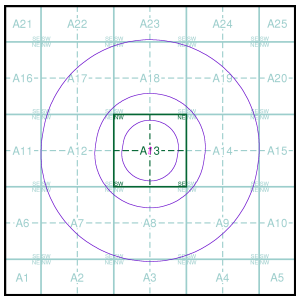
General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice A



Order Details

Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark® INFORMATION GROUP

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

Geology 1:50,000 Maps Legends

Artificial Ground and Landslip

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	MGR	Made Ground (Undivided)	Artificial Deposit	Not Supplied - Holocene
	WMGR	Infilled Ground	Artificial Deposit	Not Supplied - Holocene
	SLIP	Landslide Deposit	Unknown/Unclassified Entry	Not Supplied - Quaternary

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Not Supplied - Holocene
	GFDUD	Glaciofluvial Deposits, Devensian	Sand and Gravel	Not Supplied - Devensian
	TILLD	Till, Devensian	Diamicton	Not Supplied - Devensian
	GFICD	Glaciofluvial Ice Contact Deposits, Devensian	Sand and Gravel	Not Supplied - Devensian
	GFSDD	Glaciofluvial Sheet Deposits, Devensian	Sand and Gravel	Not Supplied - Devensian
	RTDU	River Terrace Deposits (Undifferentiated)	Sand and Gravel	Not Supplied - Quaternary
	PEAT	Peat	Peat	Not Supplied - Quaternary
	LDE	Lacustrine Deposits	Sand and Gravel	Not Supplied - Quaternary
	HEAD	Head	Clay, Silt, Sand and Gravel	Not Supplied - Quaternary
	RTD1	River Terrace Deposits, 1	Sand and Gravel	Not Supplied - Quaternary

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	PLCM	Pennine Lower Coal Measures Formation	Mudstone, Siltstone and Sandstone	Not Supplied - Westphalian
	OL	Old Lawrence Rock	Sandstone	Not Supplied - Westphalian
	HER	Helpet Edge Rock	Sandstone	Not Supplied - Westphalian
	RSC	Riddle Scout Rock	Sandstone	Not Supplied - Westphalian
	GAS	Great Arc Sandstone	Sandstone	Not Supplied - Westphalian
	WH	Woodhead Hill Rock	Sandstone	Not Supplied - Westphalian
	ROSSE	Rossendale Formation	Mudstone and Siltstone	Not Supplied - Namurian
	RR	Rough Rock	Sandstone	Not Supplied - Namurian
		Rock Segments		
		Faults		

soiltechnics
environmental ▪ geotechnical ▪ building fabric

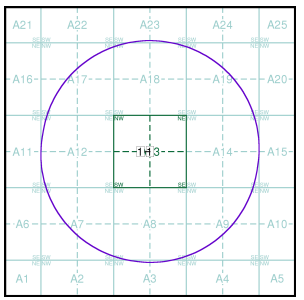
Geology 1:50,000 Maps

This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.
The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

Geology 1:50,000 Maps Coverage

Map ID:	**1**
Map Sheet No:	**085**
Map Name:	**Manchester**
Map Date:	**2010**
Bedrock Geology:	**Available**
Superficial Geology:	**Not Available**
Artificial Geology:	**Not Available**
Faults:	**Not Supplied**
Landslip:	**Not Available**
Rock Segments:	**Not Supplied**

Geology 1:50,000 Maps - Slice A



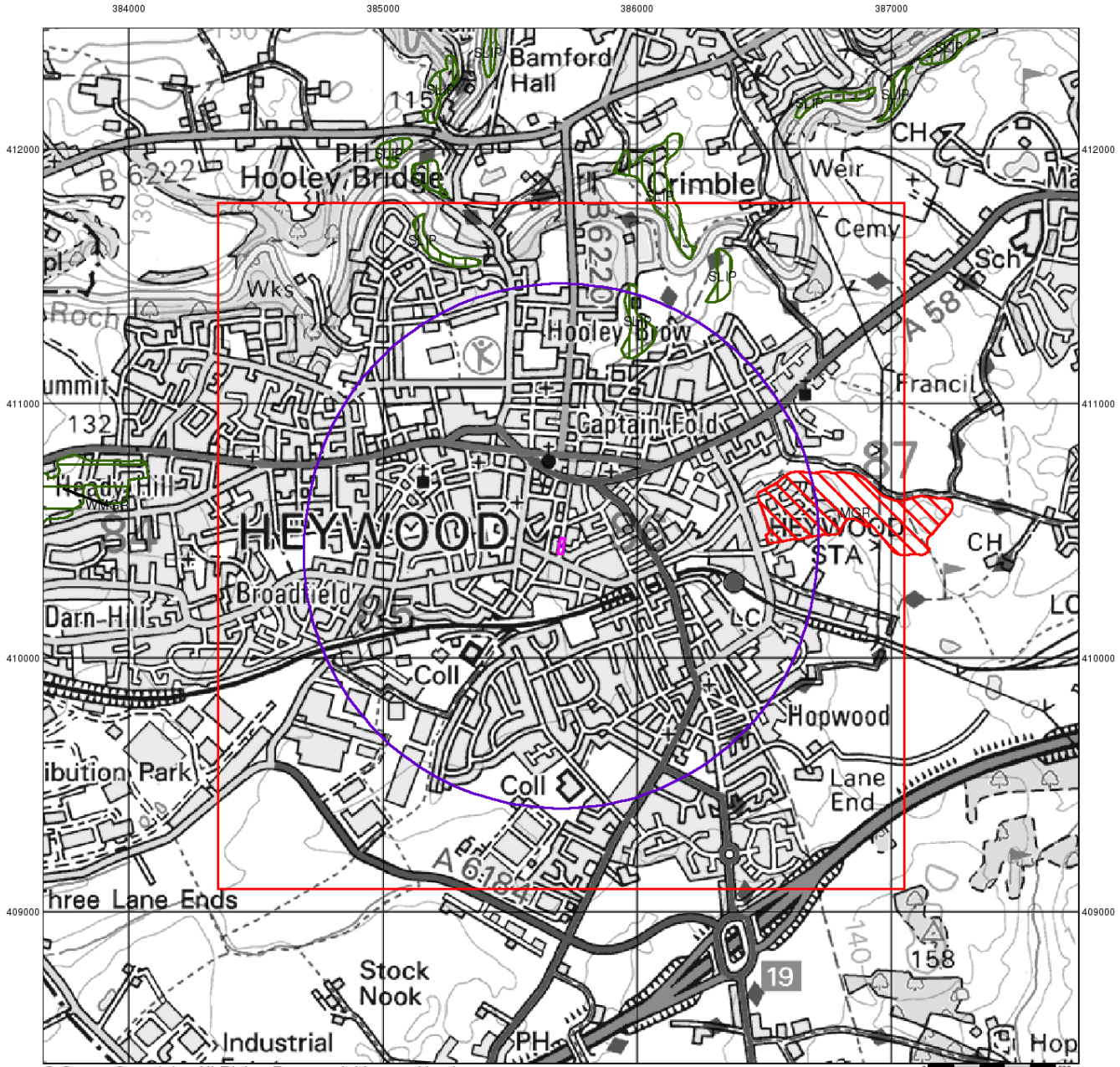
Order Details:

Order Number:	325164398_1_1
Customer Reference:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details:

Hornby Street, Heywood

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Artificial Ground and Landslip

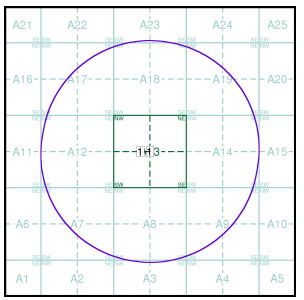
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

Artificial ground includes:

- Made ground - man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground - areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground - areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground - areas where the surface has been reshaped.
- Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

Artificial Ground and Landslip Map - Slice A



Order Details:

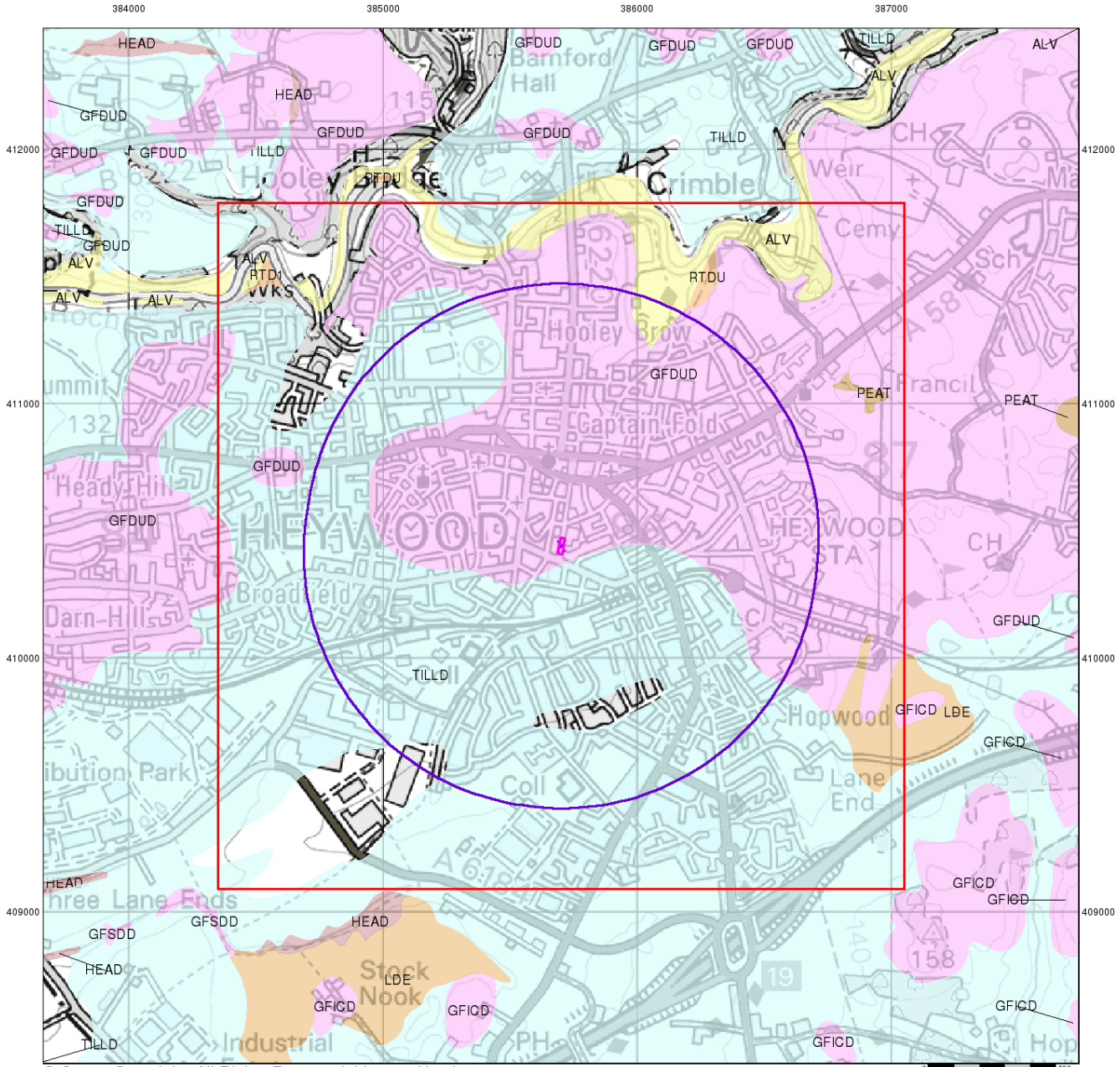
Order Number:	325164398_1_1
Customer Reference:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details:

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

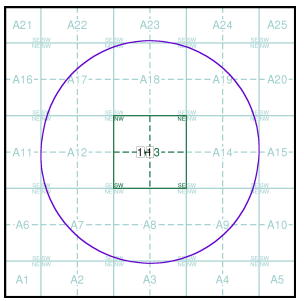
Superficial Geology

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

Superficial Geology Map - Slice A



Order Details:

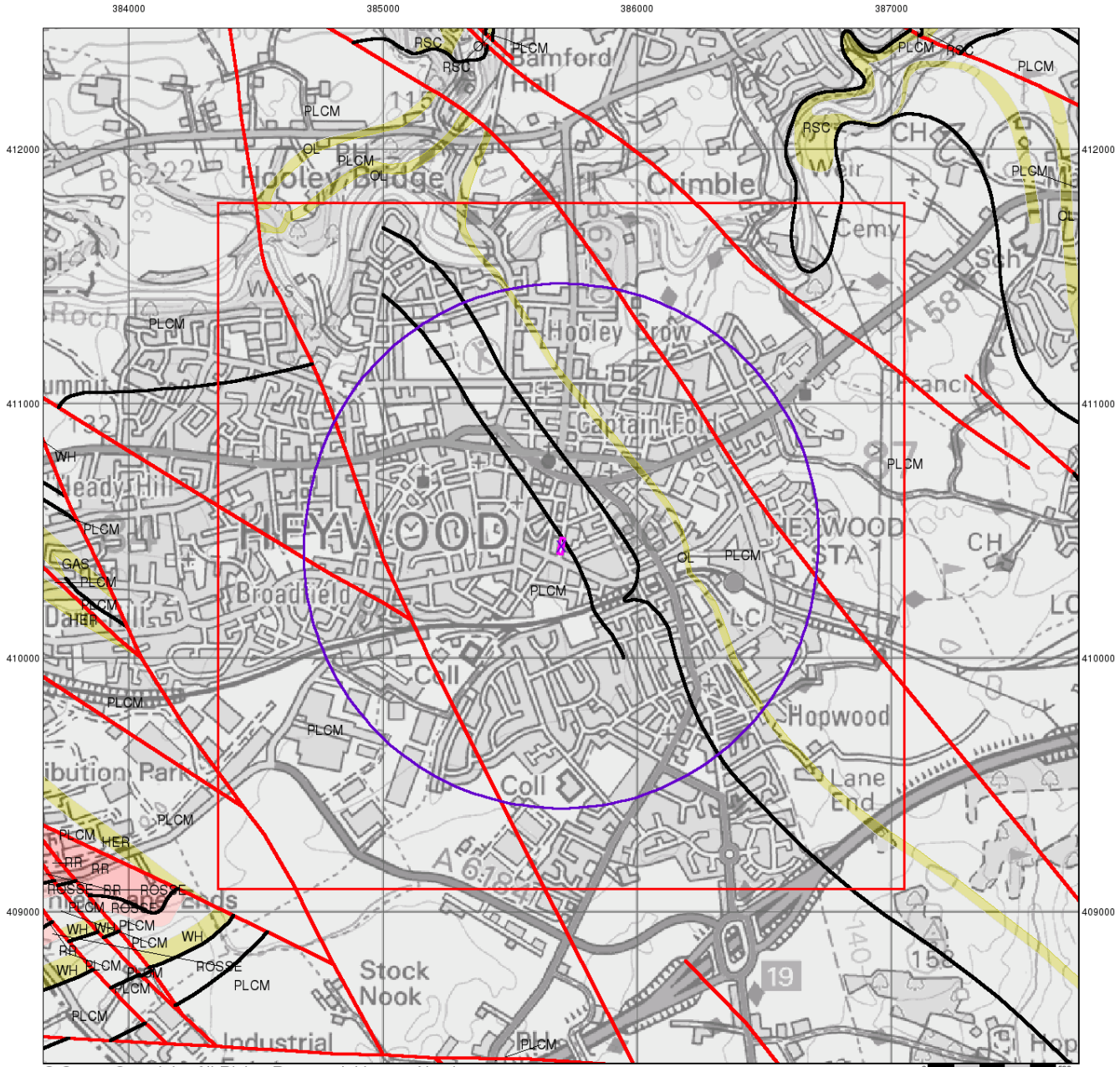
Order Number:	325164398_1_1
Customer Reference:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details:

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Bedrock and Faults

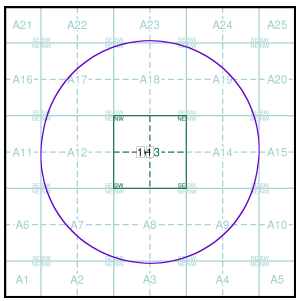
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

Bedrock and Faults Map - Slice A



Order Details:

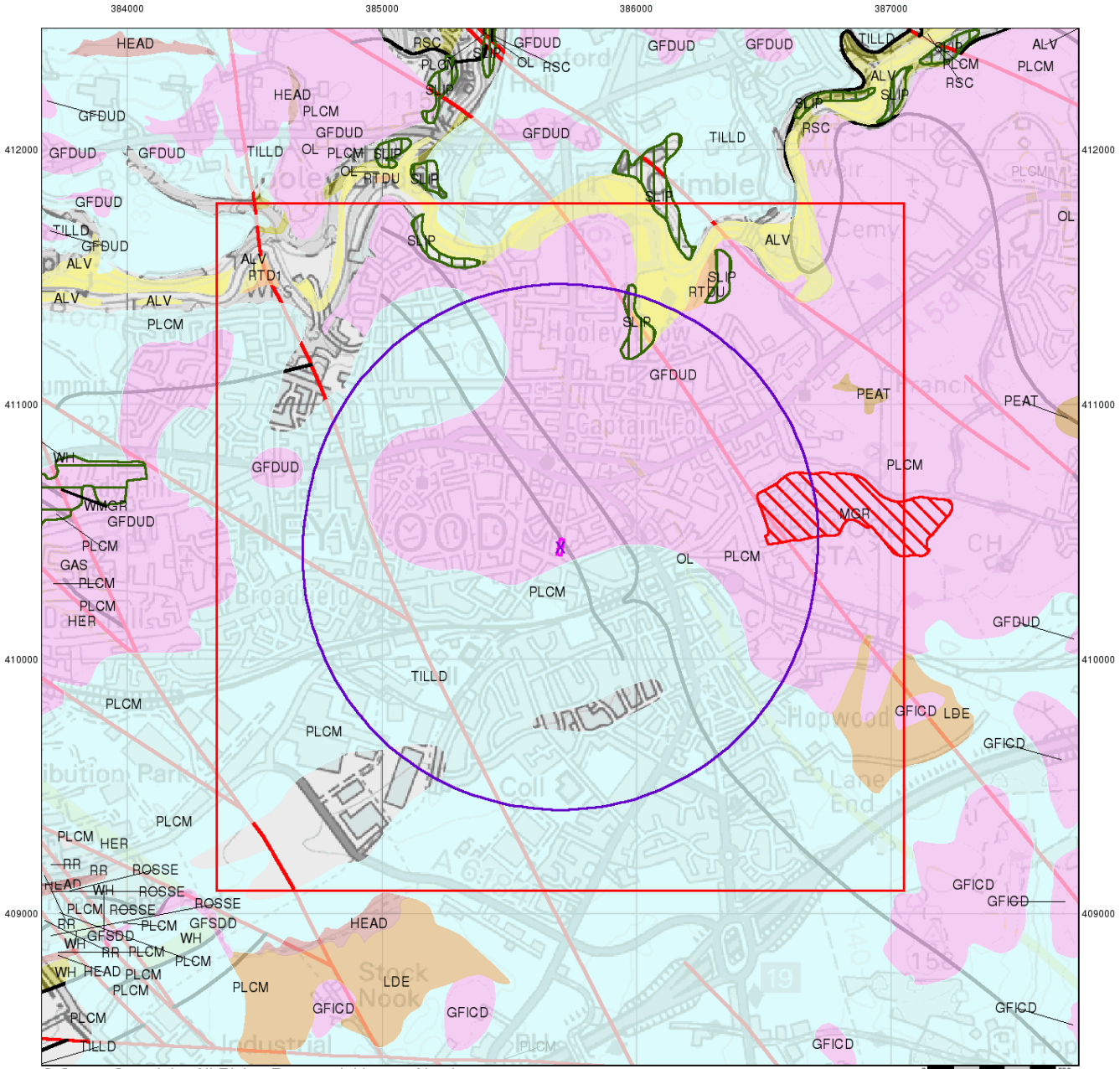
Order Number:	325164398_1_1
Customer Reference:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details:

Hornby Street, Heywood

Landmark® INFORMATION GROUP

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

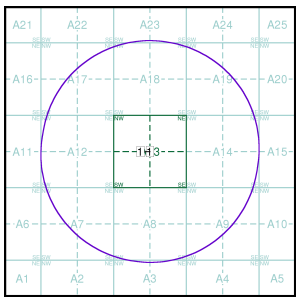
Additional Information

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

Contact

British Geological Survey
Kingsley Dunham Centre
Keyworth
Nottingham
NG12 5GG
Telephone: 0115 936 3143
Fax: 0115 936 3276
email: enquiries@bgs.ac.uk
website: www.bgs.ac.uk

Combined Geology Map - Slice A



Order Details:

Order Number:	325164398_1_1
Customer Reference:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details:

Hornby Street, Heywood

Historical Mapping Legends

Ordnance Survey County Series 1:10,560

Gravel Pit
Sand Pit
Other Pits
Quarry
Shingle
Orchard
Osiers
Reeds
Marsh
Mixed Wood
Deciduous
Brushwood
Fir
Furze
Rough Pasture
Arrow denotes flow of water
Trigonometrical Station
Site of Antiquities
Bench Mark
Pump, Guide Post, Signal Post
Well, Spring, Boundary Post
·285 Surface Level
Sketched Contour
Instrumental Contour
Main Roads
Fenced
Un-Fenced
Minor Roads
Fenced
Un-Fenced
Sunken Road
Raised Road
Road over Railway
Railway over River
Railway over Road
Level Crossing
Road over River or Canal
Road over Stream
Road over Stream
County Boundary (Geographical)
County & Civil Parish Boundary
Administrative County & Civil Parish Boundary
Co. Boro. Bdy. County Borough Boundary (England)
Co. Burgh Bdy. County Burgh Boundary (Scotland)
R.D. Bdy. Rural District Boundary
Civil Parish Boundary

Ordnance Survey Plan 1:10,000

Chalk Pit, Clay Pit or Quarry
Gravel Pit
Sand Pit
Disused Pit or Quarry
Refuse or Slag Heap
Lake, Loch or Pond
Dunes
Boulders
Coniferous Trees
Non-Coniferous Trees
Orchard
Scrub
Coppice
Bracken
Heath
Rough Grassland
Marsh
Reeds
Saltings
Building
Direction of Flow of Water
Shingle
Sand
Glasshouse
Pylon
Pylon
Electricity Transmission Line
Sloping Masonry
Cutting
Embankment
Standard Gauge Multiple Track
Road Under
Road Over
Level Crossing
Foot Bridge
Standard Gauge Single Track
Siding, Tramway or Mineral Line
Narrow Gauge
Geographical County
Administrative County, County Borough or County of City
Municipal Borough, Urban or Rural District, Burgh or District Council
Borough, Burgh or County Constituency
Shown only when not coincident with other boundaries
Civil Parish
Shown alternately when coincidence of boundaries occurs

BP, BS	Boundary Post or Stone	Pol Sta	Police Station
Ch	Church	PO	Post Office
CH	Club House	PC	Public Convenience
F E Sta	Fire Engine Station	PH	Public House
FB	Foot Bridge	SB	Signal Box
Fn	Fountain	Spr	Spring
GP	Guide Post	TCB	Telephone Call Box
MP	Mile Post	TCP	Telephone Call Post
MS	Mile Stone	W	Well

1:10,000 Raster Mapping

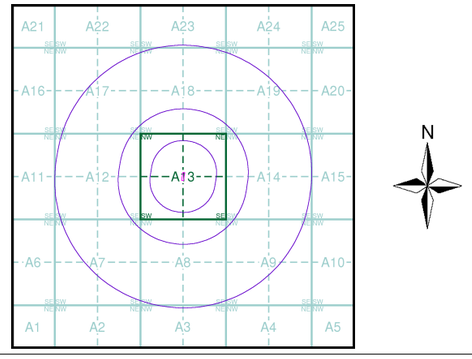
Gravel Pit
Refuse tip or slag heap
Rock
Rock (scattered)
Boulders
Boulders (scattered)
Shingle
Mud
Sand
Sand Pit
Slopes
Top of cliff
General detail
Underground detail
Overhead detail
Narrow gauge railway
Multi-track railway
Single track railway
County boundary (England only)
Civil, parish or community boundary
District, Unitary, Metropolitan, London Borough boundary
Constituency boundary
Area of wooded vegetation
Non-coniferous trees
Non-coniferous trees (scattered)
Coniferous trees
Coniferous trees (scattered)
Positioned tree
Orchard
Coppice or Osiers
Rough Grassland
Heath
Scrub
Marsh, Salt Marsh or Reeds
Water feature
Flow arrows
MHW(S) Mean high water (springs)
MLW(S) Mean low water (springs)
Telephone line (where shown)
Electricity transmission line (with poles)
BM 123.45 m Bench mark (where shown)
Triangulation station
Point feature (e.g. Guide Post or Mile Stone)
Pylon, flare stack or lighting tower
Site of (antiquity)
Glasshouse
General Building
Important Building

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:10,560	1851	3
Lancashire And Furness	1:10,560	1894	4
Lancashire And Furness	1:10,560	1910 - 1911	5
Lancashire And Furness	1:10,560	1931 - 1932	6
Lancashire And Furness	1:10,560	1938 - 1939	7
Ordnance Survey Plan	1:10,000	1955 - 1956	8
Ordnance Survey Plan	1:10,000	1965 - 1968	9
Ordnance Survey Plan	1:10,000	1974 - 1977	10
Manchester	1:25,000	1975	11
Ordnance Survey Plan	1:10,000	1983 - 1988	12
Ordnance Survey Plan	1:10,000	1993	13
10K Raster Mapping	1:10,000	1999	14
10K Raster Mapping	1:10,000	2006	15
VectorMap Local	1:10,000	2023	16

Historical Map - Slice A



Order Details

Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

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

Russian Military Mapping Legends

1:5,000 and 1:10,000 mapping

a. Not drawn to scale b. Drawn to scale

- Government and Administrative Buildings
- Military and Industrial Buildings
- Military and Communication Areas
- Subway Entrance
- Fireproof Building
- Prominent Fireproof Building
- Non-fireproof Building
- Non-fireproof Building (non-dwelling)
- Factory, mill, and flour mill, with chimneys
- Factory, mill, and flour mill, without chimneys
- Power Station, drawn to scale
- Hydroelectric Power Station
- Radio Station, drawn to scale
- Telephone Station, drawn to scale
- Abandoned Open-pit Mine or Quarry
- Open-pit Salt Mine
- Pit
- Oil Deposit or Well
- Oil Seepage
- Tailings Pile
- Fuel Storage Tanks
- Natural Gas Tank
- Bench Mark
- Drill Hole
- Burial Mound
- Triangulation Point on Burial Mound
- Single-track Railroad
- Double-track Railroad and Station Building
- Coniferous Forest
- Deciduous Forest
- Mixed Forest
- Lawns
- Citrus Orchard
- Wet Ground
- Scattered Vegetation
- 243,8 — Values for prominent elevations
- 186.0 — Numbers for spot elevations, depth soundings, contour lines, etc.
- 0,2 — Velocity of the current, width of river bed, depth of river
- Fractional terms: length and capacity of bridges; depth of fords and condition of the river bottom; height of forest and the diameter of trees

Russian Alphabet (For reference and phonetic interpretation of map text)

А а (A)	З з (Z)	П п (P)	Ч ч (CH)
Б б (B)	И и (I)	Р р (R)	Ш ш (SH)
В в (V)	Й й (Y)	С с (S)	Щ щ (SHCH)
Г г (G)	К к (K)	Т т (T)	ъ (–)
Д д (D)	Л л (L)	У у (U)	ы (Y)
Е е (E)	М м (M)	Ф ф (F)	ь (')
Ё ё (YO)	Н н (N)	Х х (KH)	Э э (E)
Ж ж (ZH)	О о (O)	Ц ц (TS)	Ю ю (YU or IU)
			Я я (YA or IA)

