



PHASE I GEO-ENVIRONMENTAL SITE ASSESSMENT

AT

229 MOSTON LANE EAST, MANCHESTER, M40 3HY

G74215

APRIL 2022

Prepared For

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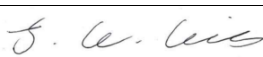
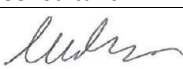
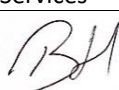
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1.0	INTRODUCTION.....	1
1.1.	Objectives	1
1.2.	Proposed Development	1
1.3.	Sources of Information	1
1.4.	Confidentiality	2
1.5.	Limitations	2
2.0	SITE SETTING.....	3
2.1.	Site Details	3
3.0	SITE HISTORY	5
3.1.	On-Site Historical Development	5
3.2.	Off-Site Historical Development	6
3.3.	Planning History.....	6
4.0	ENVIRONMENTAL SETTINGS	7
4.1.	Geology & Hydrogeology.....	7
4.2.	Geotechnical Data	7
4.3.	Hydrogeology.....	8
4.4.	Hydrology and Flood Risk	8
4.5.	Radon Risk Potential.....	8
4.6.	Industrial Land Uses.....	8
4.7.	Landfill/Waste Sites	8
4.8.	Sensitive Land Uses	9
4.9.	Mining.....	9
4.10.	Unexploded Ordnance (UXO)	9
5.0	CONCEPTUAL SITE MODEL (CSM).....	10
5.1	Initial CSM.....	10
5.2	Contaminant Sources.....	10
5.3	Potential Receptors	10
5.4	Potential Pathways	10
5.5	Risk Assessment.....	11
5.6	Conceptual Site Model	12
6.0	CONCLUSIONS & RECOMMENDATIONS	14
6.1	Conclusions.....	14
6.2	Recommendations.....	14
	APPENDIX I – LIMITATIONS.....	15
	APPENDIX II – GLOSSARY	17
	APPENDIX III – DRAWINGS.....	19
	APPENDIX IV – SITE PHOTOGRAPHS	20
	APPENDIX V – HISTORICAL MAPPING	21
	APPENDIX VI – GROUNDSURE REPORT	22

EXECUTIVE SUMMARY

Site Details	
Site Address	229 Moston Lane East, Manchester, M40 3HY
Grid Reference	SD 88992 02817
Site Area	0.03 ha
Current Site Use	Currently occupied by a residential garden and side alley access track. The site is surrounded by residential properties.
Proposed Use	Two storey residential property with garden.
Environmental Setting	The site is underlain by Devensian Till and sandstones and mudstones of the Pennine Lower Coal Measures formation. The site is underlain by secondary aquifers with low vulnerability.
Site History	An undeveloped field in 1893 and then developed with houses and track in 1906. No significant developments have occurred up to the present day.
Landfill Sites & Ground Gases	No landfill sites were identified within 250m of the site. No significant sources of ground gases were identified on site or within 100m of the site.
Radon	The site is situated within an area where less than 1% of properties are above the Action Level, and therefore no specific protection measures are required.
Mining / Land Stability	No significant geotechnical risks were identified on site.
Initial Conceptual Site Model (CSM)	
No potentially unacceptable risks to receptors at the site have been identified.	
Conclusions & Recommendations	
Based on the information presented within this report and with due regard to the proposed development, it is the opinion of Ensaf that the site generally represents a low risk to human health, controlled waters, buildings and services, and flora and fauna receptors. There is negligible risk to the proposed development from geotechnical hazards. Based on the risk assessment findings, an intrusive investigation is not required to provide an updated conceptual site model. However, the client may wish to undertake a geotechnical investigation to inform foundation design. The Local Authority should be informed immediately if any unexpected contamination is encountered within on-site soils or soils imported to site as part of its development.	

1.0 INTRODUCTION

Ensafe Consultants is the trading name of Challen Commercial Investigations Limited (03426833) incorporating the wholly owned subsidiary Ensaf Consultants (ROI) LTD (646123).

Ensafe Consultants has been commissioned by Duke Design Services on behalf of Major Group Developments, hereafter referred to as “the Client” to undertake a Phase I Geo-Environmental Site Assessment at 229 Moston Lane East, Manchester, M40 3HY.

1.1. Objectives

The purpose of the report is to provide a preliminary assessment of the site using published information in relation to the proposed development of the site.

This report has been devised to comply with the relevant principles and requirements of a range of guidance with regards to potentially contaminated land, including but not limited to:

- Part IIA of the Environment Protection Act, 1990;
- Contaminated Land (England) (Amendment) Regulations 2012 and Contaminated Land Statutory Guidance (DEFRA, April 2012);
- National Planning Policy Framework (HCA, February 2019);
- BS5930:2015: “Code of practice for site investigations”;
- BS10175: 2011 +A2:2017 “Investigation of Potentially Contaminated Sites - Code of Practice”;
- The Building Regulations 2010. Part C (HM Government 2013)
- Environment Agency Guidance (October 2020) Land Contamination Risk Management Land Contamination (LCRM);
- Environment Agency (2011) Report GPLC1 “Guiding Principles for Land Contamination”;
- Environment Agency (2017) “The Environment Agency’s Approach to Groundwater Protection” November 2017 Version 1.1

The objectives of the desk-based study are to:

- Provide understanding of the ground conditions and a phase 1 desk study for submission as part of planning permission.

1.2. Proposed Development

It is understood that the proposed development comprises an extension of the existing property at 229 Moston East, and development of a two-storey residential property with associated garden and services. The current development plans are provided in Appendix III.

The findings and conclusions of the risk assessments have been set out and recommendations given for the proposed residential end use. If there is a subsequent change in the proposed land the risk assessments and conclusions should be reviewed to determine whether they are still applicable for the revised end use.

1.3. Sources of Information

Background information was sought from the following sources:

- Groundsure Insight Report (report reference GS-8625239)
- Groundsure Historical Mapping (report reference GS-8625238)
- Environmental Agency/Scottish Environment Protection Agency
- Radon: Guidance on Protective Measures for New Buildings (BRE Document BR 211, 2015) and HPA Indicative

- Radon Atlas for England and Wales/Scotland)
British Geological Survey Online Map Database

1.4. Confidentiality

Ensafe Consultants has prepared this report solely for the use of the Client and those parties with whom a warranty agreement has been executed, or with whom an assignment has been agreed. Should any third party wish to use or rely upon the contents of the report, written approval must be sought from Ensaf Consultants. A charge may be levied against such approval.

1.5. Limitations

The full limitations of this report are presented in Appendix I and a glossary is presented in Appendix II.

2.0 SITE SETTING

2.1. Site Details

Table 1 below provides details of the location and size of the site, including site address, grid reference and current land use both on and in the vicinity. The site location is shown in Figure 1 and the approximate site boundary in Figure 2. Site photographs are presented in Appendix IV.

Table 1: Site Location

Site Address	229 Moston Lane East, Manchester, M40 3HY
Nearest Town/City	Manchester, Fallowfield
Grid Reference	SD 88992 02817
Size of Site (Approx.)	0.03 ha
Site Shape	Rectangular
Topography	Flat
Current Land Use	Currently occupied by a the 229 Moston East property and the associated residential garden. The site is surrounded by residential properties.

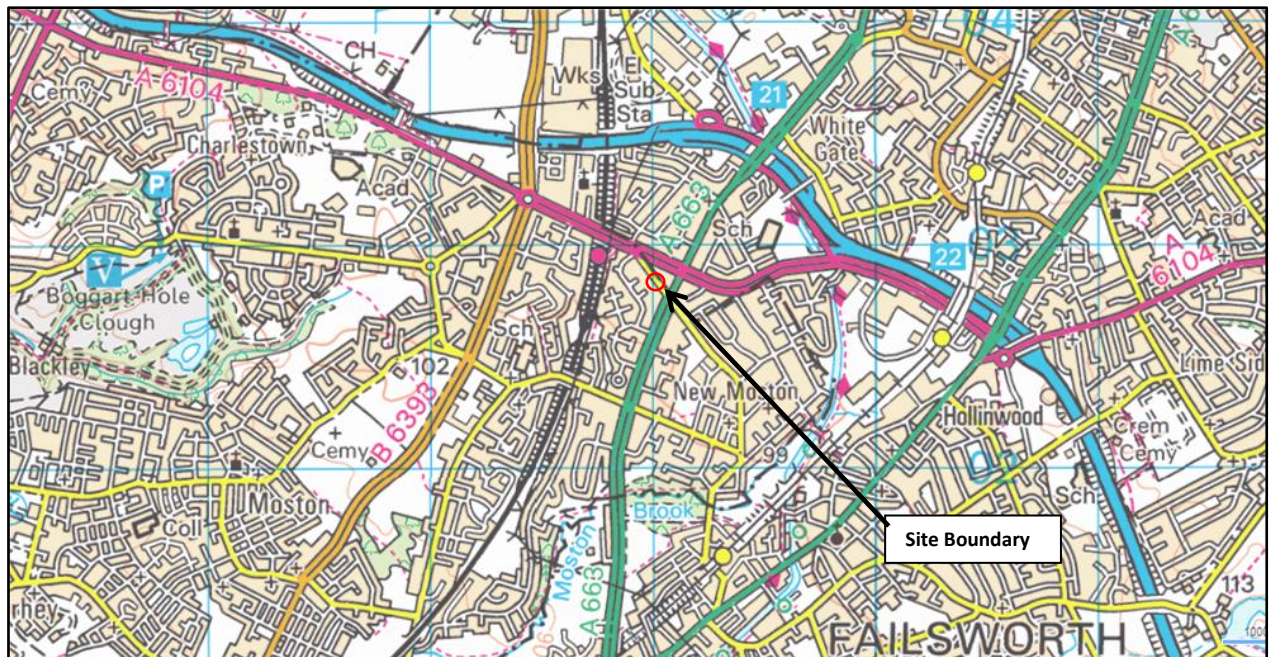


Figure 1: Site Location

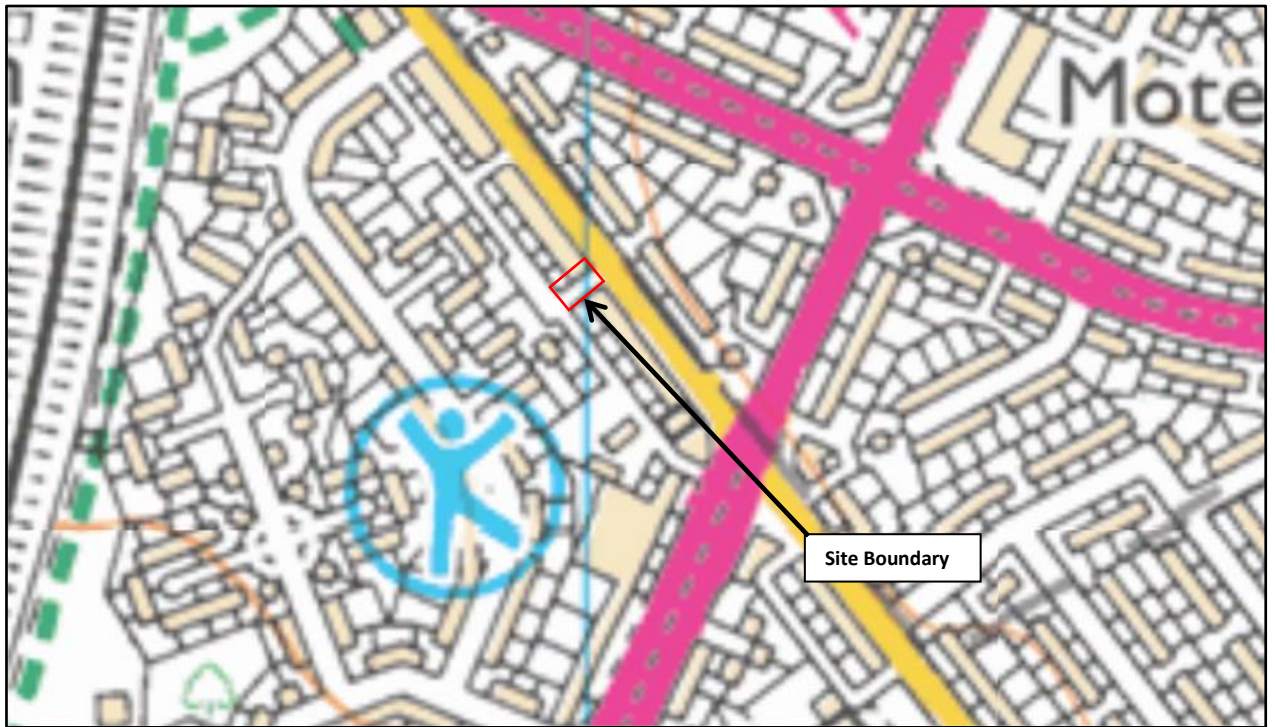


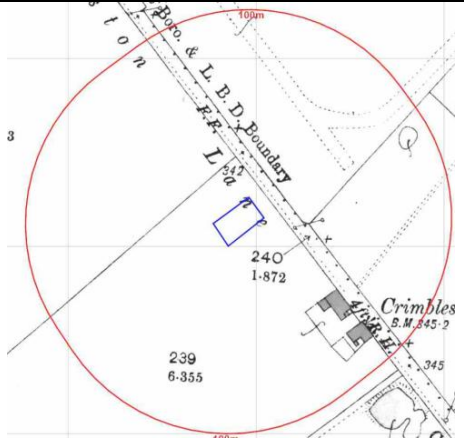
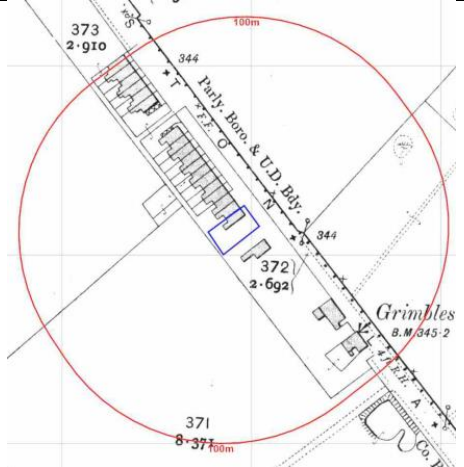
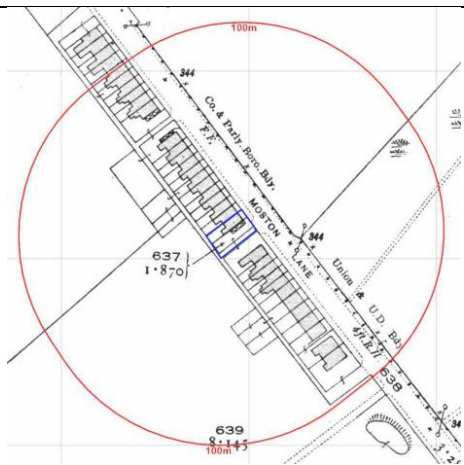
Figure 2: Site Area

3.0 SITE HISTORY

3.1. On-Site Historical Development

A review of historical maps pertinent to the site is summarised in Table 3 below. The historical maps are presented in Appendix V.

Table 3: Summary of Potentially Contaminative Historical Land Uses

Map Edition	Historical Land Use	Map Extract
1893-94 Country Series Plan 1:2,500	The site is situated in an unoccupied field adjacent to Moston Lane.	
1909 Country Series Plan 1:2,500	The site has been developed and is occupied along the north-western boundary of the site by the current terraced residential property.	
1922 Country Series Plan 1:2,500	The site development now includes the existing fence through the centre of the site and access path on the south-eastern boundary of the site.	

1932-33 Country Series Plan 1:2,500	Small unknown building noted in the centre of site.	
Present Day	No significant changes noted.	-

3.2. Off-Site Historical Development

A review of potentially contaminative land uses identified on historical Ordnance Survey maps within a 250m radius of the site is summarised below in Table 4:

Table 4: Summary of Potentially Contaminative Off-Site Historical Land Uses

Surrounding Feature	Dates	Distance (m)	Direction
Unnamed Pond	1893-1922	115m	NW
Railway line (running north south)	1893-Present	240m	W
Residential properties	1909-Present	<1m	NW and SW.
Moston Station	1932-Present	250	NWW
Significant Residential Expansion	1932-Present	0-250m	All directions

3.3 Planning History

Planning records held by the Local Planning Authority (Manchester City Council) did not yield any environmentally pertinent information with regards to historical development of the site.

4.0 ENVIRONMENTAL SETTINGS

4.1. Geology & Hydrogeology

A review of the online British Geological Survey (BGS) mapping for the site indicates that the site is underlain by the following geological sequence:

Table 5: Published Geology

Geological Unit	Classification	Description
Artificial Ground	Made Ground	No artificial ground is noted underneath the site, the nearest worked ground is situated 250m west of site in relation to the train line.
Superficial	Devensian Till	Glacial Tills – typically gravelly clays.
Bedrock	Pennine Middle Coal Measures Formation – Mudstone, Siltstone, and Sandstone.	Interbedded grey mudstone, siltstone, pale grey sandstone and commonly coal seams, with a bed of mudstone containing marine fossils at the base, and several such marine fossil-bearing mudstones in the upper half of the unit.
Faults	-	Nearest inferred fault is situated 7m southwest of the site
Coal Seams	Coal	The nearest inferred coal seam is situated 117m west of the site.

There are no historical borehole records for review within 400m of the site.

4.2. Geotechnical Data

Preliminary Geotechnical data presented within the data search identifies the following ground conditions shown in Table 6:

Table 6: Summary of Desk Study Geotechnical Information

Hazard	Hazard Potential
Shrink-Swell Clay	Very Low
Landslides	Very Low
Soluble Rocks	Negligible
Compressible Ground	Negligible
Collapsible Deposits	Very Low
Running Sand	Very Low

This information is obtained via a desk-based data search and should not be used in detailed design; instead should be used for reference only.

4.3. Hydrogeology

Table 7: Summary of Hydrogeology

	Description
Aquifers	Devensian Till – Secondary (undifferentiated) Aquifer. Pennine Middle Coal Measures Formation – Mudstone, Siltstone, Sandstone. – Secondary A Aquifer.
Groundwater Vulnerability	Secondary bedrock aquifer with low leaching potential and low vulnerability.
Groundwater Source Protection Zone (GSPZ)	None identified within 500m of the site.
Groundwater Abstraction Licenses	None identified within 2000m.
Surface Water Abstraction Licenses	None identified within 2000m.
Potable Abstraction Licenses	None identified within 2000m.

4.4. Hydrology and Flood Risk

Table 8: Summary of Hydrology

	Description
Surface Water Feature	No surface water features are noted within 250m of the site. The nearest is the River Irk situated 929m south of site.
Surface Water Classification	Site located within WFD river water body catchment for Irk (Wince to Irwell).
Flooding	The site is not within a floodplain. RoFRaS data for the site indicates a “Negligible” (greater than or equal to 1 in 30 chance) risk of flooding (depth between 0.10m – 0.30m) in any given year, for the site. The site is located within a “low” risk zone of groundwater flooding, with a “low” risk zone of groundwater flooding located within 50m of the site.

4.5. Radon Risk Potential

The site is situated within an area where less than 1% of properties are above the Action Level, and therefore no specific protection measures are required.

4.6. Industrial Land Uses

The site is situated within a predominately residential area. There are 9 no. records of current and historical industrial activities within 250m of the site including bakeries, cuttings, and energy infrastructure e.g., substations. The nearest feature is a bakery 77m southwest of site. Of the features noted, none are considered to be environmentally pertinent to the site.

4.7. Landfill/Waste Sites

Within 500m of the site, there are no active or recent landfill sites, historical landfill, licensed waste sites, or waste exemption sites identified

4.8. Sensitive Land Uses

The following sensitive land uses have been identified within close proximity to the site:

- Nitrate Vulnerable Zone within the WFD catchment area, on-site; and,
- The site is situated within an SSSI Impact Risk Zone, however for residential properties, consultation with the LA is only required for developments of 50 houses or more.

4.9. Mining

Table 9: Summary of Mining and Ground Workings

	Description
Coal Mining	The site is in an area affected by coal mining but is not located within a Development High Risk Area, as defined by the Coal Authority. A Consultants Coal Mining Report has not been purchased for this report as the development is relatively small and the nearest coal seam noted on the geological maps is situated 117m west of the site. The nearest underground workings are noted as collieries 453m southwest of the site and are considered unlikely to impact the site.
Mining/Historical Workings/ Natural Cavities	There were three surface ground workings noted within 250m of the site: • A pond 115m southeast of the site in the 1906 maps; • Cuttings from the railway 220m west of the site from the 1938 mapping onwards; and, • A pond 248m northeast of the site in the 1906-1923 maps. No Brit Pits, Non-Coal mining, Mining Cavities, JPB mining areas, Brine Areas, Gypsum Areas were identified within 500m of the Site.

4.10. Unexploded Ordnance (UXO)

The publicly available regional unexploded bomb risk maps indicate the site is in a low UXO risk area.

5.0 CONCEPTUAL SITE MODEL (CSM)

5.1 Initial CSM

In accordance with LCRM – Land Contamination Risk Management (Environment Agency, Oct 2020) and BS 10175:2011+A2:2017 (Investigation of Potentially Contaminated Land. Code of Practice), Ensaf Consultants has developed a preliminary Conceptual Site Model (CSM) to identify potential contamination sources, migration pathways, and significant receptors within the study area.

5.2 Contaminant Sources

No potential sources of contamination have been identified at the site.

5.3 Potential Receptors

Ensaf Consultants has identified the following potential receptors:

- Human Health Receptors (Future Site Users);
- Flora and Fauna; and,
- Buildings and Services.

Other potential receptors including the surface water features are considered a very low risk due to the distance from the nearest receptors to the site been greater than 500m, and the low vulnerability of the underlying aquifers.

Construction workers are not considered to be a plausible receptor as exposure will be managed through the use of appropriate PPE and hygienic working practices, as required under HSE/ CDM regulations. Furthermore, potential exposure to possible contaminants is typically on a short-term basis during the duration of works thereby limiting any potential impact to ground workers.

5.4 Potential Pathways

Receptors may be potentially at risk from the identified potential sources of contamination via the following pathways:

- Migration of mobile contaminants on or off-site via services, sewers, and manmade conduits;
- Direct contact, ingestion, and inhalation of contaminants on site; and,
- Uptake of toxins/phytotoxins by plants.

5.5 Risk Assessment

CIRIA 552: Contaminated Land Risk Assessment 'A Guide to Good Practice' provides guidance on risk assessment taking into account factors such as severity of the potential harm that may arise from a successful pollutant linkage, potential magnitude of the hazard, and the sensitivity of the target receptor. Risk assessment is initially assessed by determining the severity of the potential hazard, which takes into account receptor sensitivity and the magnitude of the potential impact as detailed in Tables 10 & 11 below.

5.5.1 Severity

Table 10: Receptor Sensitivity

Category	Human Sensitivity	Environmental Sensitivity
Very Low	Ground workers	Non-sensitive water course
Low	Commercial / Industrial	Secondary Aquifer
Medium	Residential without plant uptake	Principal Aquifer / Sensitive Watercourse
High	Residential with plant uptake	Groundwater Source Protection Zone

Table 11: Magnitude of Impact

Category	Examples
No Impact	No identified or potential pollutants present
Slight Impact	Minor leaks and spills from fuel infrastructure, inert landfills
Moderate Impact	Major leaks and spills from fuel infrastructure
Gross Impact	Heavily contaminated industrial sites, hazardous landfills

Severity is subsequently assessed considering the potential receptor and magnitude of impact as outlined within Table 12.

Table 12: Determination of Level Severity for Potential Hazards

Impact	Receptor Sensitivity			
	Very Low	Low	Medium	High
No Impact	Minor	Minor	Minor	Minor
Slight Impact	Minor	Minor	Minor	Mild
Moderate Impact	Minor	Minor	Mild	Medium
Gross Impact	Minor	Mild	Medium	Severe

5.5.2 Likelihood

The likelihood of an event is assessed while considering the potential for presence of a contaminant, presence of receptor, and the substantiality of the pollutant pathway. Likelihood is broken down into four separate categories within the CSM as shown in Table 13 below:

Table 13: Definitions of Likelihood Categories

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

5.5.3 Risk Rating

Table 14 demonstrates the methodology used to provide an overall risk rating within the preliminary CSM with respect to any potential sources of contamination that may affect the site. An overall risk rating is assigned to each potential contaminant considering the assessed likelihood and severity as determined using the methodologies within Tables 10 to 13:

Table 14: Level of Risk Rating for Hazard Definition

Likelihood	Severity			
	Minor	Mild	Medium	Severe
Unlikely	Very Low	Very Low	Low	Low / Moderate
Low Likelihood	Very Low	Low	Low / Moderate	Moderate
Likely	Low	Low / Moderate	Moderate	High
High Likelihood	Low / Moderate	Moderate	High	Very High

5.6 Conceptual Site Model

A site specific CSM has therefore been created using the above information and is provided on the following page(s) and is summarised in Figure 15.

Table 15: Conceptual Site Model

Source	Contaminant	Potential Migration Pathway	Potential Receptors	Likelihood of Occurrence	Severity	Overall Risk Rating	Active / Inactive
On-Site							
No Potential Sources Identified	None identified	Direct contact, ingestion, and inhalation of contaminants on site.	Human Health	Unlikely	Mild	Very Low	Inactive – Ensafe does not consider there to be a significant risk to potential receptors on site and thus no further ground investigation or contaminated land assessment is considered necessary for the sites proposed residential with gardens end use.
		Uptake of toxins/ phytotoxins by plants.	Flora and Fauna	Unlikely	Mild	Very Low	
		Migration of mobile contaminants off site via services, sewers, and manmade conduits.	Buildings and Services	Unlikely	Mild	Very Low	
Off-Site							
Pond on the 1906 map situated 115m southeast of site.	Hazardous ground gasses and vapours (vertical/lateral) leading to asphyxiation (carbon dioxide) or explosion (methane, hydrocarbons).	Migration and accumulation	Human Health Buildings and Services	Unlikely	Severe	Low/Moderate	Inactive – Given the age of the pond and subsequent development of the pond area, the potential risk from ground gases migrating onto the site from degrading organic matter is considered negligible and thus no further action is required.

6.0 CONCLUSIONS & RECOMMENDATIONS

6.1 Conclusions

Environmental

Given the sites history of development, it is likely there are no significant sources of contamination on the site.

Natural ground conditions at the site are indicated to comprise strata of Glacial Till overlying Sandstone & Mudstones of the Pennine Middle Coal Measures formation.

Based on the information presented within this report and with due regard to the proposed development, it is the opinion of Ensafe that the site generally represents a low risk to human health, controlled waters, buildings and services, and flora and fauna receptors.

Geotechnical

Based on the information presented within this report and with due regard to the proposed development, it is the opinion of Ensafe there is negligible risk to the proposed development from geotechnical hazards.

6.2 Recommendations

Based on the risk assessment findings, an intrusive investigation is not required to provide and updated conceptual site model. However, the client may wish to undertake a geotechnical investigation to inform foundation design.

The Local Authority should be informed immediately if any unexpected contamination is encountered within on-site soil or soils imported to site as part of its development.