1:25,000 mapping

a. Not drawn to scale b. Drawn to scale

- Government and Administrative Buildings
- Military and Industrial Buildings
- Military and Communication Areas
- Subway Entrance
- Partly Demolished Buildings
- Demolished Buildings
- Built-Up Area with Fireproof Buildings Predominant
- Built-Up Area with Non-Fireproof Buildings Predominant
- Individual Fireproof Building
- Prominent Industrial Building
- Individual Dwelling, Fireproof
- Ruins of an Individual Dwelling
- Factory or Mill Chimney
- Factory or Mill with Chimney
- Factory or Mill without Chimney
- Mine or Open Pit Mine
- Operating Shaft or Mine
- Non-Operating Shaft or Mine
- Salt Mine
- Tailings Pile
- Pit
- Stone Quarry
- Gas Pump or Service Station
- Fuel Storage or Natural Gas Tank
- Oil or Natural Gas Derrick
- Small Hydroelectric Power Station
- Power Station
- Transformer Station
- Cemetery
- Burial Mound (height in metres)
- Triangulation Point on Burial Mound
- Triangulation Point
- Bench Mark
- Bench Mark (monumented)
- Telegraph Office
- Telephone Station
- Radio Station
- Radio Tower
- Airfield or Seaplane Base
- Landing Strip
- Main Highway
- Highway under Construction
- Improved Dirt Road (former truck road)
- Double-track Railroad with First Class Station
- Dismantled Railroad
- Railroad Under Construction
- Shore Embankment
- River or Ditch with Embankment
- Well
- Water Reservoir or Rain Water Pit
- Spring
- Isobath with value
- Heavy (Index) Contour Line
- Contour Line and Value
- Half Contour Line
- Spot Elevation Value
- Coniferous
- Deciduous
- Mixed
- Scrub

Key to Numbers on Mapping

SD81_Manchester

No.	Description
116	Mill (Steel)

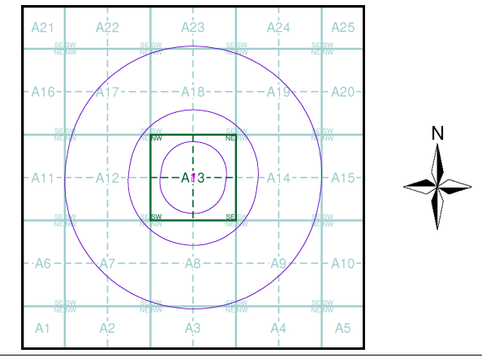
soiltechnics

environmental ▪ geotechnical ▪ building fabric

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:10,560	1851	3
Lancashire And Furness	1:10,560	1894	4
Lancashire And Furness	1:10,560	1910 - 1911	5
Lancashire And Furness	1:10,560	1931 - 1932	6
Lancashire And Furness	1:10,560	1938 - 1939	7
Ordnance Survey Plan	1:10,000	1955 - 1956	8
Ordnance Survey Plan	1:10,000	1965 - 1968	9
Ordnance Survey Plan	1:10,000	1974 - 1977	10
Manchester	1:25,000	1975	11
Ordnance Survey Plan	1:10,000	1983 - 1988	12
Ordnance Survey Plan	1:10,000	1993	13
10K Raster Mapping	1:10,000	1999	14
10K Raster Mapping	1:10,000	2006	15
VectorMap Local	1:10,000	2023	16

Russian Map - Slice A



Order Details

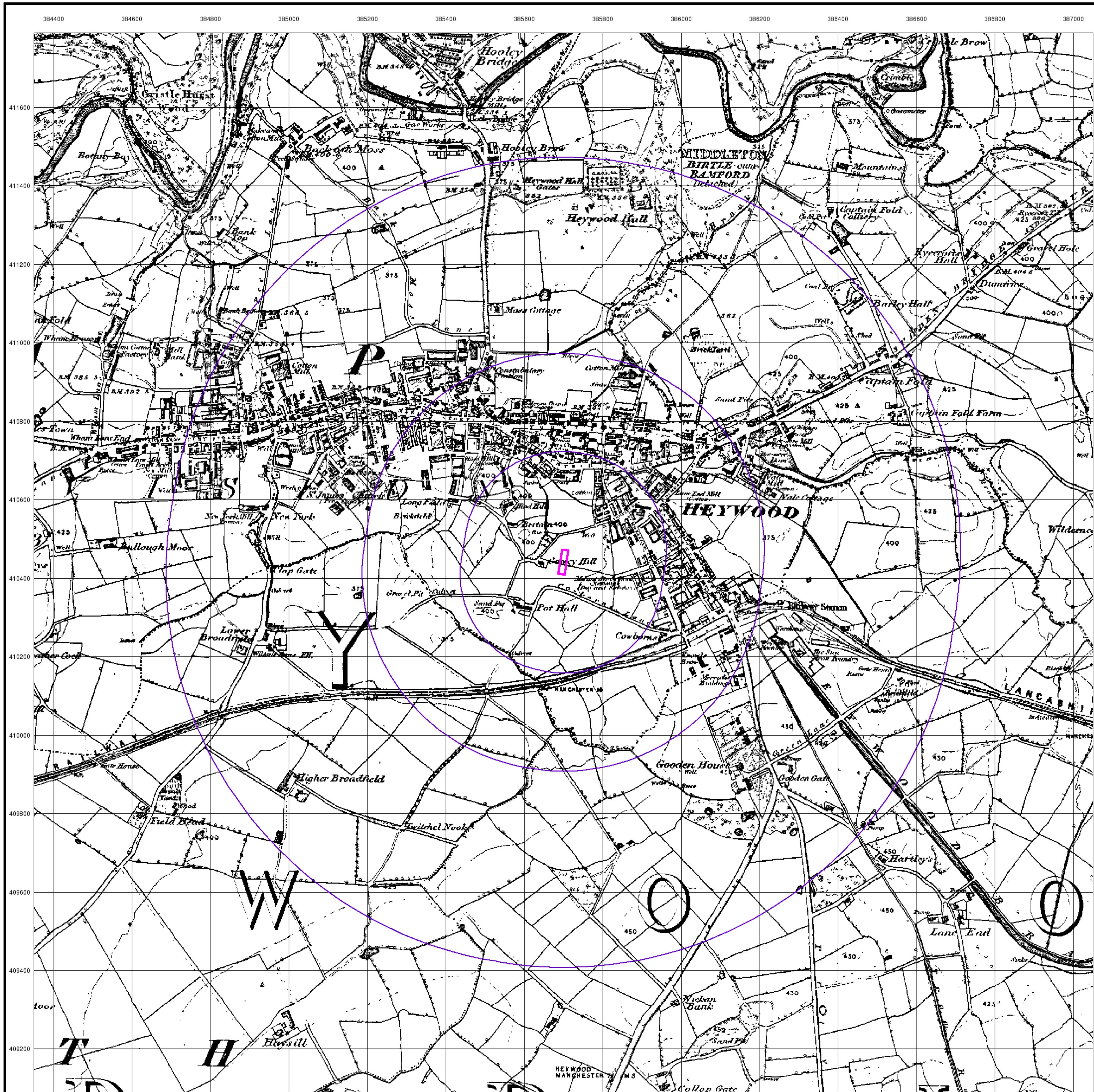
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

0 400 m

soiltechnics

environmental ▪ geotechnical ▪ building fabric

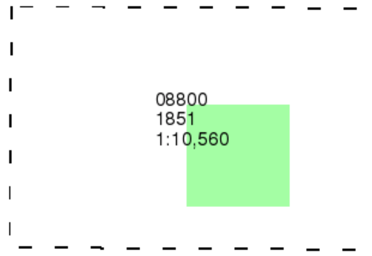
Lancashire And Furness

Published 1851

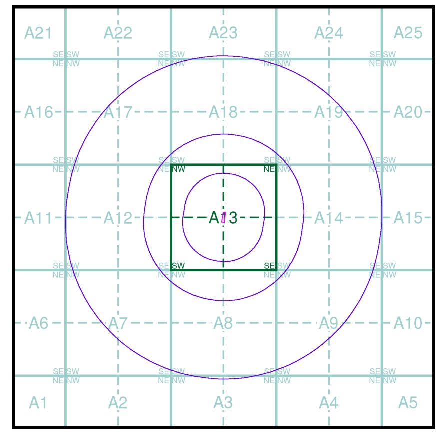
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

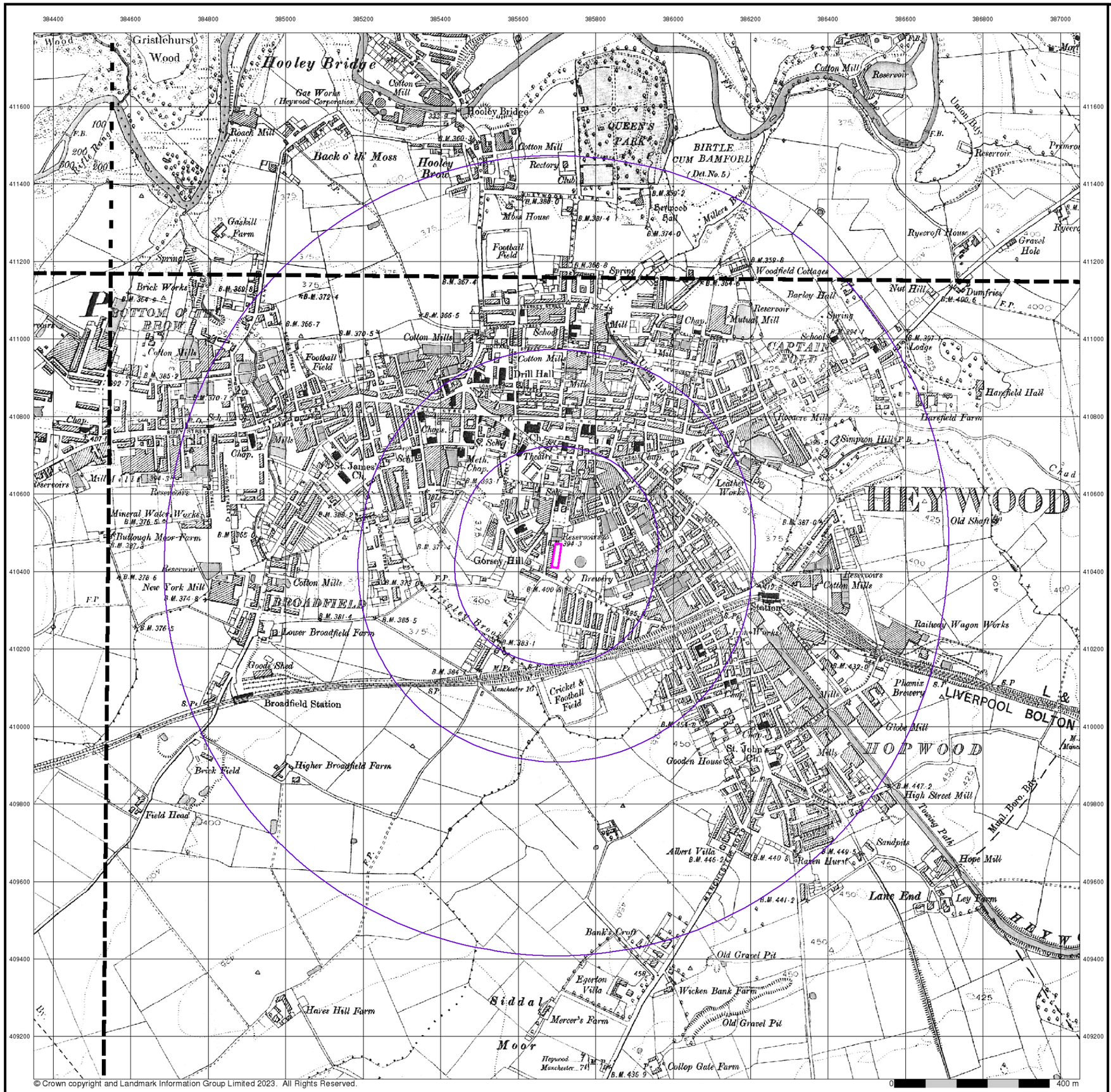
Order Number: 325164398_1_1
Customer Ref: STV6299
National Grid Reference: 385700, 410440
Slice: A
Site Area (Ha): 0.11
Search Buffer (m): 1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Lancashire And Furness

Published 1894

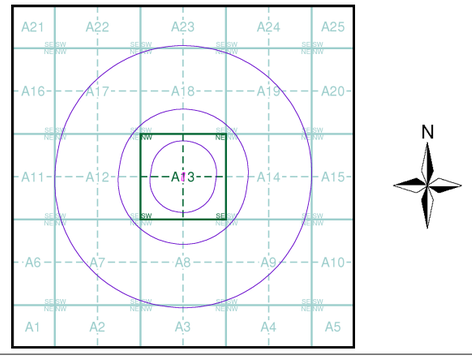
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

088NW 1894 1:10,560	088NE 1894 1:10,560
088SW 1894 1:10,560	088SE 1894 1:10,560

Historical Map - Slice A



Order Details

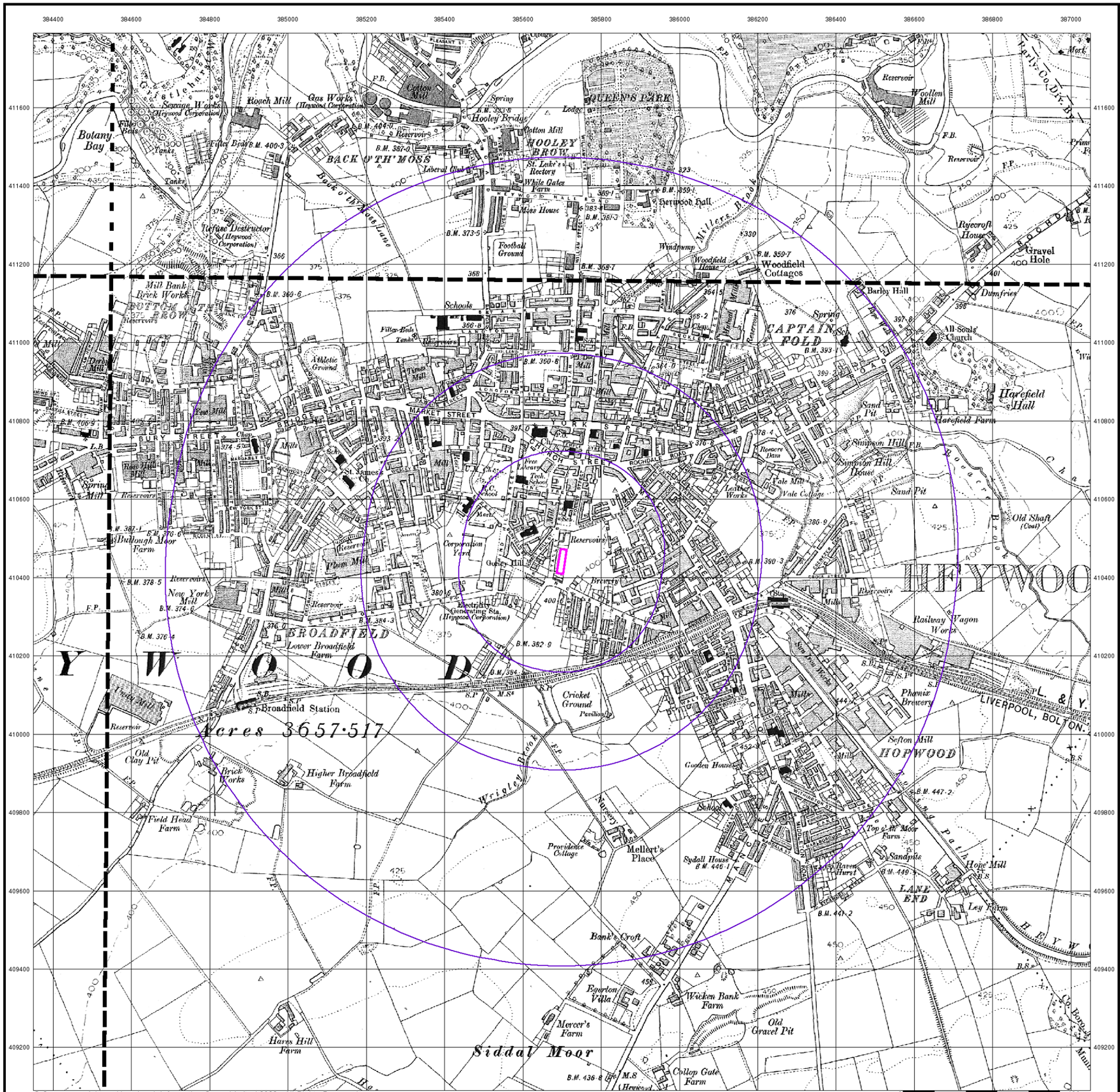
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Lancashire And Furness

Published 1910 - 1911

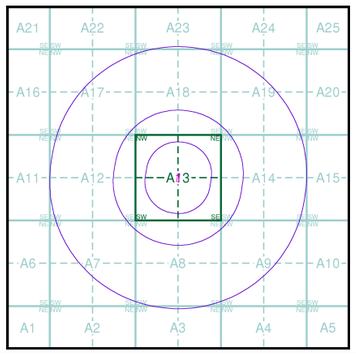
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

088NW 1911 1:10,560	088NE 1911 1:10,560
088SW 1910 1:10,560	088SE 1910 1:10,560

Historical Map - Slice A



Order Details

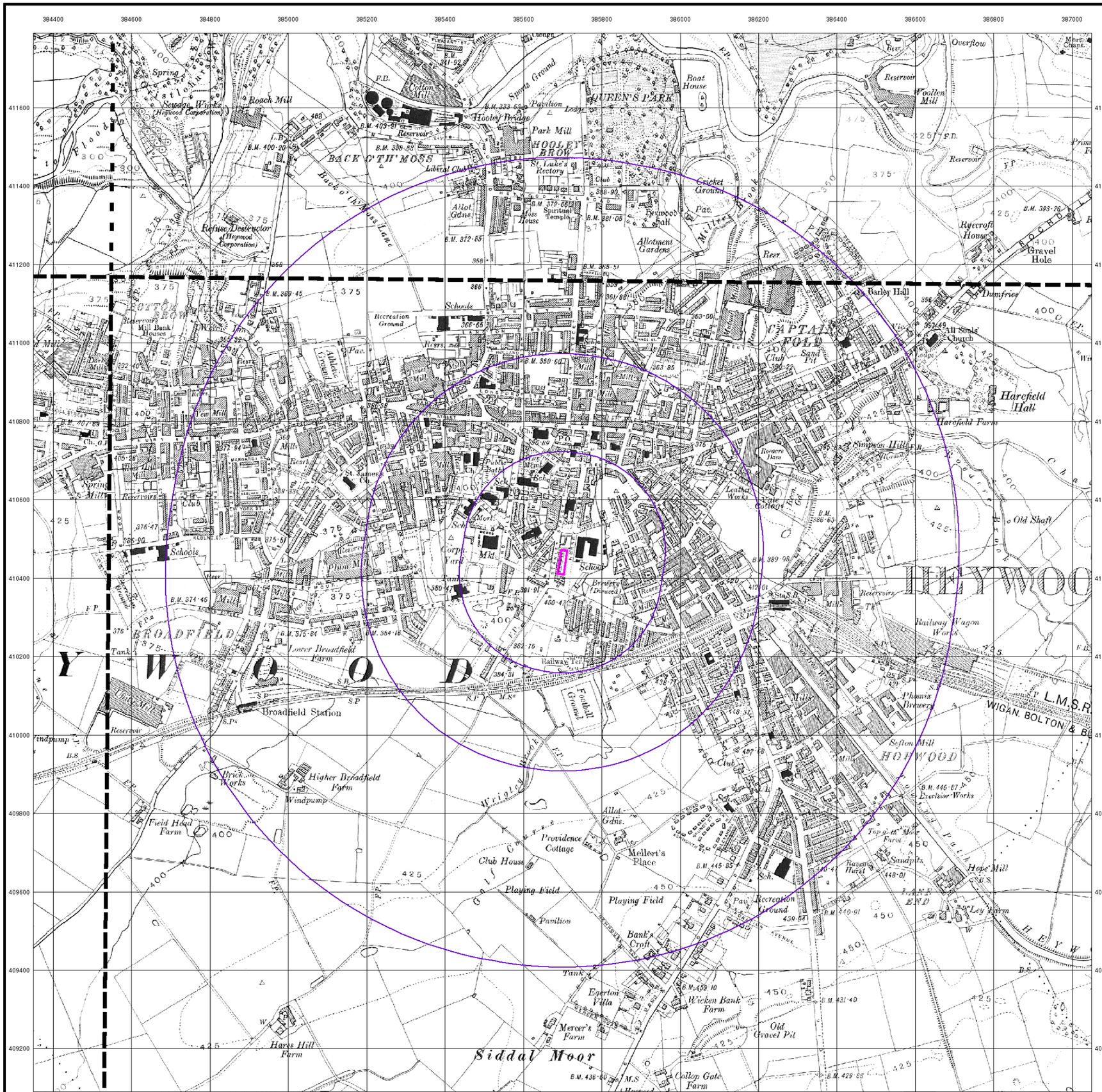
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Lancashire And Furness

Published 1931 - 1932

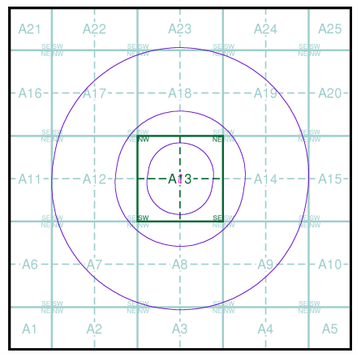
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

088NW 1931 1:10,560	088NE 1932 1:10,560
088SW 1931 1:10,560	088SE 1932 1:10,560

Historical Map - Slice A



Order Details

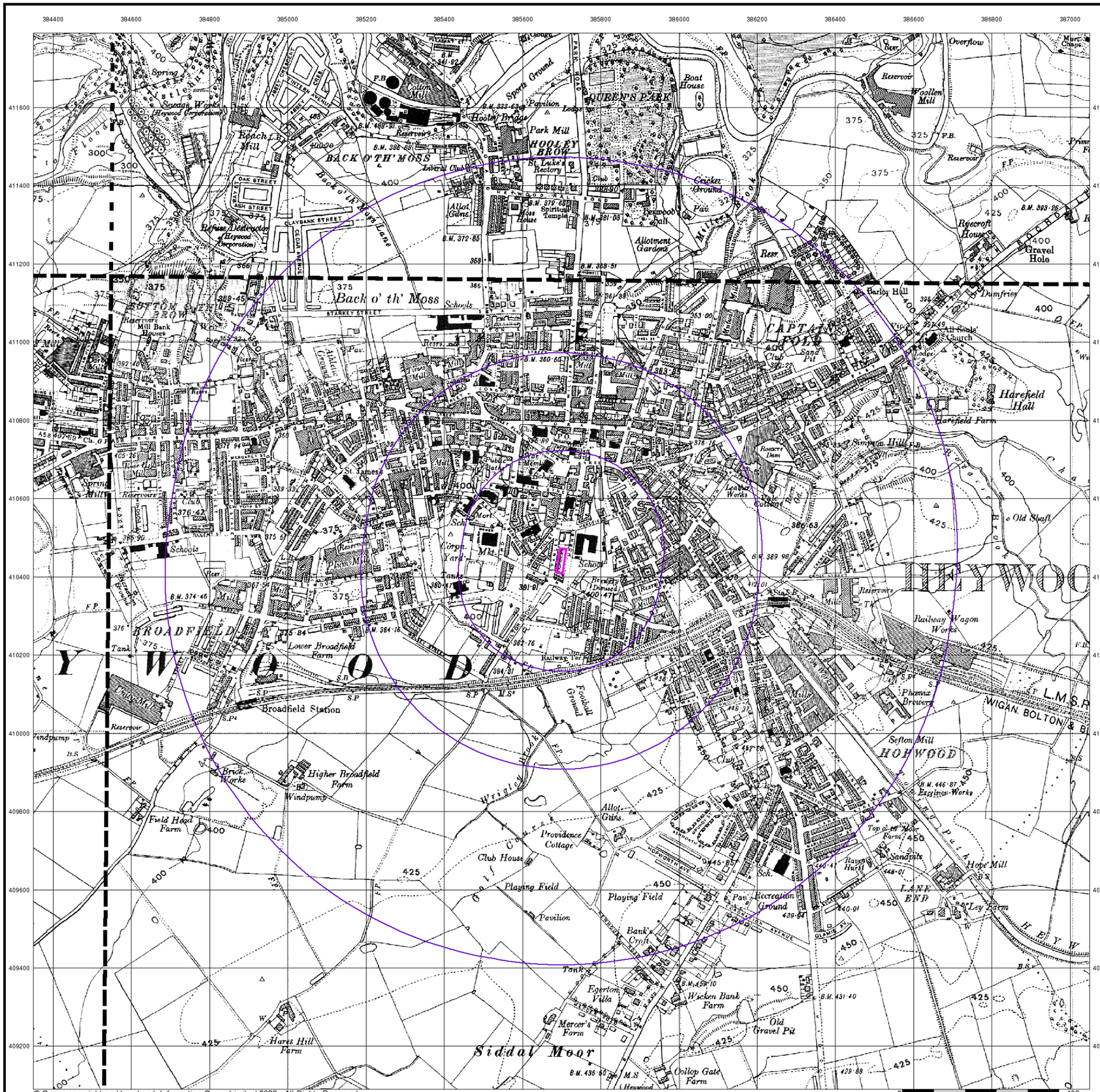
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Lancashire And Furness

Published 1938 - 1939

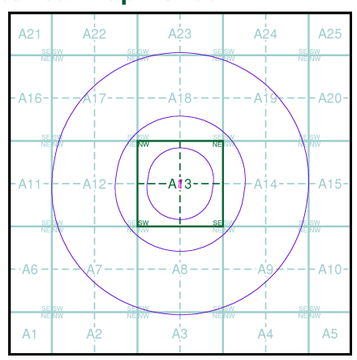
Source map scale - 1:10,560

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

Map Name(s) and Date(s)

088NW 1939 1:10,560	088NE 1938 1:10,560
088SW 1938 1:10,560	088SE 1938 1:10,560

Historical Map - Slice A



Order Details

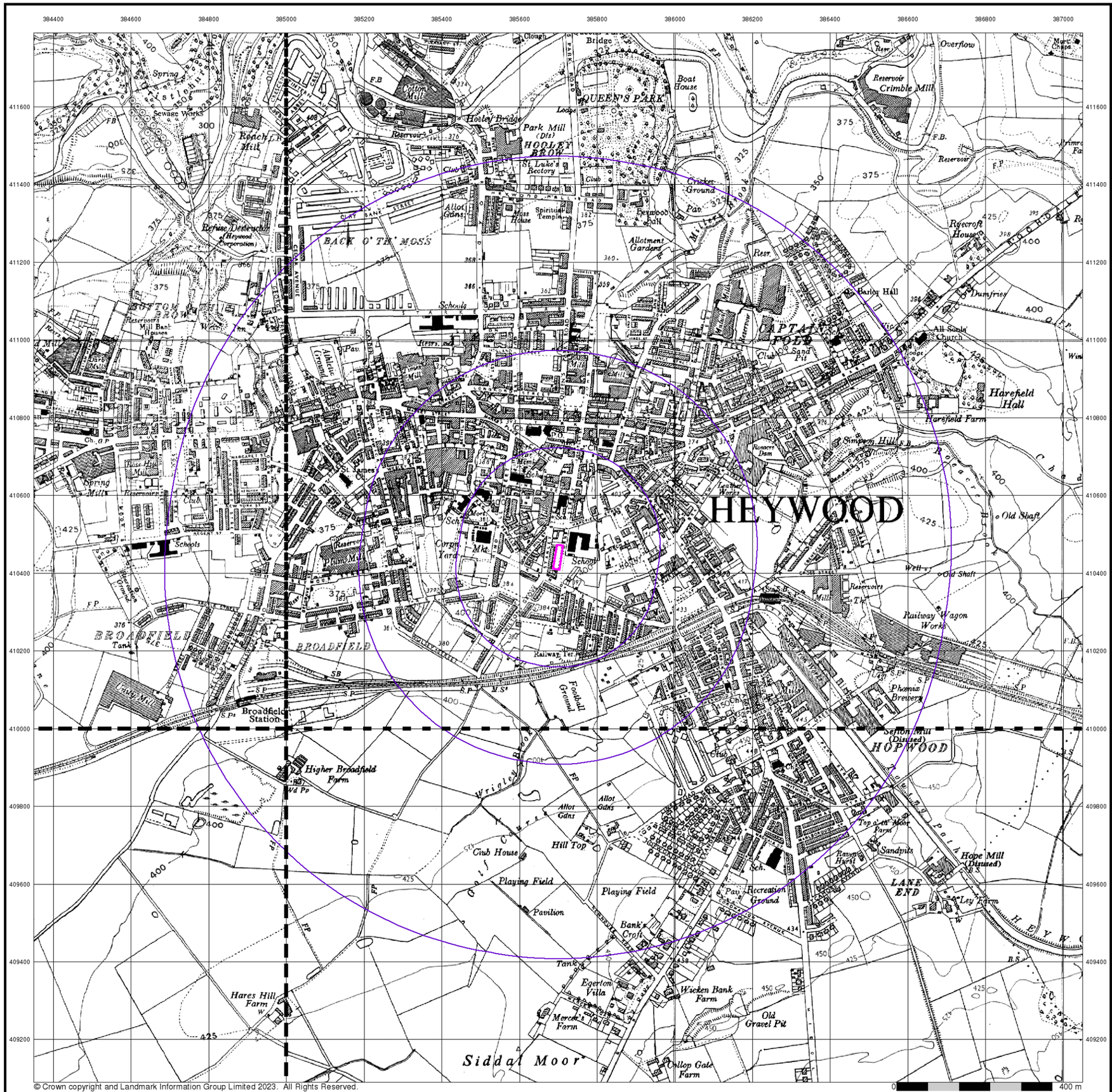
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