END OF REPORT

APPENDIX I – LIMITATIONS

APPENDIX I - LIMITATIONS

LIMITATIONS

1. This report and its findings should be considered in relation to the terms of reference and objectives agreed between Ensaf Consultants and the Client as indicated in Section 1.0.
2. For the work, reliance has been placed on publicly available data obtained from the sources identified. The information is not necessarily exhaustive and further information relevant to the site may be available from other sources. When using the information, it has been assumed it is correct. No attempt has been made to verify the information.
3. This report has been produced in accordance with current UK policy and legislative requirements for land and groundwater contamination which are enforced by the local authority and the Environment Agency. Liabilities associated with land contamination are complex and requires advice from legal professionals.
4. During the site walkover reasonable effort has been made to obtain an overview of the site conditions. However, during the site walkover no attempt has been made to enter areas of the site that are unsafe or present a risk to health and safety, are locked, barricaded, overgrown, or the location of the area has not be made known or accessible.
5. Access considerations, the presence of services and the activities being carried out on the site limited the locations where sampling locations could be installed and the techniques that could be used.
6. In addition to the above Ensaf Consultants note that when investigating, or developing, potentially contaminated land it is important to recognise that sub-surface conditions may vary spatially and also with time. The absence of certain ground, ground gas, and contamination or groundwater conditions at the positions tested is not a guarantee that such conditions do not exist anywhere across the site. Due to the presence of existing buildings and structures access could not be obtained to all areas. Additional contamination may be identified following the removal of the buildings or hard standing.
7. Site sensitivity assessments have been made based on available information at the time of writing and are ultimately for the decision of the regulatory authorities.
8. Where mention has been made to the identification of Japanese Knotweed and other invasive plant species and asbestos or asbestos-containing materials this is for indicative purposes only and do not constitute or replace full and proper surveys.
9. The executive summary, conclusions and recommendations sections of the report provide an overview and guidance only and should not be specifically relied upon without considering the context of the report in full.
10. This report presents an interpretation of the geotechnical information established by excavation, observation, and testing. Whilst every effort is made in interpretative reporting to assess the soil conditions over the Site it should be noted that natural strata vary from point to point and that manmade deposits are subject to an even greater diversity. Groundwater conditions are dependent on seasonal and other factors. Consequently, there may be conditions present not revealed by this investigation.
11. Ensaf Consultants cannot be held responsible for any use of the report or its contents for any purpose other than that for which it was prepared. The copyright in this report and other plans and documents prepared by Ensaf Consultants is owned by them and no such plans or documents may be reproduced, published, or adapted without written consent. Complete copies of this may, however, be made and distributed by the client as is expected in dealing with matters related to its commission. Should the client pass copies of the report to other parties for information, the whole report should be copied, but no professional liability or warranties shall be extended to other parties by Ensaf Consultants in this connection without their explicit written agreement there to by Ensaf Consultants.
12. Rather, this investigation has been undertaken to provide a preliminary characterisation of the existing sub-surface geotechnical characteristics and make up and the findings of this study are our best interpretation of the data collected, within the scope of work and agreed budget. New information, revised practices or changes in legislation may necessitate the re-interpretation of the report, in whole or in part.
13. This investigation has been undertaken to reasonably characterise existing sub-surface conditions and the findings of this study are our best interpretation of the data collected, within the scope of work and agreed budget. New information, revised practices or changes in legislation may necessitate the re-interpretation of the report, in whole or in part.

APPENDIX II – GLOSSARY

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GLOSSARY

AST	Above Ground Storage Tank
BGS	British Geological Survey
BSI	British Standards Institute
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
CIEH	Chartered Institute of Environmental Health
CIRIA	Construction Industry Research Association
CLEA	Contaminated Land Exposure Assessment
CSM	Conceptual Site Model
DNAPL	Dense Non-Aqueous Phase Liquid (chlorinated solvents, PCB)
DWS	Drinking Water Standard
EA	Environment Agency
EQS	Environmental Quality Standard
GAC	General Assessment Criteria
GL	Ground Level
GSV	Gas Screening Value
HCV	Health Criteria Value
ICSM	Initial Conceptual Site Model
LNAPL	Light Non-Aqueous Phase Liquid (petrol, diesel, kerosene)
ND	Not Detected
LMRL	Lower Method Reporting Limit
NR	Not Recorded
PAH	Poly Aromatic Hydrocarbon
PCB	Poly-Chlorinated Biphenyl
PID	Photo Ionisation Detector
QA	Quality Assurance
SGV	Soil Guideline Value
SPH	Separate Phase Hydrocarbon
Sp.TPH (CWG)	Total Petroleum Hydrocarbon (Criteria Working Group)
SPT	Standard Penetration Test
SVOC	Semi Volatile Organic Compound
UST	Underground Storage Tank
VCCs	Vibro Concrete Columns
VOC	Volatile Organic Compound
WTE	Water Table Elevation

APPENDIX III – DRAWINGS

Company	Drawing No	Revision	Title
Major Group Developments	21(04)_020	A	Proposed Site Plan
Major Group Developments	21(04)_010	–	Existing Site Plan
Major Group Developments	21(04)_201	–	Proposed Elevations
Major Group Developments	21(04)_200	–	Proposed Floor Plans

APPENDIX III - DRAWINGS

Notes

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Rev	Description	Date	By

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E:dd@dukedesignservices.co.uk

C	Concept	G	Contract
D	Planning	J	Construction
E	Building Regs	L	As Built
F	Tender	Sk	Sketch

Client:
Major Group Development Ltd

Project:
229 Moston Lane East, Manchester, M40 3HY

Scale:
1:1250

Is original size:
A4

Date:
Feb 2021

Job Number	Description	Rev
21(04)_010	Existing Site Plan	-



Notes

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Site Plan
1:500

A	Site plan updated	23/7/2021	DD
Rev	Description	Date	By

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T:07450607284 w:ddesignservices.co.uk
E:dd@dukedesignservices.co.uk



C	Concept	G	Contract
D	Planning	J	Construction
E	Building Regs	L	As Built
F	Tender	SK	Sketch

Client	Major Group Developments Ltd
Project	229 Moston Lane East, Manchester, M40 3HY

Scale	1:100	Drawn	Feb 2021
Scale	A3	Drawn	Feb 2021

Job Number	Description	Rev
21(04)_020	Proposed Site Plan	A



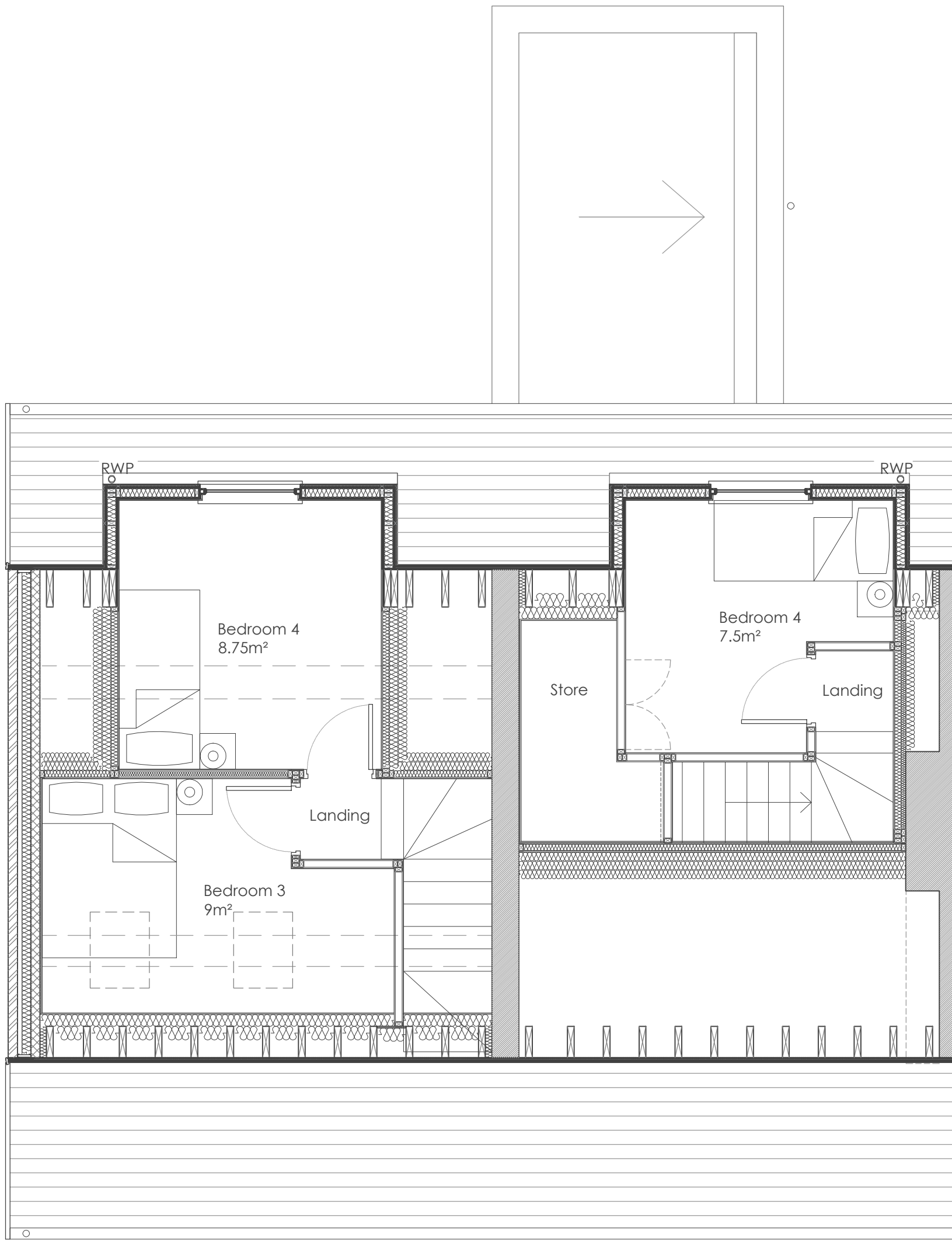
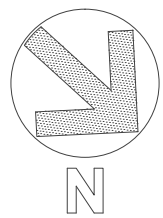
Scale 1:100

Site Plan
1:100

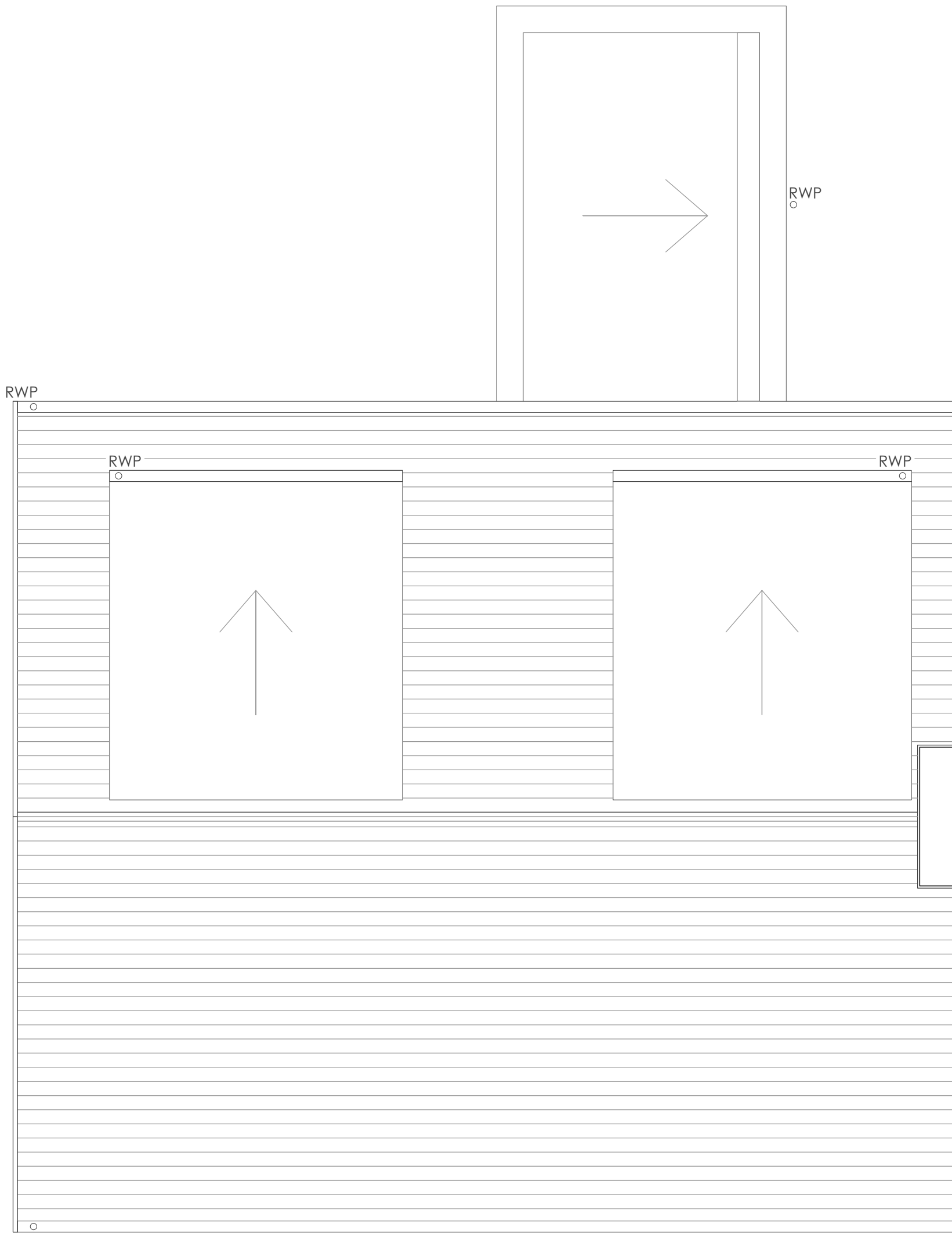


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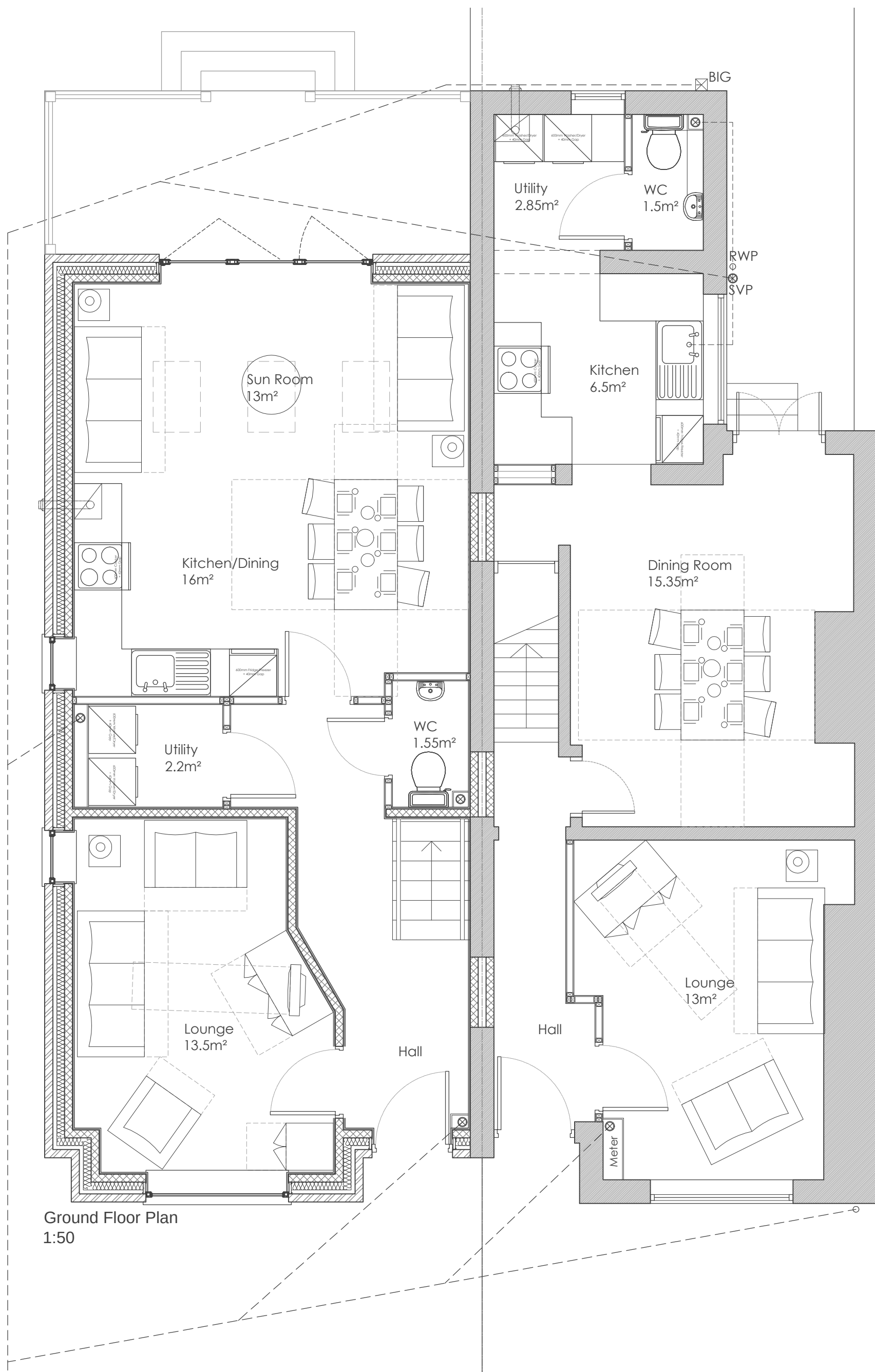
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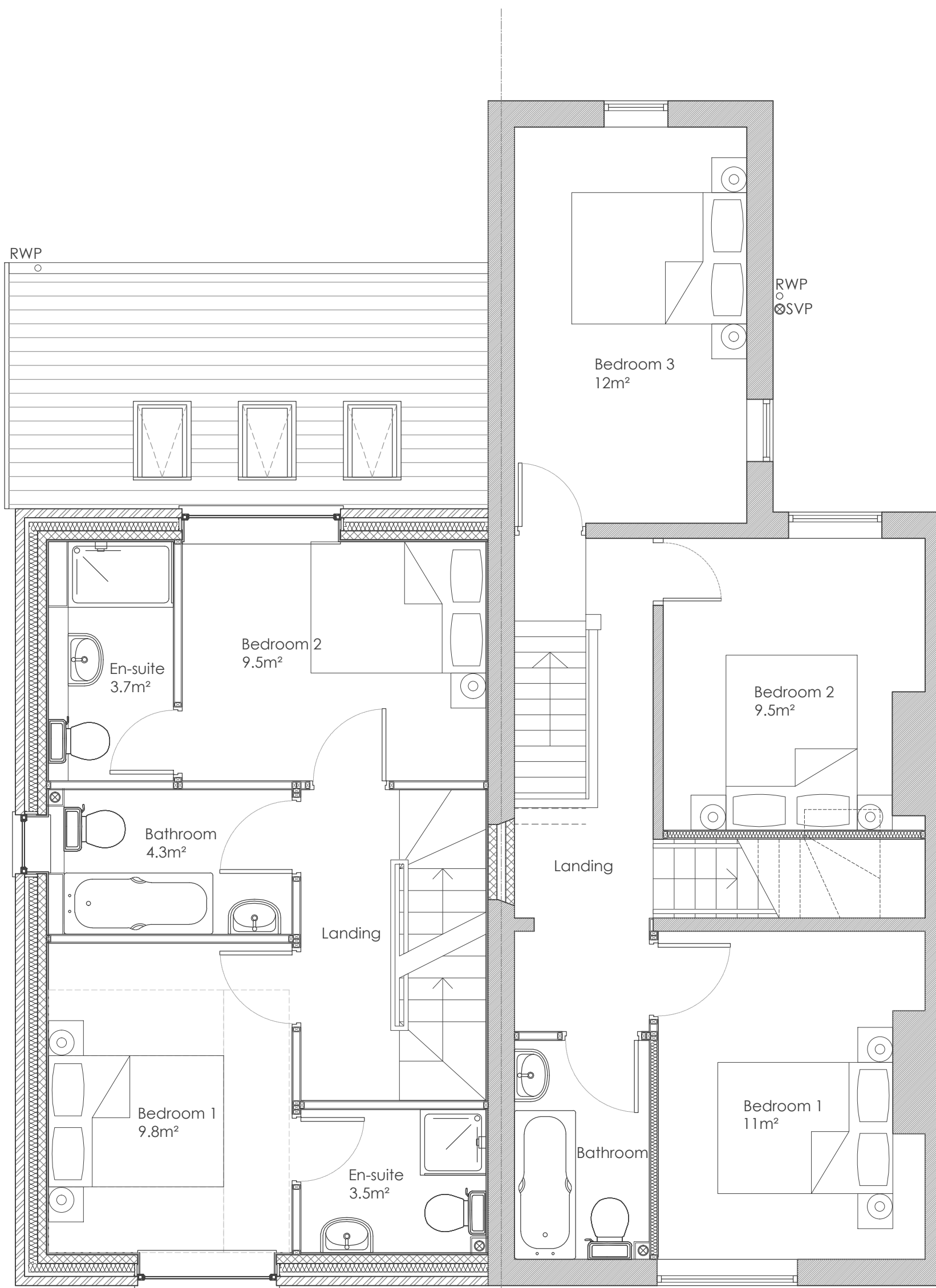
Second Floor Plan
1:50



Roof Plan
1:50



Ground Floor Plan
1:50



First Floor Plan
1:50

Rev	Description	Date	By

Duke Design Services

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C	Concept	G	Contract
D	Planning	J	Construction
E	Building Regs	L	As Built
F	Tender	Sk	Sketch

Client:	Major Group Developments Ltd		
Project:	229 Moston Lane East, Manchester, M40 3HY		
Scale:	1:50	@ original size	Date: July 2021

Drawing Number	Description	Rev
21(04)_200	Proposed Floor Plans	



Notes

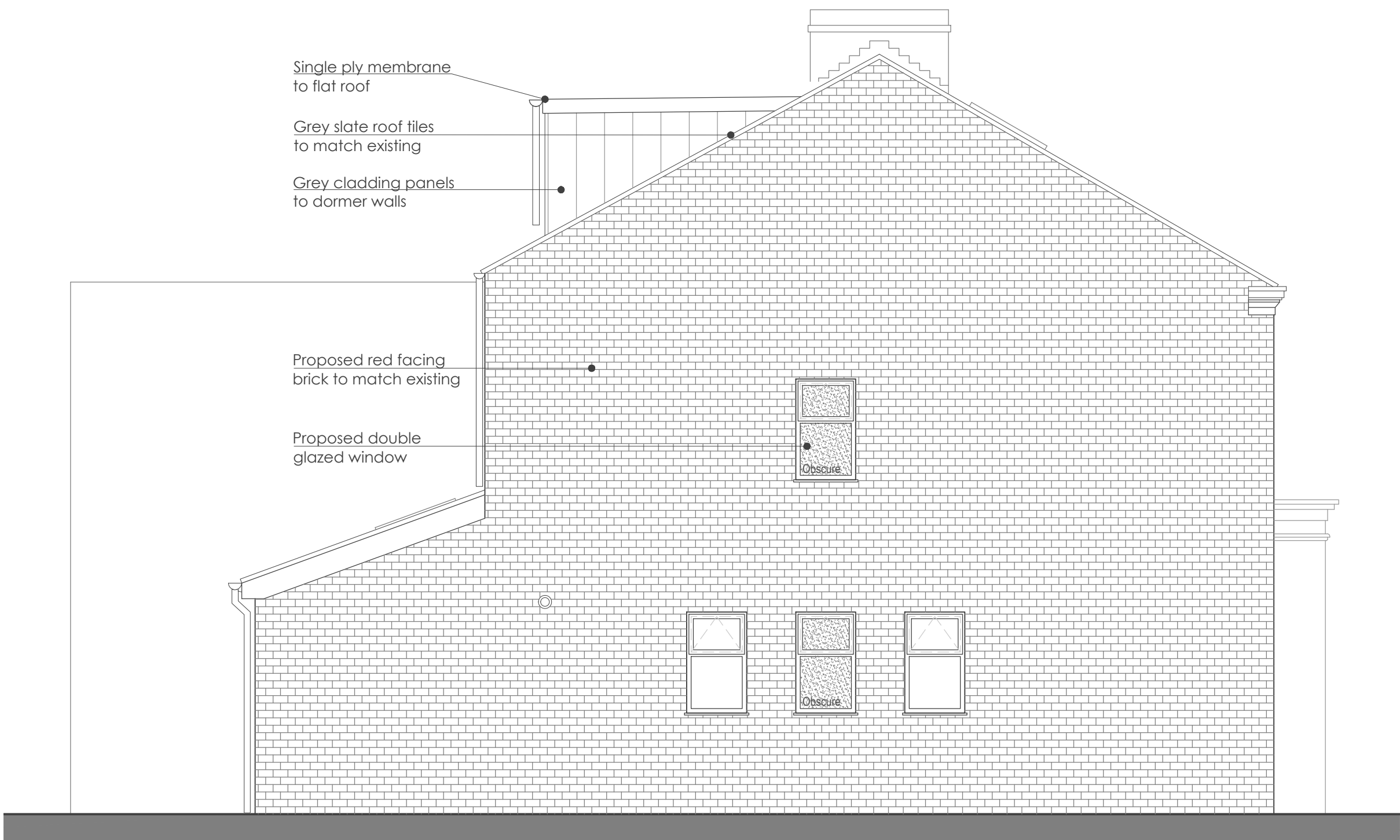
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Front Elevation
1:50



Rear Elevation
1:50



Side Elevation
1:50

Rev	Description	Date	By

Duke Design Services
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C	Concept	G	Contract
D	Planning	J	Construction
E	Building Regs	L	As Built
F	Tender	Sk	Sketch

Client:	Major Group Developments Ltd	
Project:	229 Moston Lane East, Manchester, M40 3HY	
Scale:	@ original size	Date:
1:50	A1	July 2021

Drawing Number	Description	Rev
21(04)_201	Proposed Elevations	—

Scale 1:50

APPENDIX IV – SITE PHOTOGRAPHS



APPENDIX IV – SITE PHOTOGRAPHS

Photograph 1 – Site location showing existing use as a driveway and access track to back of properties.

APPENDIX V – HISTORICAL MAPPING

APPENDIX V – HISTORICAL MAPPING

Site Details:

229, MOSTON LANE EAST,
MANCHESTER, M40 3HY

Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: County Series

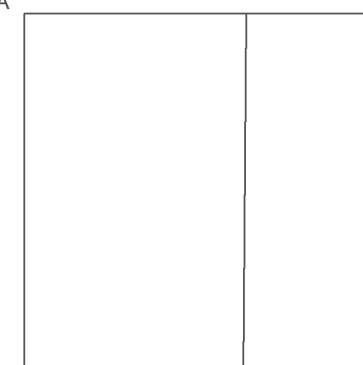
Map date: 1848

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1845
Revised N/A
Edition 1848
Copyright N/A
Levelled N/A

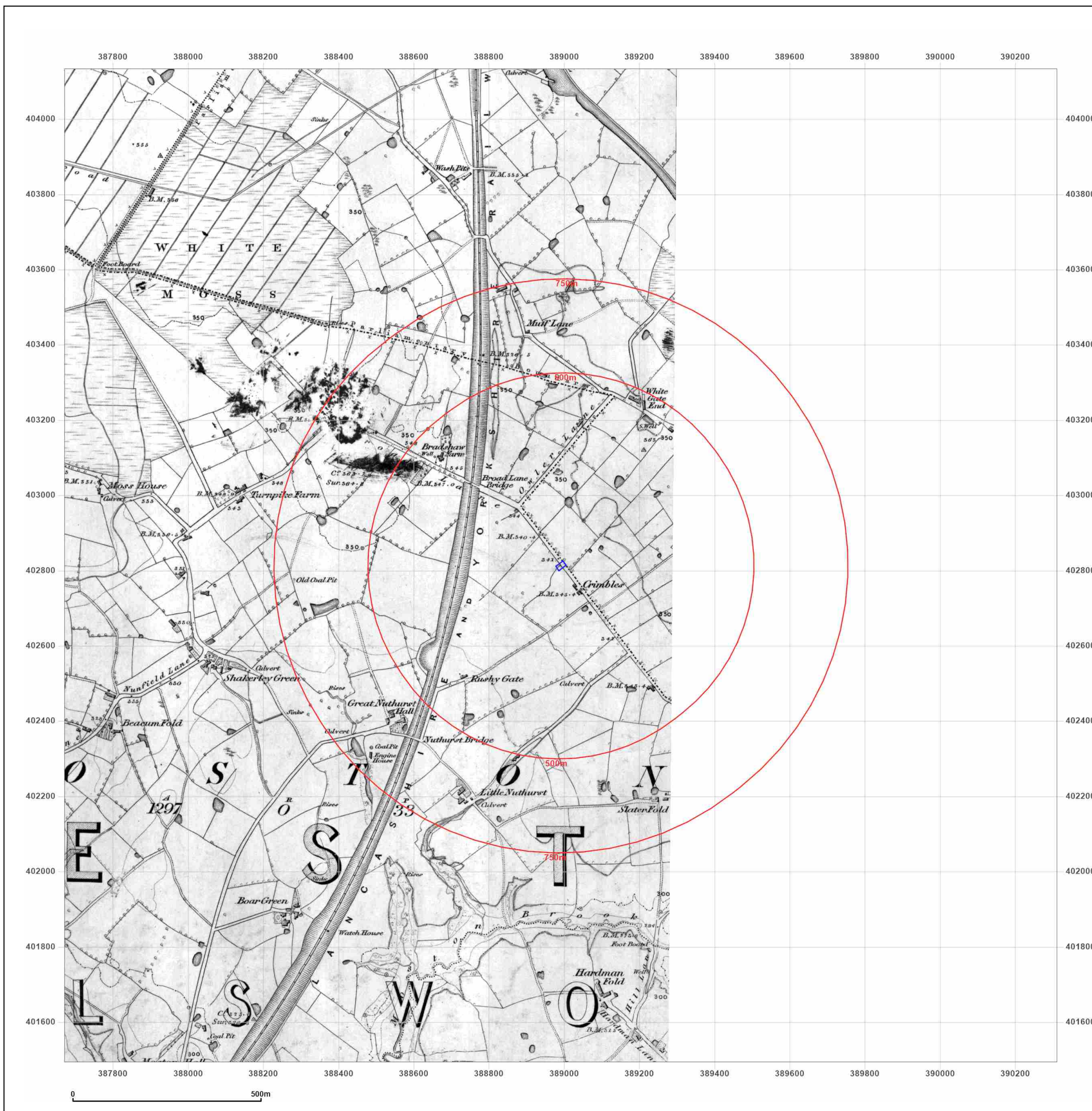


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Site Details:

229, MOSTON LANE EAST,
MANCHESTER, M40 3HY

Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: County Series

Map date: 1891

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1891
Revised 1891
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1891
Revised 1891
Edition N/A
Copyright N/A
Levelled N/A

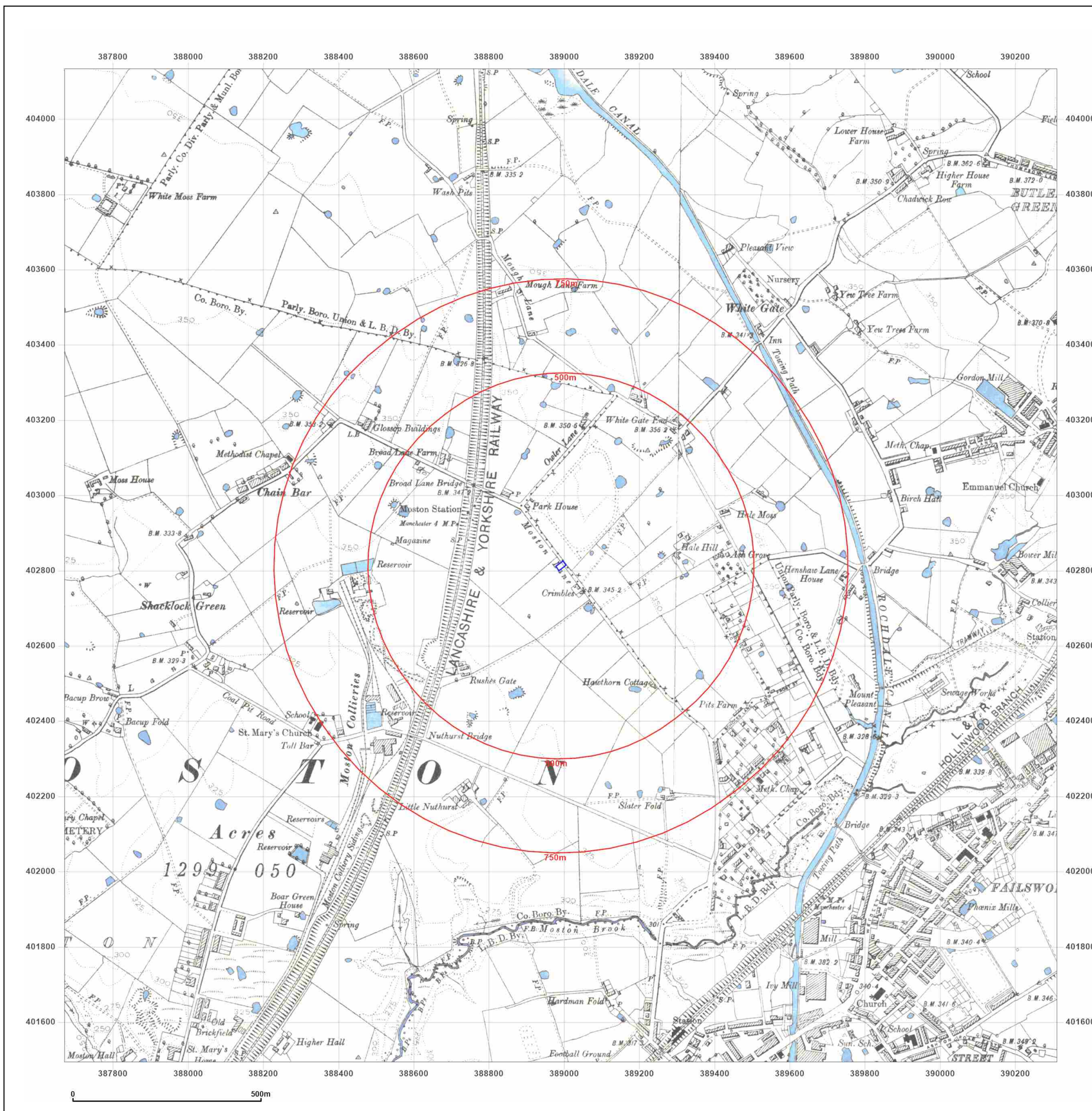


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Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: County Series

Map date: 1906

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
Revised 1906
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1906
Edition N/A
Copyright N/A
Levelled N/A

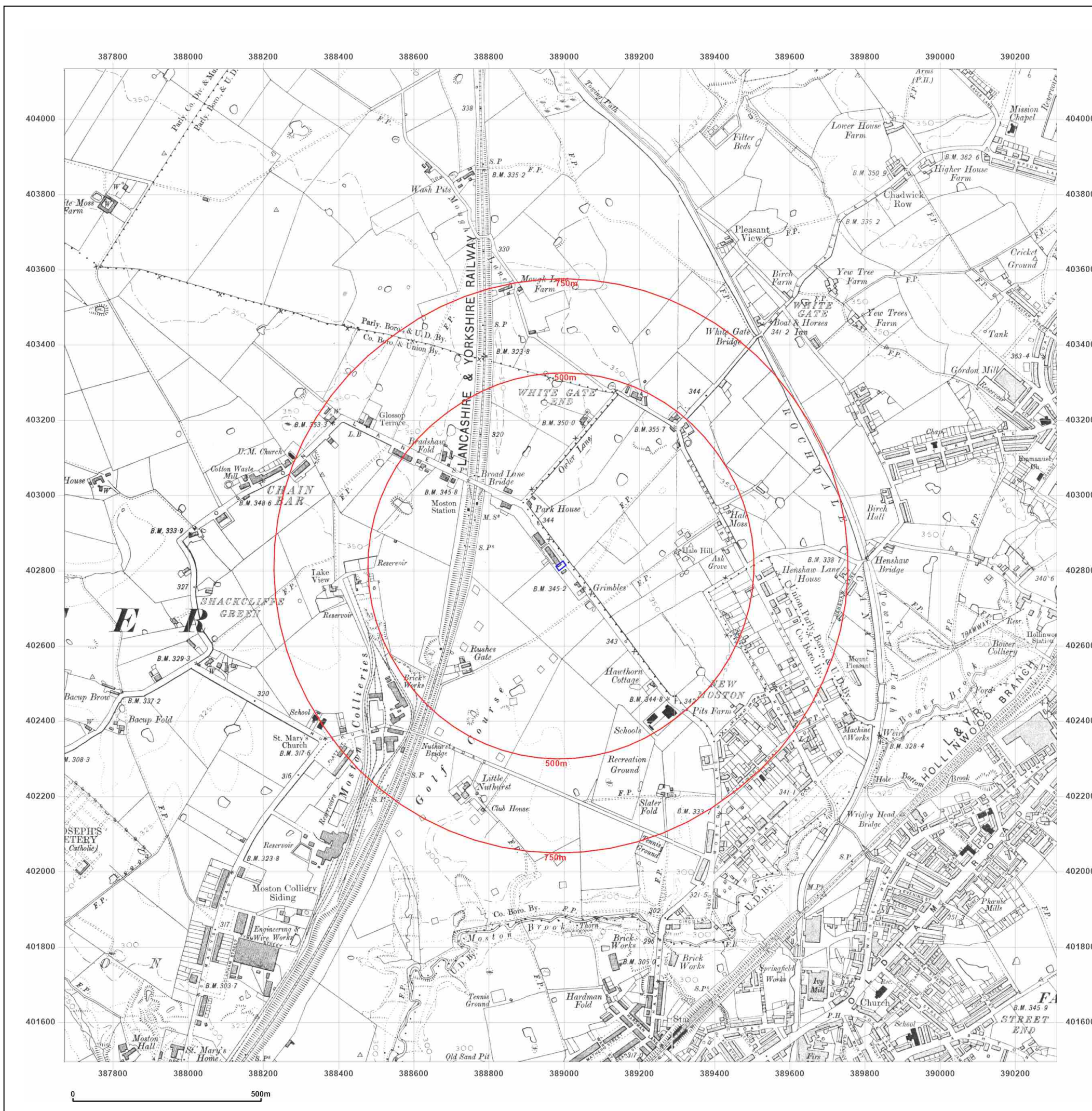


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Site Details:

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Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: County Series

Map date: 1915-1916

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
Revised 1915
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1916
Edition N/A
Copyright N/A
Levelled N/A

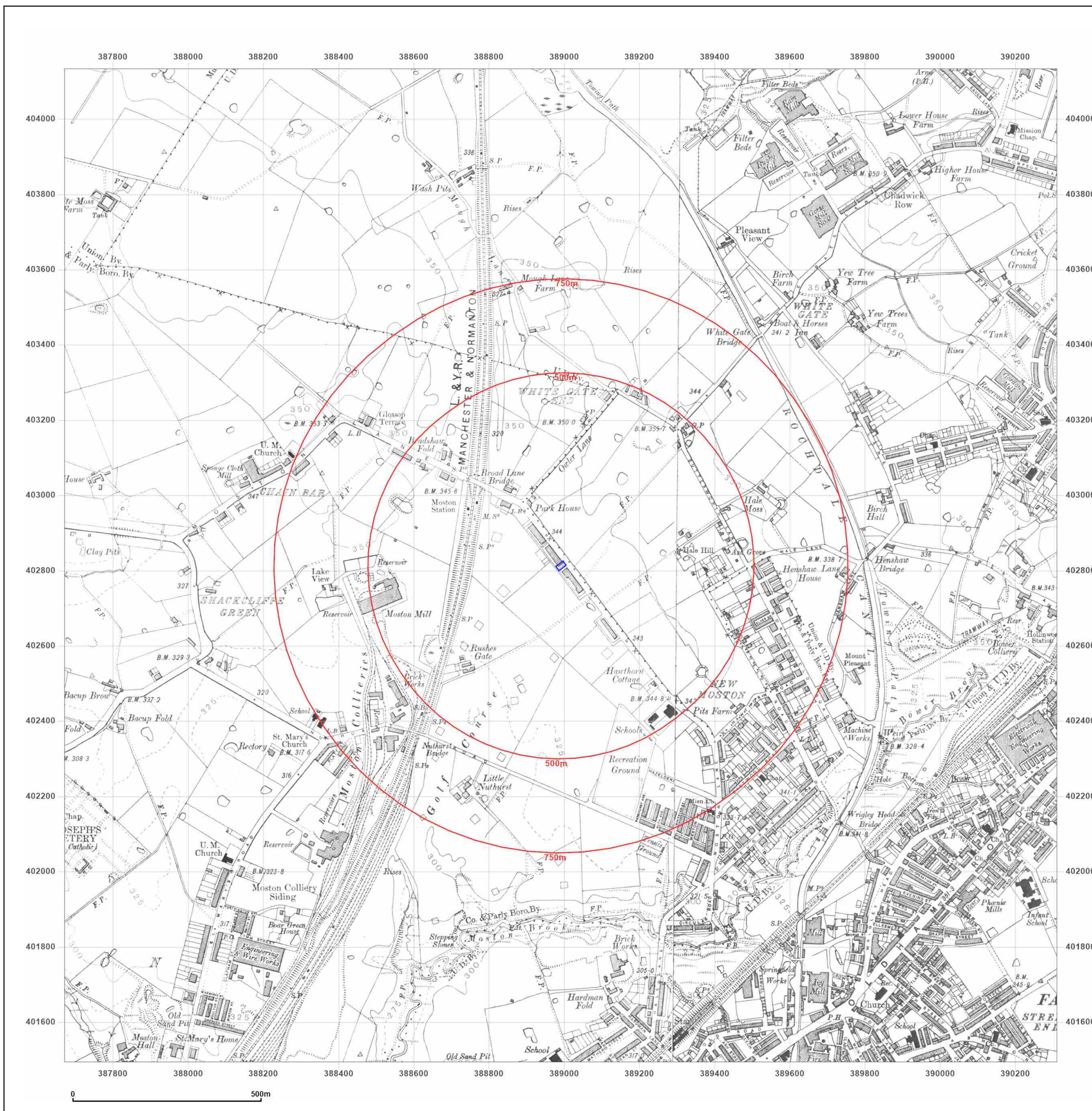


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Site Details:

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MANCHESTER, M40 3HY

Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: County Series

Map date: 1923

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
Revised 1923
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1923
Edition N/A
Copyright N/A
Levelled N/A

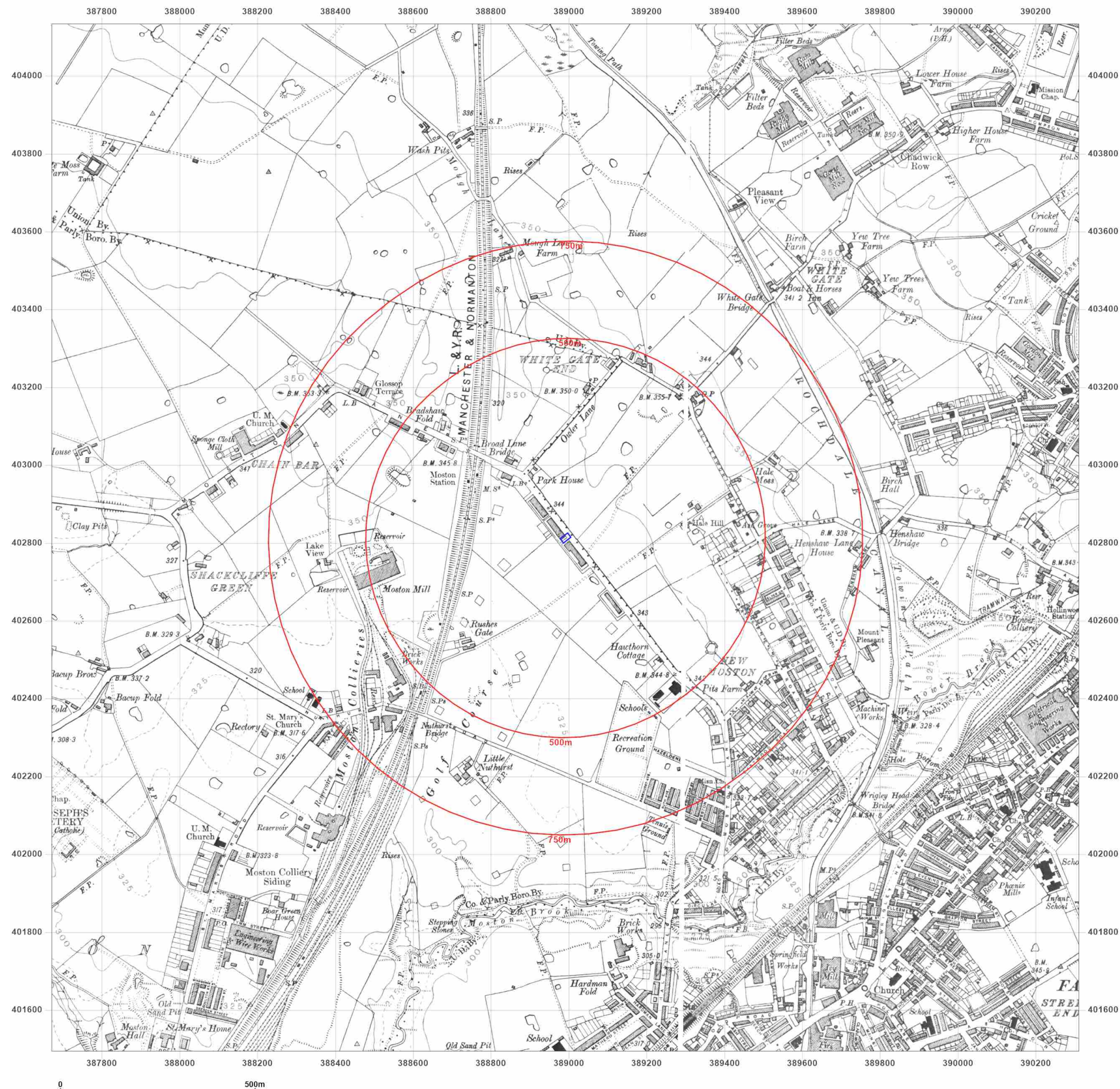


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Site Details:

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MANCHESTER, M40 3HY

Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: County Series

Map date: 1933

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
Revised 1933
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1933
Edition N/A
Copyright N/A
Levelled N/A

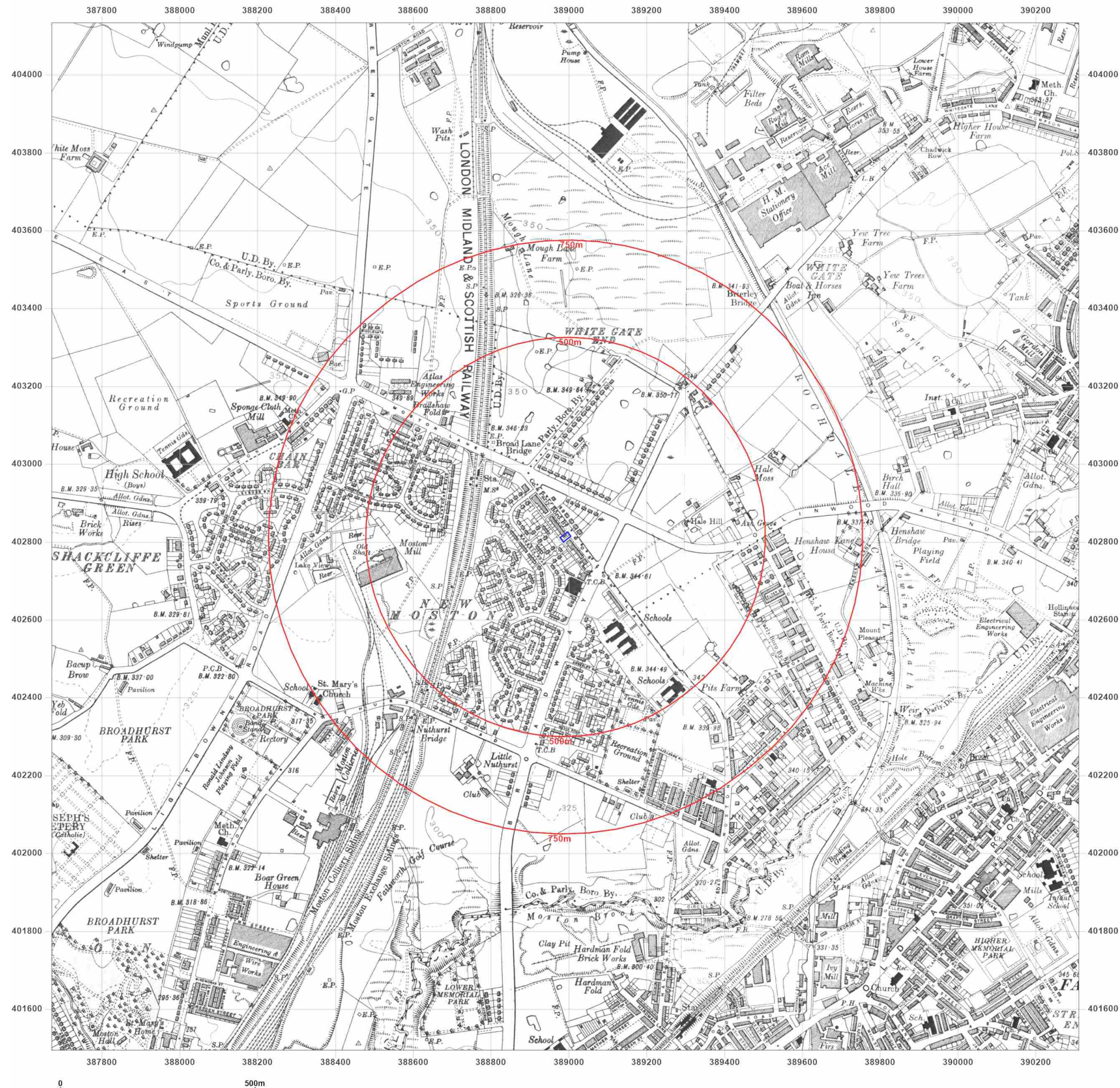


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Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: County Series

Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

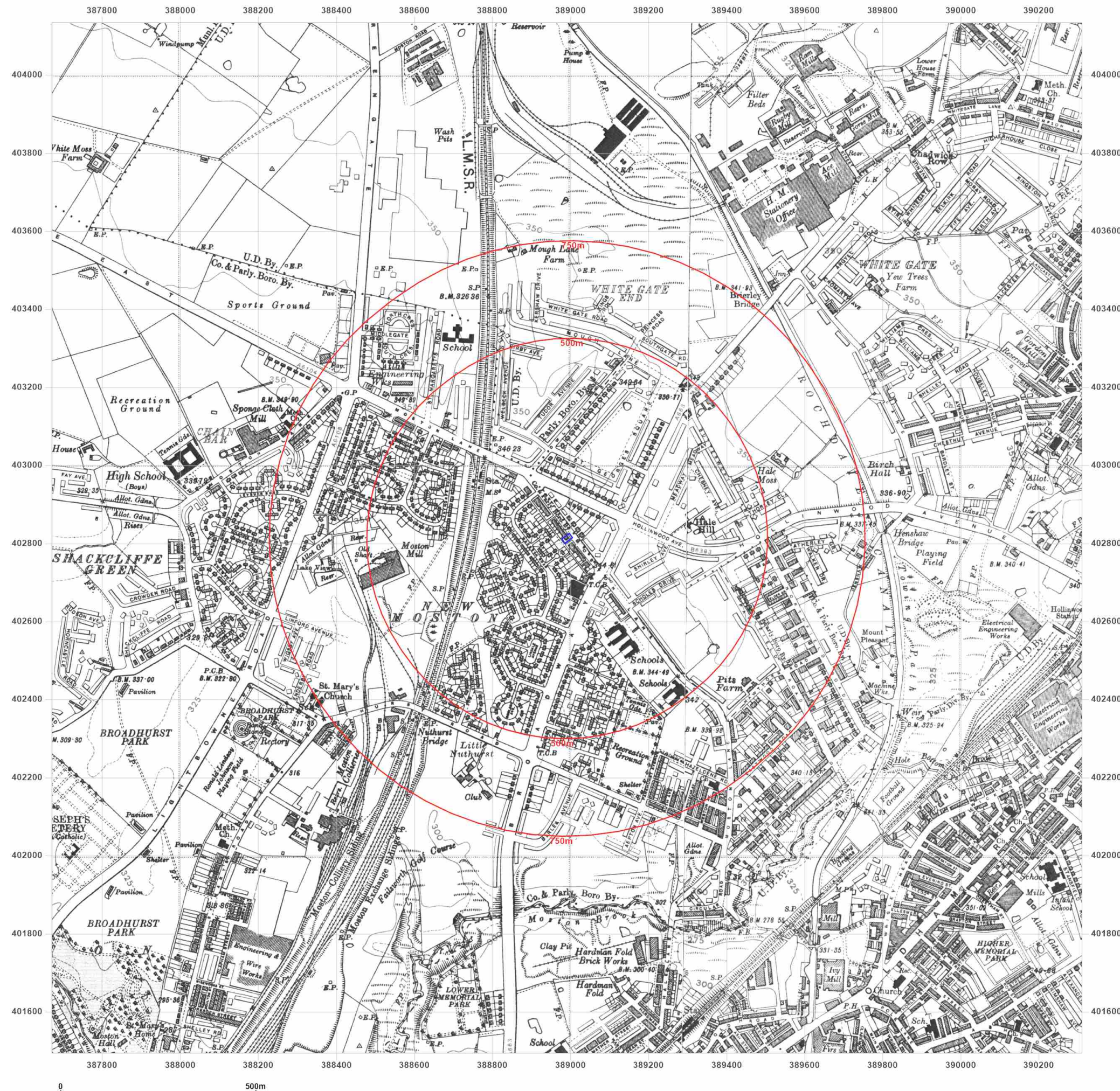


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Site Details:

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MANCHESTER, M40 3HY

Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: Provisional

Map date: 1956

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1956
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Surveyed N/A
Revised 1955
Edition 1956
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MANCHESTER, M40 3HY

Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: Provisional

Map date: 1966-1967

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1966
Revised 1966
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1967
Revised 1967
Edition N/A
Copyright N/A
Levelled N/A

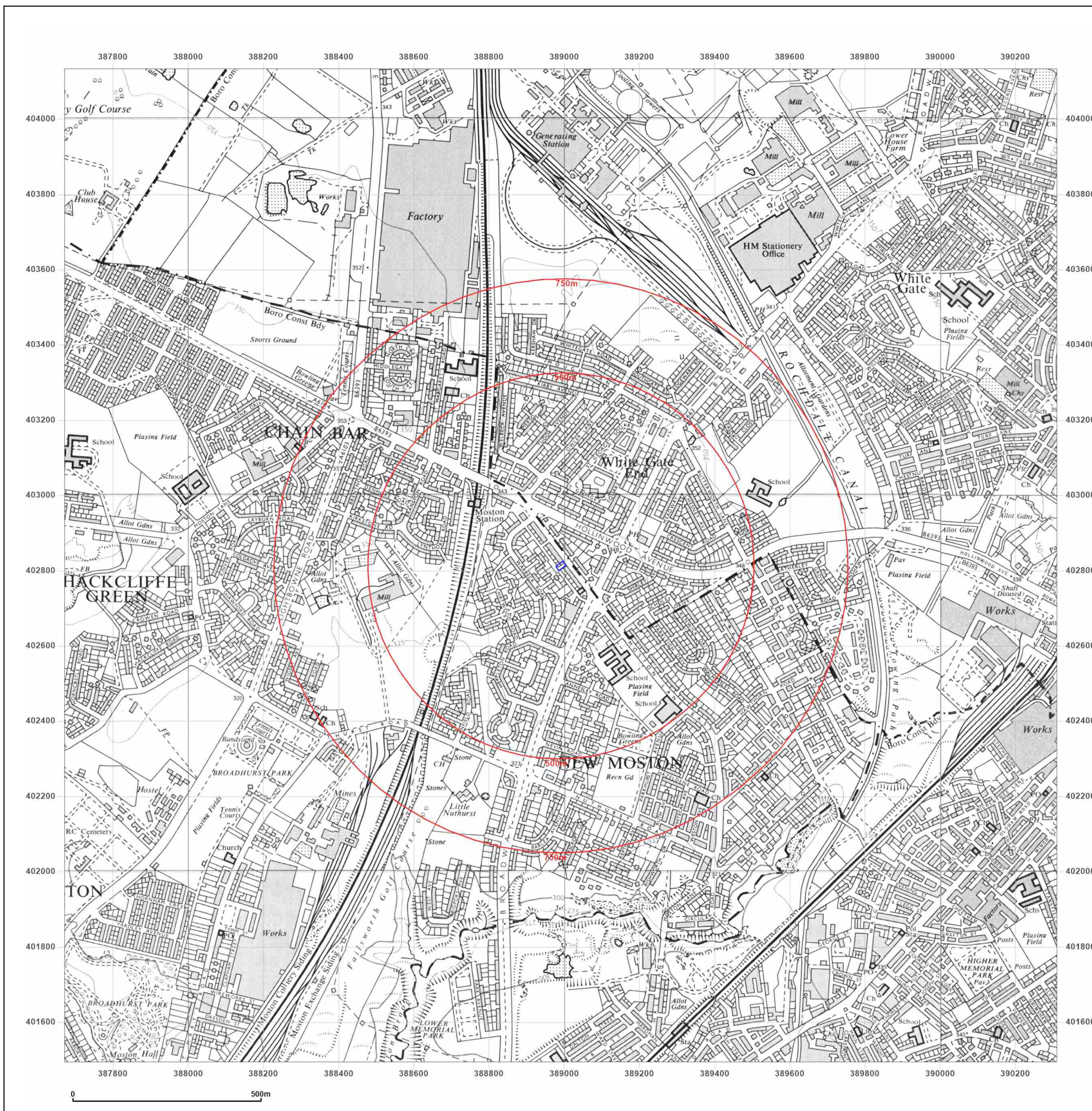


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MANCHESTER, M40 3HY

Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: National Grid

Map date: 1973-1975

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1975
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Edition N/A
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Surveyed 1973
Revised 1973
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MANCHESTER, M40 3HY

Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: National Grid

Map date: 1988

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1987
Revised 1988
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1986
Revised 1988
Edition N/A
Copyright N/A
Levelled N/A

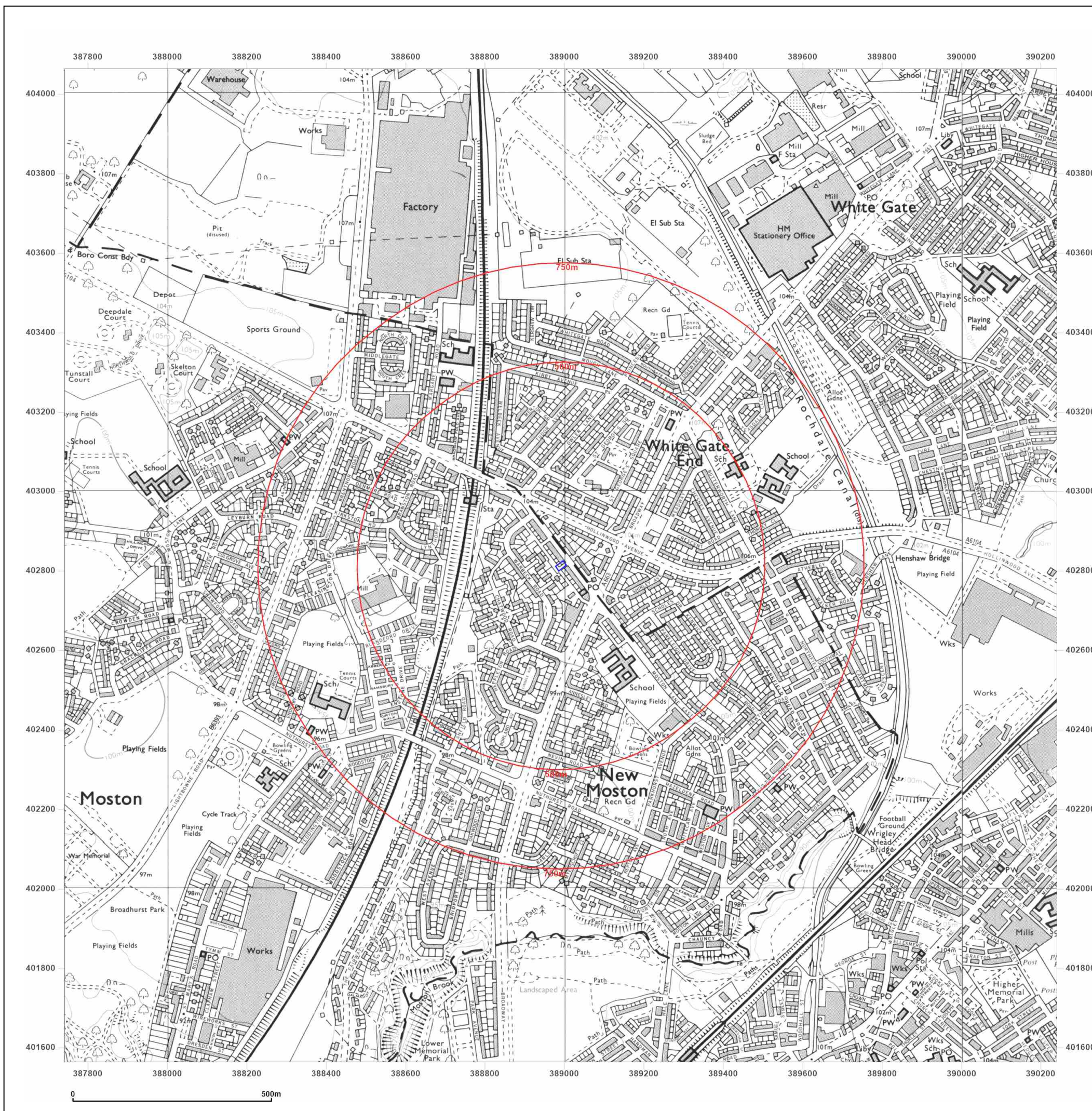


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Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: National Grid

Map date: 2001

Scale: 1:10,000

Printed at: 1:10,000



2001



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Site Details:

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Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



2010



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Site Details:

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Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: National Grid

Map date: 2022

Scale: 1:10,000

Printed at: 1:10,000



2022

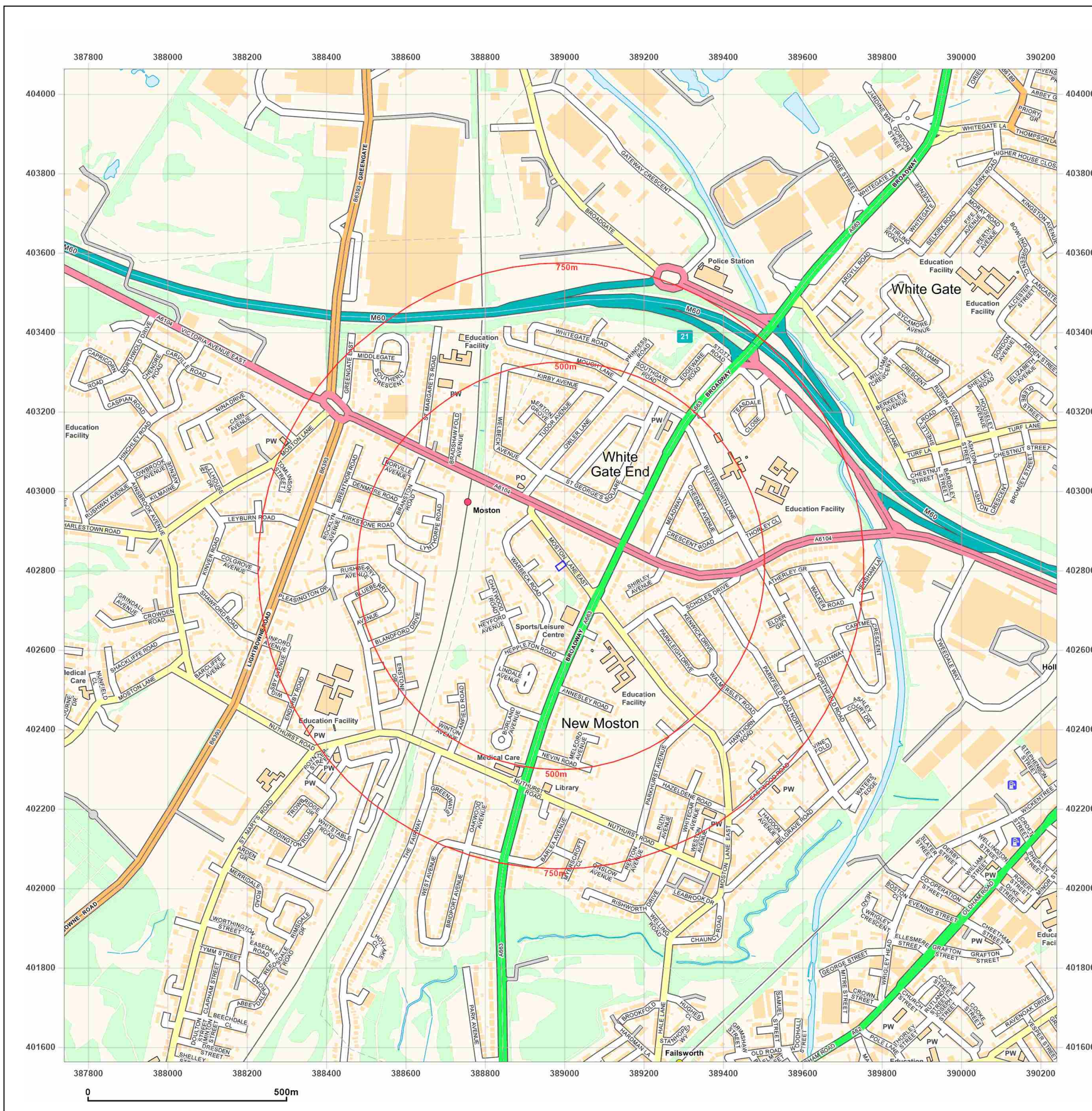


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Site Details:

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MANCHESTER, M40 3HY

Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: County Series

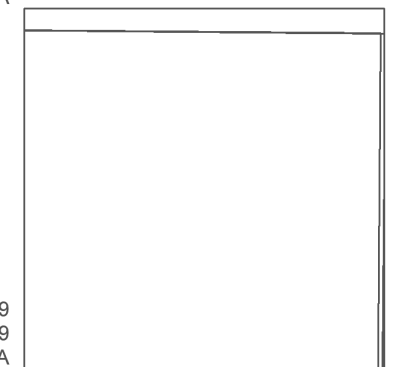
Map date: 1909

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1909
Revised 1909
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1909
Revised 1909
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1909
Revised 1909
Edition N/A
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Levelled N/A

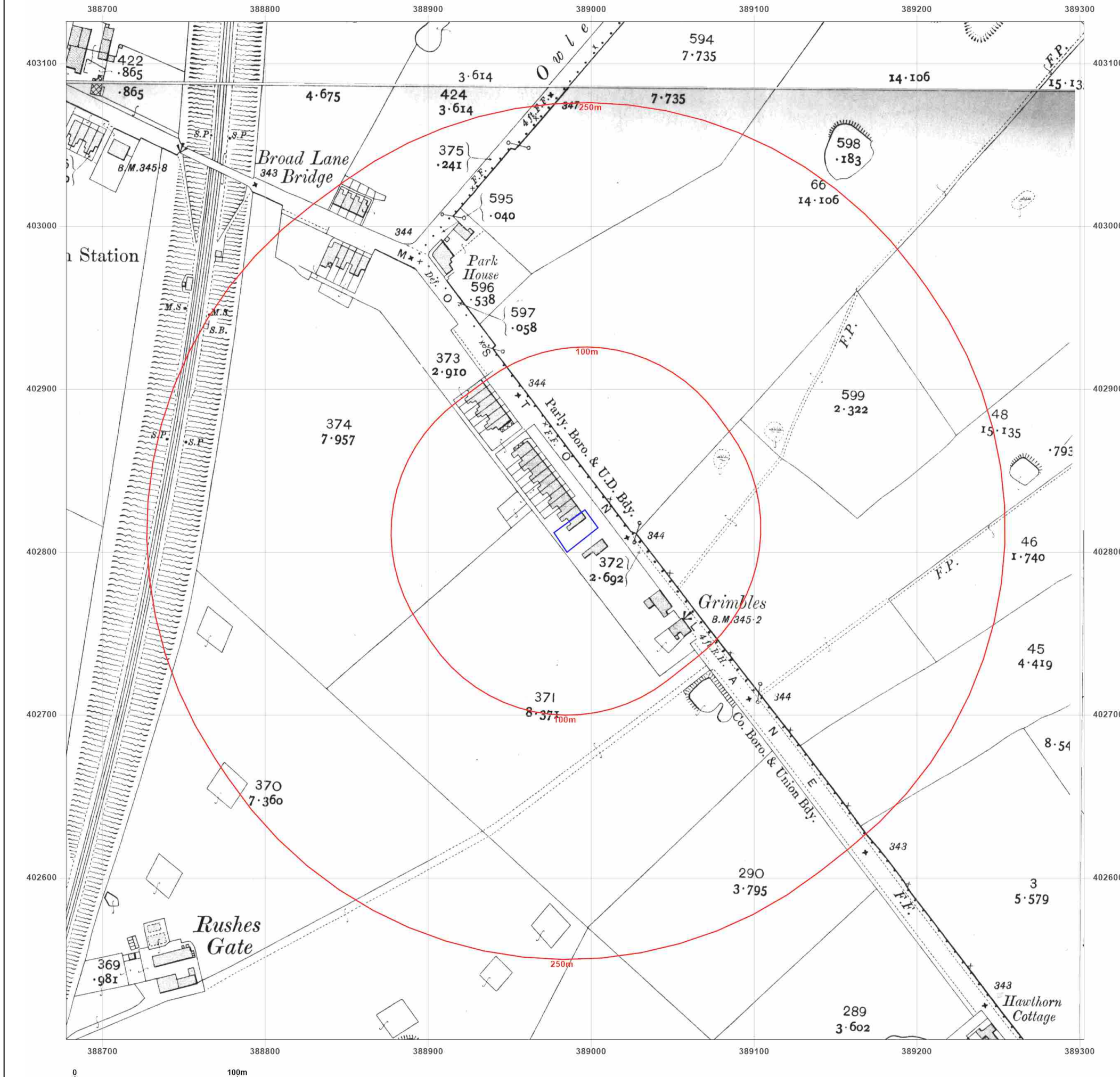


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Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: County Series

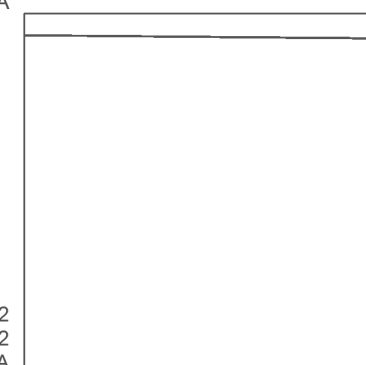
Map date: 1922

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1922
Revised 1922
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1922
Revised 1922
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1922
Revised 1922
Edition N/A
Copyright N/A
Levelled N/A

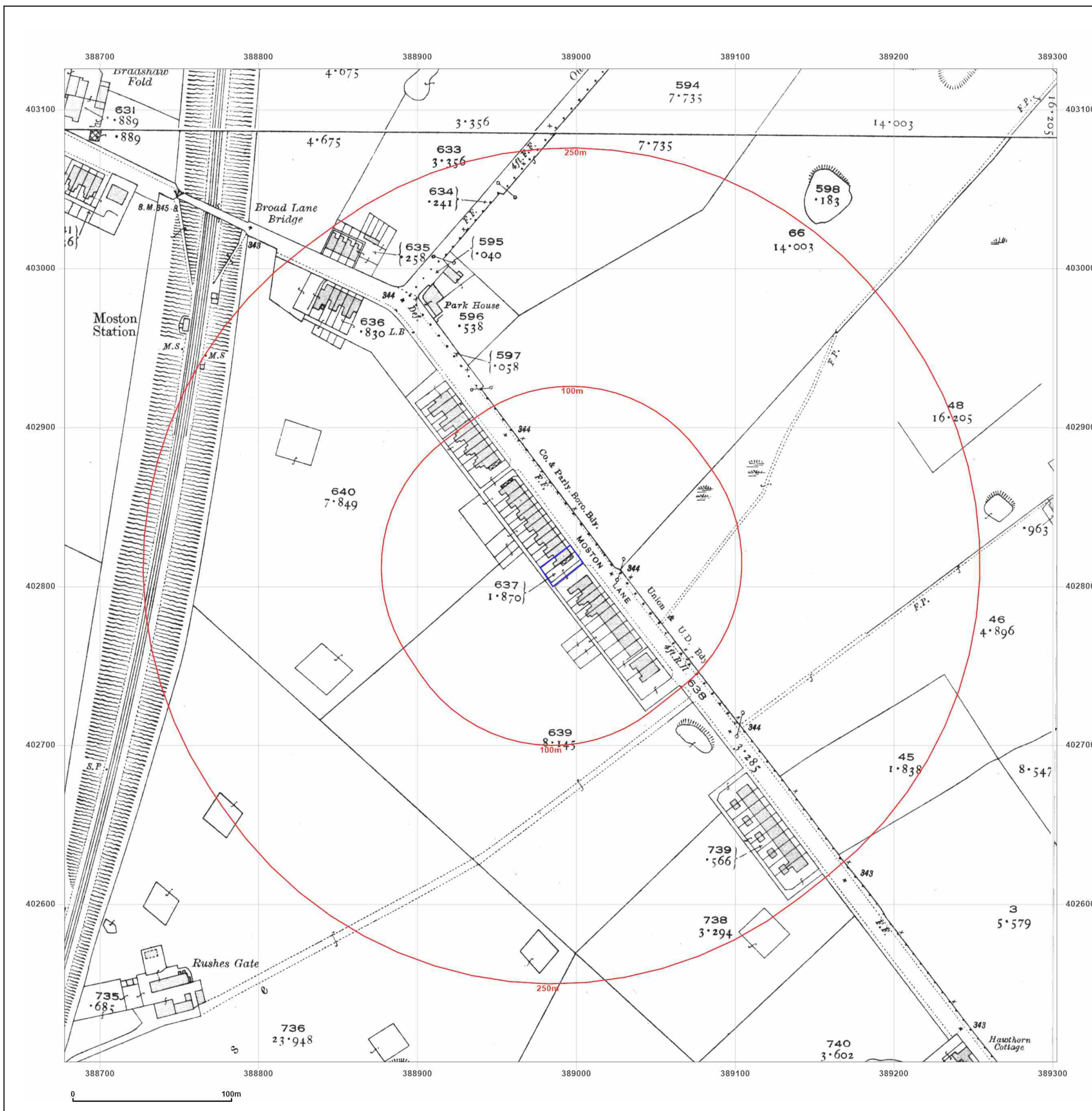


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Site Details:

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Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: County Series

Map date: 1932-1933

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1932
Revised 1932
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1933
Revised 1933
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1932
Revised 1932
Edition N/A
Copyright N/A
Levelled N/A

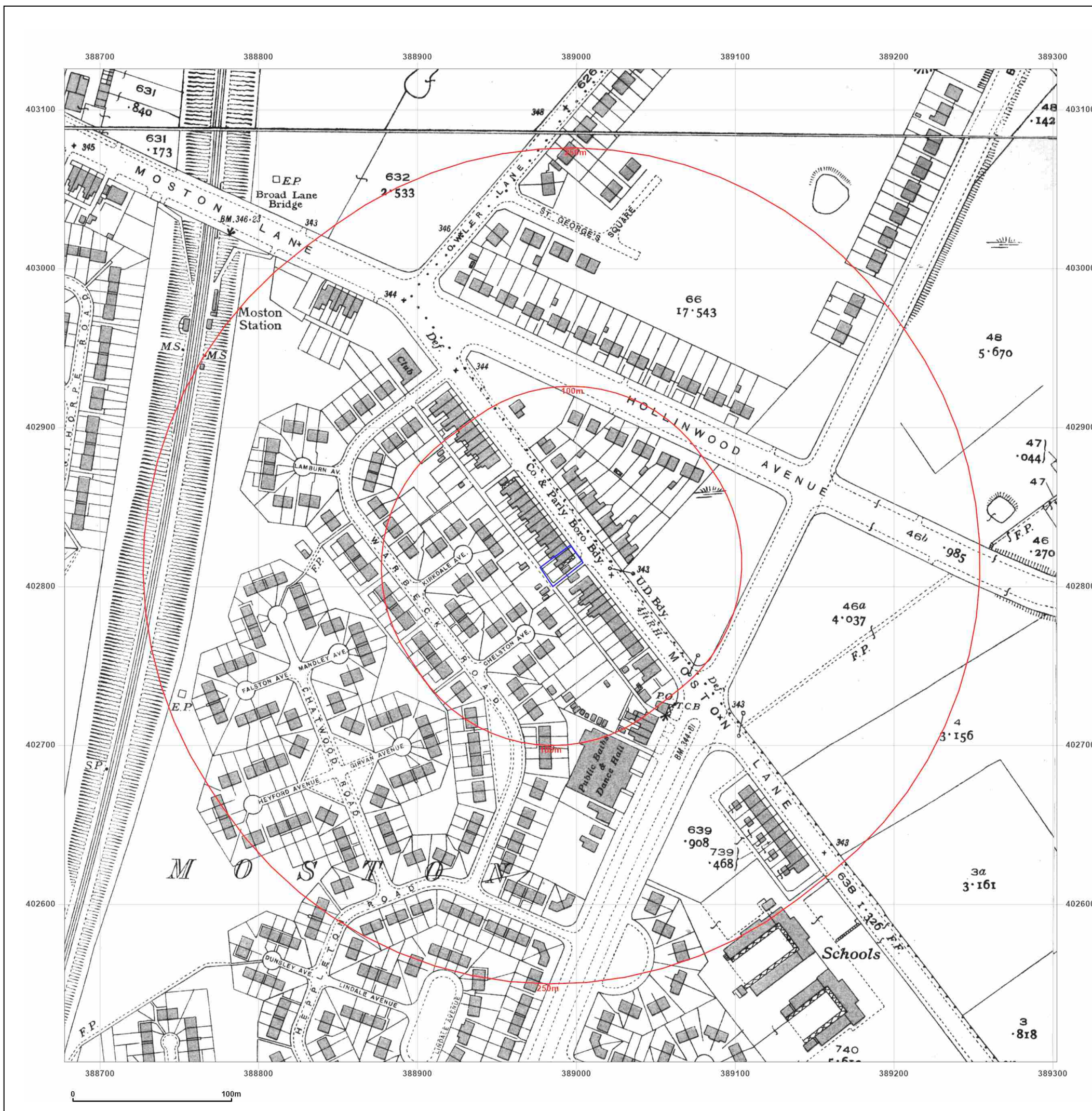


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Site Details:

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Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: National Grid

Map date: 1950-1953

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1951
Revised 1951
Edition N/A
Copyright N/A
Levelled 1948

Surveyed 1953
Revised 1953
Edition N/A
Copyright N/A
Levelled 1948

Surveyed 1950
Revised 1950
Edition N/A
Copyright N/A
Levelled 1948

Surveyed 1951
Revised 1951
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MANCHESTER, M40 3HY

Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: National Grid

Map date: 1951-1954

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1951
Revised N/A
Edition N/A
Copyright 1952
Levelled 1948

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

Surveyed N/A
Revised N/A
Edition N/A
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Surveyed N/A
Revised 1954
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MANCHESTER, M40 3HY

Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: National Grid

Map date: 1950-1955

Scale: 1:2,500

Printed at: 1:2,500



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

Surveyed 1953
Revised 1953
Edition 1955
Copyright N/A
Levelled 1948

Surveyed 1950
Revised 1950
Edition N/A
Copyright N/A
Levelled 1948

Surveyed 1951
Revised 1951
Edition N/A
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Site Details:

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MANCHESTER, M40 3HY

Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: National Grid

Map date: 1954-1959

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1951
Revised 1957
Edition N/A
Copyright N/A
Levelled 1948

Surveyed 1958
Revised 1958
Edition N/A
Copyright 1959
Levelled 1948

Surveyed 1951
Revised 1954
Edition N/A
Copyright N/A
Levelled 1948

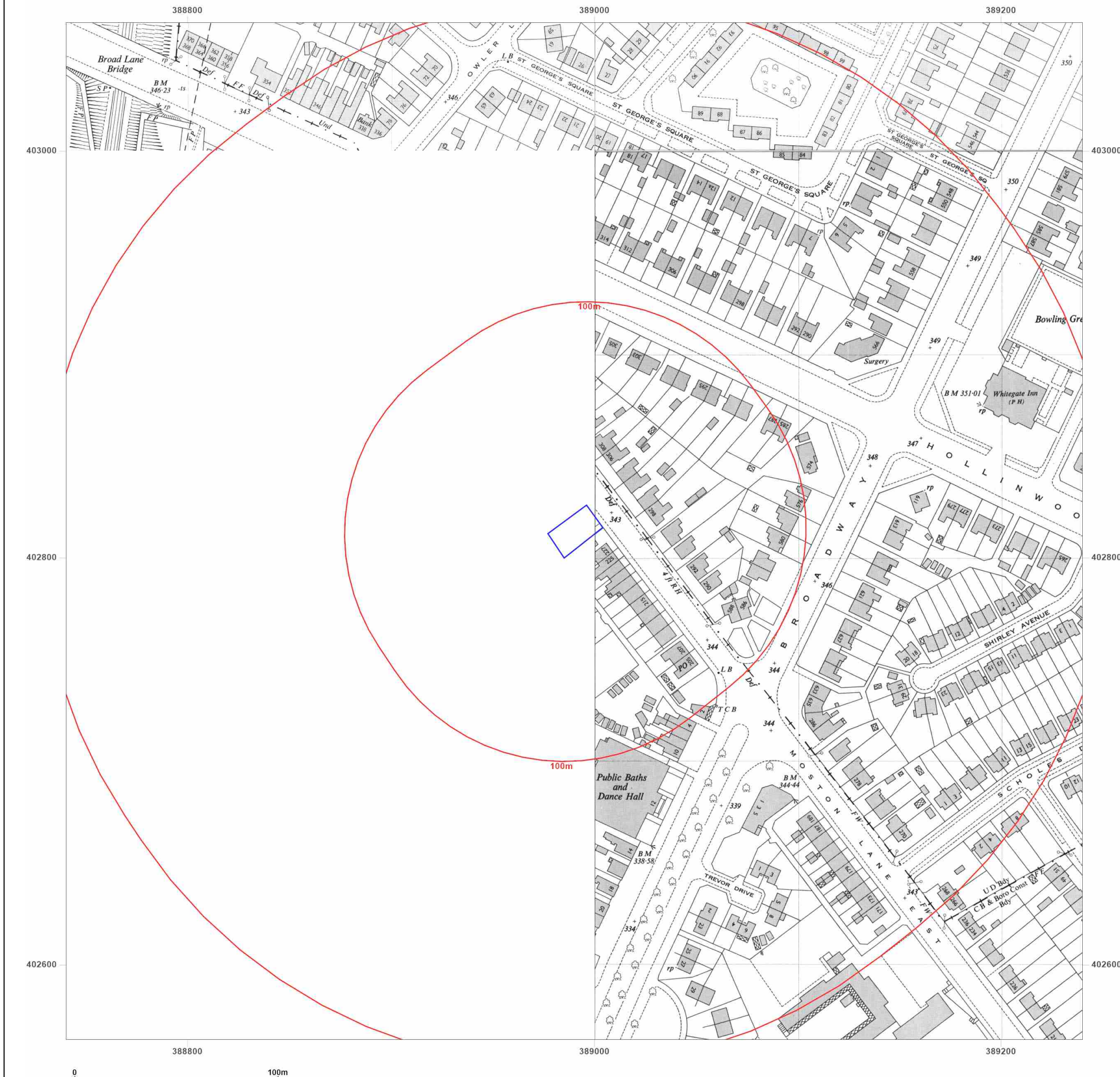


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Site Details:

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MANCHESTER, M40 3HY

Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: National Grid

Map date: 1967

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1950
Revised 1967
Edition N/A
Copyright 1967
Levelled 1964

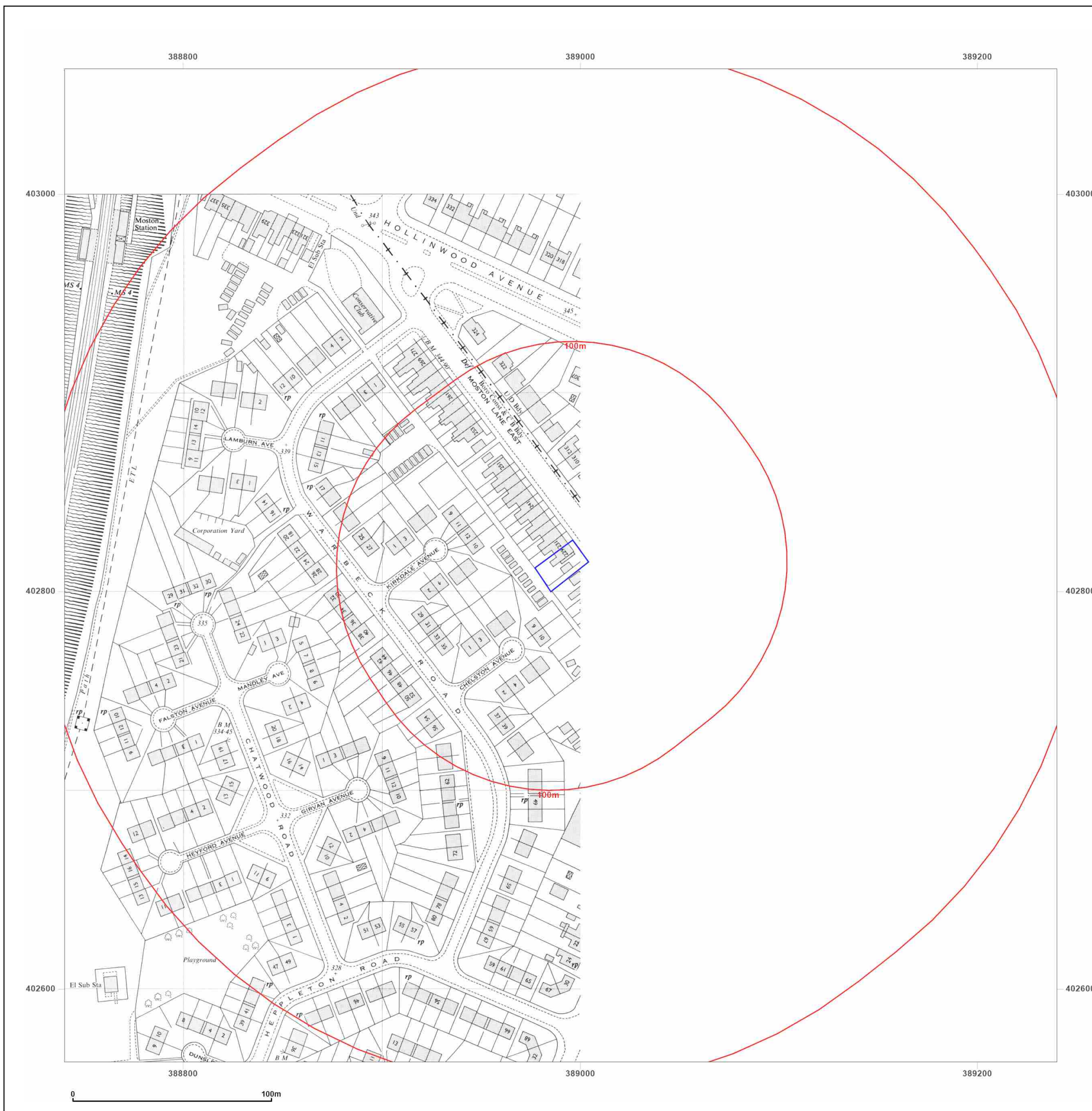


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Site Details:

229, MOSTON LANE EAST,
MANCHESTER, M40 3HY

Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: National Grid

Map date: 1970

Scale: 1:2,500

Printed at: 1:2,500



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Revised 1969
Edition N/A
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Surveyed 1969
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Site Details:

229, MOSTON LANE EAST,
MANCHESTER, M40 3HY

Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: National Grid

Map date: 1975

Scale: 1:1,250

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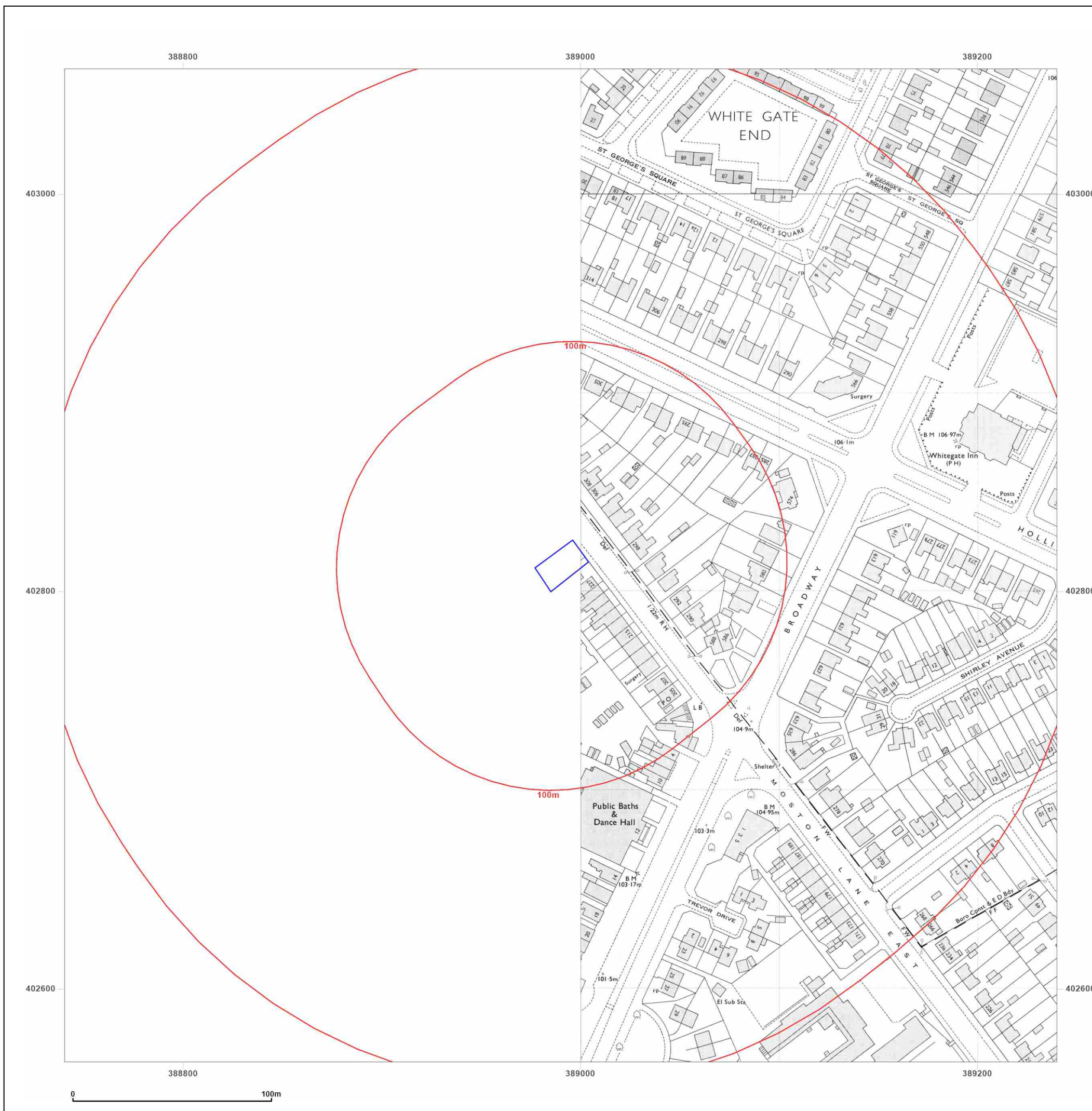


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Site Details:

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MANCHESTER, M40 3HY

Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: National Grid

Map date: 1992

Scale: 1:1,250

Printed at: 1:2,000



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Site Details:

229, MOSTON LANE EAST,
MANCHESTER, M40 3HY

Client Ref: PO-665
Report Ref: GS-8625238
Grid Ref: 388990, 402813

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250



2003

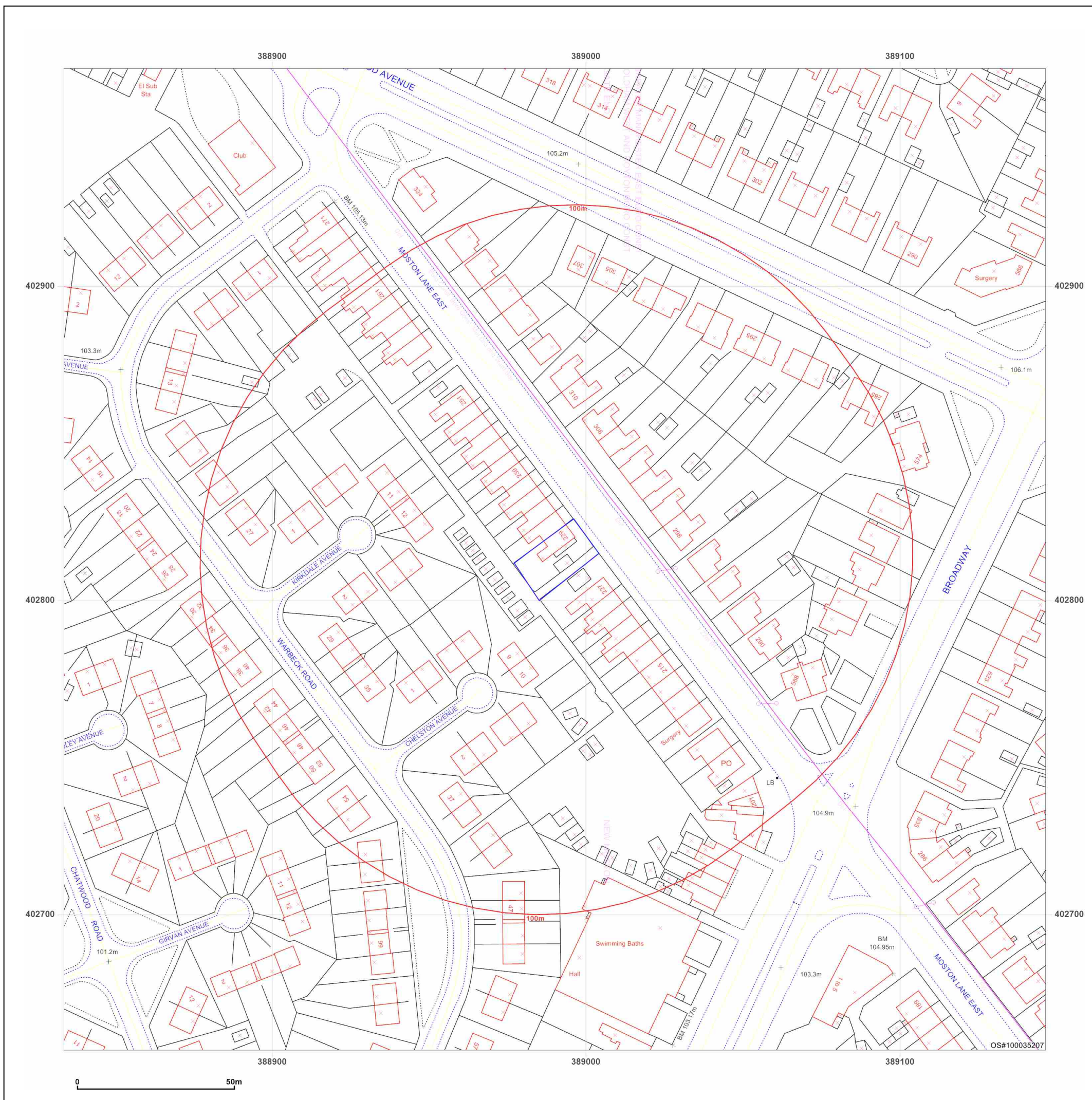


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APPENDIX VI – GROUNDSURE REPORT

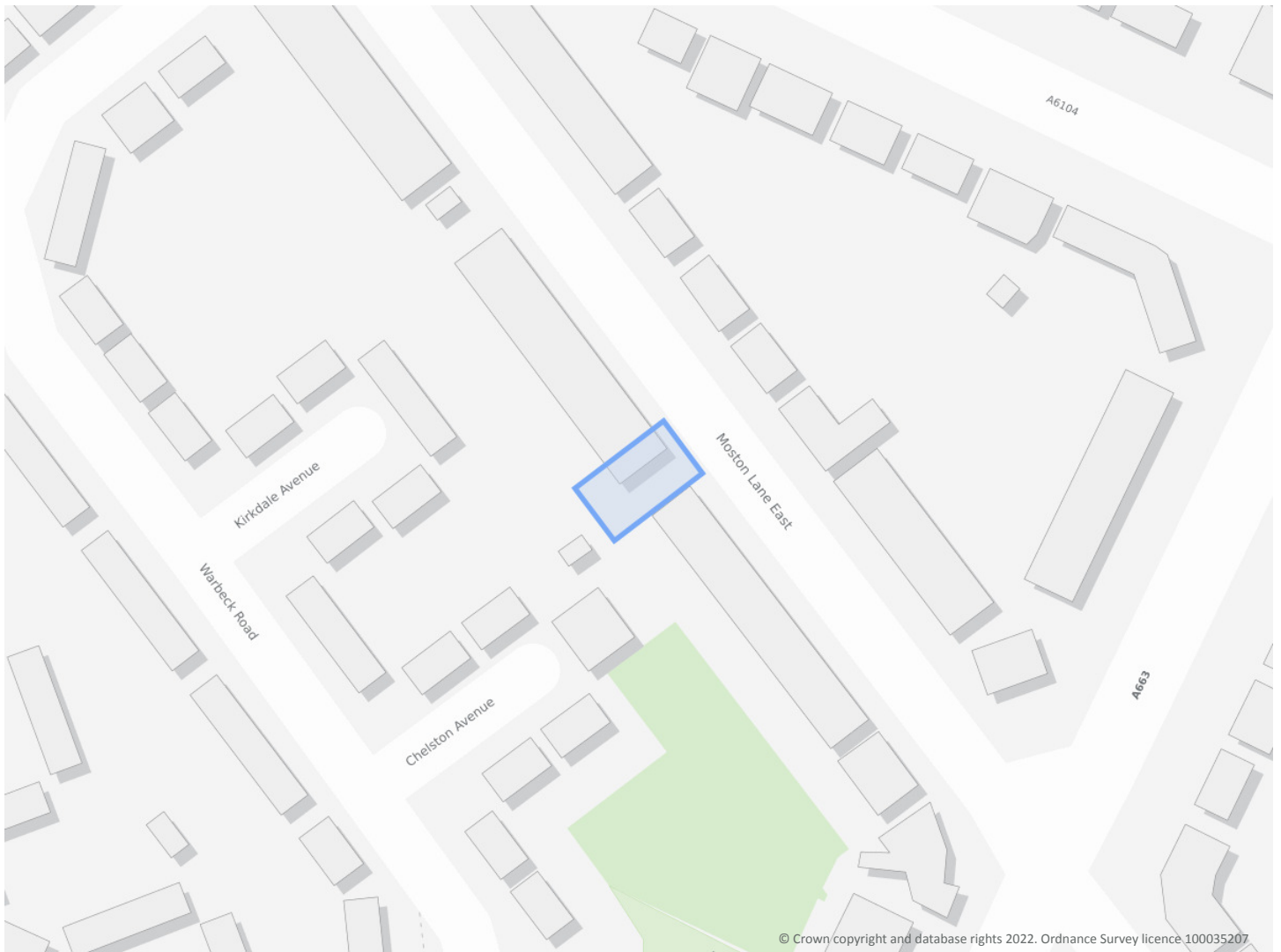
229, MOSTON LANE EAST, MANCHESTER, M40 3HY

Order Details

Date: 25/03/2022
Your ref: PO-665
Our Ref: GS-8625239
Client: Melissa Morales

Site Details

Location: 388991 402812
Area: 0.03 ha
Authority: [Manchester City Council](#)



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Summary of findings

p. 2 **Aerial image**

p. 8

OS MasterMap site plan

p.12 groundsure.com/insightuserguide

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
<u>13</u>	<u>1.1</u>	<u>Historical industrial land uses</u>	0	0	7	59	-
<u>16</u>	<u>1.2</u>	<u>Historical tanks</u>	0	0	0	3	-
<u>16</u>	<u>1.3</u>	<u>Historical energy features</u>	0	0	3	7	-
17	1.4	Historical petrol stations	0	0	0	0	-
<u>17</u>	<u>1.5</u>	<u>Historical garages</u>	0	0	0	2	-
18	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
<u>19</u>	<u>2.1</u>	<u>Historical industrial land uses</u>	0	0	12	87	-
<u>23</u>	<u>2.2</u>	<u>Historical tanks</u>	0	0	0	10	-
<u>24</u>	<u>2.3</u>	<u>Historical energy features</u>	0	0	4	11	-
25	2.4	Historical petrol stations	0	0	0	0	-
<u>25</u>	<u>2.5</u>	<u>Historical garages</u>	0	0	0	3	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
26	3.1	Active or recent landfill	0	0	0	0	-
26	3.2	Historical landfill (BGS records)	0	0	0	0	-
26	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
26	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
26	3.5	Historical waste sites	0	0	0	0	-
27	3.6	Licensed waste sites	0	0	0	0	-
27	3.7	Waste exemptions	0	0	0	0	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
<u>28</u>	<u>4.1</u>	<u>Recent industrial land uses</u>	0	0	7	-	-
<u>29</u>	<u>4.2</u>	<u>Current or recent petrol stations</u>	0	0	0	1	-
29	4.3	Electricity cables	0	0	0	0	-
29	4.4	Gas pipelines	0	0	0	0	-
30	4.5	Sites determined as Contaminated Land	0	0	0	0	-



30	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
30	4.7	Regulated explosive sites	0	0	0	0	-
30	4.8	Hazardous substance storage/usage	0	0	0	0	-
30	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
31	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
31	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
31	4.12	Radioactive Substance Authorisations	0	0	0	0	-
31	4.13	Licensed Discharges to controlled waters	0	0	0	0	-
31	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
32	4.15	Pollutant release to public sewer	0	0	0	0	-
32	4.16	List 1 Dangerous Substances	0	0	0	0	-
32	4.17	List 2 Dangerous Substances	0	0	0	0	-
32	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
32	4.19	Pollution inventory substances	0	0	0	0	-
33	4.20	Pollution inventory waste transfers	0	0	0	0	-
33	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
34	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
35	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
36	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
37	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
37	5.5	Groundwater vulnerability- local information	None (within 0m)				
38	5.6	Groundwater abstractions	0	0	0	0	0
38	5.7	Surface water abstractions	0	0	0	0	0
38	5.8	Potable abstractions	0	0	0	0	0
38	5.9	Source Protection Zones	0	0	0	0	-
39	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
40	6.1	Water Network (OS MasterMap)	0	0	0	-	-



40	6.2	Surface water features	0	0	0	-	-
41	6.3	<u>WFD Surface water body catchments</u>	1	-	-	-	-
41	6.4	<u>WFD Surface water bodies</u>	0	0	0	-	-
41	6.5	<u>WFD Groundwater bodies</u>	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
43	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
43	7.2	Historical Flood Events	0	0	0	-	-
43	7.3	Flood Defences	0	0	0	-	-
44	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
44	7.5	Flood Storage Areas	0	0	0	-	-
45	7.6	Flood Zone 2	None (within 50m)				
45	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
46	8.1	<u>Surface water flooding</u>	1 in 30 year, 0.1m - 0.3m (within 50m)				
Page	Section	Groundwater flooding					
48	9.1	<u>Groundwater flooding</u>	Low (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
49	10.1	<u>Sites of Special Scientific Interest (SSSI)</u>	0	0	0	0	5
50	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
50	10.3	<u>Special Areas of Conservation (SAC)</u>	0	0	0	0	5
51	10.4	Special Protection Areas (SPA)	0	0	0	0	0
51	10.5	National Nature Reserves (NNR)	0	0	0	0	0
51	10.6	<u>Local Nature Reserves (LNR)</u>	0	0	0	0	1
52	10.7	<u>Designated Ancient Woodland</u>	0	0	0	0	1
52	10.8	Biosphere Reserves	0	0	0	0	0
52	10.9	Forest Parks	0	0	0	0	0
52	10.10	Marine Conservation Zones	0	0	0	0	0
53	10.11	Green Belt	0	0	0	0	0
53	10.12	Proposed Ramsar sites	0	0	0	0	0



53	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
53	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
53	10.15	Nitrate Sensitive Areas	0	0	0	0	0
54	10.16	<u>Nitrate Vulnerable Zones</u>	1	0	0	0	0
55	10.17	<u>SSSI Impact Risk Zones</u>	1	-	-	-	-
56	10.18	<u>SSSI Units</u>	0	0	0	0	5
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
59	11.1	World Heritage Sites	0	0	0	-	-
59	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
59	11.3	National Parks	0	0	0	-	-
59	11.4	Listed Buildings	0	0	0	-	-
60	11.5	Conservation Areas	0	0	0	-	-
60	11.6	Scheduled Ancient Monuments	0	0	0	-	-
60	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
61	12.1	<u>Agricultural Land Classification</u>	Urban (within 250m)				
62	12.2	Open Access Land	0	0	0	-	-
62	12.3	<u>Tree Felling Licences</u>	0	0	1	-	-
62	12.4	Environmental Stewardship Schemes	0	0	0	-	-
62	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
63	13.1	Priority Habitat Inventory	0	0	0	-	-
63	13.2	Habitat Networks	0	0	0	-	-
63	13.3	Open Mosaic Habitat	0	0	0	-	-
63	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
64	14.1	<u>10k Availability</u>	Identified (within 500m)				
65	14.2	<u>Artificial and made ground (10k)</u>	0	0	1	1	-
66	14.3	<u>Superficial geology (10k)</u>	1	0	0	0	-

67	14.4	Landslip (10k)	0	0	0	0	-
68	14.5	<u>Bedrock geology (10k)</u>	1	0	1	1	-
69	14.6	<u>Bedrock faults and other linear features (10k)</u>	0	2	3	3	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
70	15.1	<u>50k Availability</u>	Identified (within 500m)				
71	15.2	Artificial and made ground (50k)	0	0	0	0	-
71	15.3	Artificial ground permeability (50k)	0	0	-	-	-
72	15.4	<u>Superficial geology (50k)</u>	1	0	0	0	-
73	15.5	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
73	15.6	Landslip (50k)	0	0	0	0	-
73	15.7	Landslip permeability (50k)	None (within 50m)				
74	15.8	<u>Bedrock geology (50k)</u>	1	0	1	1	-
75	15.9	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
75	15.10	<u>Bedrock faults and other linear features (50k)</u>	0	2	3	3	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
76	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence					
77	17.1	<u>Shrink swell clays</u>	Very low (within 50m)				
78	17.2	<u>Running sands</u>	Very low (within 50m)				
79	17.3	<u>Compressible deposits</u>	Negligible (within 50m)				
80	17.4	<u>Collapsible deposits</u>	Very low (within 50m)				
81	17.5	<u>Landslides</u>	Very low (within 50m)				
82	17.6	<u>Ground dissolution of soluble rocks</u>	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
83	18.1	Natural cavities	0	0	0	0	-
84	18.2	BritPits	0	0	0	0	-
84	18.3	<u>Surface ground workings</u>	0	0	16	-	-
85	18.4	<u>Underground workings</u>	0	0	0	3	8
85	18.5	Historical Mineral Planning Areas	0	0	0	0	-



86	18.6	Non-coal mining	0	0	0	0	0
86	18.7	Mining cavities	0	0	0	0	0
86	18.8	JPB mining areas	None (within 0m)				
86	18.9	<u>Coal mining</u>	Identified (within 0m)				
87	18.10	Brine areas	None (within 0m)				
87	18.11	Gypsum areas	None (within 0m)				
87	18.12	Tin mining	None (within 0m)				
87	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
88	19.1	<u>Radon</u>	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
89	20.1	<u>BGS Estimated Background Soil Chemistry</u>	3	0	-	-	-
89	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
89	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
90	21.1	Underground railways (London)	0	0	0	-	-
90	21.2	Underground railways (Non-London)	0	0	0	-	-
91	21.3	Railway tunnels	0	0	0	-	-
91	21.4	<u>Historical railway and tunnel features</u>	0	0	1	-	-
91	21.5	Royal Mail tunnels	0	0	0	-	-
91	21.6	Historical railways	0	0	0	-	-
92	21.7	<u>Railways</u>	0	0	3	-	-
92	21.8	Crossrail 1	0	0	0	0	-
92	21.9	Crossrail 2	0	0	0	0	-
92	21.10	HS2	0	0	0	0	-



Recent aerial photograph



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Capture Date: 22/04/2019

Site Area: 0.03ha



Recent site history - 2015 aerial photograph



Capture Date: 11/06/2015

Site Area: 0.03ha



Recent site history - 2009 aerial photograph



Capture Date: 02/06/2009

Site Area: 0.03ha



Recent site history - 2000 aerial photograph



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Capture Date: 19/06/2000

Site Area: 0.03ha



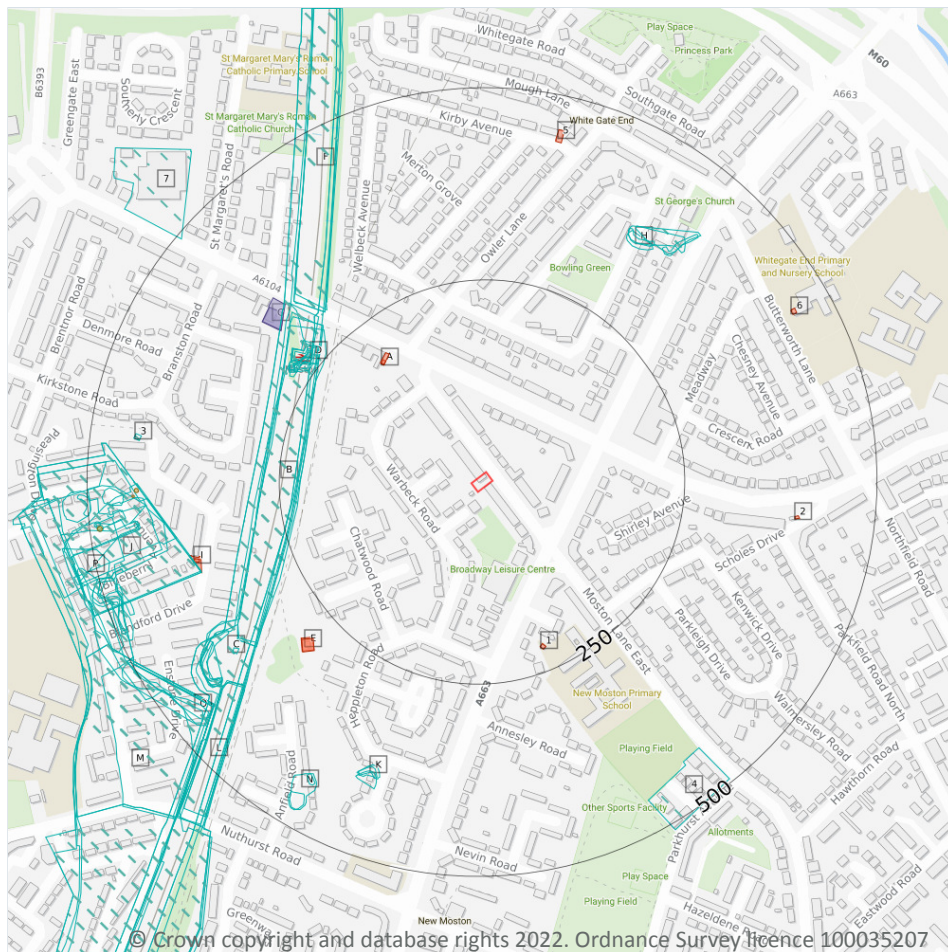
OS MasterMap site plan



Site Area: 0.03ha



1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features
- Historical garages

1.1 Historical industrial land uses

Records within 500m

66

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
B	220m W	Cuttings	1923 - 1938	751806



ID	Location	Land use	Dates present	Group ID
B	220m W	Cuttings	1906 - 1915	764105
B	222m W	Cuttings	1891	695849
C	223m W	Cuttings	1956	712238
C	224m W	Cuttings	1966 - 1988	699710
B	228m W	Cuttings	1851	693959
B	228m W	Cuttings	1851	693960
D	253m NW	Railway Station	1975 - 1988	739664
D	255m NW	Railway Station	1966	747025
D	257m NW	Railway Station	1938	737662
D	260m NW	Railway Station	1956	781118
D	260m NW	Railway Station	1923 - 1933	703627
D	263m NW	Railway Station	1906	742994
D	265m NW	Railway Station	1891	786497
D	265m NW	Railway Station	1915	722846
F	293m NW	Cuttings	1906 - 1915	781480
F	293m NW	Cuttings	1923 - 1933	790361
F	294m NW	Cuttings	1938 - 1988	765072
C	347m SW	Unspecified Pit	1923	770145
H	350m NE	Unspecified Pit	1891	781757
H	355m NE	Unspecified Ground Workings	1906	648490
H	356m NE	Unspecified Pit	1915 - 1923	696254
H	366m NE	Unspecified Pit	1933	699938
H	367m NE	Unspecified Ground Workings	1906	648489
J	370m W	Unspecified Mill	1988	788758
J	370m W	Unspecified Mill	1980	711903
J	370m W	Unspecified Mill	1975	744743
C	370m SW	Unspecified Ground Workings	1906 - 1915	723703
C	371m SW	Railway Building	1915	670484



ID	Location	Land use	Dates present	Group ID
K	380m S	Unspecified Pit	1915 - 1923	750174
K	383m S	Unspecified Ground Workings	1906	648419
K	389m S	Unspecified Pit	1891	738587
J	390m W	Unspecified Mill	1956 - 1966	696455
L	394m SW	Cuttings	1923	776389
C	394m SW	Unspecified Ground Workings	1933	747606
L	395m SW	Cuttings	1906 - 1915	722805
C	395m SW	Unspecified Pit	1938	715829
L	397m SW	Cuttings	1933 - 1938	723936
J	404m W	Unspecified Mill	1915 - 1933	788032
J	412m W	Unspecified Mill	1938	762890
M	424m W	Railway Sidings	1915 - 1938	711377
N	424m SW	Unspecified Pit	1915 - 1923	752262
N	426m SW	Unspecified Ground Workings	1906	648421
3	434m W	Magazine	1891	675804
M	436m W	Railway Sidings	1923 - 1980	787911
4	439m SE	Unspecified Works	1980 - 1988	739563
M	440m SW	Unspecified Commercial/Industrial	1933	643362
M	440m SW	Brick Works	1915 - 1923	775670
O	441m SW	Refuse Heap	1923	779268
M	443m SW	Brick Works	1906	705763
M	443m SW	Railway Sidings	1891 - 1906	738876
O	443m SW	Unspecified Heap	1906	651103
J	453m W	Unspecified Heap	1915 - 1923	765369
M	453m SW	Collieries	1891 - 1906	772121
N	453m SW	Unspecified Pit	1906	717764
P	458m SW	Refuse Heap	1891	724669
P	467m W	Unspecified Ground Workings	1915	704888