0 400 m

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Ordnance Survey Plan

Published 1955 - 1956

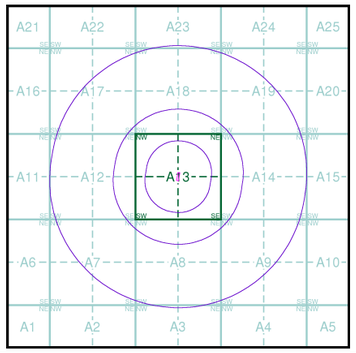
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SD81SW 1956 1:10,560	SD81SE 1956 1:10,560
SD80NW 1955 1:10,560	SD80NE 1956 1:10,560

Historical Map - Slice A



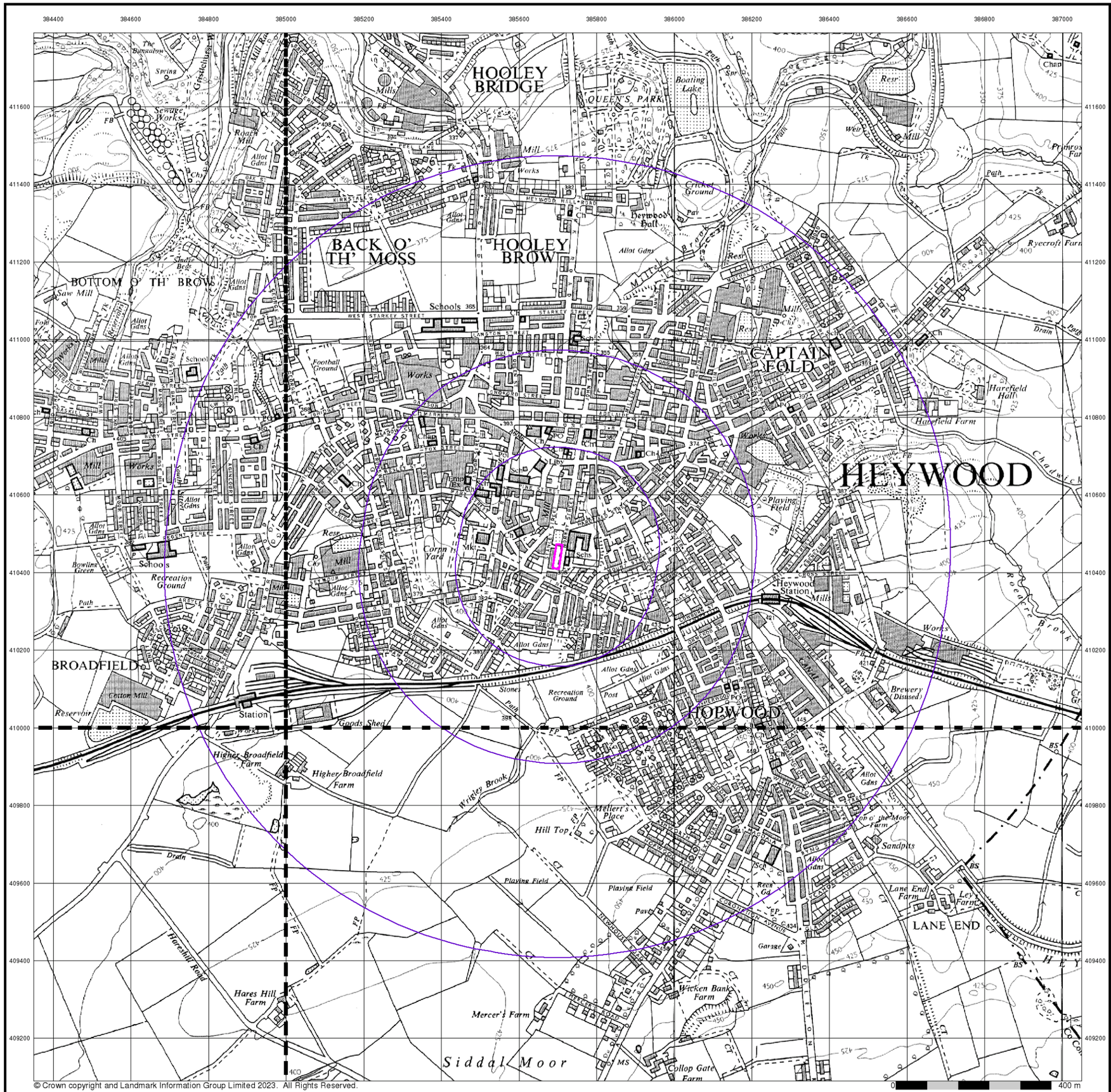
Order Details

Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Ordnance Survey Plan

Published 1965 - 1968

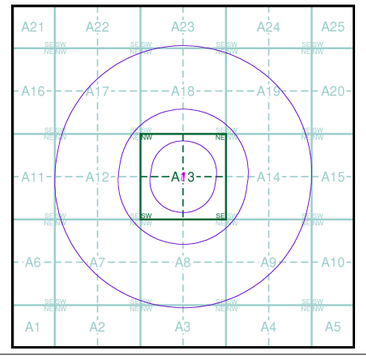
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SD81SW 1967 1:10,560	SD81SE 1968 1:10,560
SD80NW 1965 1:10,560	SD80NE 1965 1:10,560

Historical Map - Slice A



Order Details

Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Ordnance Survey Plan

Published 1974 - 1977

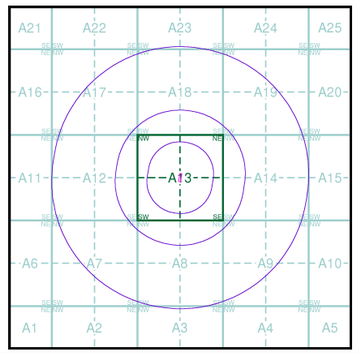
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SD80NW 1974 1:10,000	SD80NE 1977 1:10,000
	SD81SE 1977 1:10,000

Historical Map - Slice A



Order Details

Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Copyright Landmark Information Group Ltd. All Rights Reserved.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Manchester

Published 1975

Source map scale - 1:25,000

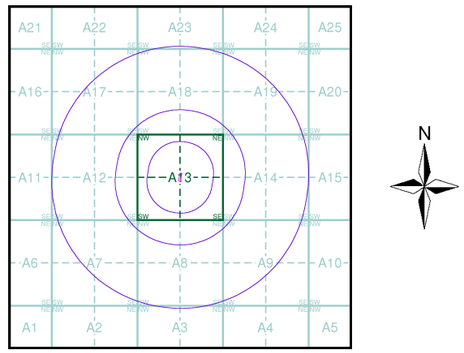
These maps were produced by the Russian military during the Cold War between 1950 and 1997, and cover 103 towns and cities throughout the U.K. The maps are produced at 1:25,000, 1:10,000 and 1:5,000 scale, and show detailed land use, with colour-coded areas for development, green areas, and non-developed areas. Buildings are coloured black and important building uses (such as hospitals, post offices, factories etc.) are numbered, with a numbered key describing their use.
They were produced by the Russians for the benefit of navigation, as well as strategic military sites and transport hubs, for use if they were to have invaded the U.K. The detailed information provided indicates that the areas were surveyed using land-based personnel, on the ground, in the cities that are mapped.

Map Name(s) and Date(s)

SD81
1975
1:25,000

SD80
1975
1:25,000

Russian Map - Slice A



Order Details

Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Ordnance Survey Plan

Published 1983 - 1988

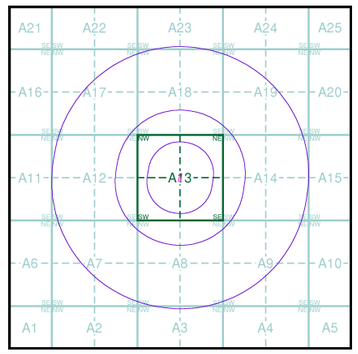
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SD81SW 1984 1:10,000	SD81SE 1988 1:10,000
SD80NW 1983 1:10,000	SD80NE 1984 1:10,000

Historical Map - Slice A



Order Details

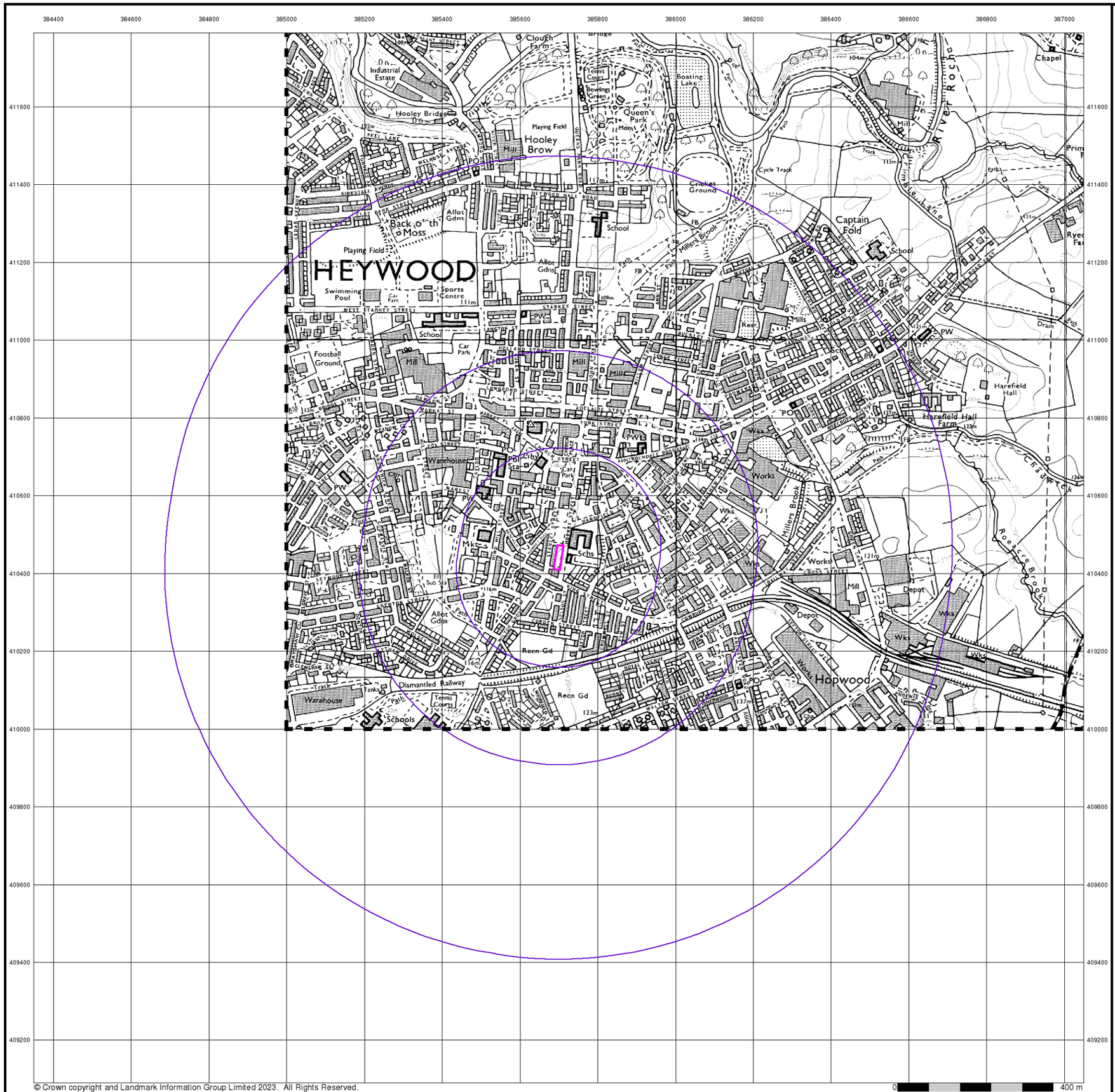
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

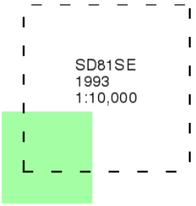
Ordnance Survey Plan

Published 1993

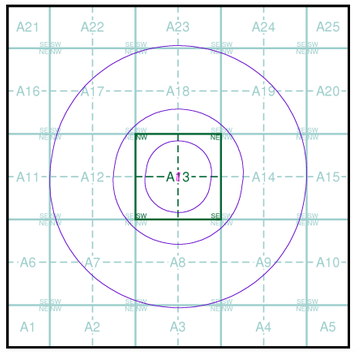
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

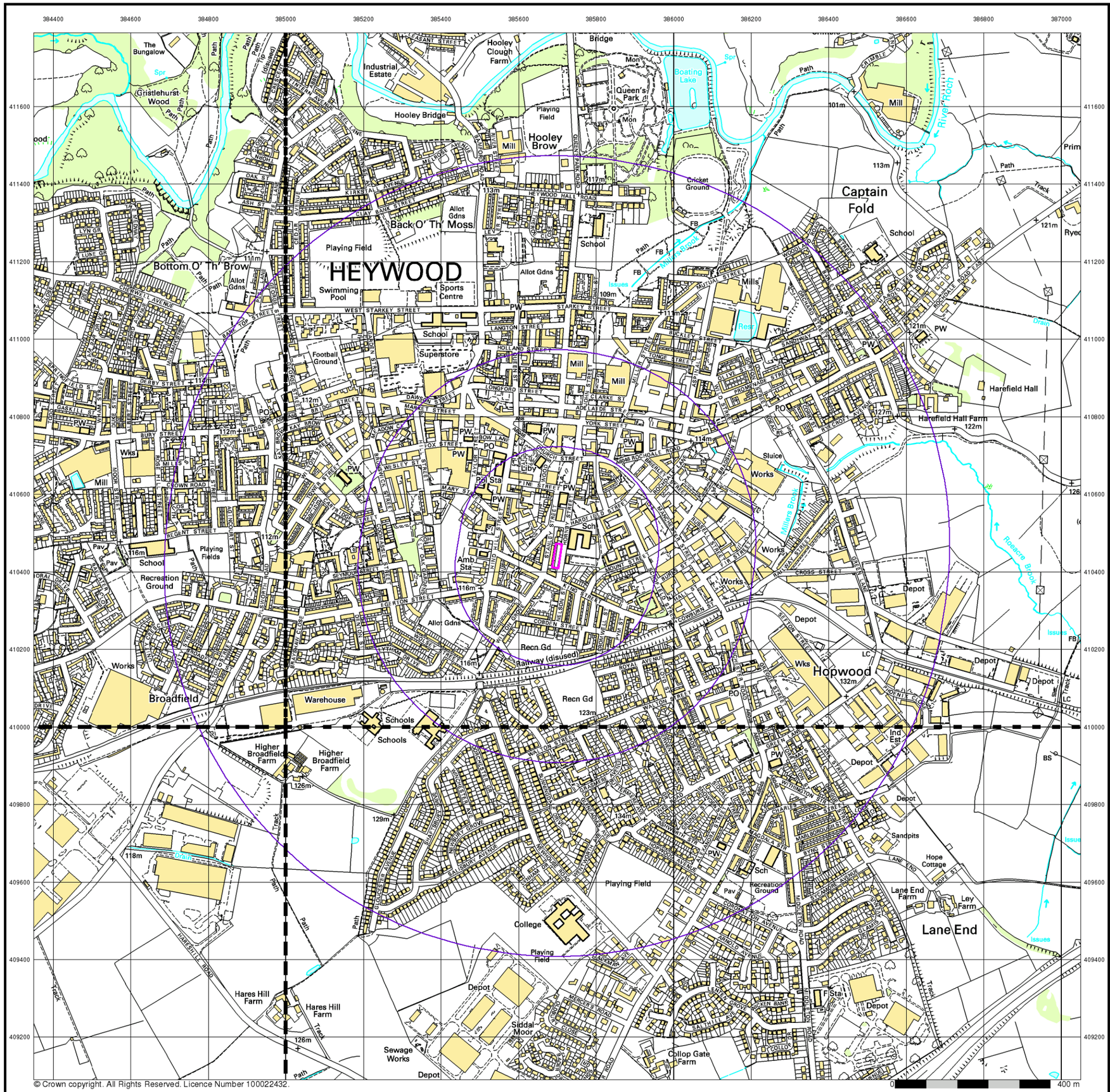
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright. All Rights Reserved. Licence Number 100022432.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

10k Raster Mapping

Published 1999

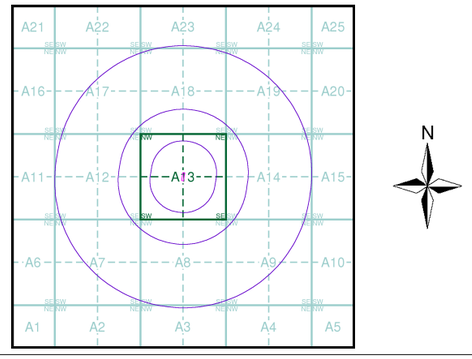
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SD81SW 1999 1:10,000	SD81SE 1999 1:10,000
SD80NW 1999 1:10,000	SD80NE 1999 1:10,000

Historical Map - Slice A



Order Details

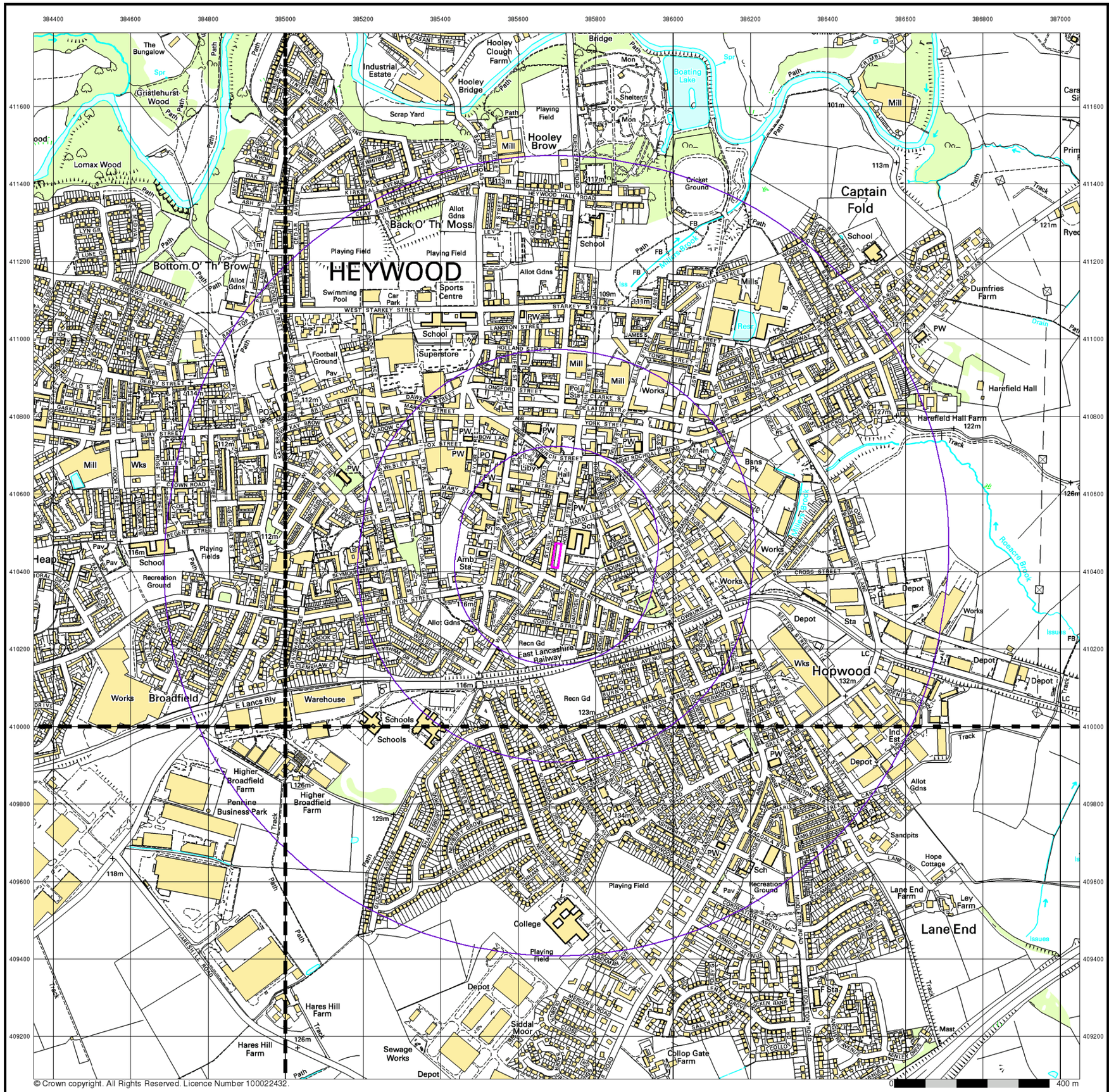
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright. All Rights Reserved. Licence Number 100022432.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

10k Raster Mapping

Published 2006

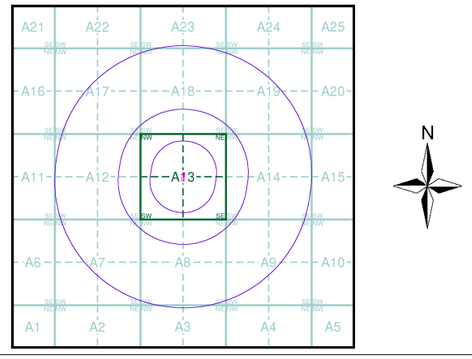
Source map scale - 1:10,000

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

Map Name(s) and Date(s)

SD81SW 2006 1:10,000	SD81SE 2006 1:10,000
SD80NW 2006 1:10,000	SD80NE 2006 1:10,000

Historical Map - Slice A



Order Details

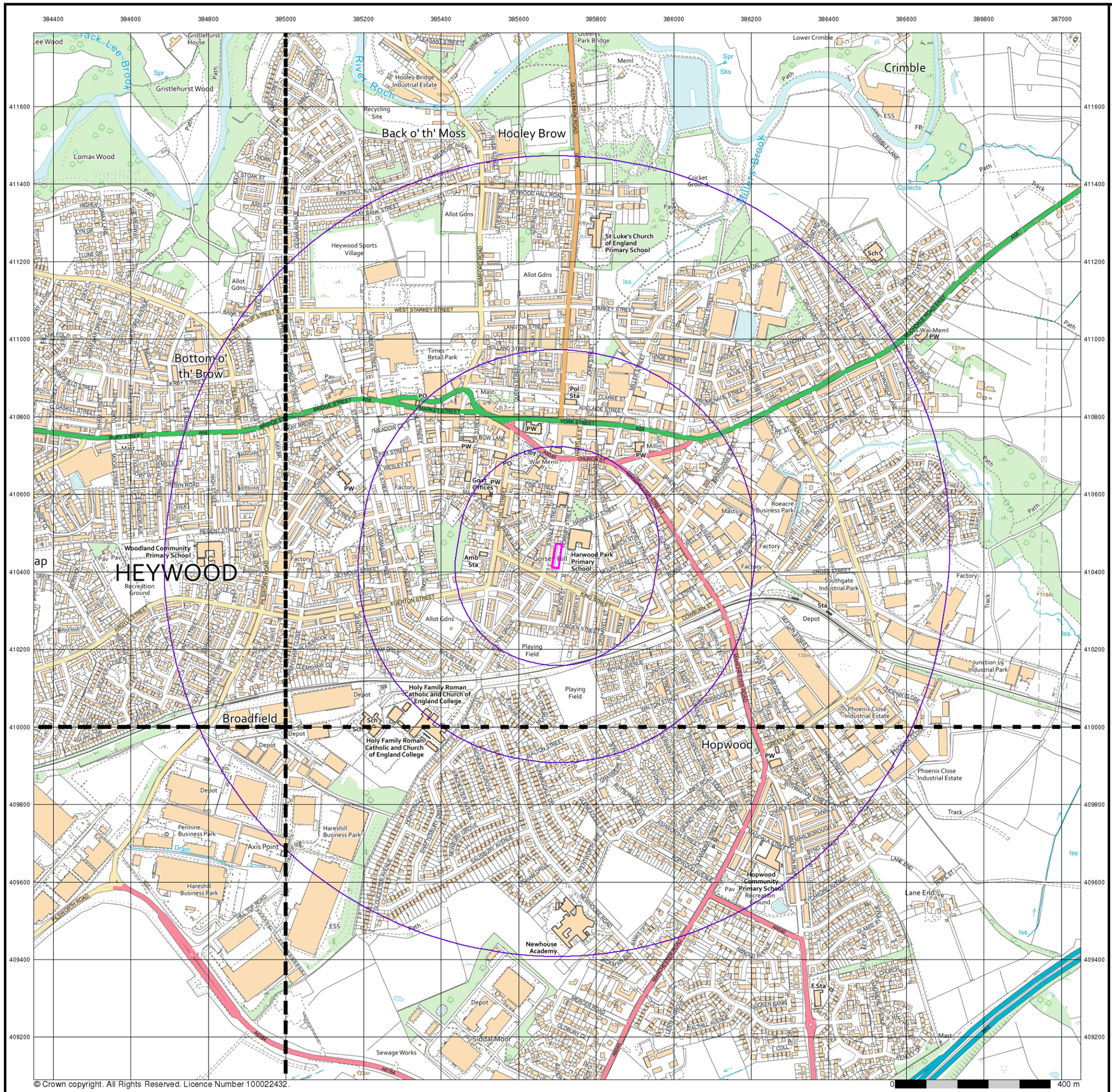
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright. All Rights Reserved. Licence Number 100022432.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

VectorMap Local

Published 2023

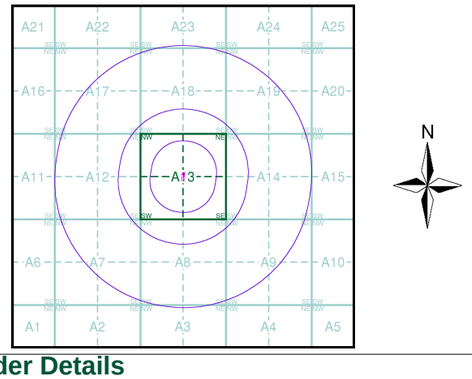
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities),1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)

SD81SW 2023 Variable	SD81SE 2023 Variable
SD80NW 2023 Variable	SD80NE 2023 Variable