ID	Location	Land use	Dates present	Group ID
P	469m W	Unspecified Ground Workings	1956	739964
P	478m W	Unspecified Pit	1938	691270
P	479m W	Unspecified Ground Workings	1923	697120
J	482m W	Unspecified Tank	1906	674964
J	486m W	Unspecified Old Shaft	1933	651945
P	491m W	Unspecified Heap	1906	651102
7	493m NW	Engineering Works	1933 - 1938	723374
J	496m W	Refuse Heap	1915 - 1923	789934
J	497m W	Unspecified Ground Workings	1906	648418

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

3

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
J	433m W	Unspecified Tank	1950 - 1992	91811
J	439m W	Unspecified Tank	1922 - 1933	102316
J	484m W	Unspecified Tank	1893 - 1922	102901

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

10

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or



succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
A	191m NW	Electricity Substation	1967 - 1992	57935
A	192m NW	Electricity Substation	1969	53302
1	214m SE	Electricity Substation	1975	45904
E	286m SW	Electricity Substation	1967 - 1969	52496
E	287m SW	Electricity Substation	1992	56849
I	365m W	Electricity Substation	1969	55820
I	367m W	Electricity Substation	1967 - 1992	48359
2	396m E	Electricity Substation	1975	45912
5	439m N	Electricity Substation	1975 - 1998	52067
6	447m NE	Electricity Substation	1975 - 1998	49464

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m

0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m

2

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 13**



ID	Location	Land use	Dates present	Group ID
G	317m NW	Garage	1951 - 1957	19370
G	318m NW	Garage	1969	16869

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

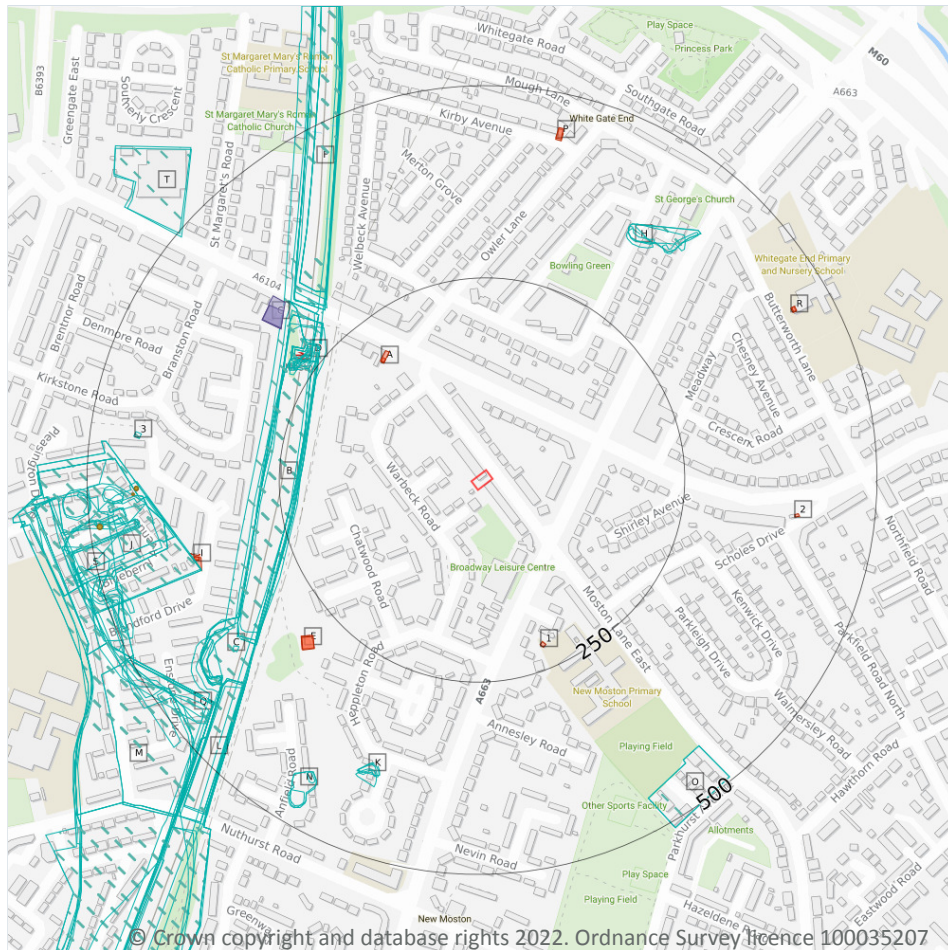
0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.



2 Past land use - un-grouped



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features
- Historical garages

2.1 Historical industrial land uses

Records within 500m

99

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 19**

ID	Location	Land Use	Date	Group ID
B	220m W	Cuttings	1938	751806
B	220m W	Cuttings	1933	751806
B	220m W	Cuttings	1915	764105



ID	Location	Land Use	Date	Group ID
B	220m W	Cuttings	1906	764105
B	222m W	Cuttings	1923	751806
B	222m W	Cuttings	1891	695849
C	223m W	Cuttings	1956	712238
C	224m W	Cuttings	1980	699710
C	224m W	Cuttings	1966	699710
C	224m W	Cuttings	1988	699710
C	224m W	Cuttings	1975	699710
B	228m W	Cuttings	1851	693959
D	253m NW	Railway Station	1980	739664
D	253m NW	Railway Station	1988	739664
D	253m NW	Railway Station	1975	739664
D	255m NW	Railway Station	1966	747025
D	257m NW	Railway Station	1938	737662
D	260m NW	Railway Station	1956	781118
D	260m NW	Railway Station	1933	703627
D	263m NW	Railway Station	1923	703627
D	263m NW	Railway Station	1906	742994
D	265m NW	Railway Station	1891	786497
D	265m NW	Railway Station	1915	722846
F	293m NW	Cuttings	1933	790361
F	293m NW	Cuttings	1915	781480
F	293m NW	Cuttings	1906	781480
F	294m NW	Cuttings	1938	765072
F	297m NW	Cuttings	1923	790361
F	302m NW	Cuttings	1956	765072
F	311m NW	Cuttings	1980	765072
F	311m NW	Cuttings	1966	765072



ID	Location	Land Use	Date	Group ID
F	311m NW	Cuttings	1988	765072
F	311m NW	Cuttings	1975	765072
C	347m SW	Unspecified Pit	1923	770145
H	350m NE	Unspecified Pit	1891	781757
H	355m NE	Unspecified Ground Workings	1906	648490
H	356m NE	Unspecified Pit	1915	696254
H	356m NE	Unspecified Pit	1923	696254
H	366m NE	Unspecified Pit	1933	699938
H	367m NE	Unspecified Ground Workings	1906	648489
J	370m W	Unspecified Mill	1988	788758
J	370m W	Unspecified Mill	1980	711903
J	370m W	Unspecified Mill	1975	744743
C	370m SW	Unspecified Ground Workings	1906	723703
C	370m SW	Unspecified Ground Workings	1915	723703
C	371m SW	Railway Building	1915	670484
K	380m S	Unspecified Pit	1915	750174
K	381m S	Unspecified Pit	1923	750174
K	383m S	Unspecified Ground Workings	1906	648419
K	389m S	Unspecified Pit	1891	738587
J	390m W	Unspecified Mill	1966	696455
J	394m W	Unspecified Mill	1956	696455
L	394m SW	Cuttings	1923	776389
C	394m SW	Unspecified Ground Workings	1933	747606
L	395m SW	Cuttings	1915	722805
L	395m SW	Cuttings	1906	722805
C	395m SW	Unspecified Pit	1938	715829
L	397m SW	Cuttings	1933	723936
L	398m SW	Cuttings	1938	723936



ID	Location	Land Use	Date	Group ID
J	404m W	Unspecified Mill	1933	788032
J	404m W	Unspecified Mill	1915	788032
J	404m W	Unspecified Mill	1923	788032
J	412m W	Unspecified Mill	1938	762890
M	424m W	Railway Sidings	1938	711377
N	424m SW	Unspecified Pit	1915	752262
N	425m SW	Unspecified Pit	1923	752262
N	426m SW	Unspecified Ground Workings	1906	648421
3	434m W	Magazine	1891	675804
M	436m W	Railway Sidings	1933	711377
M	436m W	Railway Sidings	1923	787911
O	439m SE	Unspecified Works	1980	739563
O	439m SE	Unspecified Works	1988	739563
M	440m W	Railway Sidings	1915	711377
M	440m SW	Unspecified Commercial/Industrial	1933	643362
M	440m SW	Brick Works	1915	775670
M	440m SW	Brick Works	1923	775670
Q	441m SW	Refuse Heap	1923	779268
M	443m SW	Brick Works	1906	705763
M	443m SW	Railway Sidings	1906	738876
Q	443m SW	Unspecified Heap	1906	651103
J	453m W	Unspecified Heap	1915	765369
J	453m W	Unspecified Heap	1923	765369
M	453m SW	Collieries	1891	772121
N	453m SW	Unspecified Pit	1906	717764
S	458m SW	Refuse Heap	1891	724669
S	467m W	Unspecified Ground Workings	1915	704888
S	469m W	Unspecified Ground Workings	1956	739964

ID	Location	Land Use	Date	Group ID
M	474m W	Collieries	1906	772121
S	478m W	Unspecified Pit	1938	691270
S	479m W	Unspecified Ground Workings	1923	697120
M	482m SW	Railway Sidings	1891	738876
J	482m W	Unspecified Tank	1906	674964
J	486m W	Unspecified Old Shaft	1933	651945
S	491m W	Unspecified Heap	1906	651102
T	493m NW	Engineering Works	1938	723374
J	496m W	Refuse Heap	1915	789934
J	497m W	Unspecified Ground Workings	1906	648418
T	498m NW	Engineering Works	1933	723374
J	498m W	Refuse Heap	1923	789934

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m

10

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 19**

ID	Location	Land Use	Date	Group ID
J	433m W	Unspecified Tank	1992	91811
J	434m W	Unspecified Tank	1967	91811
J	434m W	Unspecified Tank	1950	91811
J	434m W	Unspecified Tank	1969	91811
J	434m W	Unspecified Tank	1950	91811
J	439m W	Unspecified Tank	1922	102316
J	439m W	Unspecified Tank	1933	102316
J	484m W	Unspecified Tank	1893	102901



ID	Location	Land Use	Date	Group ID
J	484m W	Unspecified Tank	1909	102901
J	484m W	Unspecified Tank	1922	102901

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m

15

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 19**

ID	Location	Land Use	Date	Group ID
A	191m NW	Electricity Substation	1992	57935
A	192m NW	Electricity Substation	1967	57935
A	192m NW	Electricity Substation	1969	53302
1	214m SE	Electricity Substation	1975	45904
E	286m SW	Electricity Substation	1969	52496
E	287m SW	Electricity Substation	1967	52496
E	287m SW	Electricity Substation	1992	56849
I	365m W	Electricity Substation	1969	55820
I	367m W	Electricity Substation	1992	48359
I	368m W	Electricity Substation	1967	48359
2	396m E	Electricity Substation	1975	45912
P	439m N	Electricity Substation	1998	52067
P	442m N	Electricity Substation	1975	52067
R	447m NE	Electricity Substation	1998	49464
R	448m NE	Electricity Substation	1975	49464

This data is sourced from Ordnance Survey / Groundsure.



2.4 Historical petrol stations

Records within 500m**0**

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m**3**

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 19**

ID	Location	Land Use	Date	Group ID
G	317m NW	Garage	1957	19370
G	317m NW	Garage	1951	19370
G	318m NW	Garage	1969	16869

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill

3.1 Active or recent landfill

Records within 500m

0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m

0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m

0

Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m

0

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.5 Historical waste sites

Records within 500m

0

Waste site records derived from Local Authority planning records and high detail historical mapping.

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.



3.6 Licensed waste sites

Records within 500m	0
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Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.7 Waste exemptions

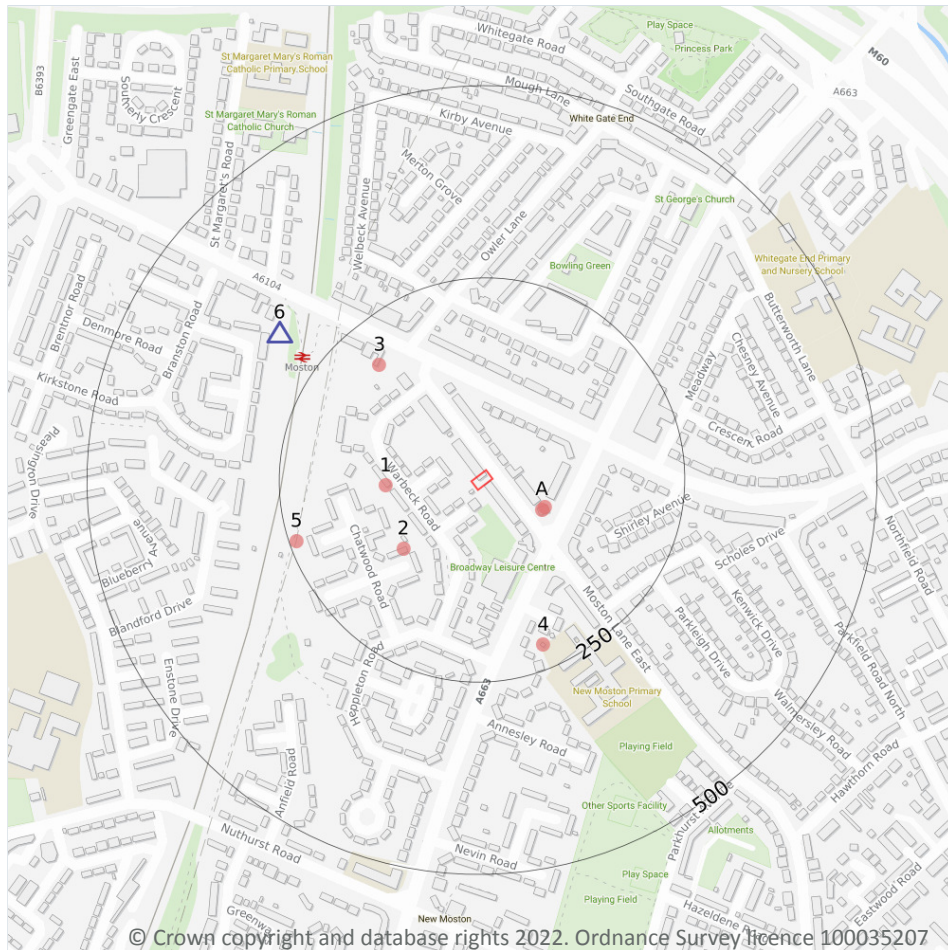
Records within 500m	0
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Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

This data is sourced from the Environment Agency and Natural Resources Wales.



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- △ Current or recent petrol stations

4.1 Recent industrial land uses

Records within 250m

7

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 28**

ID	Location	Company	Address	Activity	Category
A	75m SE	Sparkles Cakes	588, Broadway, Moston, Manchester, Greater Manchester, M40 3PA	Baking and Confectionery	Foodstuffs
A	77m SE	Sparkles Cakes	586-588, Broadway, Chadderton, Oldham, Greater Manchester, OL9 9NF	Baking and Confectionery	Foodstuffs
1	112m W	Sky Blue Box Ltd	28, Warbeck Road, Manchester, Greater Manchester, M40 3LG	Textiles, Fabrics, Silk and Machinery	Industrial Products



ID	Location	Company	Address	Activity	Category
2	124m SW	A D B Contracts Ltd	7, Girvan Avenue, Manchester, Greater Manchester, M40 3LT	Electrical Equipment Repair and Servicing	Repair and Servicing
3	193m NW	Electricity Sub Station	Greater Manchester, M40	Electrical Features	Infrastructure and Facilities
4	219m SE	Electricity Sub Station	Greater Manchester, M40	Electrical Features	Infrastructure and Facilities
5	241m W	Pylon	Greater Manchester, M40	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	1
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Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 28**

ID	Location	Company	Address	LPG	Status
6	316m NW	OBSOLETE	Hollingswood Avenue, Moston, Manchester, Greater Manchester, M40 0JB	Not Applicable	Obsolete

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0
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High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0
----------------------------	----------

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m**0**

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m**0**

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m**0**

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m**0**

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m**0**

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.10 Licensed industrial activities (Part A(1))

Records within 500m**0**

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m**0**

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m**0**

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.13 Licensed Discharges to controlled waters

Records within 500m**0**

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Pollutant release to surface waters (Red List)

Records within 500m**0**

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to public sewer

Records within 500m**0**

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 List 1 Dangerous Substances

Records within 500m**0**

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 2 Dangerous Substances

Records within 500m**0**

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 Pollution Incidents (EA/NRW)

Records within 500m**0**

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.19 Pollution inventory substances

Records within 500m**0**

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m

0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.21 Pollution inventory radioactive waste

Records within 500m

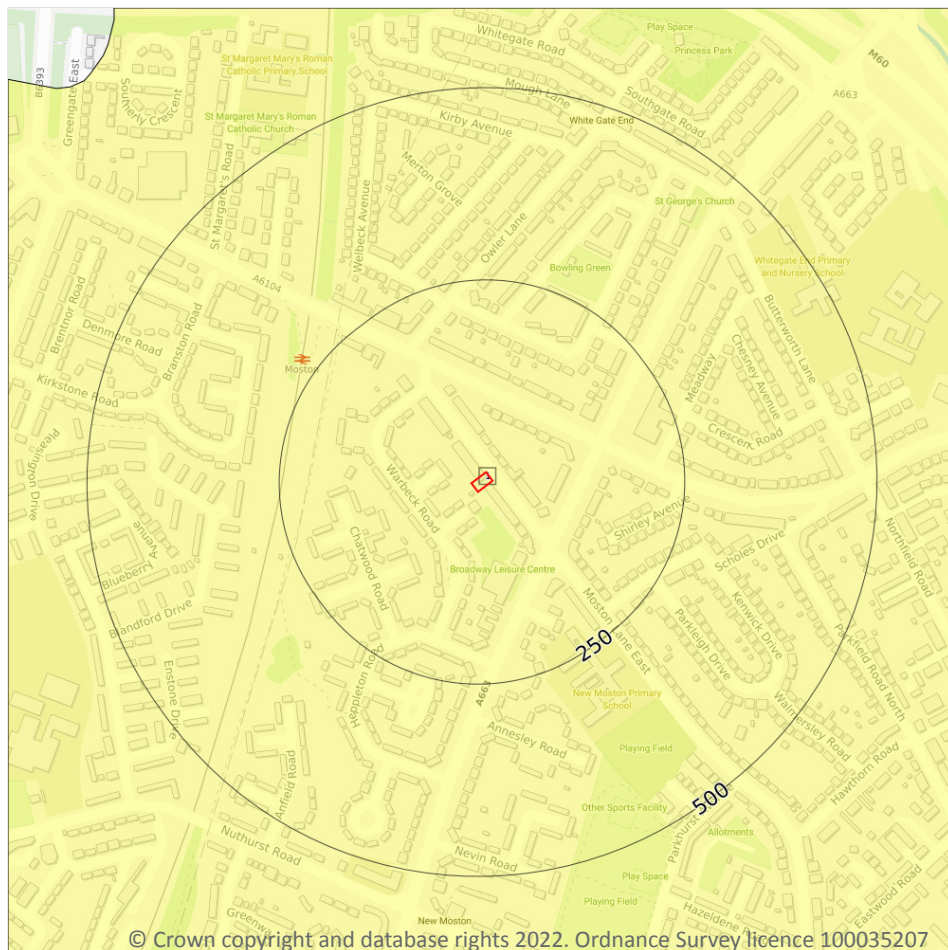
0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.



5 Hydrogeology - Superficial aquifer



- Site Outline**
- Search buffers in metres (m)**
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive
 - Unknown

5.1 Superficial aquifer

Records within 500m

1

Aquifer status of groundwater held within superficial geology.

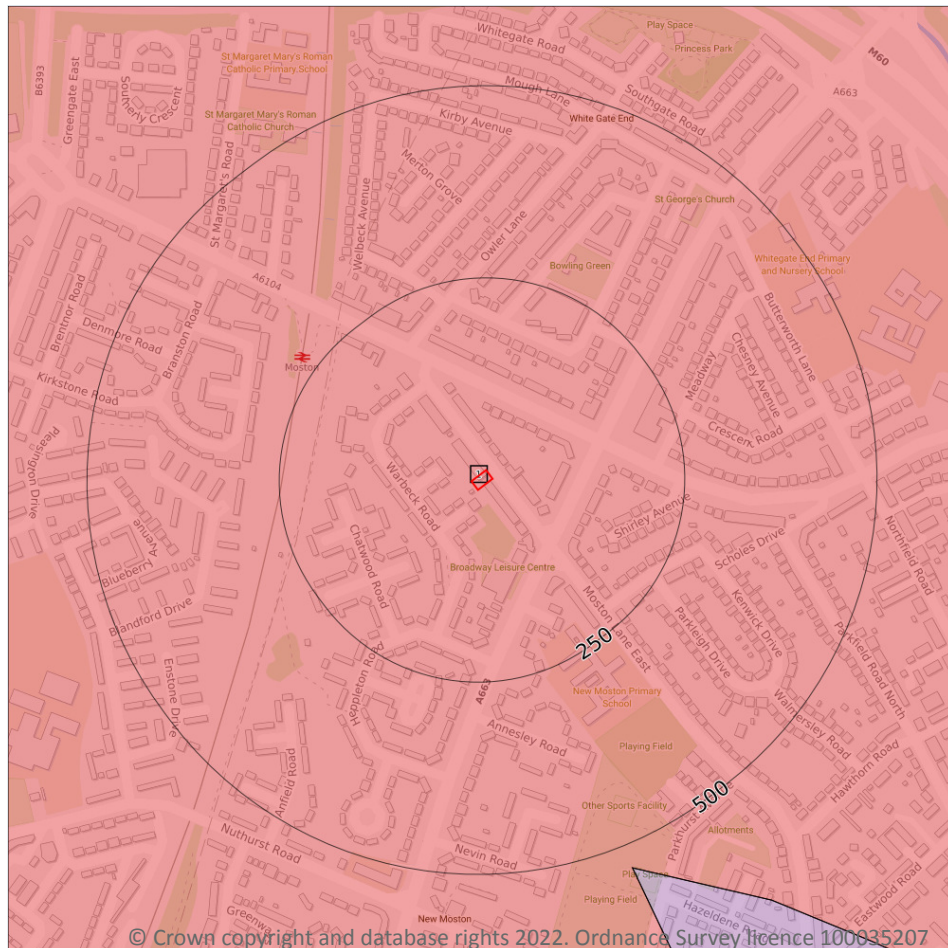
Features are displayed on the Hydrogeology map on **page 34**

ID	Location	Designation	Description
1	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Bedrock aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive

5.2 Bedrock aquifer

Records within 500m

1

Aquifer status of groundwater held within bedrock geology.

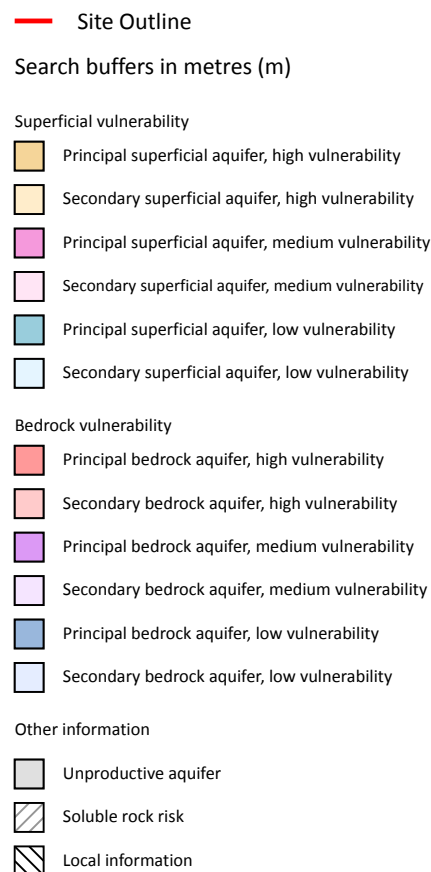
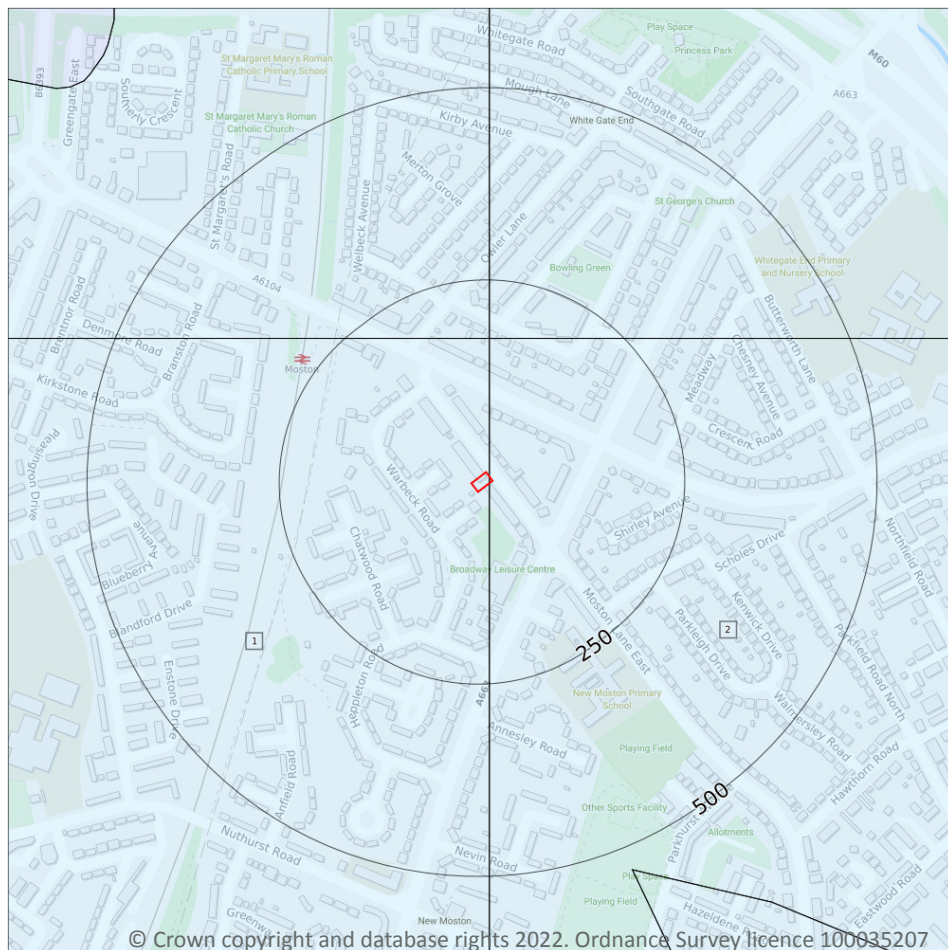
Features are displayed on the Bedrock aquifer map on **page 35**

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

2

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on **page 36**



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: >550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Medium	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: >550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Medium	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0
------------------------	----------

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

5.5 Groundwater vulnerability- local information

Records on site	0
------------------------	----------

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk.

This data is sourced from the British Geological Survey and the Environment Agency.

Abstractions and Source Protection Zones

5.6 Groundwater abstractions

Records within 2000m

0

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m

0

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m

0

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.9 Source Protection Zones

Records within 500m

0

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

This data is sourced from the Environment Agency and Natural Resources Wales.