Historical Map - Slice A



Order Details

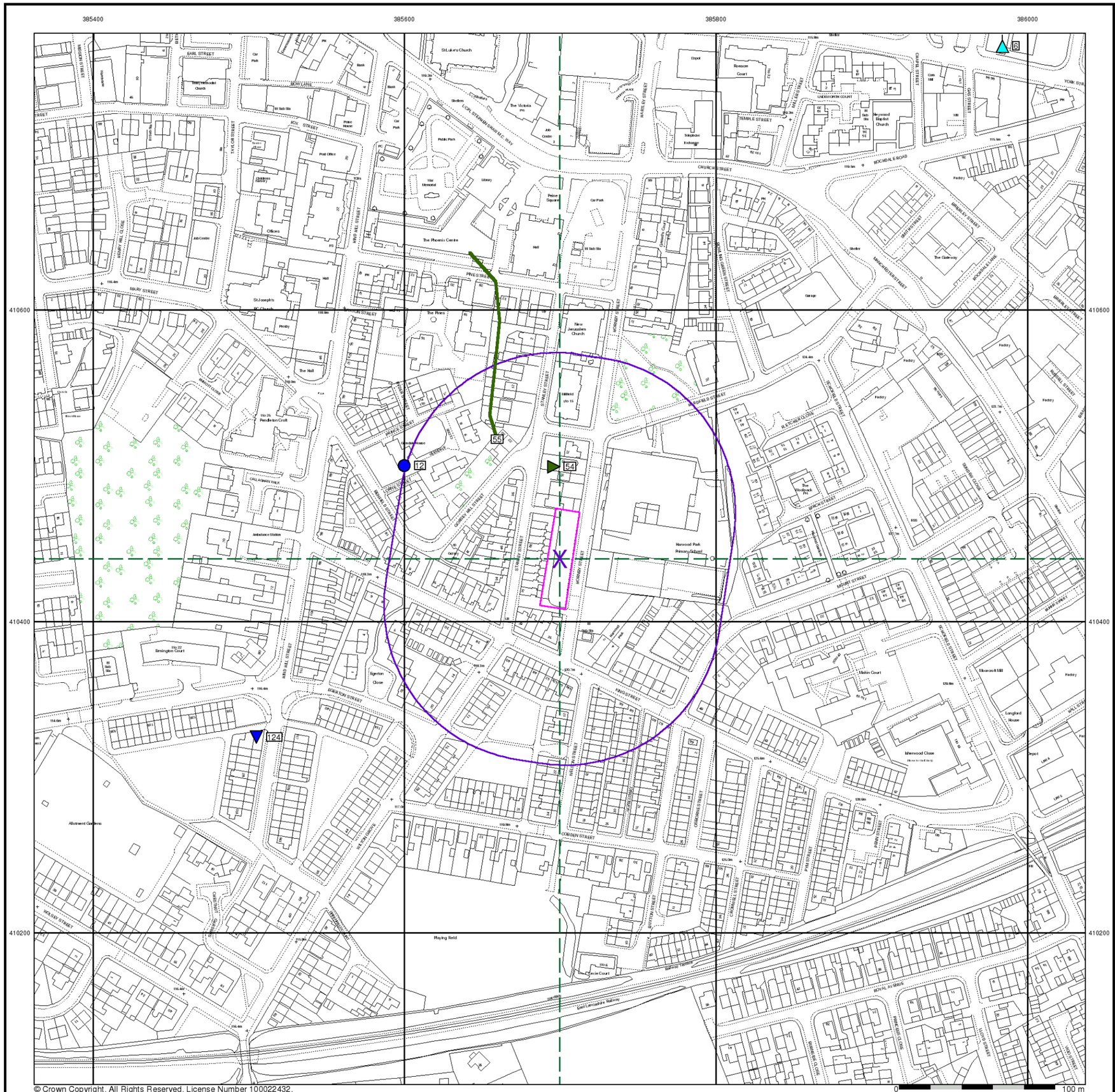
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location
- Pylon
- Overhead Transmission Line

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

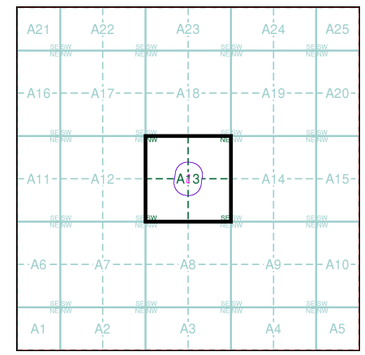
Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Segment A13



Order Details

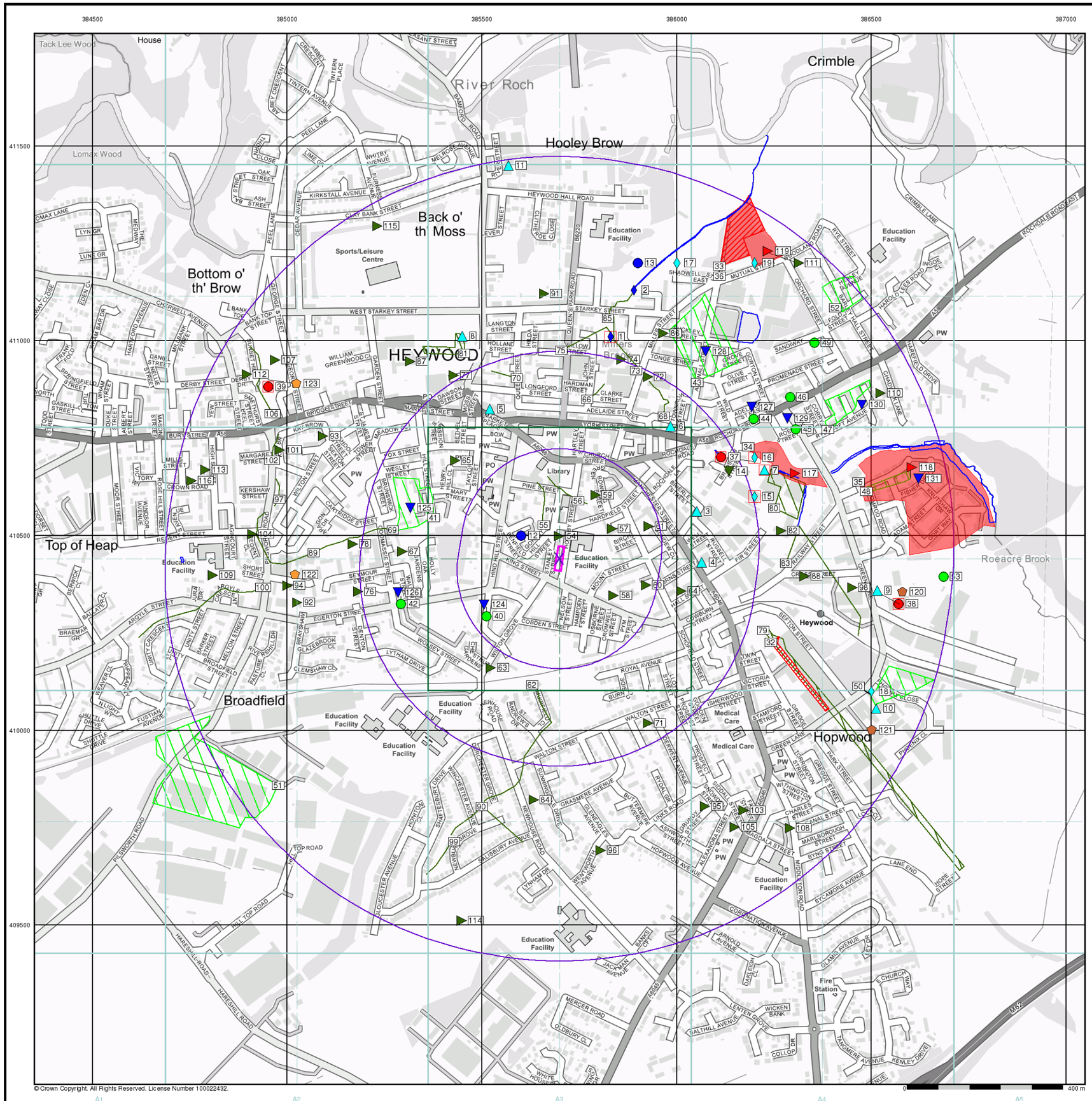
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Plot Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Map ID

Several of Type at Location

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

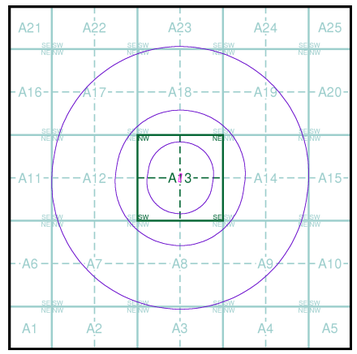
Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Slice A



Order Details

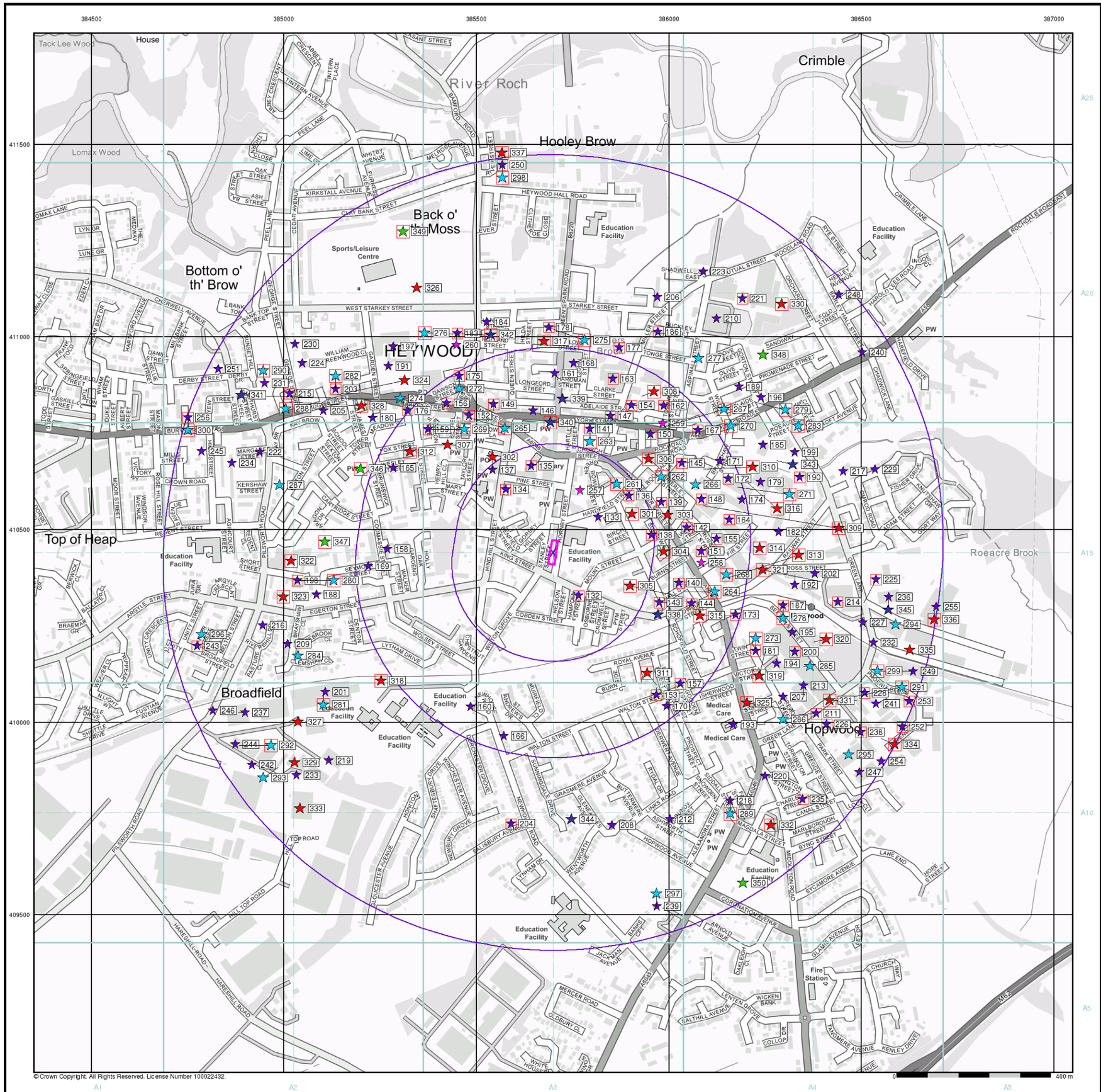
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

Industrial Land Use Map

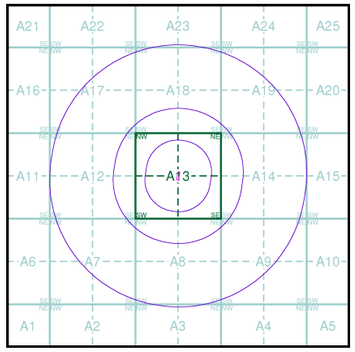
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Gas Pipeline
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Environmental
- Underground Electrical Cables

Industrial Land Use Map - Slice A



Order Details

Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

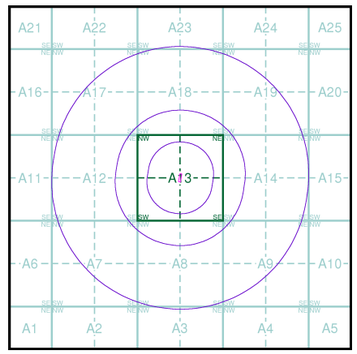
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Agency and Hydrological (Flood)

- Extreme Flooding from Rivers or Sea without Defences (Zone 2)
- Flooding from Rivers or Sea without Defences (Zone 3)
- Area Benefiting from Flood Defence
- Flood Water Storage Areas
- Flood Defence

Flood Map - Slice A



Order Details

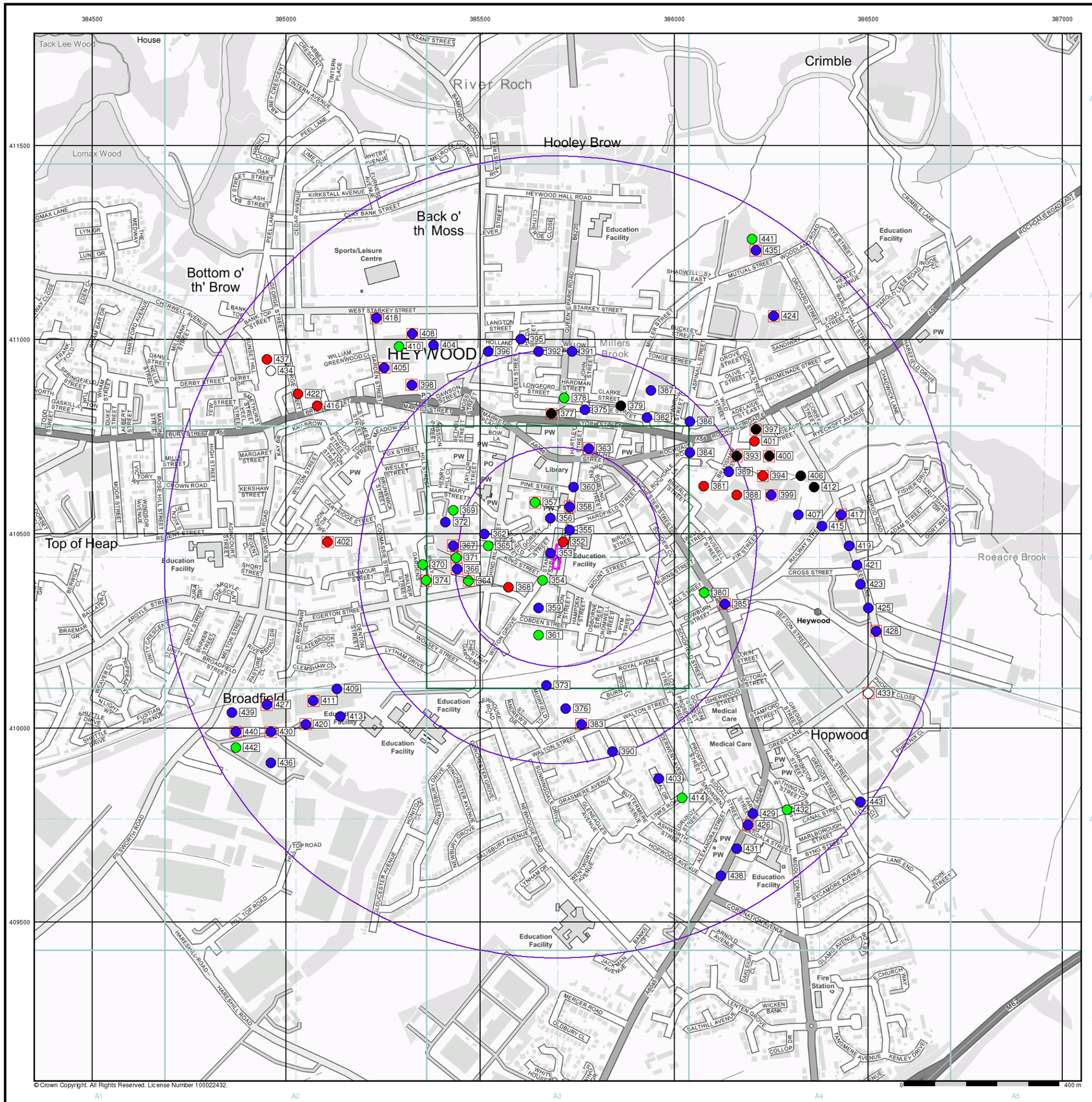
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location

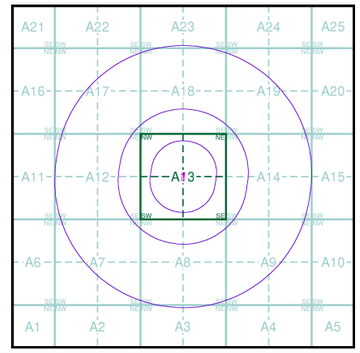
Agency and Hydrological (Boreholes)

- BGS Borehole Depth 0 - 10m
- BGS Borehole Depth 10 - 30m
- BGS Borehole Depth 30m +
- Confidential
- Other

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

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

Borehole Map - Slice A



Order Details

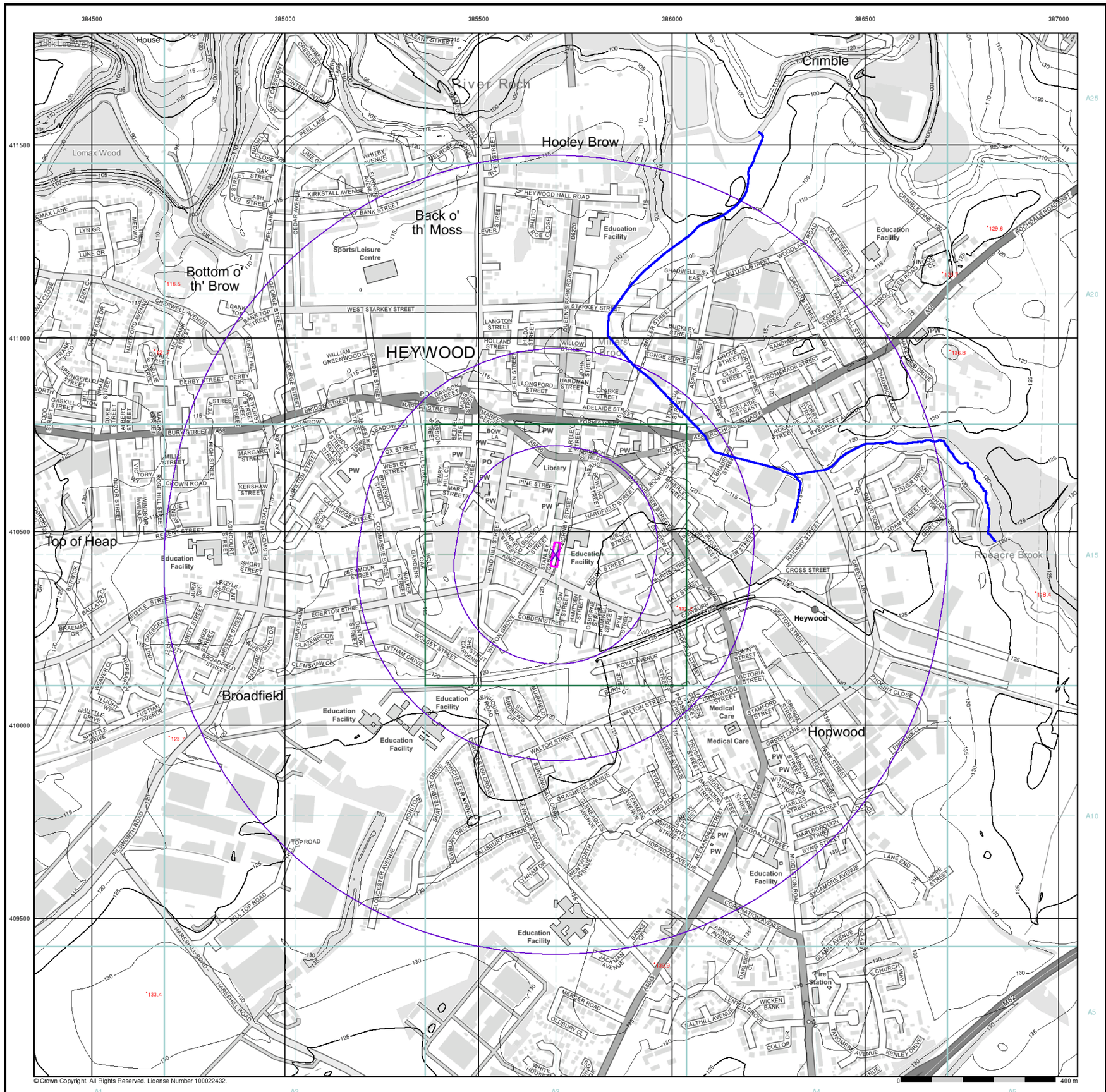
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

OS Water Network Data

- Canal
- Reservoir
- Foreshore
- Marsh
- Tidal River
- Inland River
- Drain
- Other
- Lake
- Transfer
- Lock Or Flight Of Locks
- Sea

Contours (height in meters)

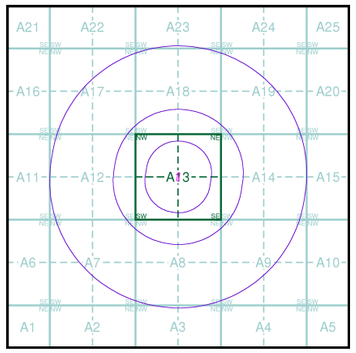
Standard Contour 105 100 95

Master Contour

Spot Height 167.3

- MLW Mean Low Water
- MHW Mean High Water

OS Water Network Map - Slice A



Order Details

Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

General

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

Risk of Flooding from Surface Water

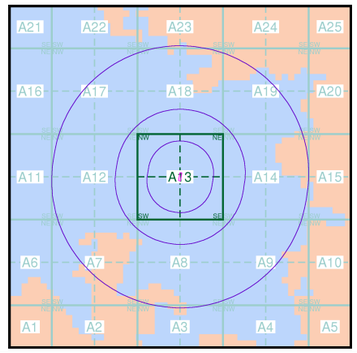
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

EA/NRW Suitability Map - Slice A



Order Details

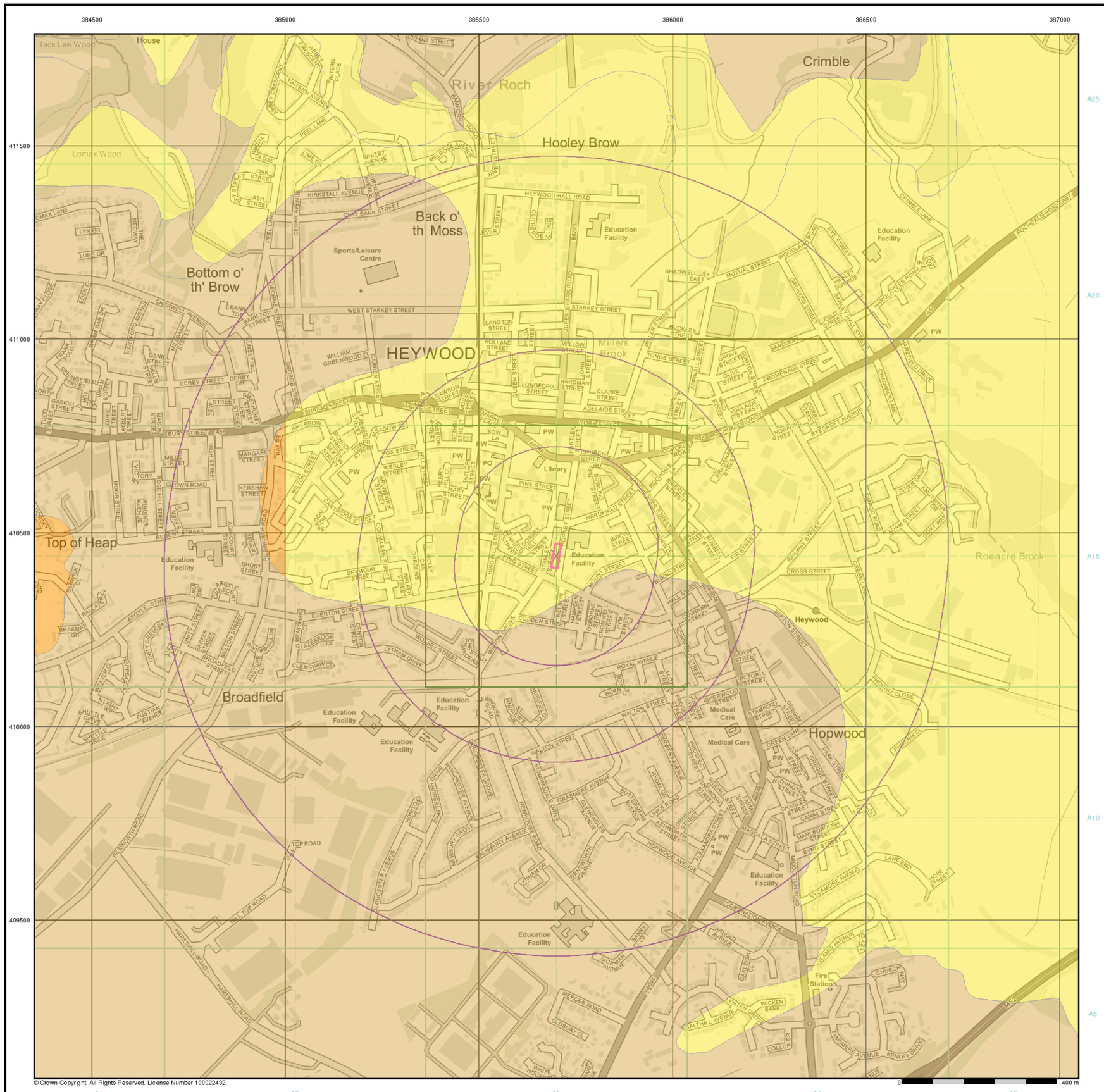
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

General

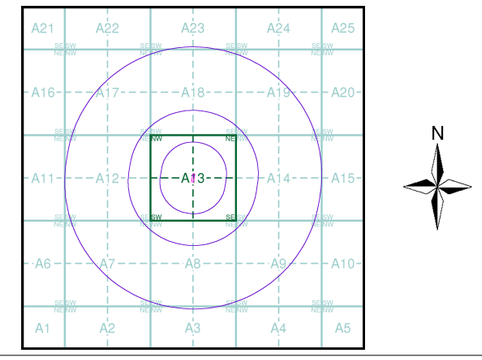
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg

- < 15
- 15 - 25
- 25 - 35
- 35 - 45
- 45 - 60
- 60 - 120
- > 120

Estimated Soil Chemistry Arsenic - Slice A



Order Details

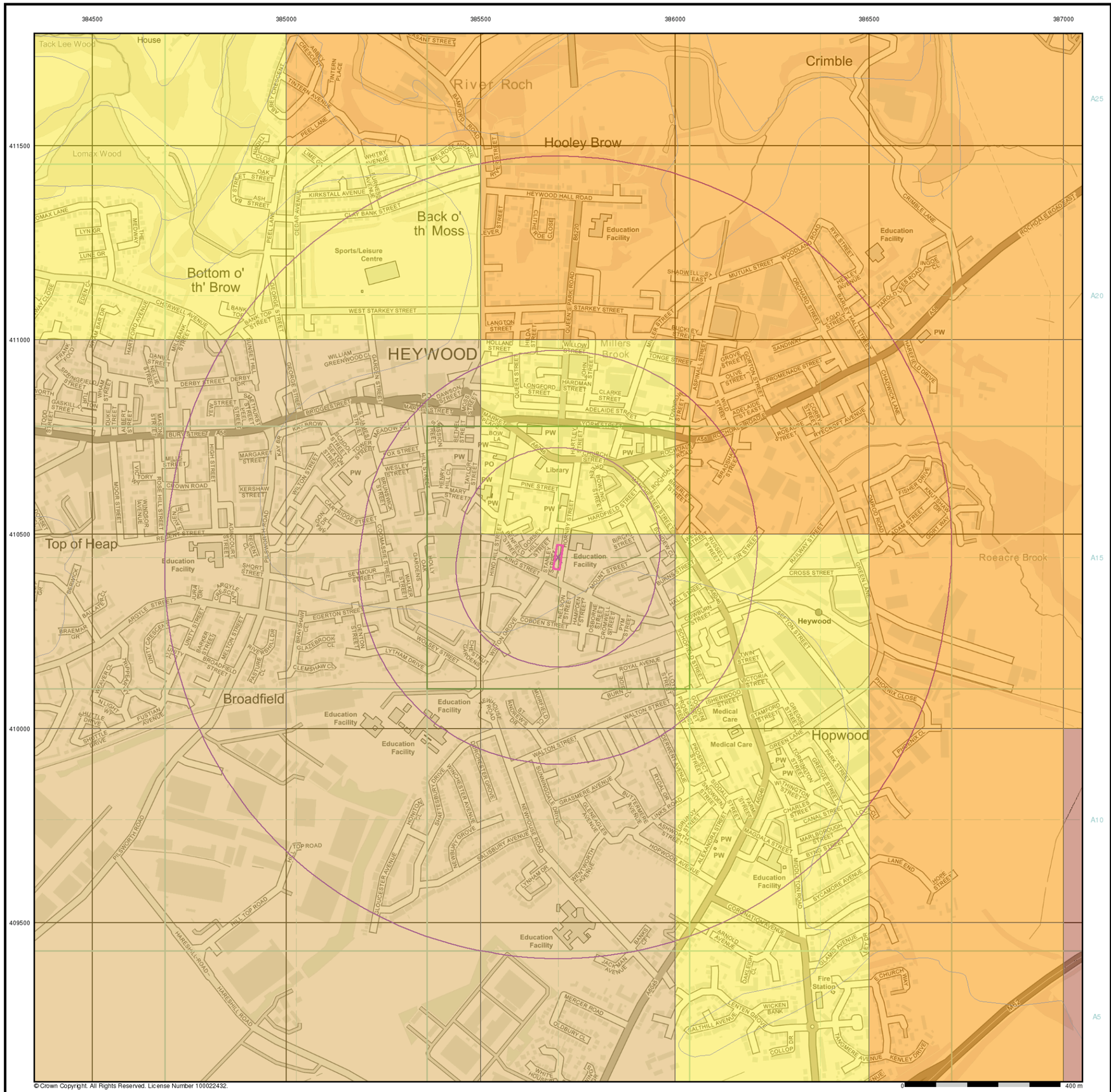
Order Details:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

General

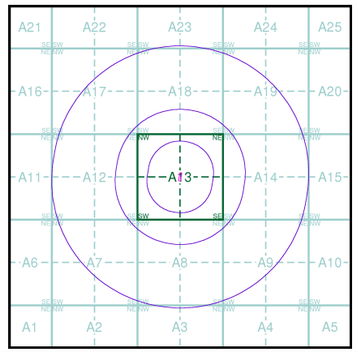
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Cadmium

Cadmium Concentrations mg/kg

- < 1.8
- 1.8 - 2.2
- 2.2 - 3.0
- > 3.0

Estimated Soil Chemistry Cadmium - Slice A



Order Details

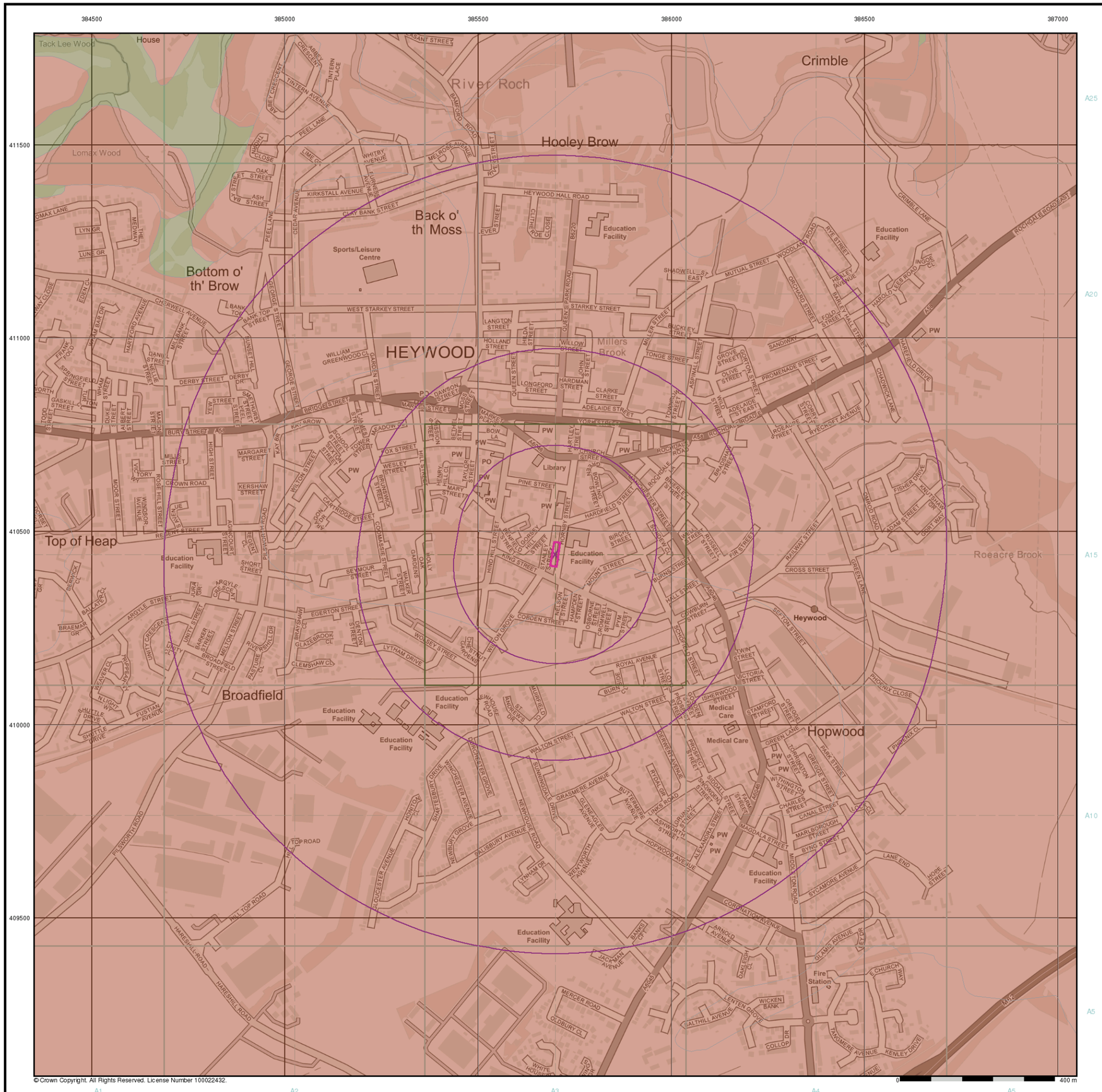
Order Details:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

General

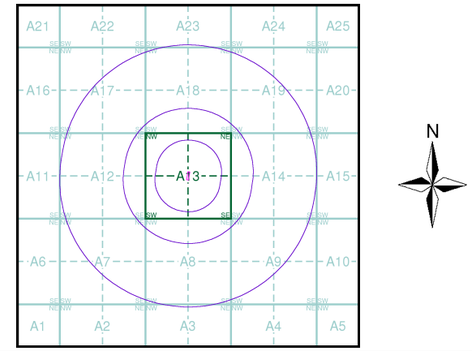
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg

- < 20
- 20 - 40
- 40 - 60
- 60 - 90
- 90 - 120
- 120 - 180
- > 180

Estimated Soil Chemistry Chromium - Slice A



Order Details

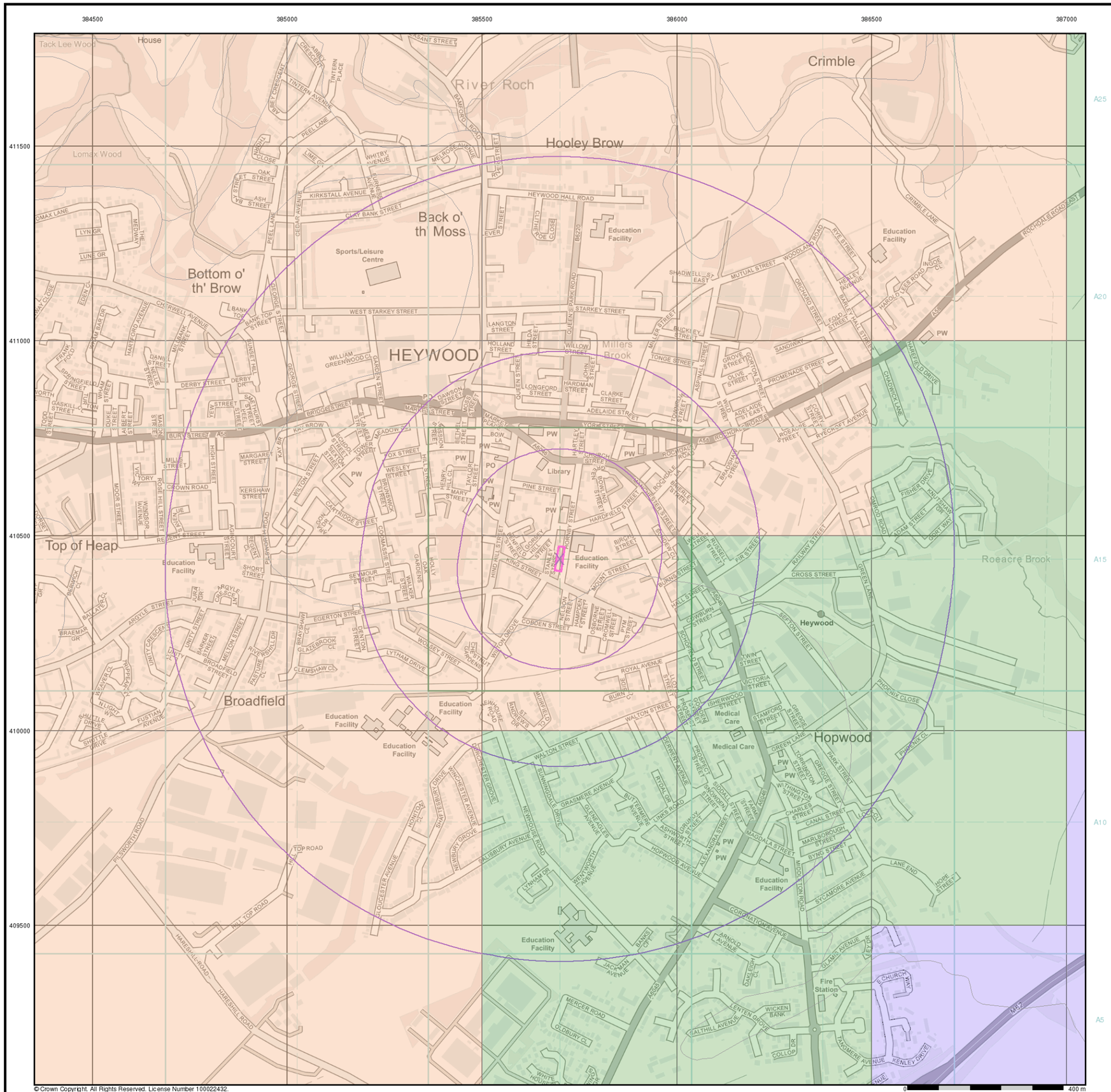
Order Details:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown Copyright. All Rights Reserved. License Number 100022432.

0 400 m

soiltechnics

environmental ▪ geotechnical ▪ building fabric

General

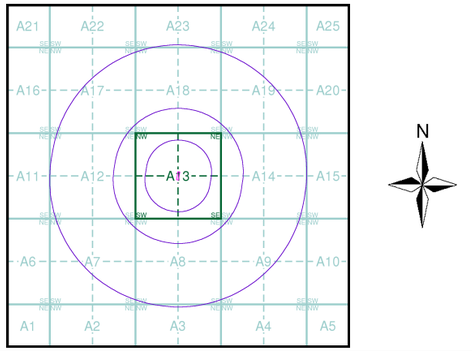
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Lead

Lead Concentrations mg/kg

- <100 mg/kg
- 100 - 200
- 200 - 300
- 300 - 600
- 600 - 1200
- >1200

Estimated Soil Chemistry Lead - Slice A



Order Details

Order Details:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

General

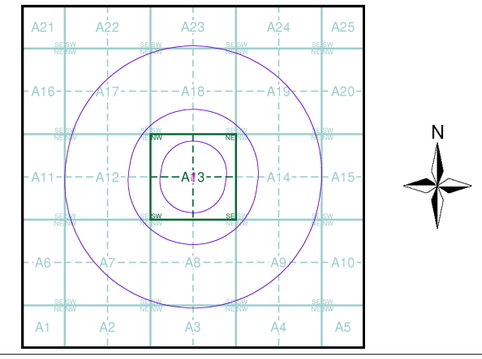
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg

- < 15
- 15 - 30
- 30 - 45
- 45 - 60
- 60 - 80
- 80 - 100
- > 100

Estimated Soil Chemistry Nickel - Slice A



Order Details

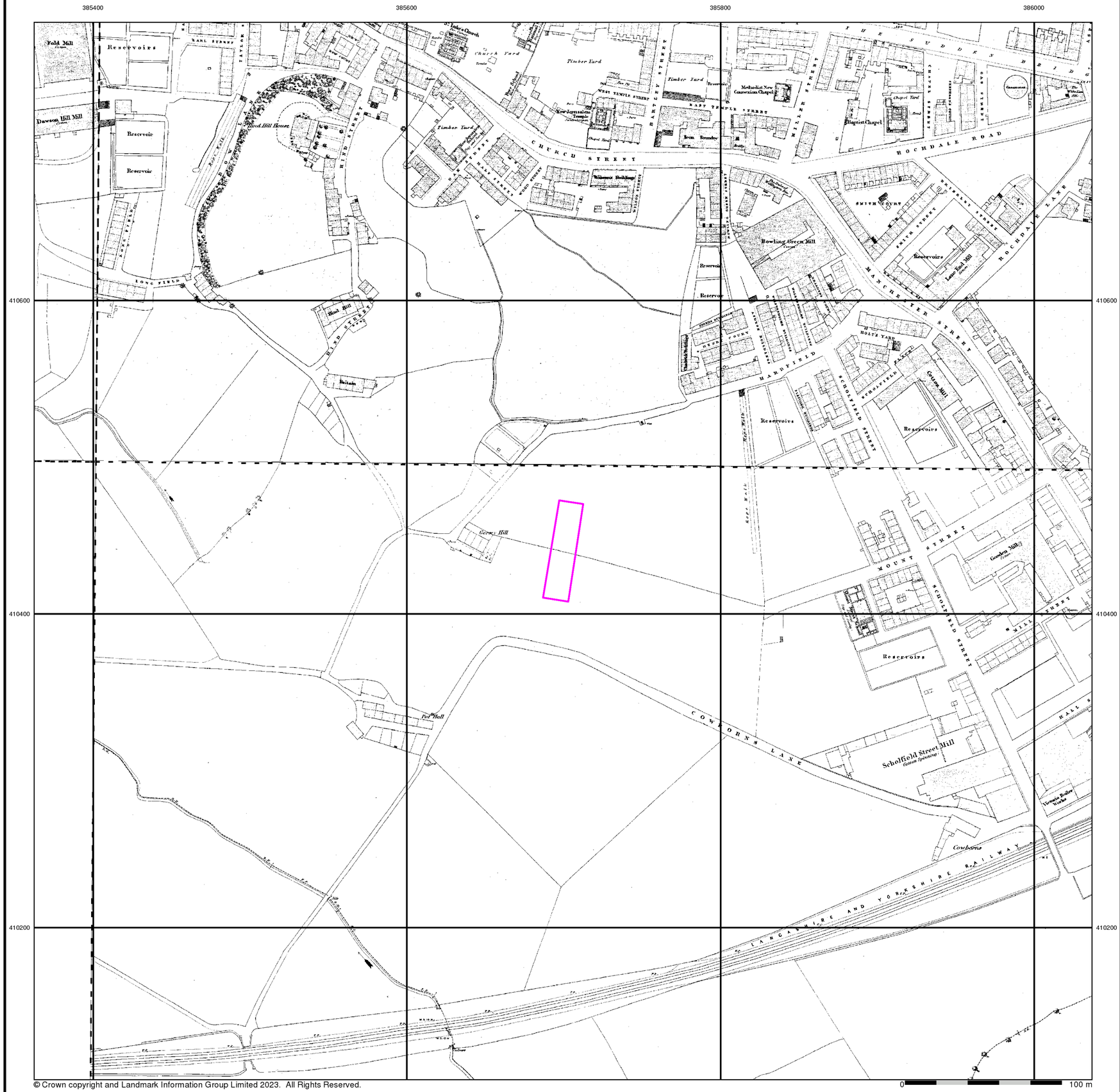
Order Details:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	1000

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

0 100 m

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Lancashire And Furness

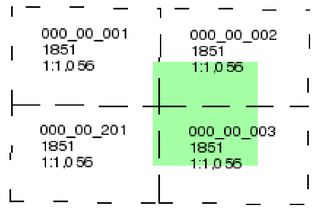
Published 1851

Source map scale - 1:1,056

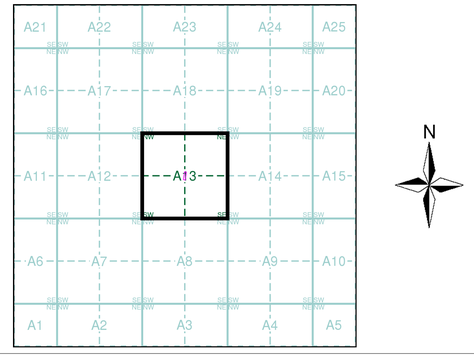
The 1:1056 scale of Ordnance Survey mapping was adopted from Ireland in 1848 and was used to survey towns with a population of over 4000, plus county towns of lesser population, in those counties mapped at the six-inch scale in 1841-55. The scale was the largest scale at which London was mapped by the Ordnance Survey and a 'skeleton' survey of the capital, showing little more than streets, street names, frontages and altitudes, was undertaken between 1848 and 1850. The majority of the 1:1056 surveys were later replaced by 1:500 surveys; although almost all the remainder were revised at this scale, sometimes more than once before 1895. The type of detail shown on the 1:1056 scale is broadly similar to that on 1:500; the apparent omission of minor details such as sewer access points and street lights may be as much a reflection of the generally earlier date of these plans, as of the specification of the map.

Please note: Due to the partial coverage of Historical Town Plans, it is possible that not all segments within an order will contain mapping. Only the segments that have Town Plan coverage will be generated.

Map Name(s) and Date(s)



Historical Town Plan - Segment A13



Order Details

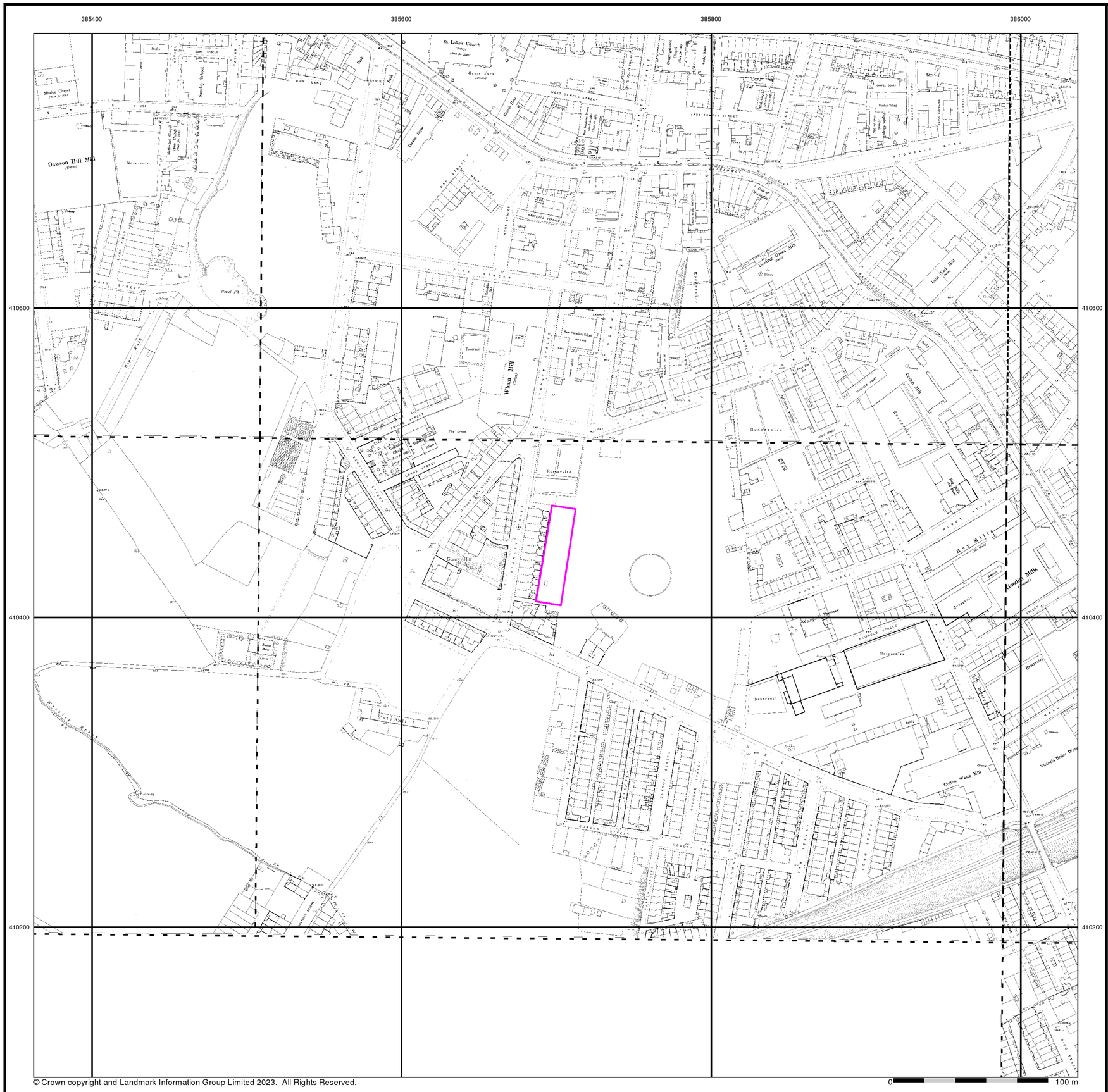
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	0

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Lancashire And Furness

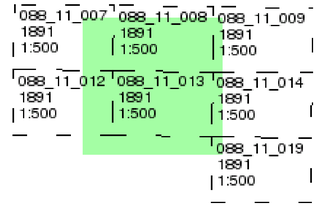
Published 1891

Source map scale - 1:500

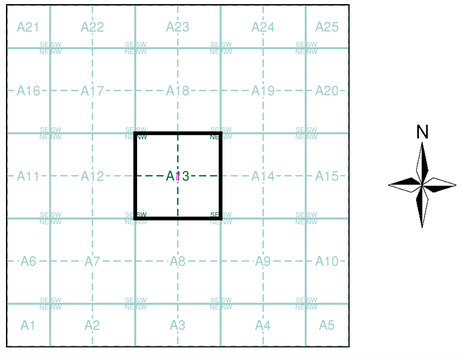
The 1:500 scale Ordnance Survey mapping was introduced in 1855 as a replacement for the 1:528 scale and to compliment the 1:2500 scale that had been implemented in 1853. By 1895, the 1:500 scale covered most towns over a population of about 4000 at the time of survey, although very few towns were mapped more than once at this scale, and none have been since 1910. The 1:500 scale gives particular emphasis to such features as lamp posts, man holes, arched passages and minor building projections. Also often featured are divisions between tenements, interior ground floor layouts of public buildings, and on earlier plans, the functions of the various parts of larger industrial premises are also indicated. Content of the plans does vary however, from one town to the next in terms of, for example, the completeness of railway tracks and the coverage of public buildings.

Please note: Due to the partial coverage of Historical Town Plans, it is possible that not all segments within an order will contain mapping. Only the segments that have Town Plan coverage will be generated.

Map Name(s) and Date(s)



Historical Town Plan - Segment A13



Order Details

Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	0

Site Details

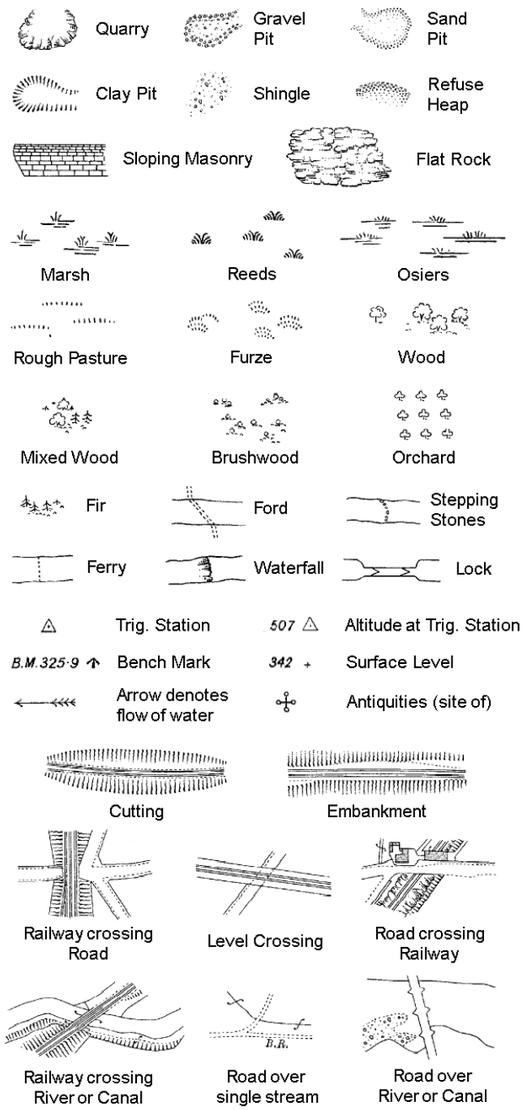
Hornby Street, Heywood

Landmark INFORMATION GROUP

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

Historical Mapping Legends

Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



County Boundary (Geographical)

County & Civil Parish Boundary

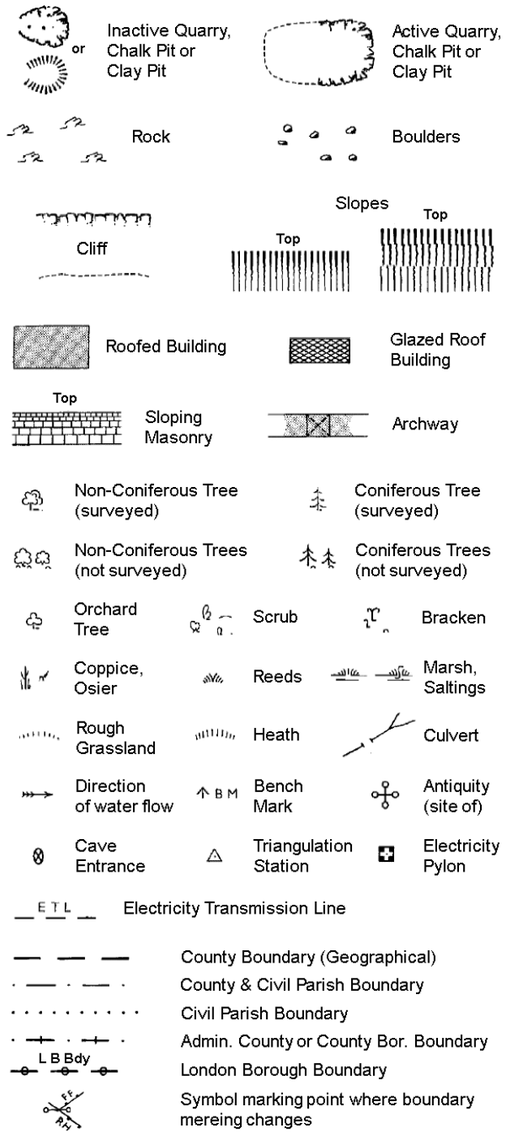
Administrative County & Civil Parish Boundary

Co. Boro. Bdy. County Borough Boundary (England)

Co. Burgh Bdy. County Burgh Boundary (Scotland)

B P B S	Boundary Post or Stone	P.C.B	Police Call Box
B.R.	Bridle Road	P	Pump
E.P	Electricity Pylon	S.P	Signal Post
F.B.	Foot Bridge	St.	Sluice
F.P.	Foot Path	Sp.	Spring
G.P	Guide Post or Board	T.C.B	Telephone Call Box
M.S	Mile Stone	Tr.	Trough
M.P M.R	Mooring Post or Ring	W	Well

Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



County Boundary (Geographical)