5.10 Source Protection Zones (confined aquifer)

Records within 500m

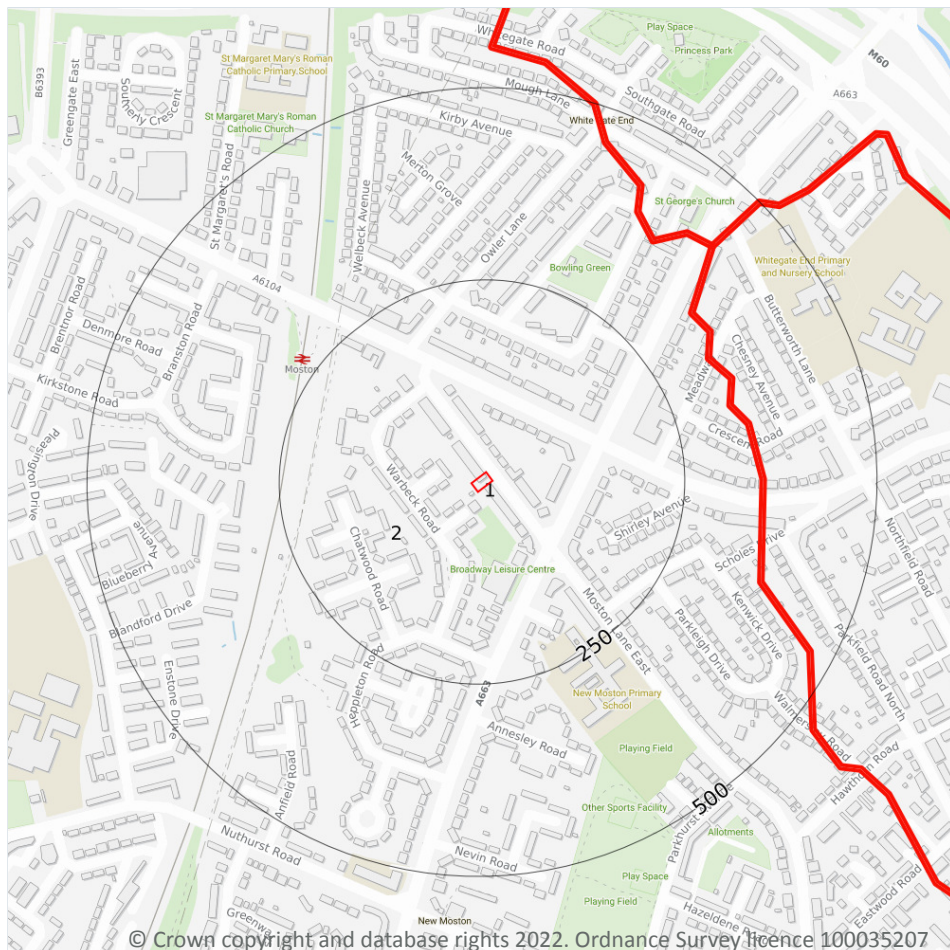
0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.



6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS MasterMap)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m

0

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

0

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.



This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site

1

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on **page 40**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
2	On site	River	Irk (Wince to Irwell)	GB112069061131	Roch Irk Medlock	Irwell

This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified

1

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on **page 40**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	929m S	River	Irk (Wince to Irwell)	GB112069061131	Moderate	Fail	Moderate	2019

This data is sourced from the Environment Agency and Natural Resources Wales.

6.5 WFD Groundwater bodies

Records on site

1

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.



Features are displayed on the Hydrology map on **page 40**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
1	On site	Northern Manchester Carboniferous Aquifers	<u>GB41202G101800</u>	Poor	Poor	Good	2019

This data is sourced from the Environment Agency and Natural Resources Wales.



7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m**0**

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

This data is sourced from the Environment Agency and Natural Resources Wales.

7.2 Historical Flood Events

Records within 250m**0**

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.3 Flood Defences

Records within 250m**0**

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

This data is sourced from the Environment Agency and Natural Resources Wales.



7.4 Areas Benefiting from Flood Defences

Records within 250m

0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.5 Flood Storage Areas

Records within 250m

0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

This data is sourced from the Environment Agency and Natural Resources Wales.



River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m	0
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Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.7 Flood Zone 3

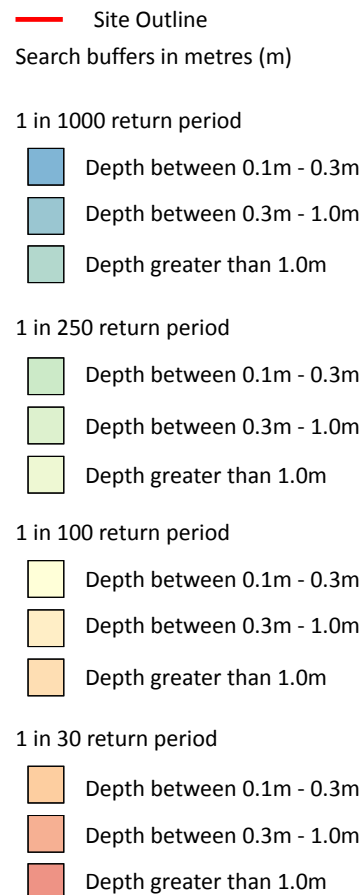
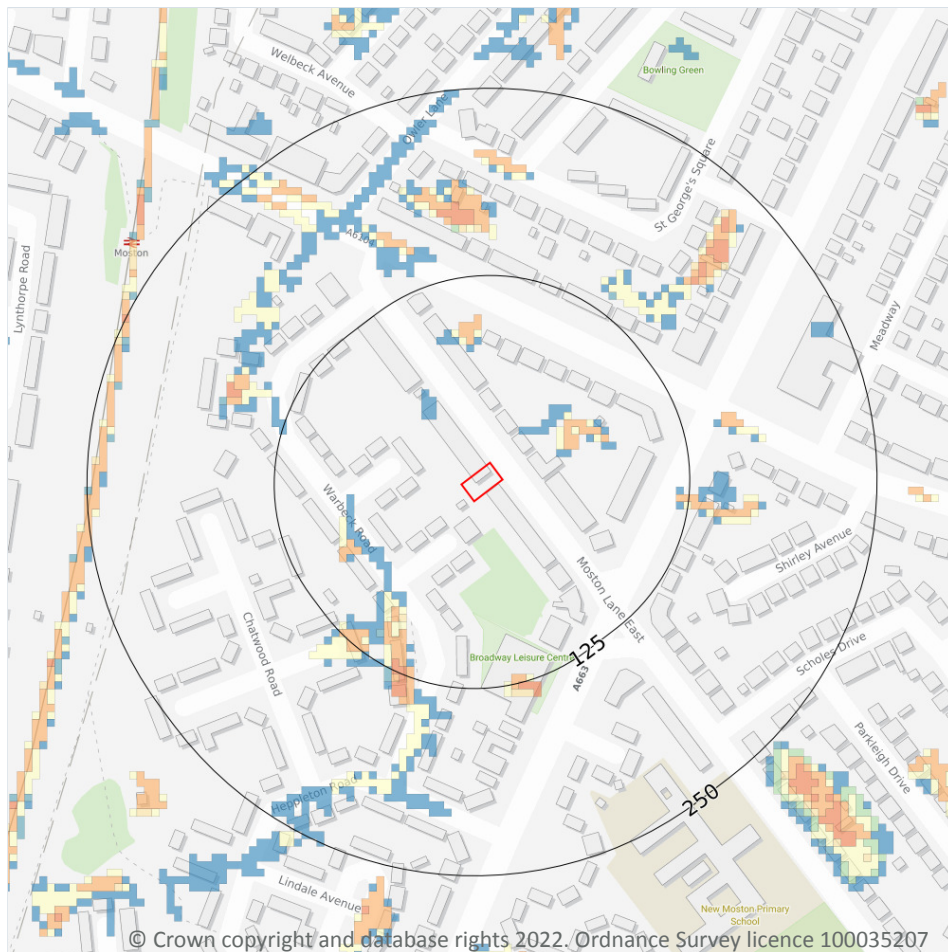
Records within 50m	0
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Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.



8 Surface water flooding



8.1 Surface water flooding

Highest risk on site

Negligible

Highest risk within 50m

1 in 30 year, 0.1m - 0.3m

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on **page 46**

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

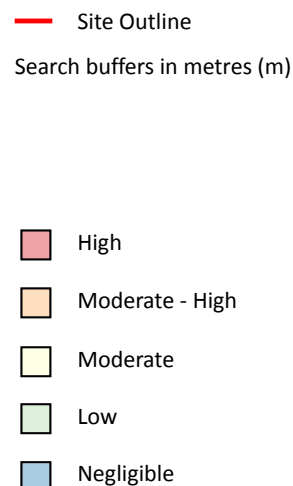
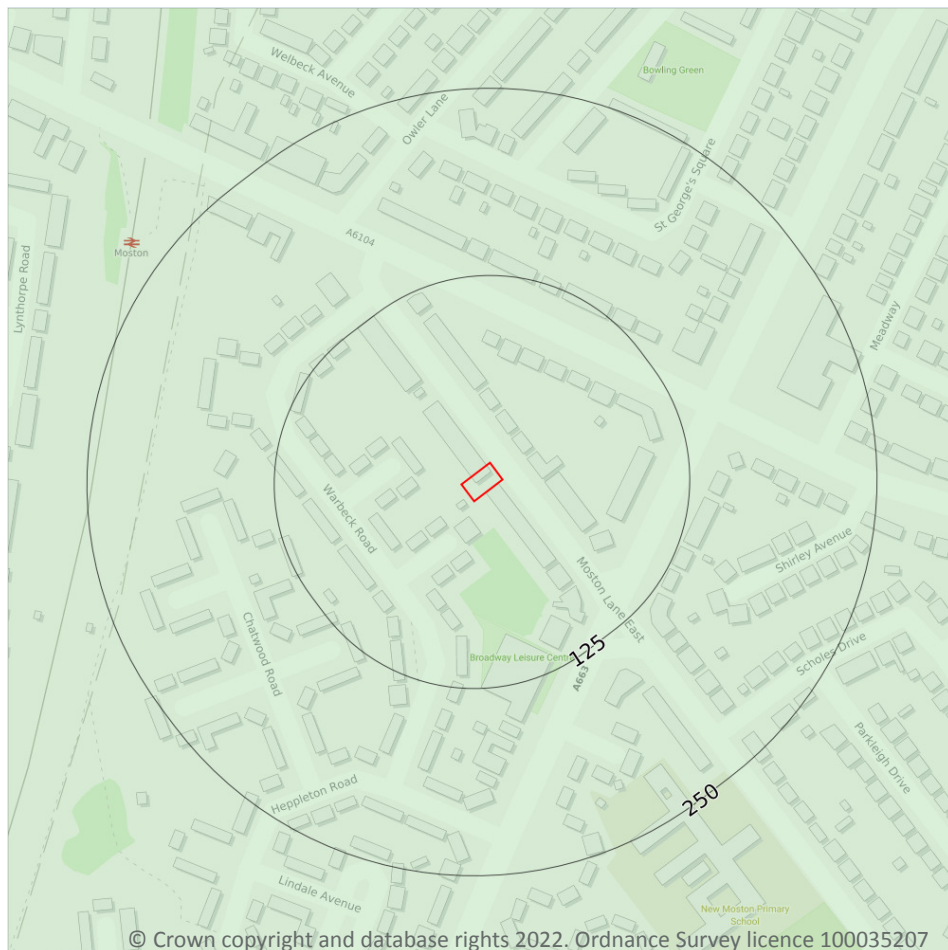
The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Negligible
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site

Low

Highest risk within 50m

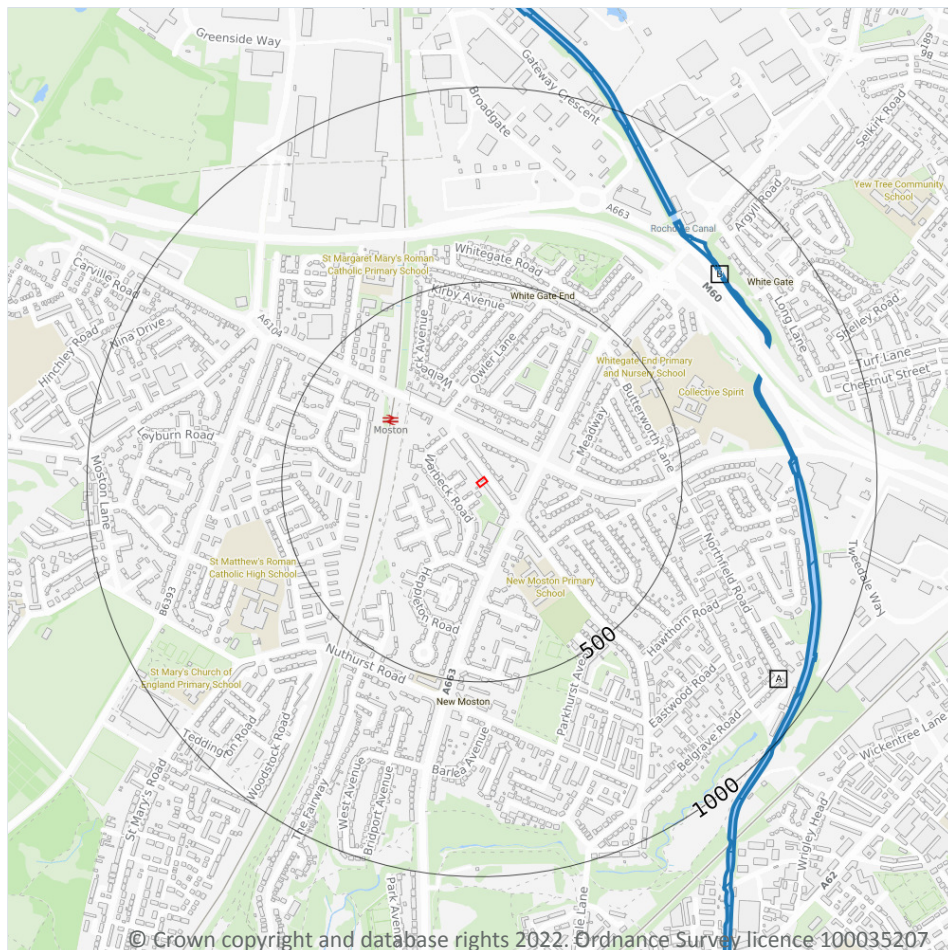
Low

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on **page 48**

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- Sites of Special Scientific Interest (SSSI)
- + Special Areas of Conservation (SAC)
- + Local Nature Reserves (LNR)
- X Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

5

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

Features are displayed on the Environmental designations map on **page 49**

ID	Location	Name	Data source
A	726m E	Rochdale Canal	Natural England



ID	Location	Name	Data source
B	792m NE	Rochdale Canal	Natural England
C	825m NE	Rochdale Canal	Natural England
-	1393m SE	Rochdale Canal	Natural England
-	1639m S	Rochdale Canal	Natural England

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0
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Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.3 Special Areas of Conservation (SAC)

Records within 2000m	5
-----------------------------	----------

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

Features are displayed on the Environmental designations map on **page 49**

ID	Location	Name	Features of interest	Habitat description	Data source
A	726m E	Rochdale Canal	Floating water-plantain.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water)	Natural England
B	792m NE	Rochdale Canal	Floating water-plantain.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water)	Natural England
C	826m NE	Rochdale Canal	Floating water-plantain.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water)	Natural England

ID	Location	Name	Features of interest	Habitat description	Data source
-	1393m SE	Rochdale Canal	Floating water-plantain.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water)	Natural England
-	1639m S	Rochdale Canal	Floating water-plantain.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water)	Natural England

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.4 Special Protection Areas (SPA)

Records within 2000m

0

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.5 National Nature Reserves (NNR)

Records within 2000m

0

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.6 Local Nature Reserves (LNR)

Records within 2000m

1

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

Features are displayed on the Environmental designations map on **page 49**

ID	Location	Name	Data source
-	1583m W	Boggart Hole Clough	Natural England

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.



10.7 Designated Ancient Woodland

Records within 2000m**1**

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

Features are displayed on the Environmental designations map on **page 49**

ID	Location	Name	Woodland Type
-	1399m W	Boggart Hole Clough	Ancient & Semi-Natural Woodland

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.8 Biosphere Reserves

Records within 2000m**0**

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.9 Forest Parks

Records within 2000m**0**

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m**0**

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.



10.11 Green Belt

Records within 2000m

0

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m

0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m

0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was



closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

1

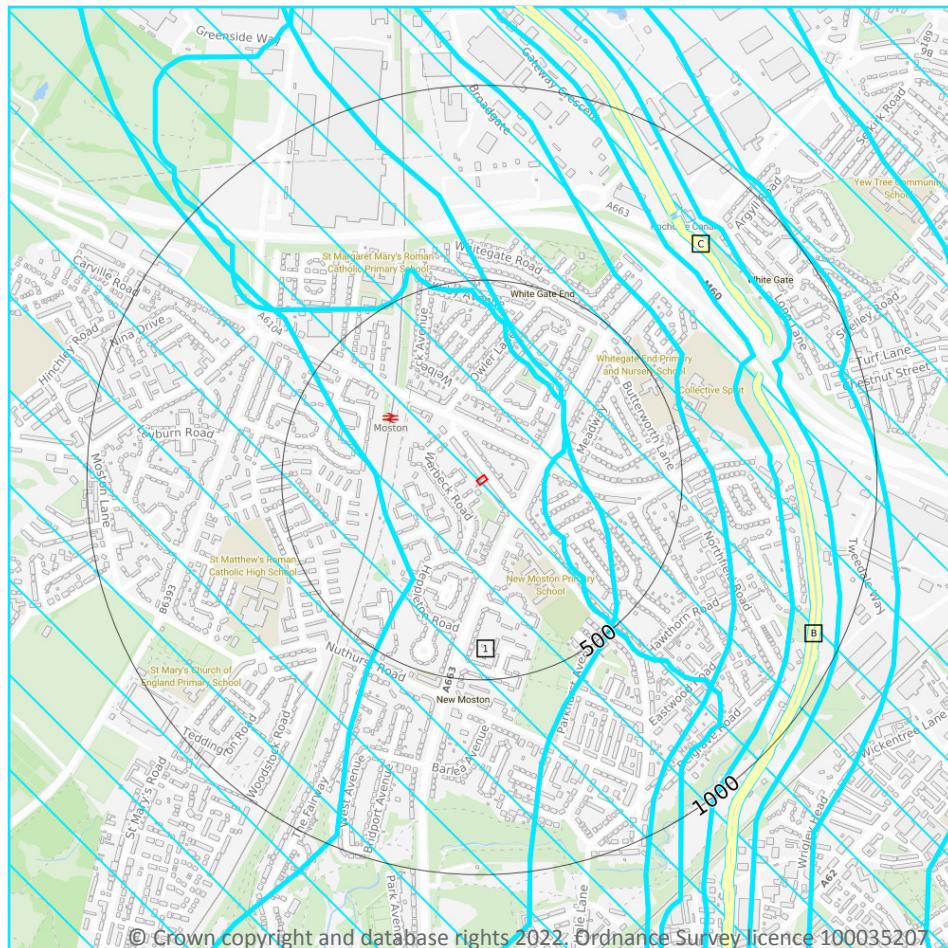
Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	River Irk (Moston Brook to River Irwell) NVZ	Surface Water	638	Existing

This data is sourced from Natural England and Natural Resources Wales.



SSSI Impact Zones and Units



- Site Outline
- Search buffers in metres (m)
- SSSI Impact Risk Zones
- SSSI Units
- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site

1

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on **page 55**

ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Pipelines, pylons and overhead cables. any transport proposal including road, rail and by water (excluding routine maintenance). airports, helipads and other aviation proposals. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, review of minerals permissions (romp), extensions, variations to conditions etc. oil & gas exploration/extraction. Residential - Residential development of 100 units or more. Rural residential - Any residential development of 50 or more houses outside existing settlements/urban areas. Air pollution - Any industrial/agricultural development that could cause air pollution (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 200m², manure stores > 250t). Combustion - General combustion processes >20mw energy input. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Landfill. incl: inert landfill, non-hazardous landfill, hazardous landfill. Composting - Any composting proposal with more than 500 tonnes maximum annual operational throughput. incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management. Water supply - Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply .

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	5
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Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

Features are displayed on the SSSI Impact Zones and Units map on **page 55**

ID: B
 Location: 726m E
 SSSI name: Rochdale Canal
 Unit name: Failsworth
 Broad habitat: Standing Open Water And Canals
 Condition: Unfavourable - Recovering
 Reportable features:

Feature name	Feature condition	Date of assessment
Population of Schedule 8 plant - Luronium natans, Floating Water-plantain	Unfavourable - Recovering	25/11/2010



ID: C
Location: 792m NE
SSSI name: Rochdale Canal
Unit name: Failsworth
Broad habitat: Standing Open Water And Canals
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
Population of Schedule 8 plant - Luronium natans, Floating Water-plantain	Unfavourable - Recovering	25/11/2010

ID: 11
Location: 825m NE
SSSI name: Rochdale Canal
Unit name: Failsworth
Broad habitat: Standing Open Water And Canals
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
Population of Schedule 8 plant - Luronium natans, Floating Water-plantain	Unfavourable - Recovering	25/11/2010

ID: -
Location: 1393m SE
SSSI name: Rochdale Canal
Unit name: Failsworth
Broad habitat: Standing Open Water And Canals
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
Population of Schedule 8 plant - Luronium natans, Floating Water-plantain	Unfavourable - Recovering	25/11/2010

ID: -
Location: 1639m S
SSSI name: Rochdale Canal
Unit name: Failsworth
Broad habitat: Standing Open Water And Canals
Condition: Unfavourable - Recovering
Reportable features:



Feature name	Feature condition	Date of assessment
Population of Schedule 8 plant - Luronium natans, Floating Water-plantain	Unfavourable - Recovering	25/11/2010

This data is sourced from Natural England and Natural Resources Wales.



11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m

0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m

0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m

0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m

0

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.



This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m

0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m

0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.7 Registered Parks and Gardens

Records within 250m

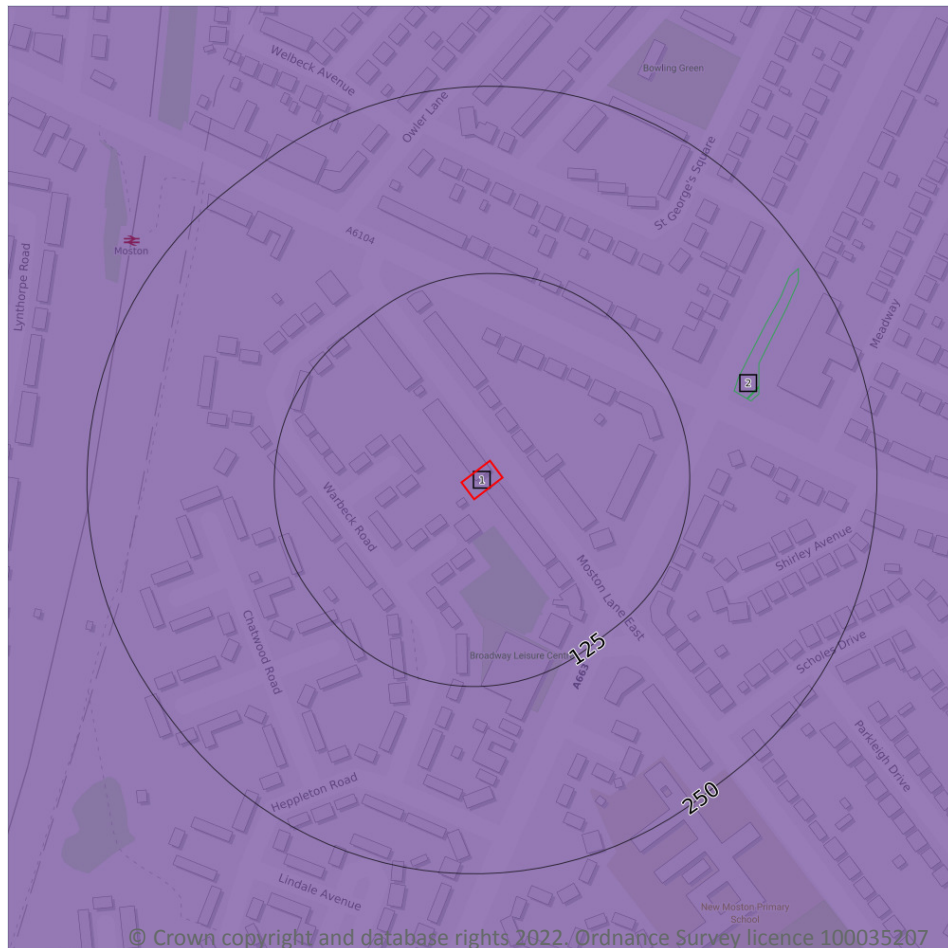
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Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.



12 Agricultural designations



- Site Outline
- Search buffers in metres (m)
- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m

1

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 61**

ID	Location	Classification	Description
1	On site	Urban	-

This data is sourced from Natural England.



12.2 Open Access Land

Records within 250m

0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m

1

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

Features are displayed on the Agricultural designations map on **page 61**

ID	Location	Description	Reference	Application date
2	165m E	Selective Fell/Thin (Unconditional)	018/366/15-16	-

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m

0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m

0

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

This data is sourced from Natural England.