County & Civil Parish Boundary

Civil Parish Boundary

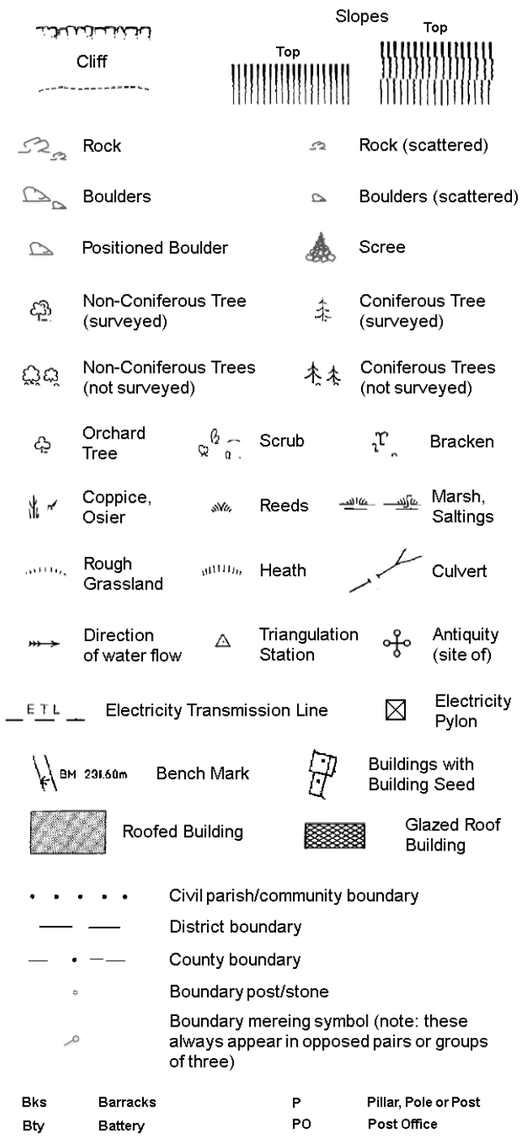
Admin. County or County Bor. Boundary

L B Bdy London Borough Boundary

Symbol marking point where boundary mereing changes

BH	Beer House	P	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
El P	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
H	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	Wr Pt, Wr T	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

Large-Scale National Grid Data 1:2,500 and 1:1,250



Civil parish/community boundary

District boundary

County boundary

Boundary post/stone

Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	Tk	Tank or Track
Gas Gov	Gas Valve Compound	Tr	Trough
GVC	Gas Governer	Wd Pp	Wind Pump
GP	Guide Post	Wr Pt, Wr T	Water Point, Water Tap
MH	Manhole	Wks	Works (building or area)
MP, MS	Mile Post or Mile Stone	W	Well

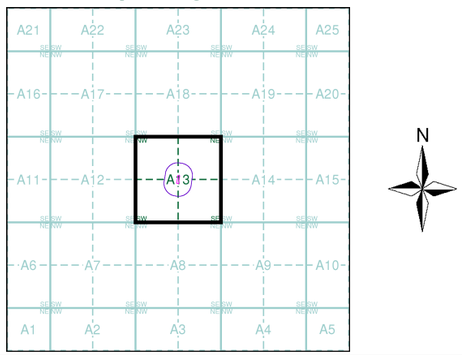
soiltechnics

environmental ▪ geotechnical ▪ building fabric

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:2,500	1893	2
Lancashire And Furness	1:2,500	1910	3
Lancashire And Furness	1:2,500	1929	4
Lancashire And Furness	1:2,500	1937	5
Ordnance Survey Plan	1:1,250	1956 - 1957	6
Ordnance Survey Plan	1:2,500	1957	7
Ordnance Survey Plan	1:1,250	1964 - 1971	8
Ordnance Survey Plan	1:2,500	1969 - 1970	9
Ordnance Survey Plan	1:1,250	1973 - 1991	10
Supply of Unpublished Survey Information	1:1,250	1975	11
Additional SIMs	1:1,250	1977 - 1985	12
Additional SIMs	1:1,250	1983 - 1991	13
Additional SIMs	1:1,250	1988 - 1990	14
Ordnance Survey Plan	1:1,250	1990	15
Large-Scale National Grid Data	1:1,250	1992	16
Large-Scale National Grid Data	1:1,250	1994 - 1995	17
Large-Scale National Grid Data	1:1,250	1996	18
Large-Scale National Grid Data	1:1,250	1996	19
Historical Aerial Photography	1:2,500	2000	20

Historical Map - Segment A13



Order Details

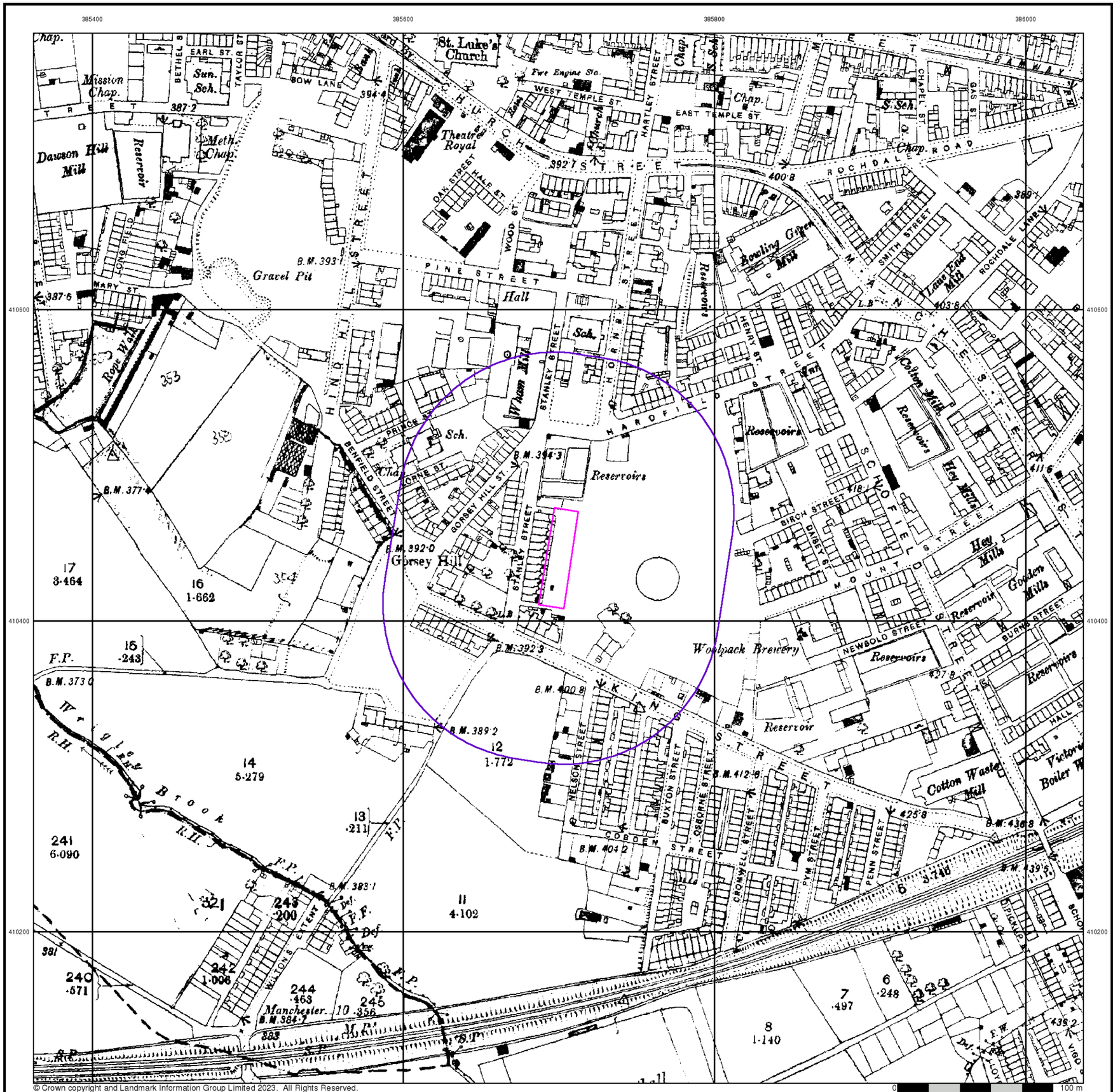
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark® INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

0 100 m

soiltechnics

environmental ▪ geotechnical ▪ building fabric

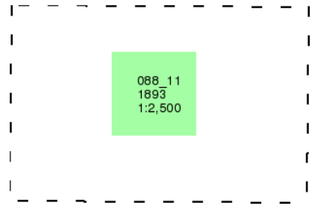
Lancashire And Furness

Published 1893

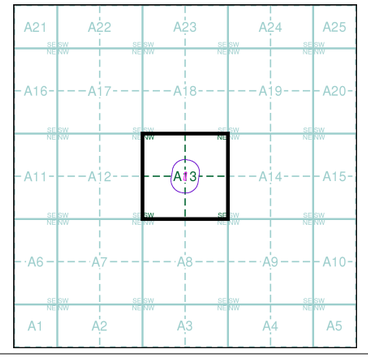
Source map scale - 1:2,500

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

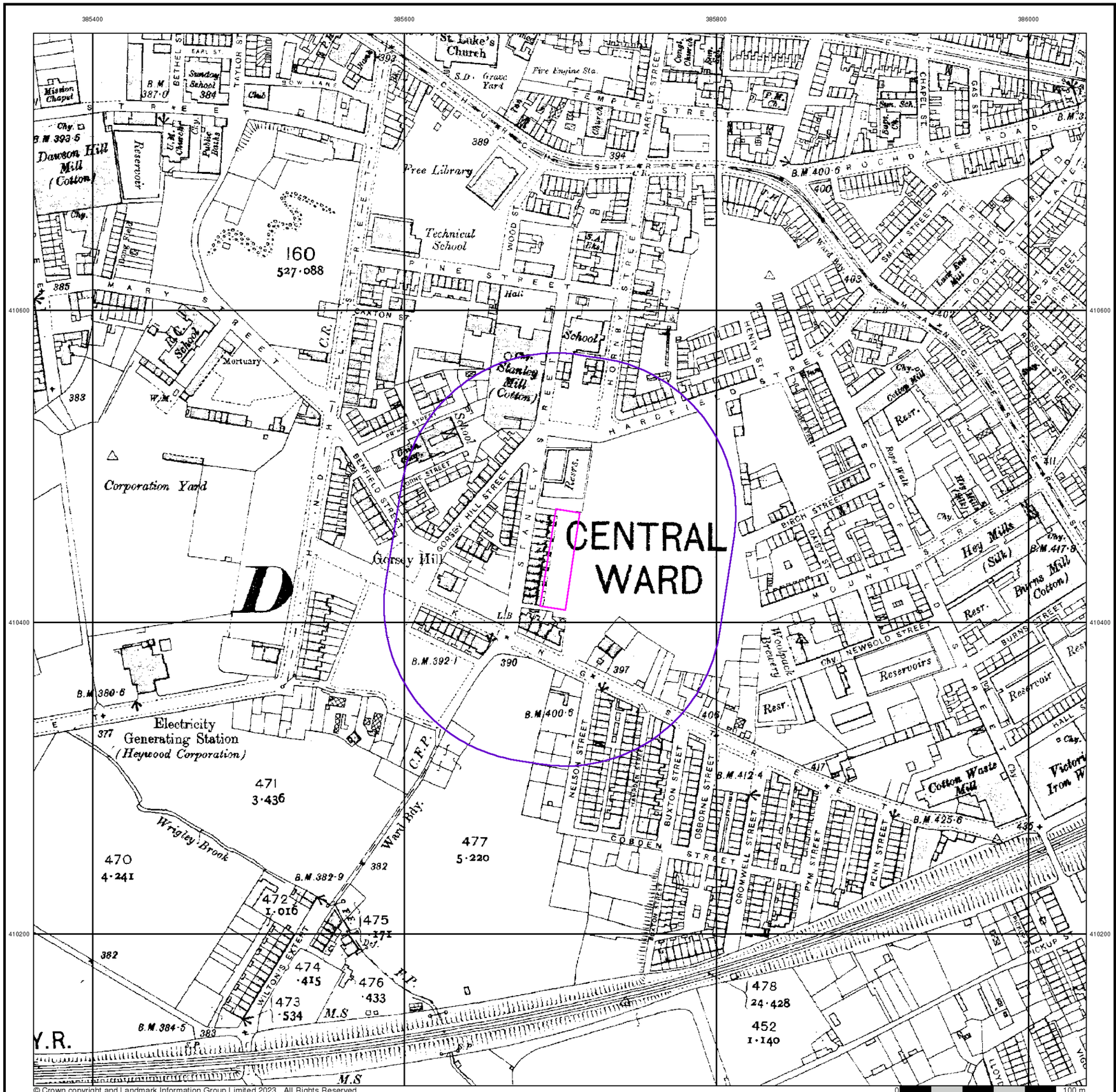
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Lancashire And Furness

Published 1910

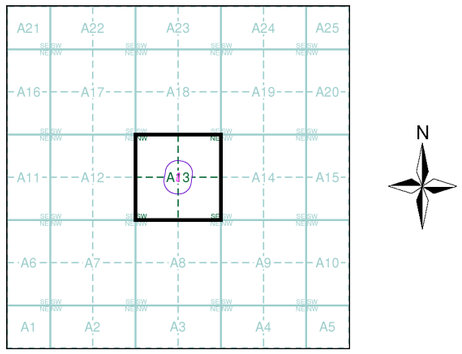
Source map scale - 1:2,500

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)

088_11
1910
1:2,500

Historical Map - Segment A13



Order Details

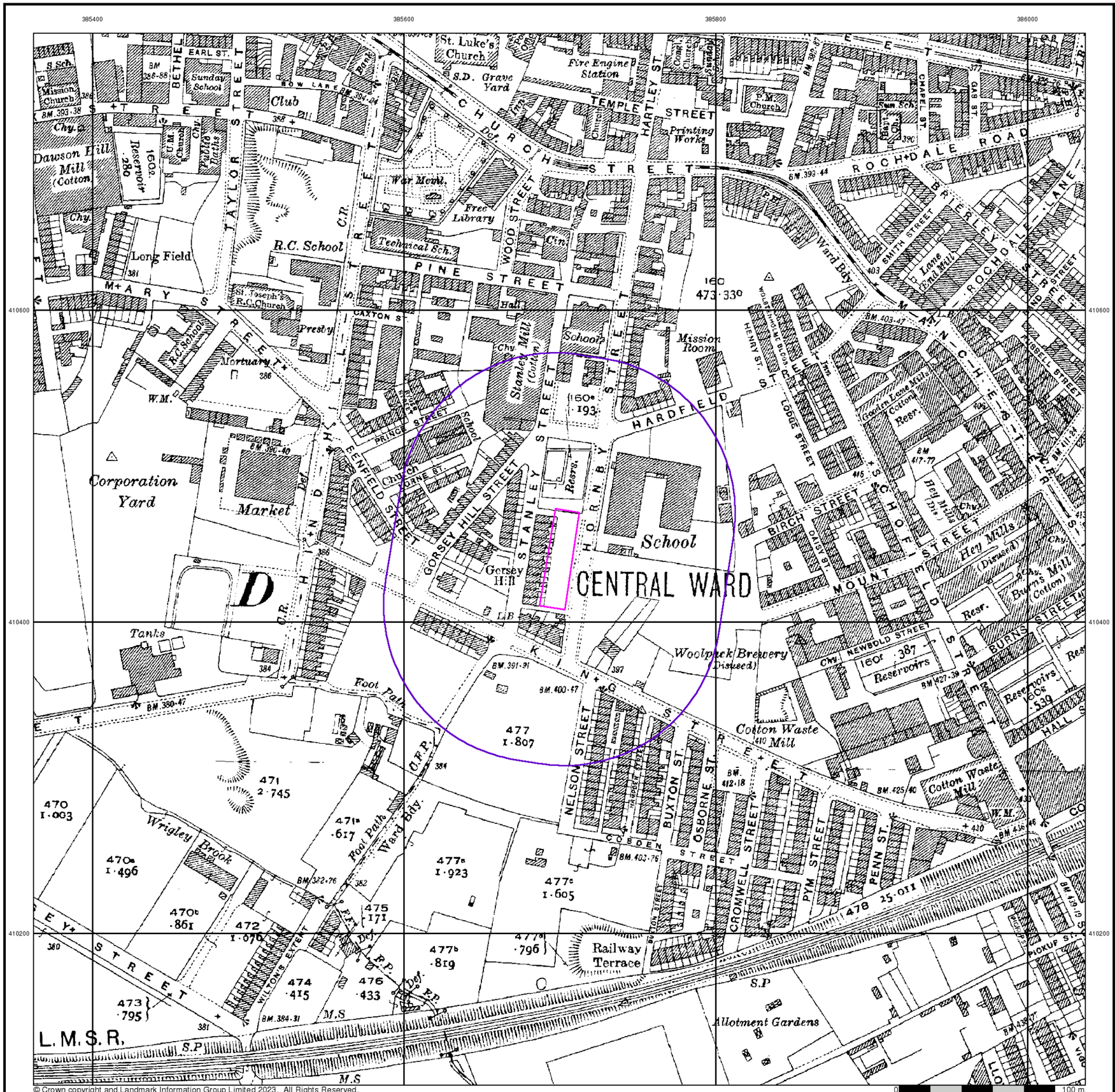
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

Lancashire And Furness

Published 1929

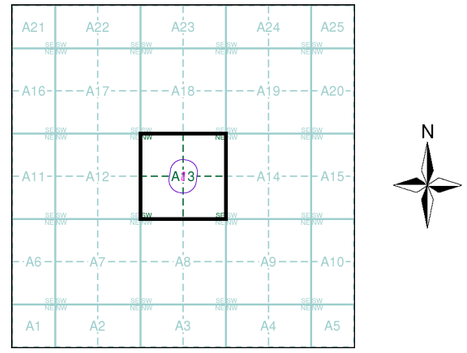
Source map scale - 1:2,500

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)

088_11
1929
1:2,500

Historical Map - Segment A13



Order Details

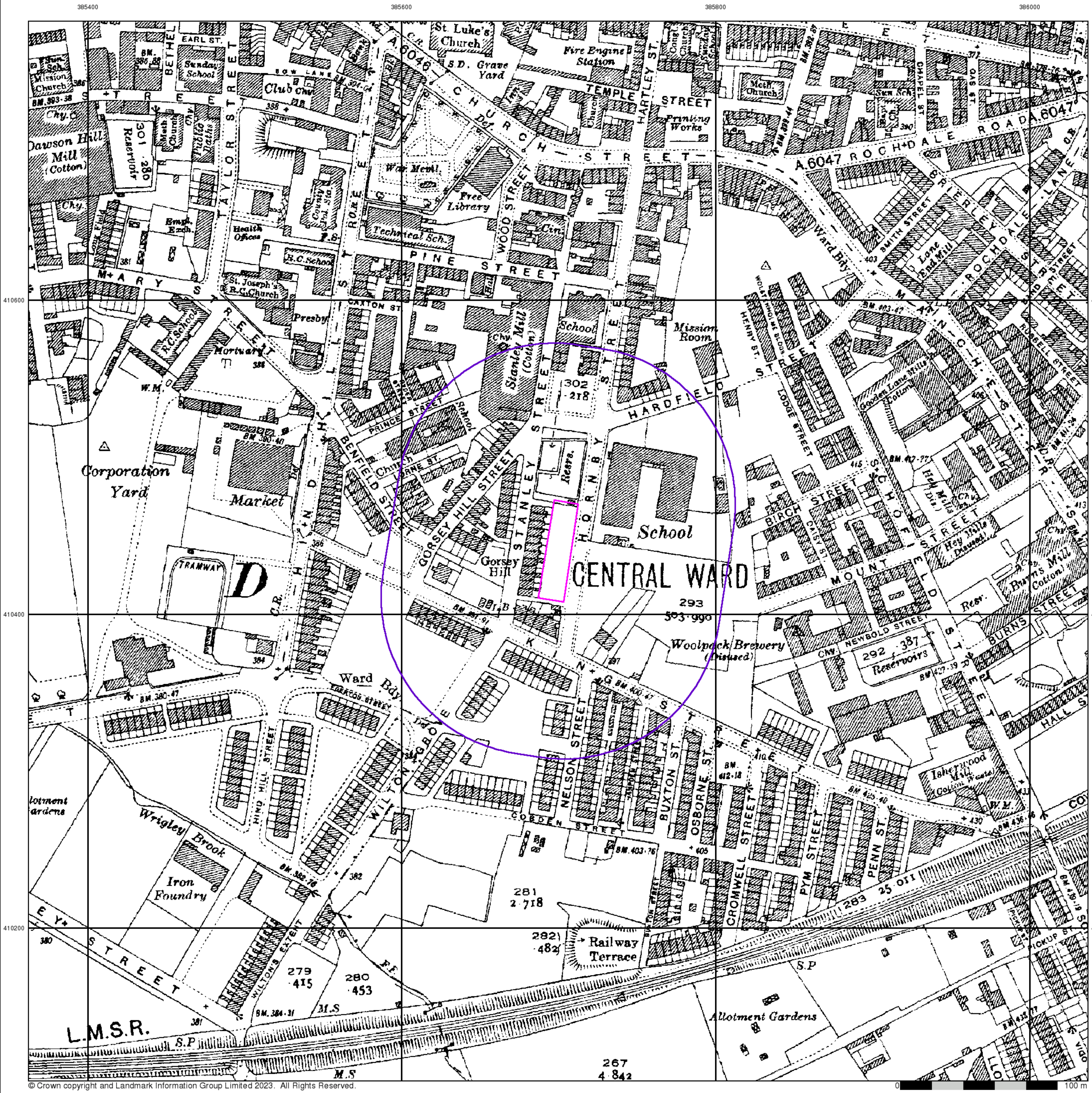
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Lancashire And Furness

Published 1937

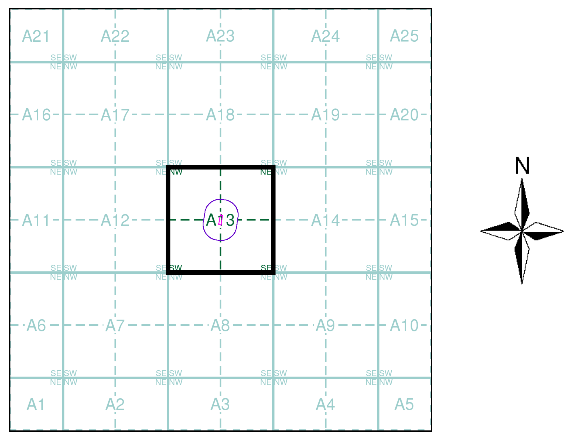
Source map scale - 1:2,500

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)

088_11
1937
1:2,500

Historical Map - Segment A13



Order Details

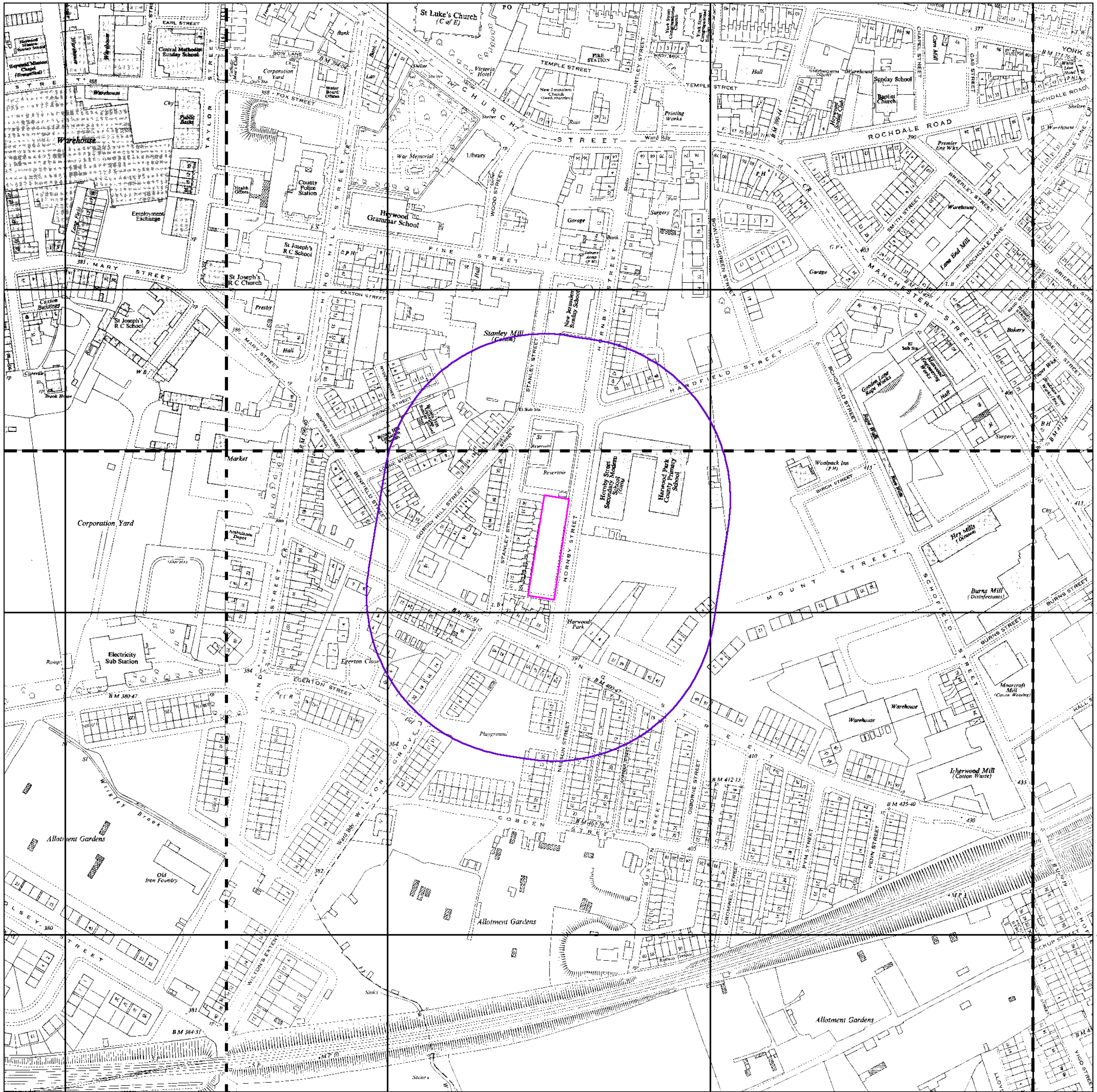
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

0 100 m

soiltechnics

environmental ▪ geotechnical ▪ building fabric

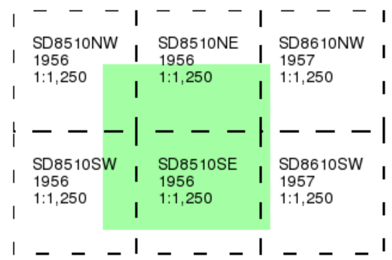
Ordnance Survey Plan

Published 1956 - 1957

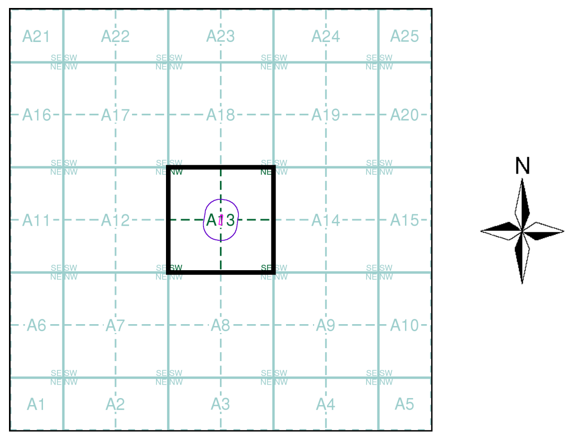
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

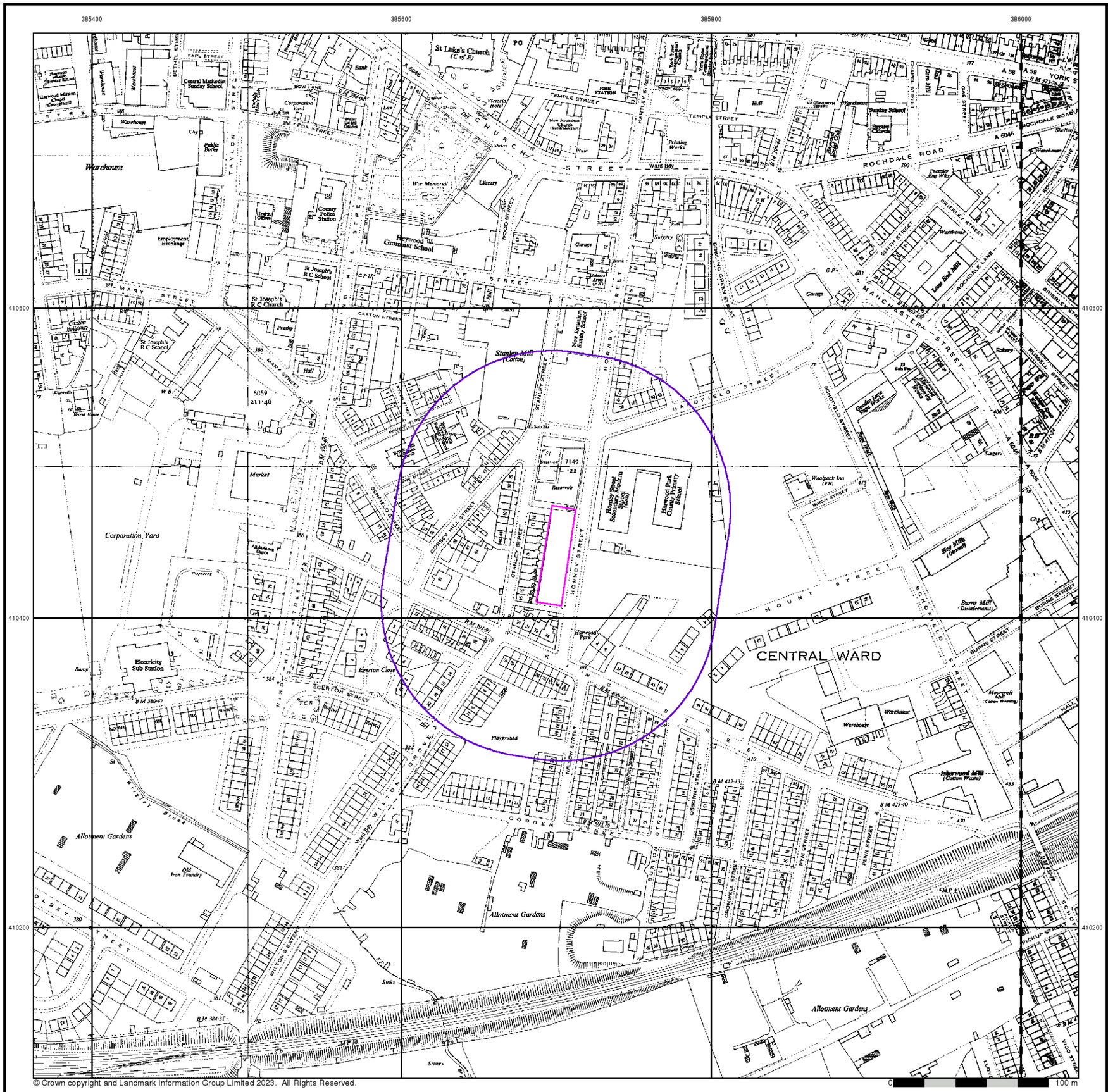
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

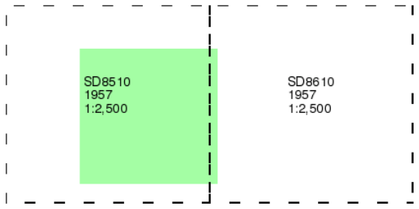
Ordnance Survey Plan

Published 1957

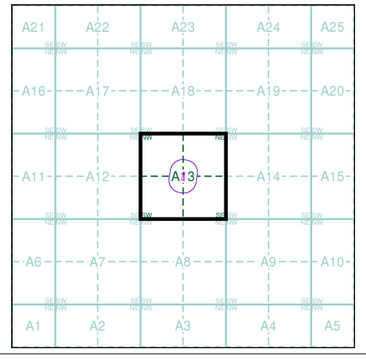
Source map scale - 1:2,500

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

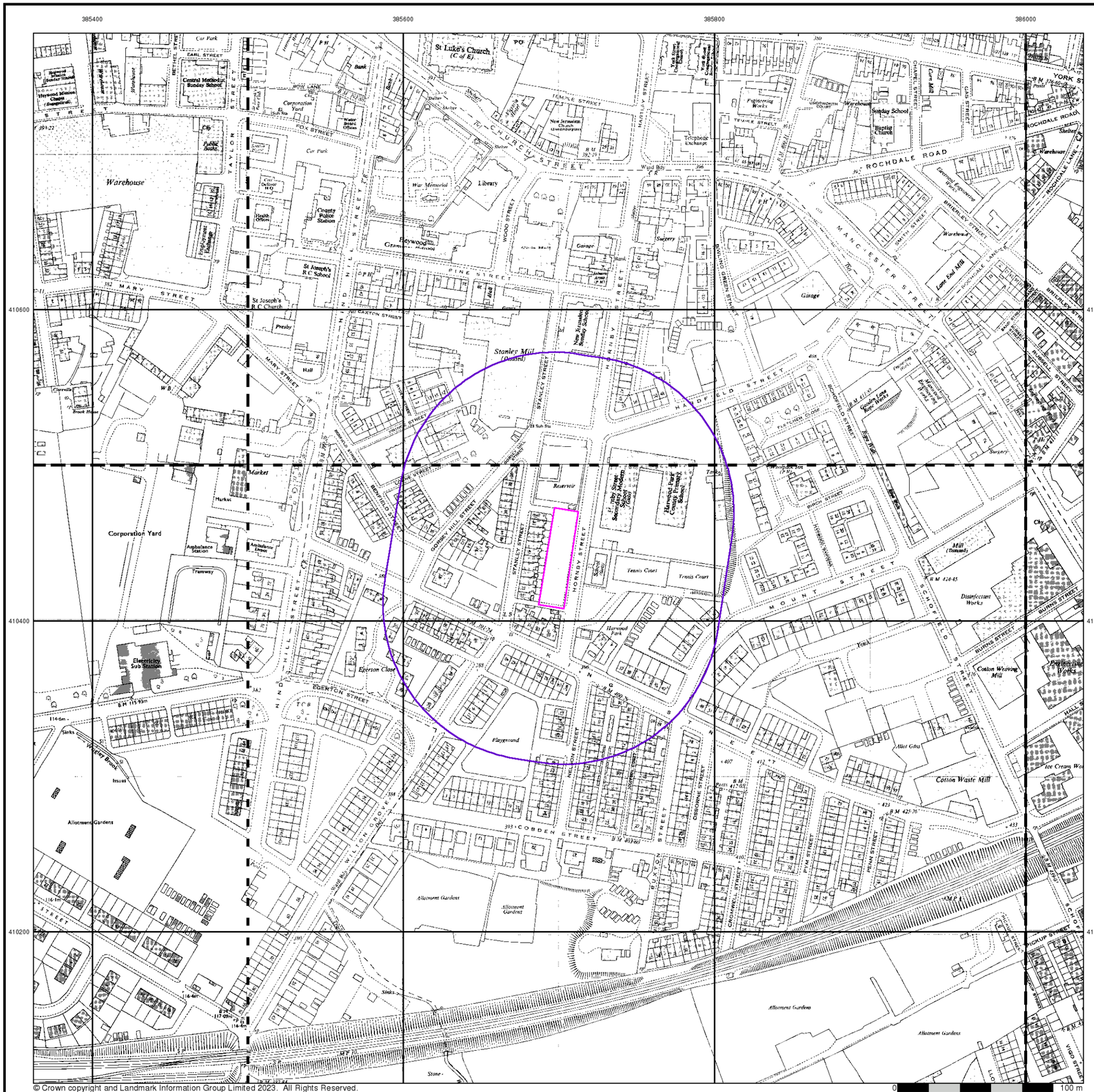
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

Ordnance Survey Plan

Published 1964 - 1971

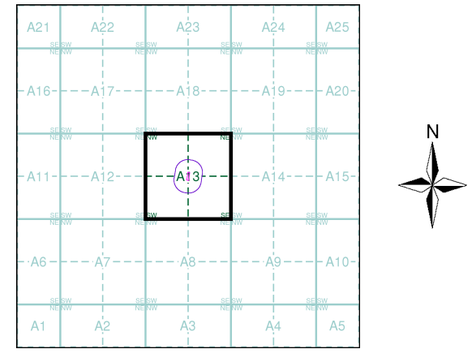
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

SD8510NW 1964 1:1,250	SD8510NE 1968 1:1,250	SD8610NW 1967 1:1,250
SD8510SW 1971 1:1,250	SD8510SE 1965 1:1,250	SD8610SW 1968 1:1,250

Historical Map - Segment A13



Order Details

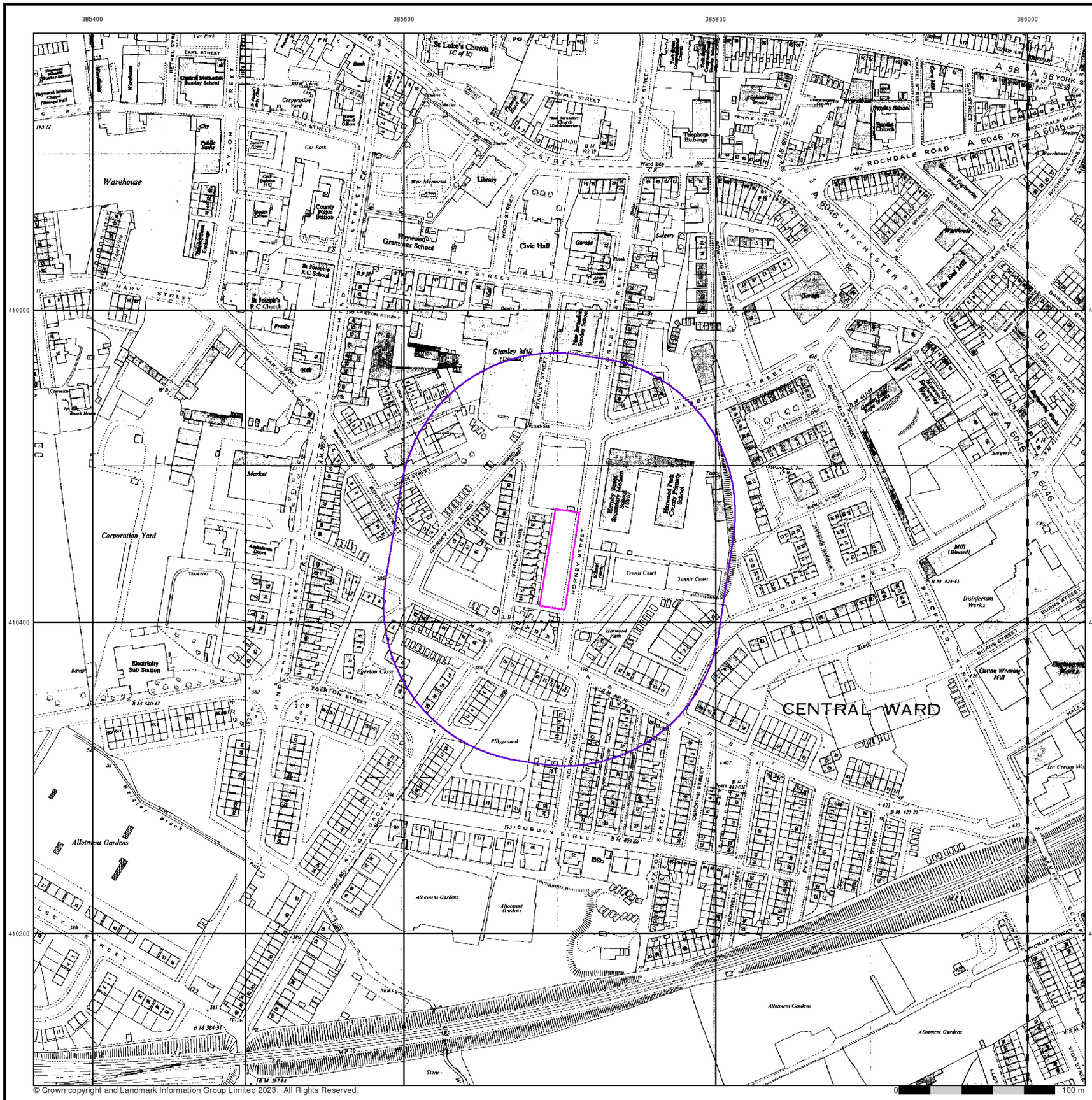
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

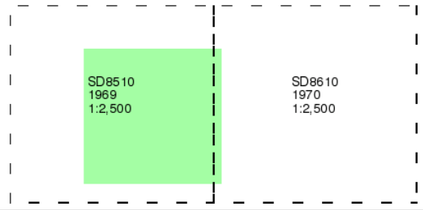
Ordnance Survey Plan

Published 1969 - 1970

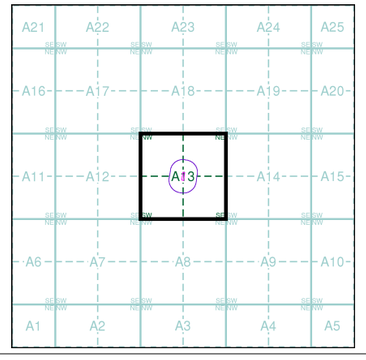
Source map scale - 1:2,500

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

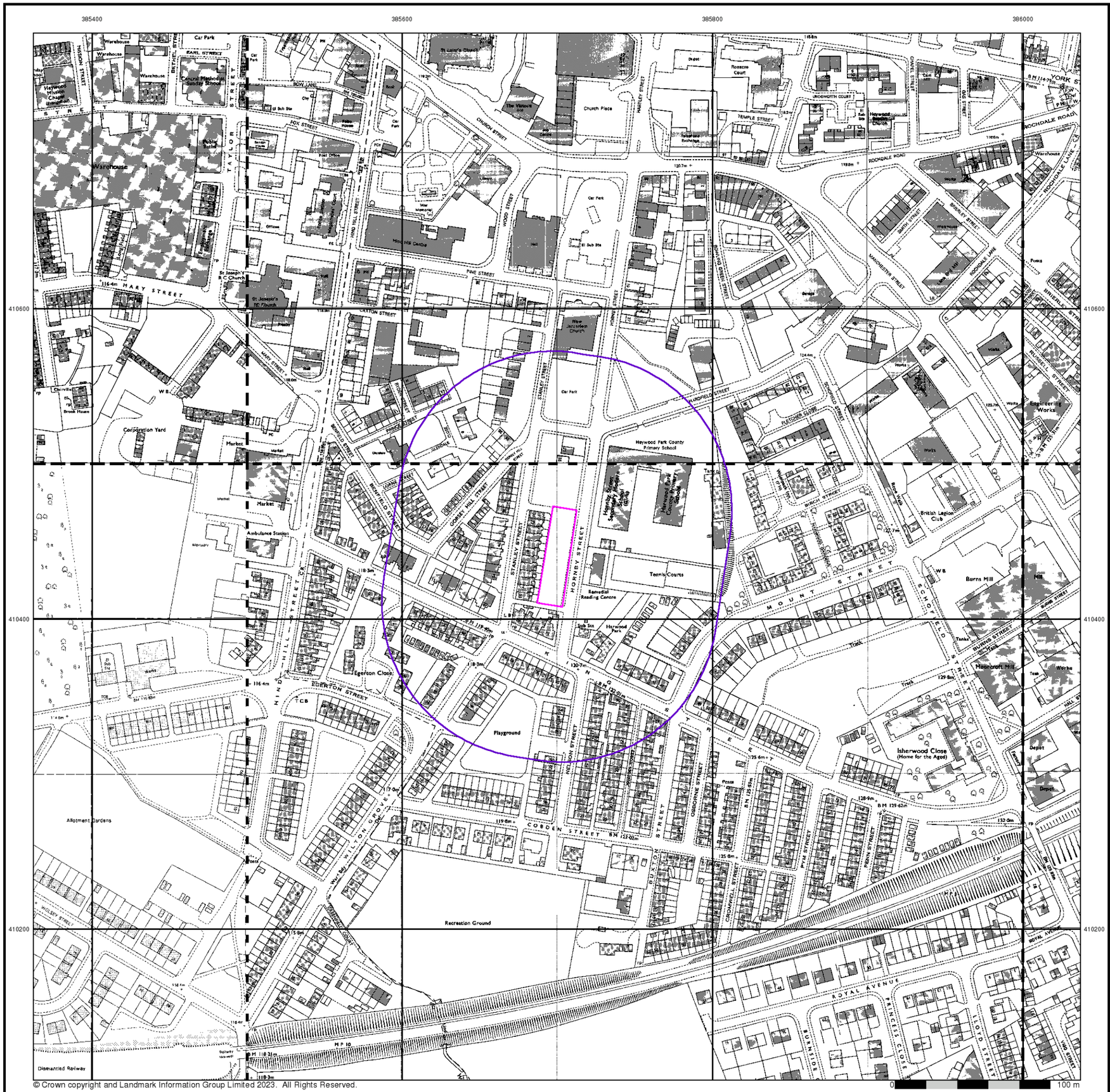
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Ordnance Survey Plan

Published 1973 - 1991

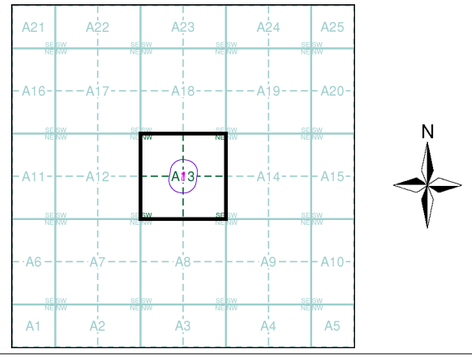
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

SD8510NW 1973 1:1,250	SD8510NE 1989 1:1,250	SD8610NW 1974 1:1,250
SD8510SW 1991 1:1,250	SD8510SE 1974 1:1,250	SD8610SW 1986 1:1,250

Historical Map - Segment A13



Order Details

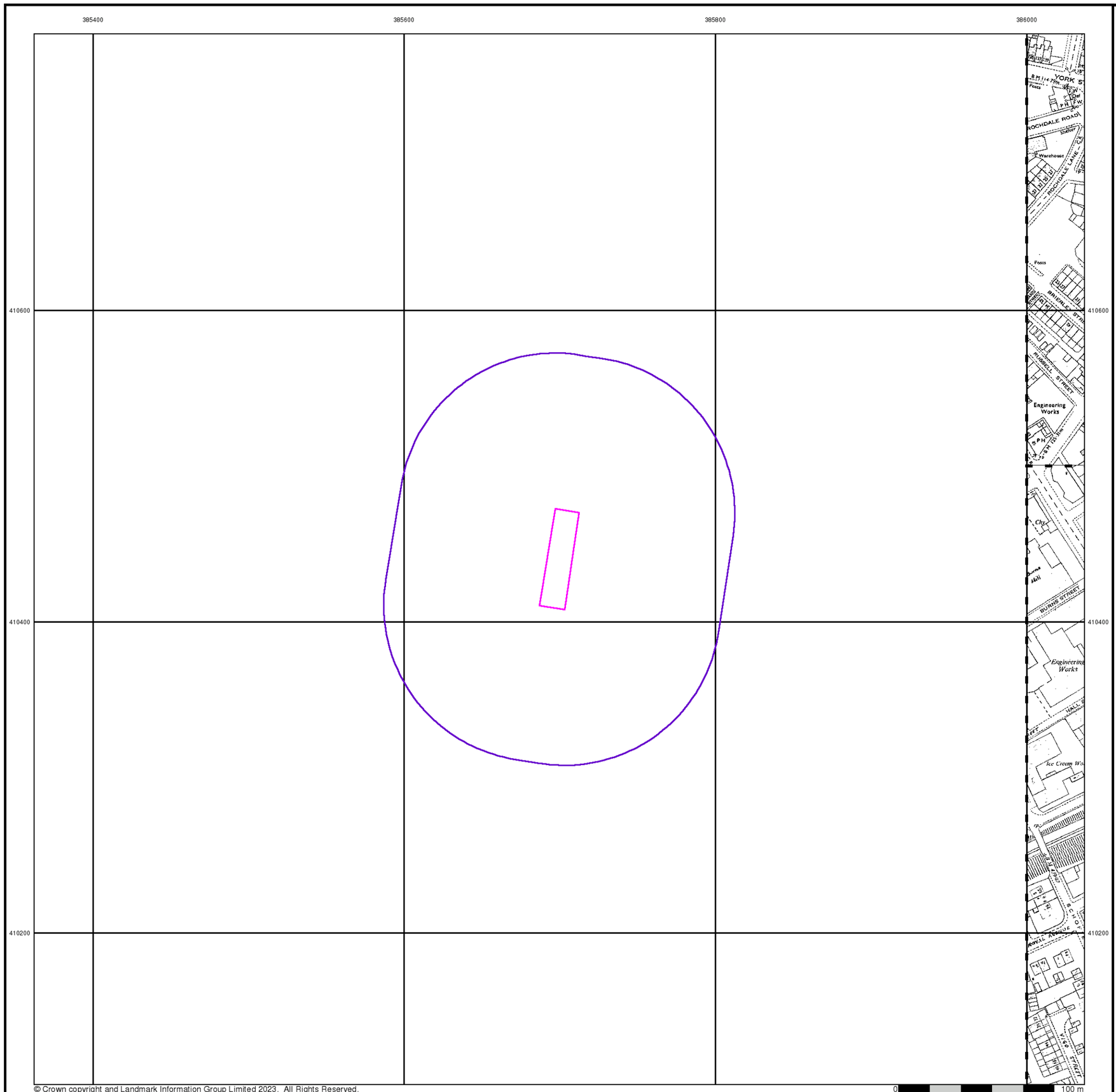
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

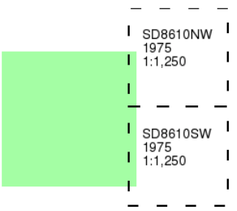
Supply of Unpublished Survey Information

Published 1975

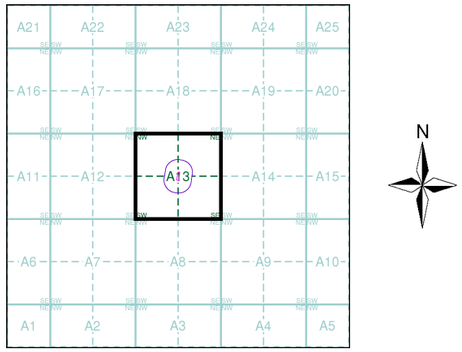
Source map scale - 1:1,250

SUSI maps (Supply of Unpublished Survey Information) were produced between 1972 and 1977, mainly for internal use at Ordnance Survey. These were more of a `work-in-progress' plan as they showed updates of individual areas on a map. These maps were unpublished, and they do not represent a single moment in time. They were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

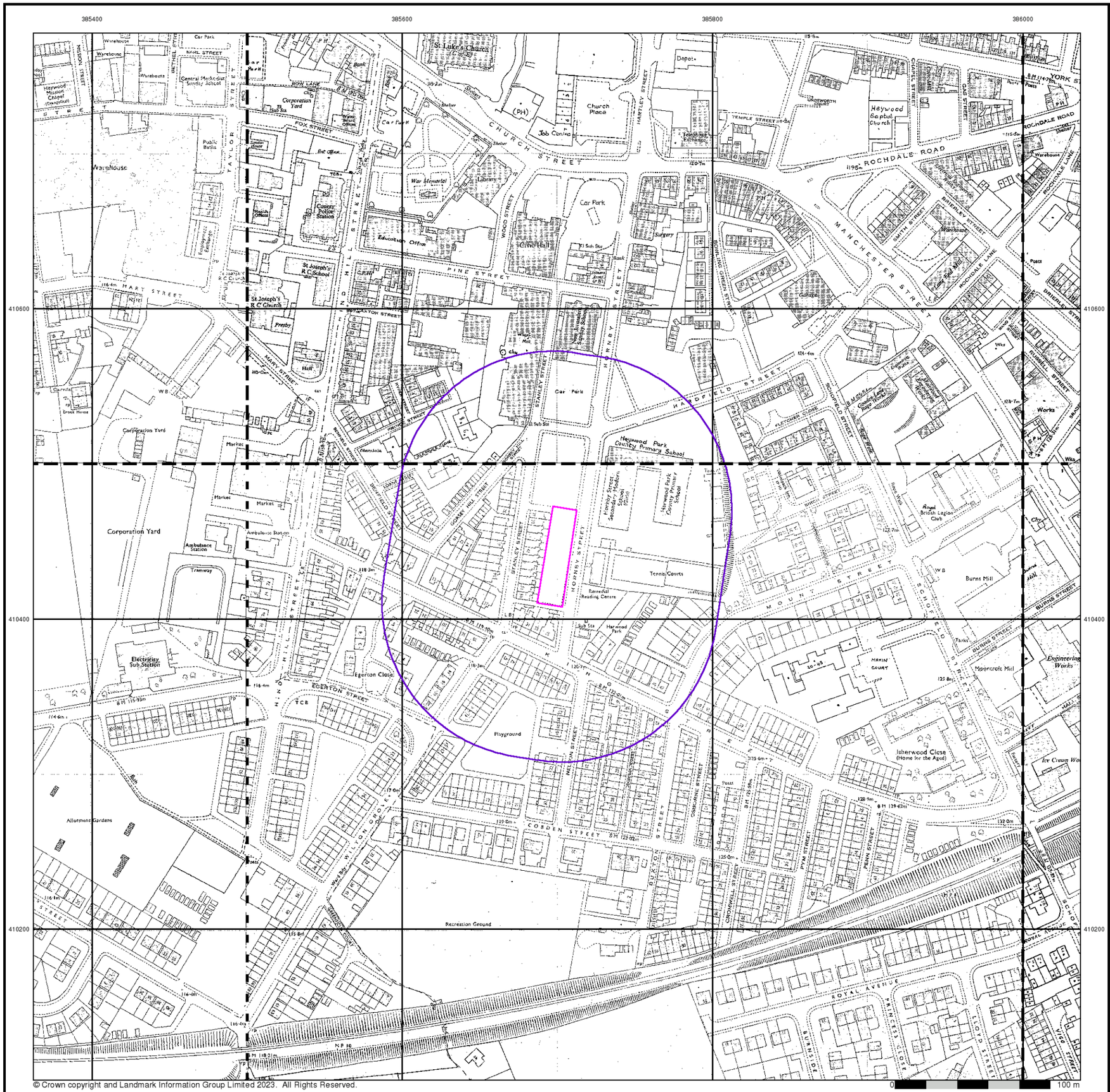
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Additional SIMs

Published 1977 - 1985

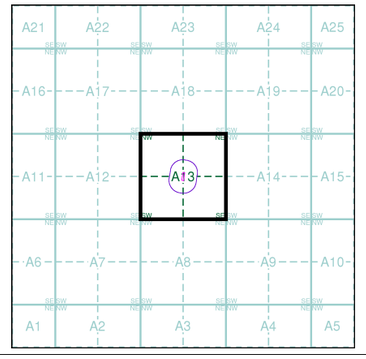
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

SD8510NW 1984 1:1,250	SD8510NE 1981 1:1,250	SD8610NW 1985 1:1,250
SD8510SW 1984 1:1,250	SD8510SE 1978 1:1,250	SD8610SW 1977 1:1,250

Historical Map - Segment A13



Order Details

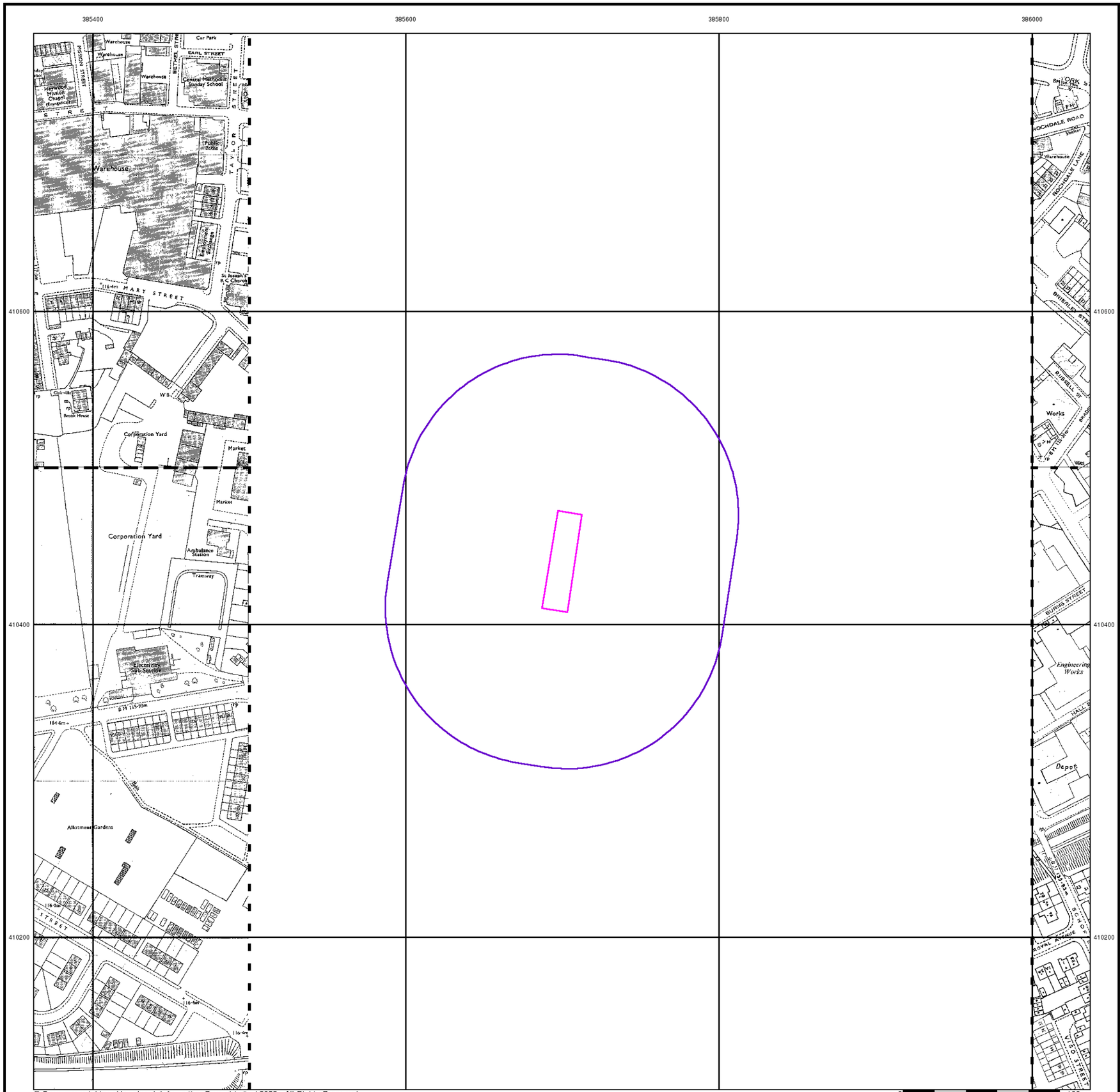
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

0 100 m

soiltechnics

environmental ▪ geotechnical ▪ building fabric

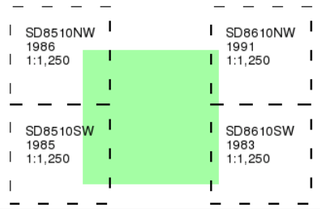
Additional SIMs

Published 1983 - 1991

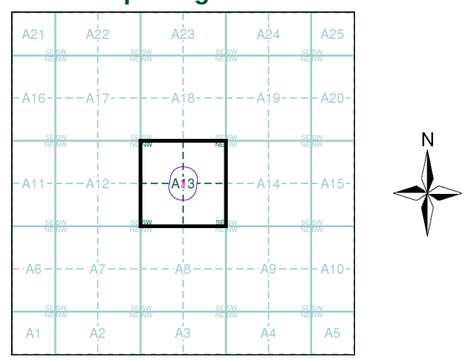
Source map scale - 1:1,250

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

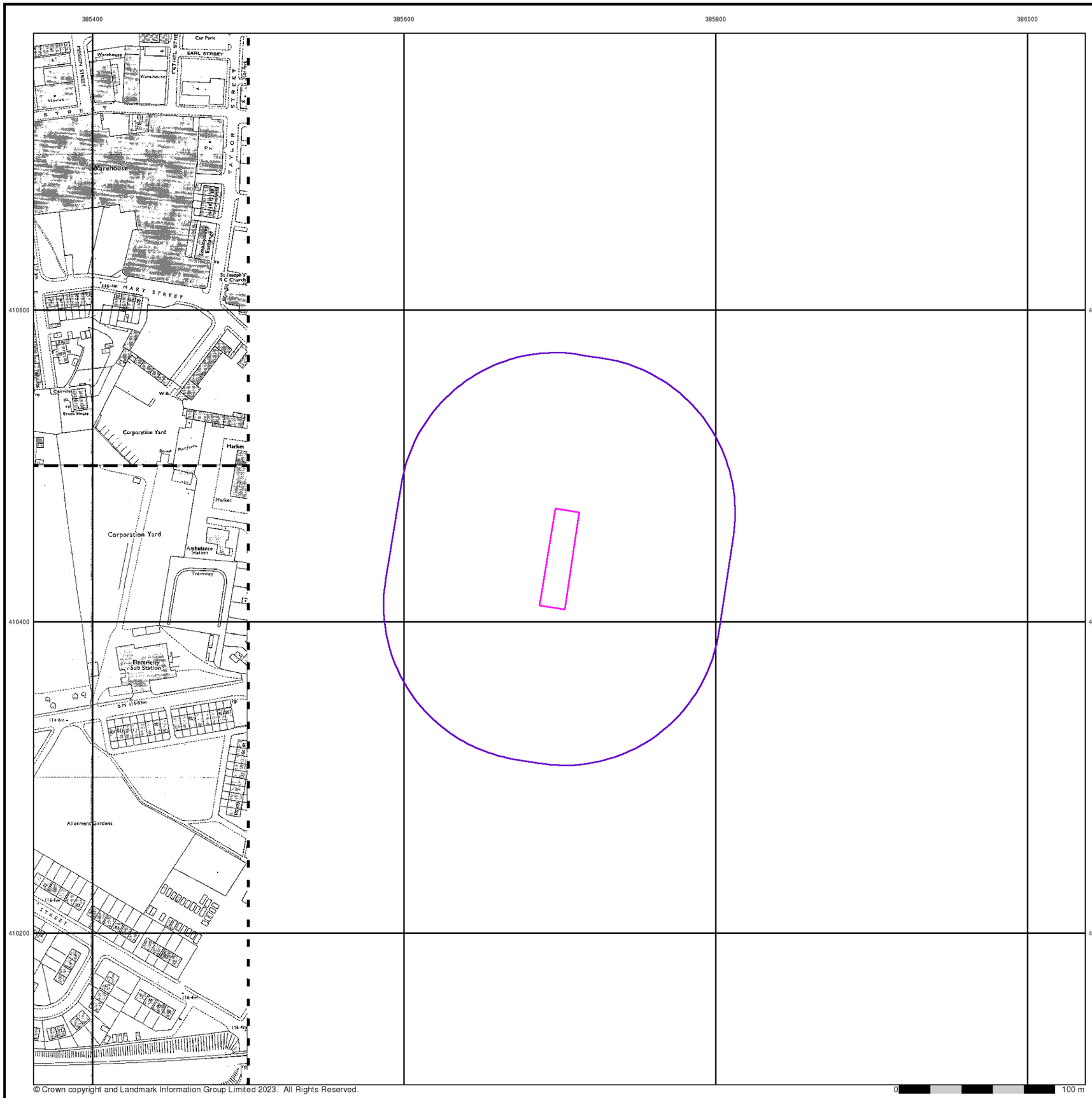
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

0 100 m

soiltechnics

environmental ▪ geotechnical ▪ building fabric

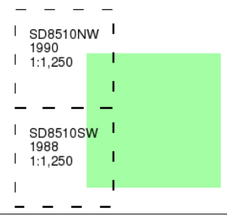
Additional SIMs

Published 1988 - 1990

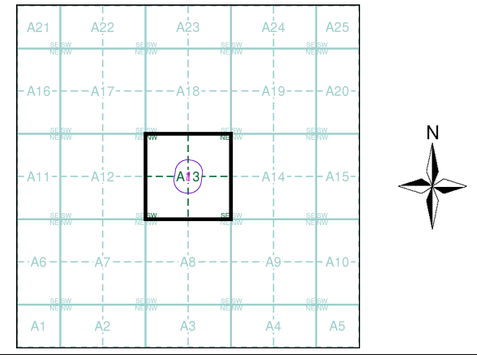
Source map scale - 1:1,250

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:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

0 100 m

soiltechnics

environmental ▪ geotechnical ▪ building fabric

Ordnance Survey Plan

Published 1990

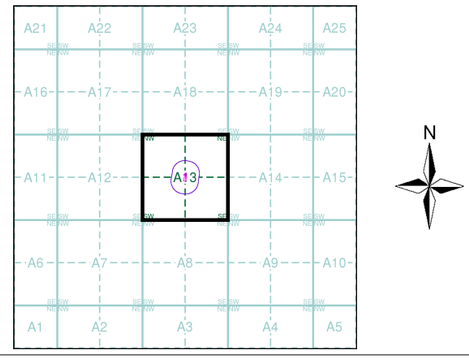
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

SD8510SE
1990
1:1,250

Historical Map - Segment A13



Order Details

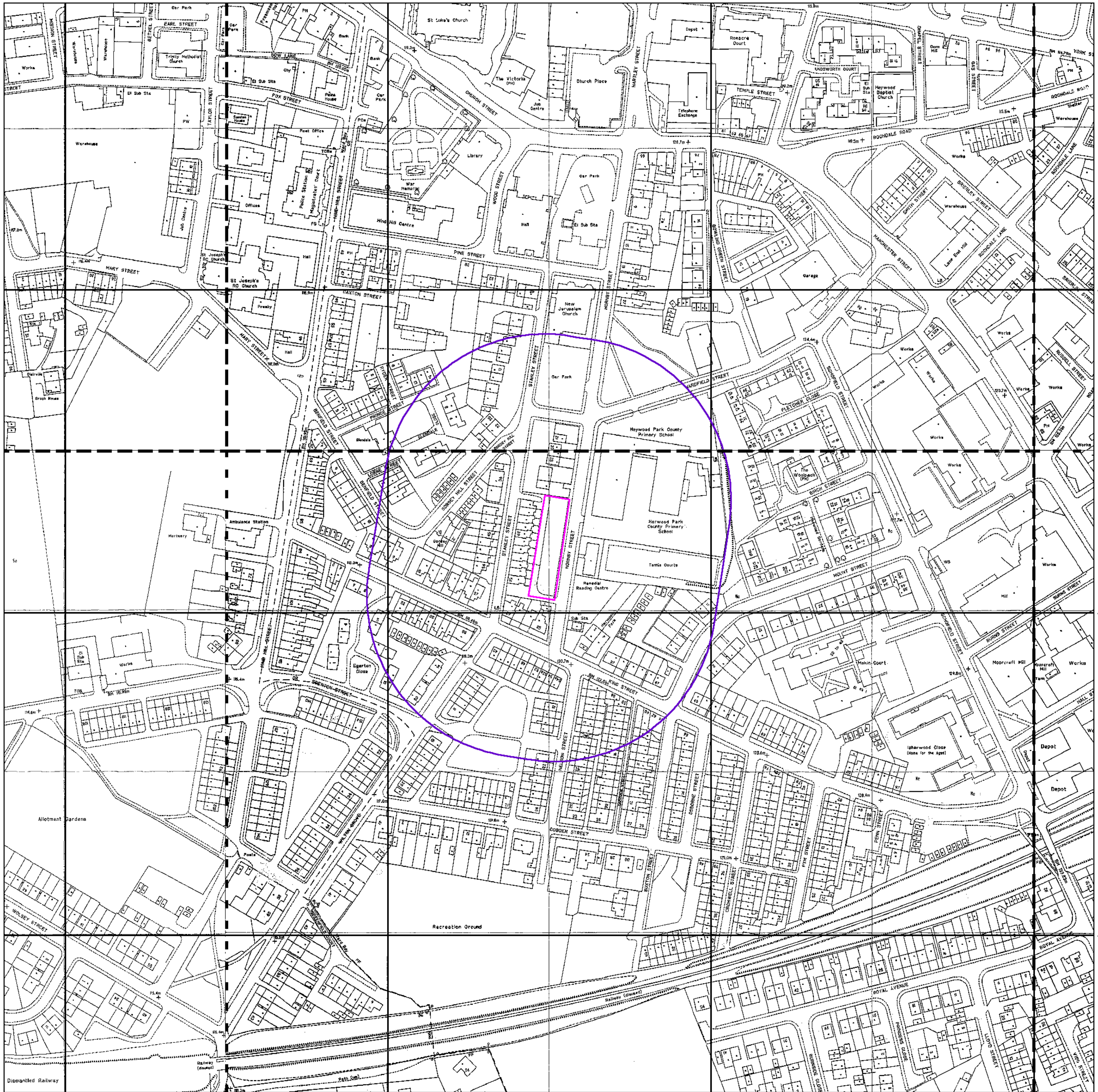
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

soiltechnics
environmental ▪ geotechnical ▪ building fabric

Large-Scale National Grid Data

Published 1992

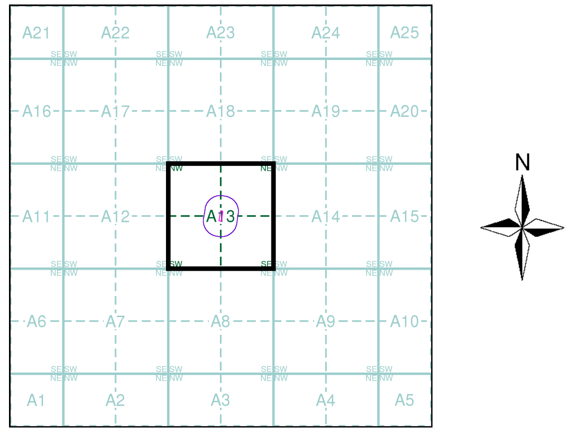
Source map scale - 1:1,250

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

Map Name(s) and Date(s)

SD8510NW 1992 1:1,250	SD8510NE 1992 1:1,250	SD8610NW 1992 1:1,250
SD8510SW 1992 1:1,250	SD8510SE 1992 1:1,250	SD8610SW 1992 1:1,250

Historical Map - Segment A13



Order Details

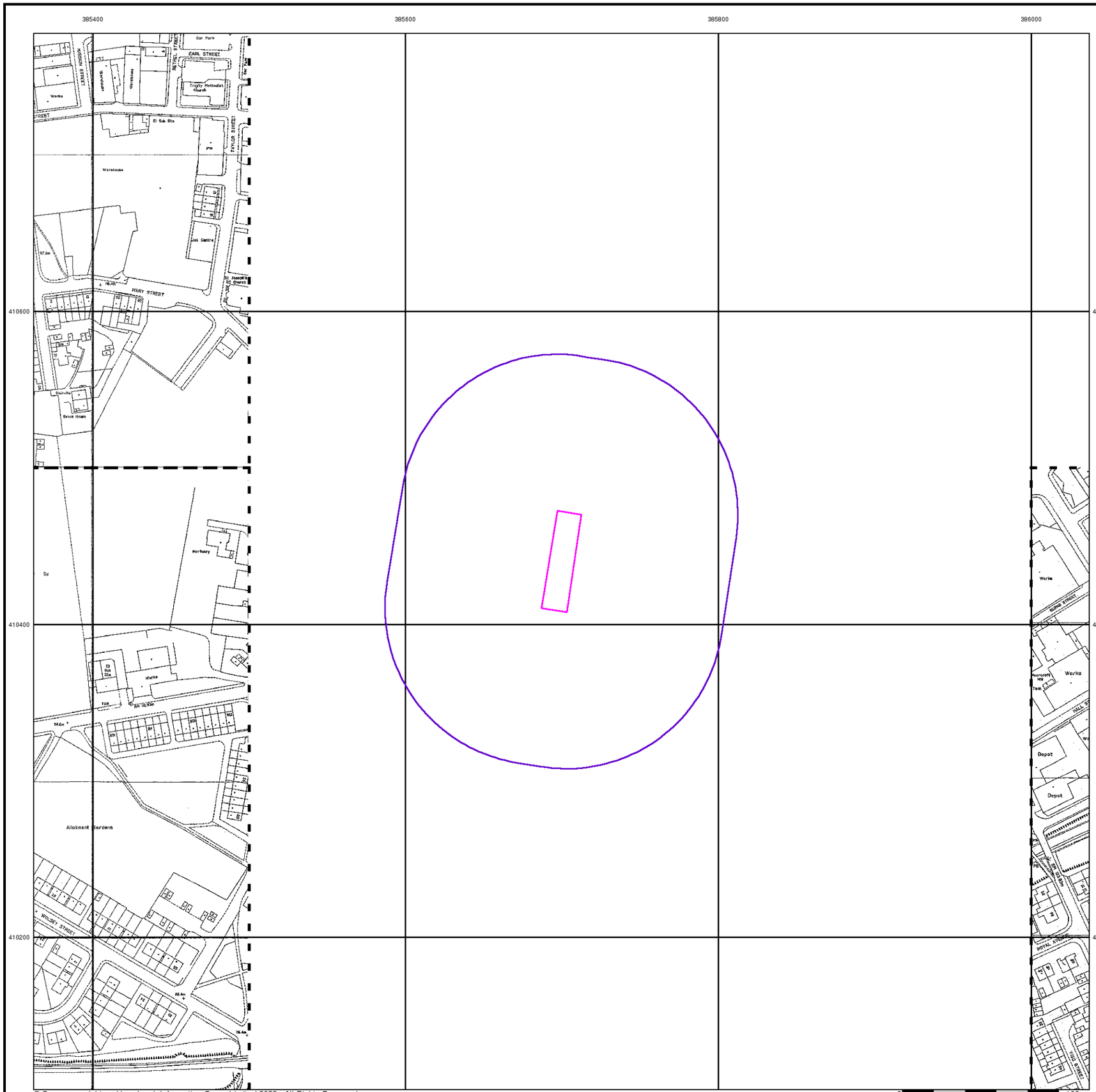
Order Number: 325164398_1_1
Customer Ref: STV6299
National Grid Reference: 385700, 410440
Slice: A
Site Area (Ha): 0.11
Search Buffer (m): 100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



soiltechnics

environmental ▪ geotechnical ▪ building fabric

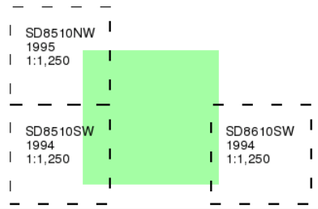
Large-Scale National Grid Data

Published 1994 - 1995

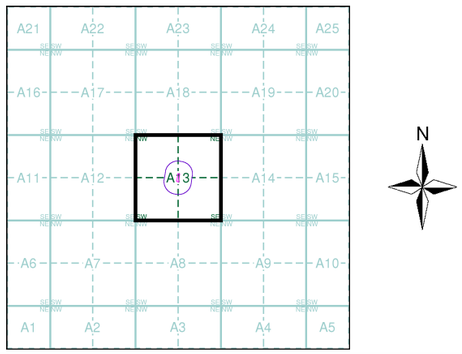
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

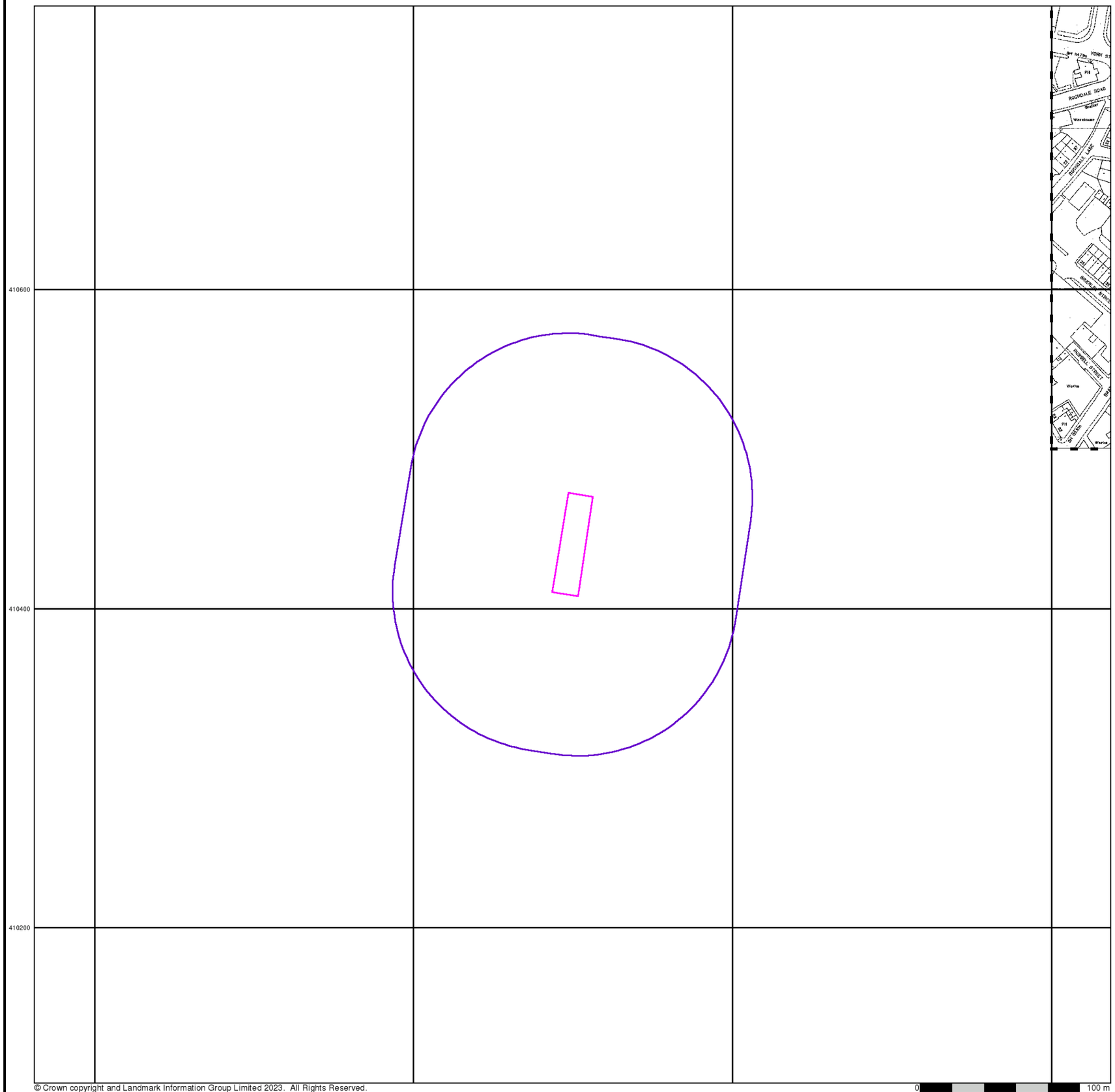
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

soiltechnics

environmental ▪ geotechnical ▪ building fabric

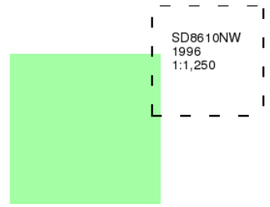
Large-Scale National Grid Data

Published 1996

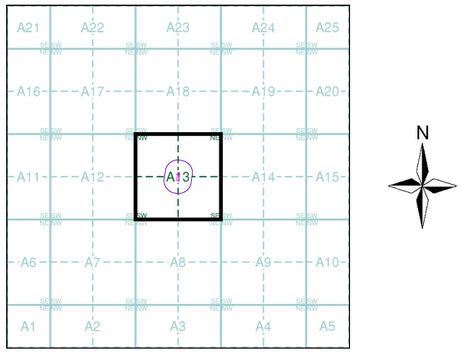
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

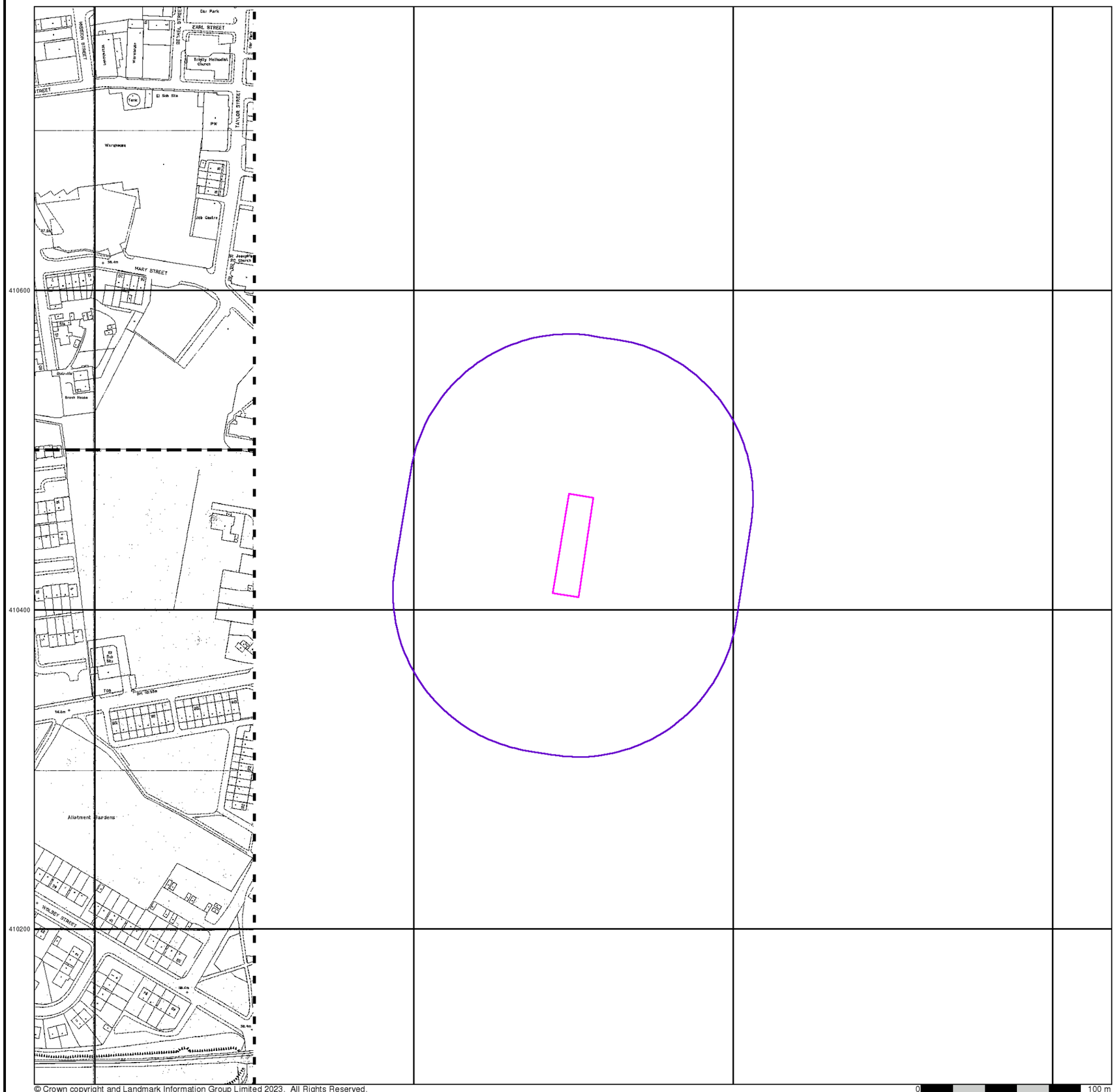
Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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



© Crown copyright and Landmark Information Group Limited 2023. All Rights Reserved.

0 100 m

soiltechnics
environmental ▪ geotechnical ▪ building fabric

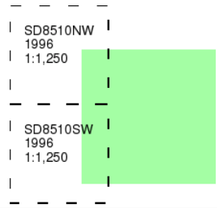
Large-Scale National Grid Data

Published 1996

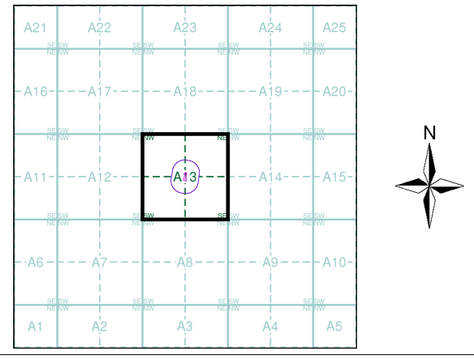
Source map scale - 1:1,250

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

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



soiltechnics

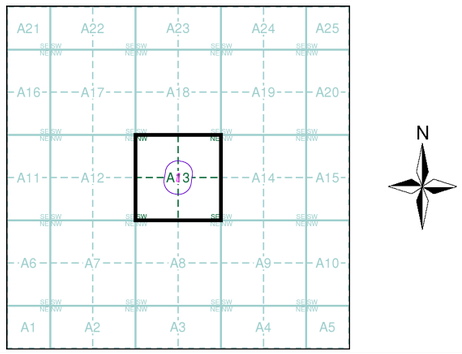
environmental ▪ geotechnical ▪ building fabric

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:	325164398_1_1
Customer Ref:	STV6299
National Grid Reference:	385700, 410440
Slice:	A
Site Area (Ha):	0.11
Search Buffer (m):	100

Site Details

Hornby Street, Heywood

Landmark INFORMATION GROUP

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