13 Habitat designations

13.1 Priority Habitat Inventory

Records within 250m

0

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m

0

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

0

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

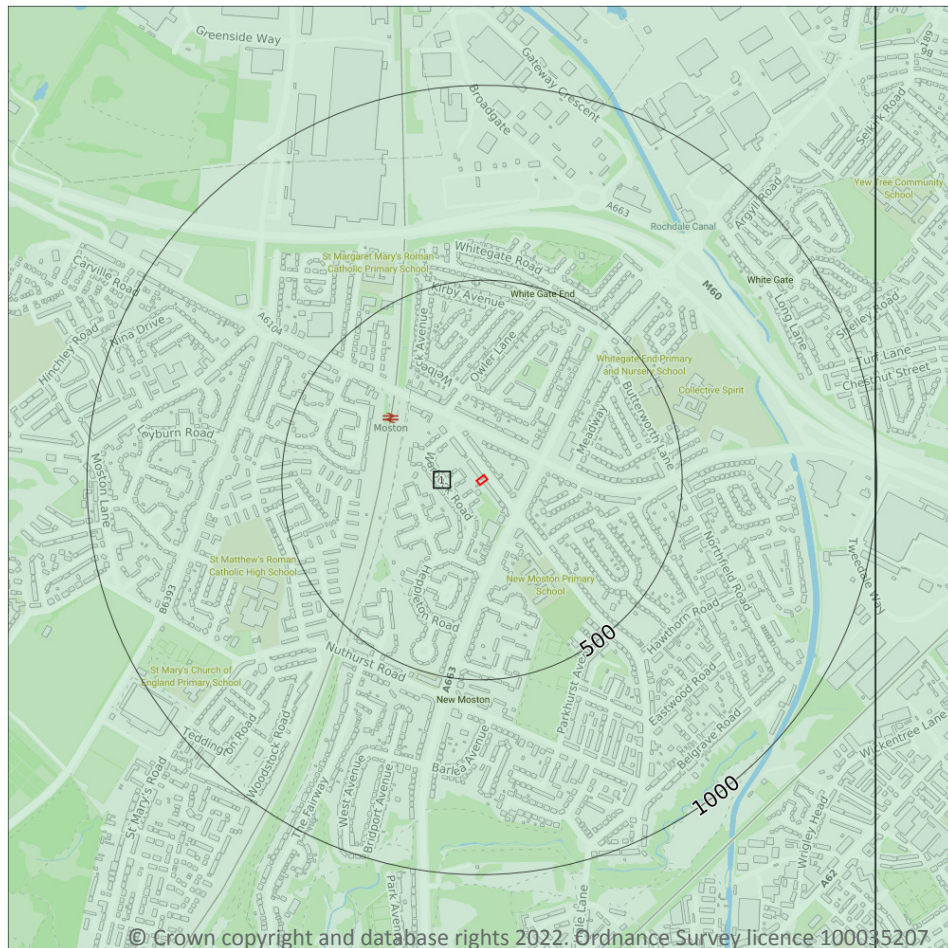
0

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



- Site Outline**
- Search buffers in metres (m)
- Full coverage
 - Partial coverage
 - No coverage

14.1 10k Availability

Records within 500m

1

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

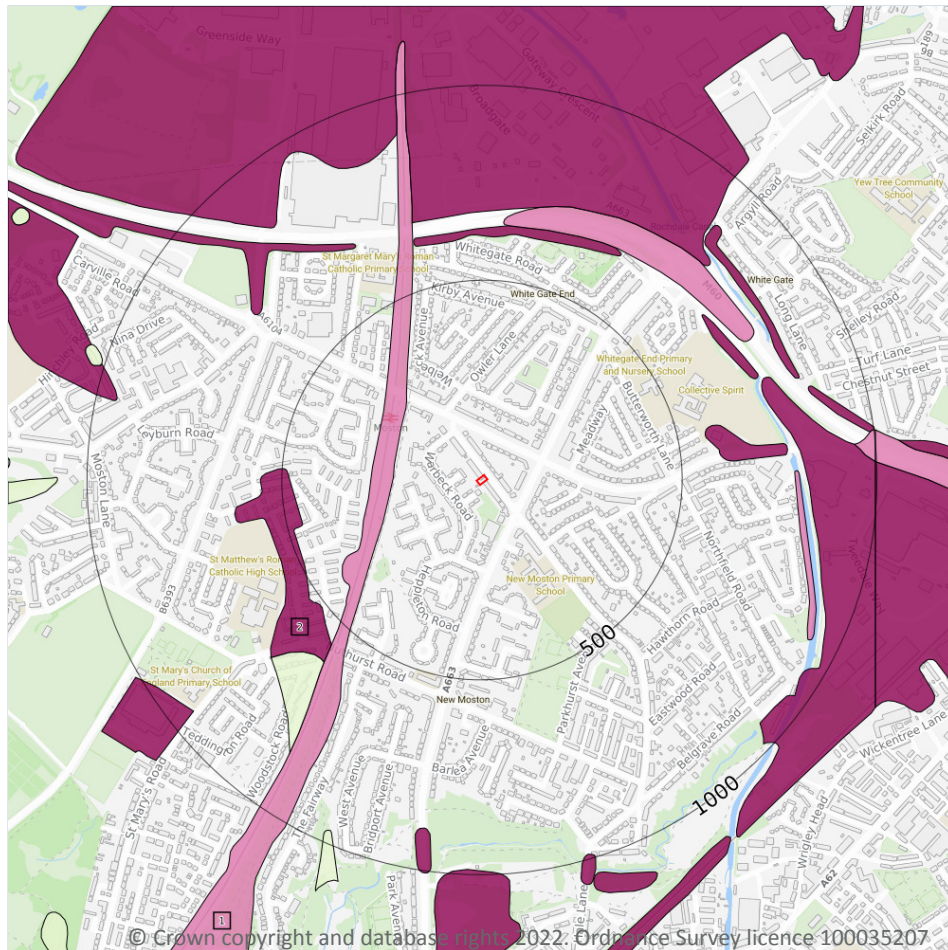
Features are displayed on the Geology 1:10,000 scale - Availability map on **page 64**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	SD80SE

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Artificial and made ground



- Site Outline**
- Search buffers in metres (m)**
- Reclaimed ground
 - Made ground
 - Worked ground
 - Infilled ground
 - Disturbed ground
 - Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m

2

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

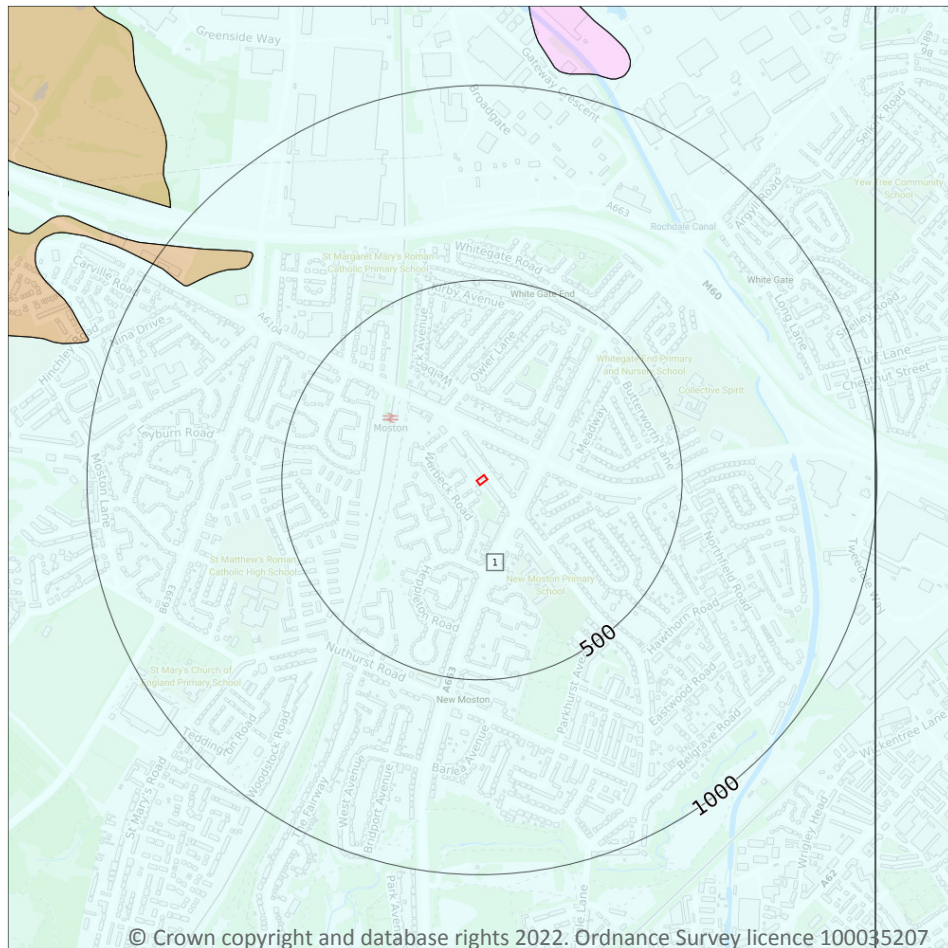
Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 65**

ID	Location	LEX Code	Description	Rock description
1	214m W	WGR-VOID	Worked Ground (Undivided)	Void
2	460m W	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m

1

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 66**

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton

This data is sourced from the British Geological Survey.



14.4 Landslip (10k)

Records within 500m

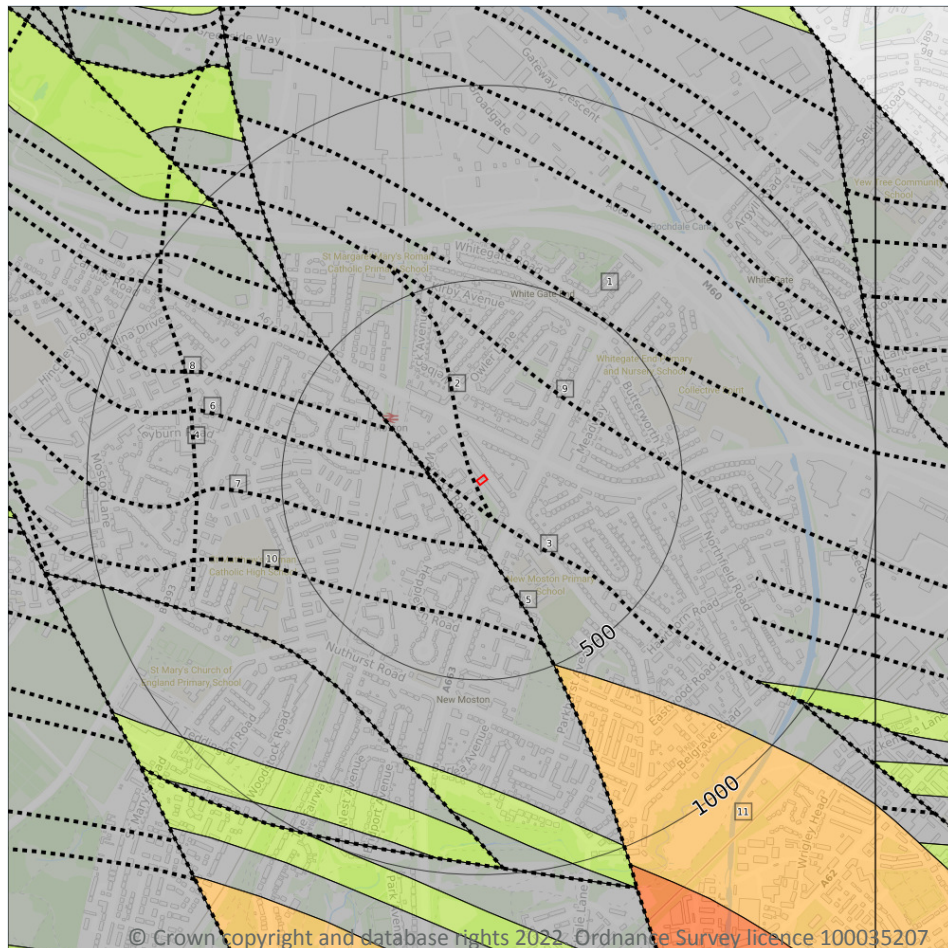
0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m

3

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 68**

ID	Location	LEX Code	Description	Rock age
1	On site	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovia Sub-age - Duckmantian Sub-age
4	88m SW	PMCM-MDSS	Pennine Middle Coal Measures Formation - Mudstone, Siltstone And Sandstone	Bolsovia Sub-age - Duckmantian Sub-age
11	498m S	CS-SDST	Collyhurst Sandstone Formation - Sandstone	Cisuralian Epoch



This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

8

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

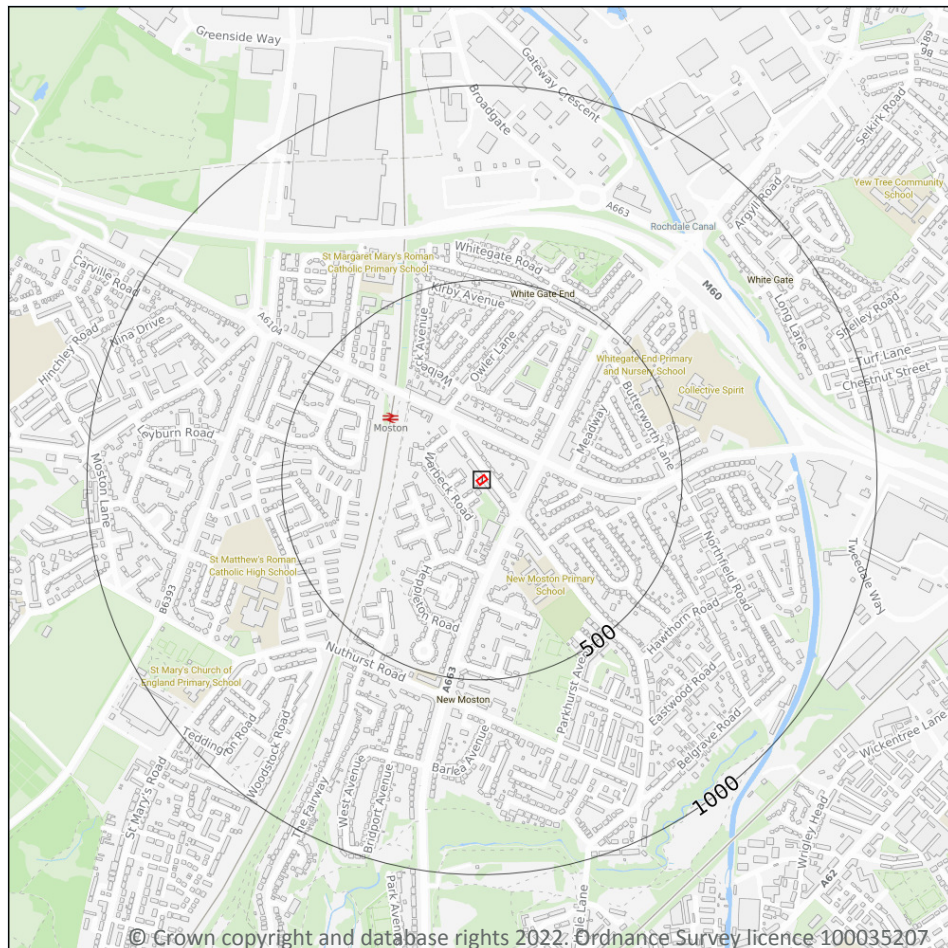
Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 68**

ID	Location	Category	Description
2	7m SW	FAULT	Normal fault, inferred; crossmarks on downthrow side
3	49m SW	FAULT	Normal fault, inferred; crossmarks on downthrow side
5	88m SW	FAULT	Normal fault, inferred; crossmarks on downthrow side
6	117m W	ROCK	Coal seam, inferred
7	159m S	ROCK	Coal seam, inferred
8	251m NW	ROCK	Coal seam, inferred
9	280m NE	FOSSIL_HORIZON	Fossil horizon, marine band
10	340m S	FOSSIL_HORIZON	Fossil horizon, marine band

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



— Site Outline

Search buffers in metres (m)

□ Geological map tile

15.1 50k Availability

Records within 500m

1

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 70**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	No coverage	EW085_manchester_v4

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Artificial and made ground

15.2 Artificial and made ground (50k)

Records within 500m

0

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

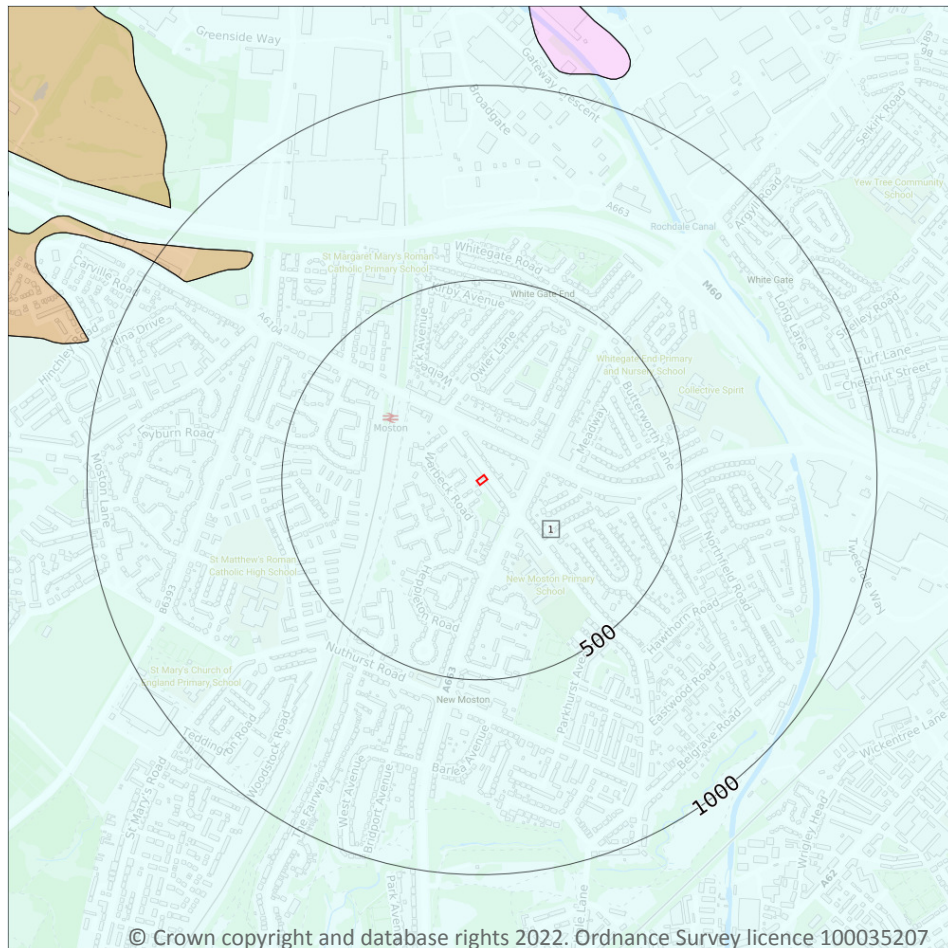
0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m

1

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 72**

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	TILL, DEVANSIAN	DIAMICTON

This data is sourced from the British Geological Survey.



15.5 Superficial permeability (50k)

Records within 50m	1
--------------------	---

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	High	Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0
---------------------	---

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

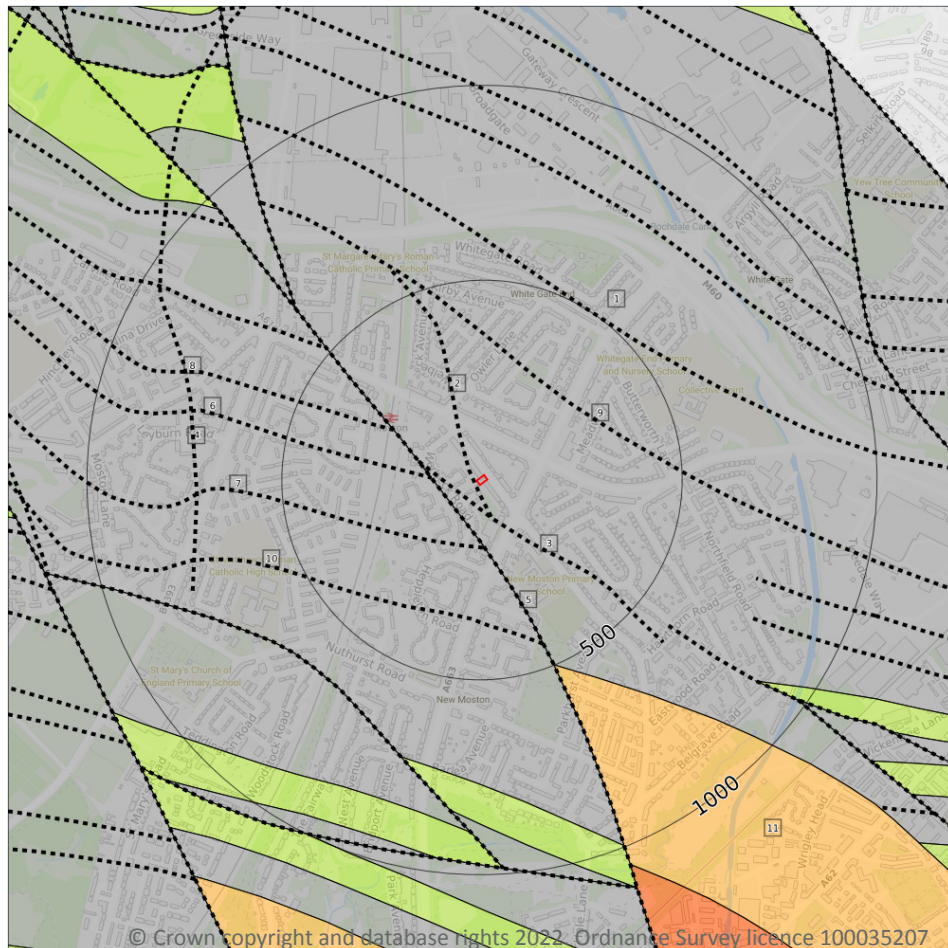
15.7 Landslip permeability (50k)

Records within 50m	0
--------------------	---

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

..... Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m

3

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 74**

ID	Location	LEX Code	Description	Rock age
1	On site	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
4	88m SW	PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
11	499m S	CS-SDST	COLLYHURST SANDSTONE FORMATION - SANDSTONE	-



This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m

1

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Moderate	Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

8

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 74**

ID	Location	Category	Description
2	7m SW	FAULT	Fault, inferred
3	48m SW	FAULT	Fault, inferred
5	88m SW	FAULT	Fault, inferred
6	117m W	ROCK	Coal seam, inferred
7	159m S	ROCK	Coal seam, inferred
8	250m NW	ROCK	Coal seam, inferred
9	280m NE	FOSSIL_HORIZON	Marine band
10	340m S	FOSSIL_HORIZON	Marine band

This data is sourced from the British Geological Survey.



16 Boreholes

16.1 BGS Boreholes

Records within 250m

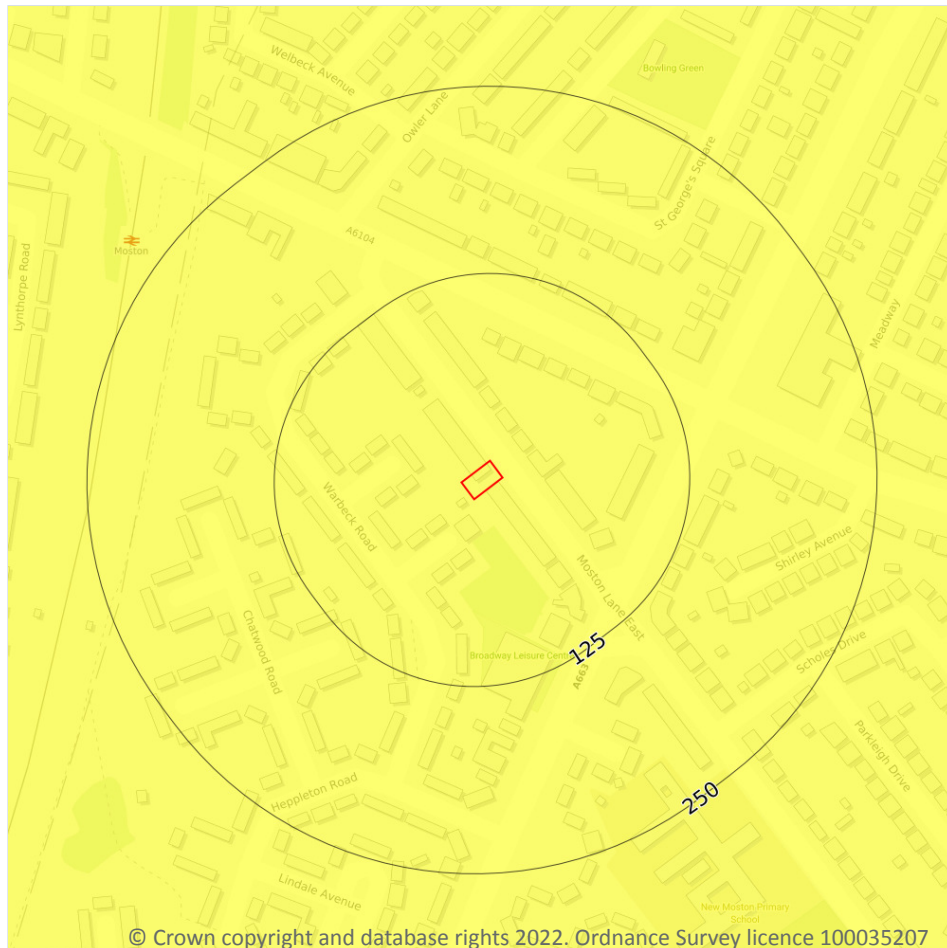
0

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.1 Shrink swell clays

Records within 50m

1

The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

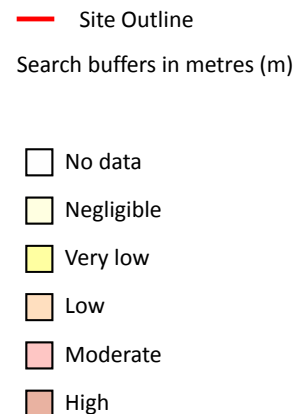
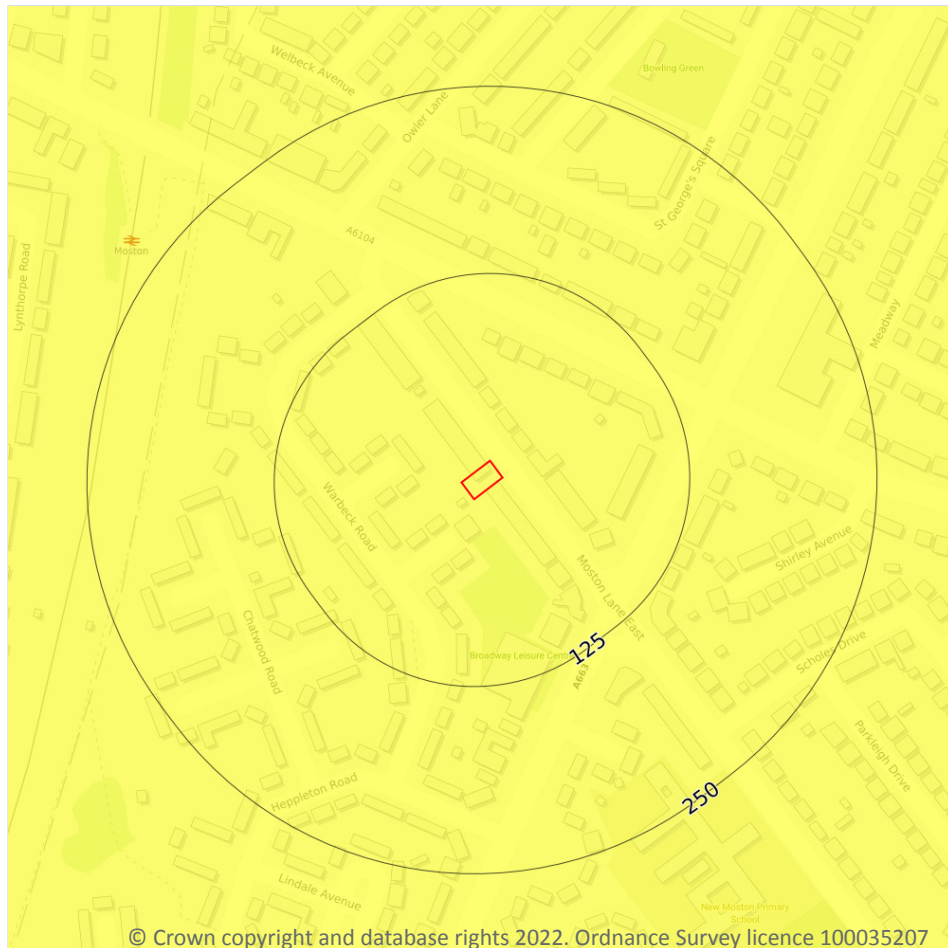
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 77**

Location	Hazard rating	Details
On site	Very low	Ground conditions predominantly low plasticity.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m

1

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

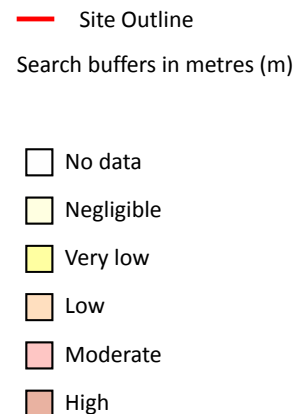
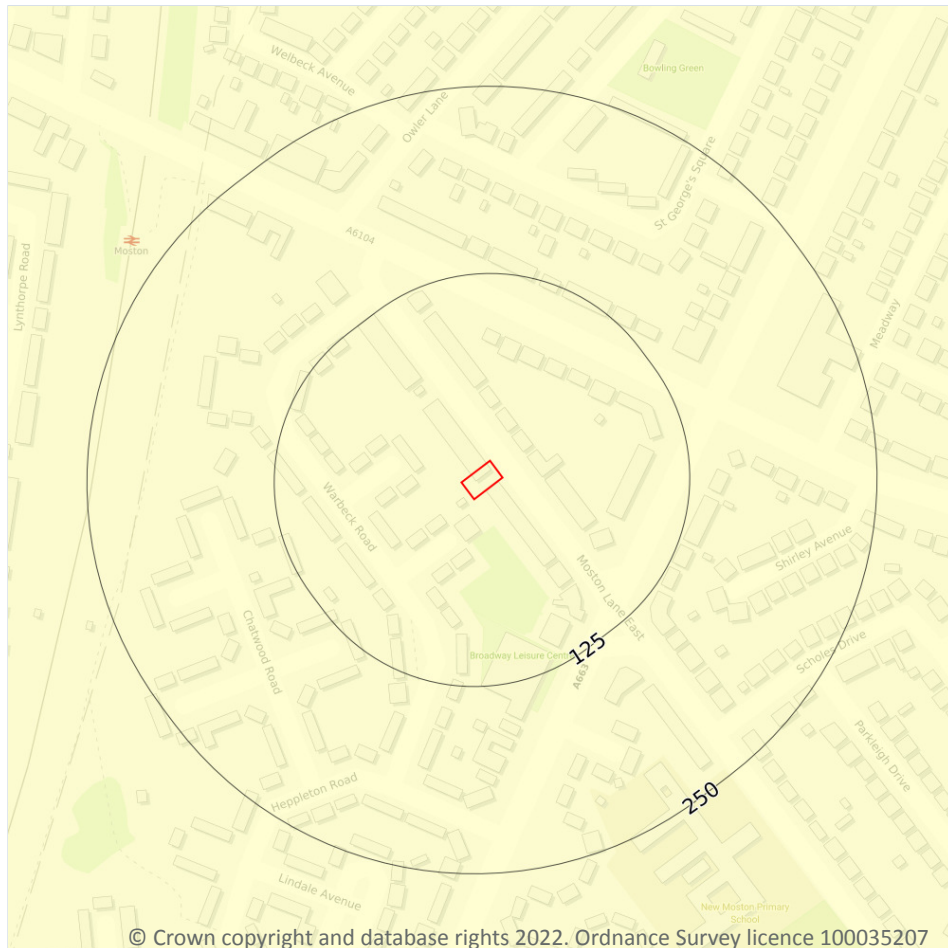
Features are displayed on the Natural ground subsidence - Running sands map on **page 78**

Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

1

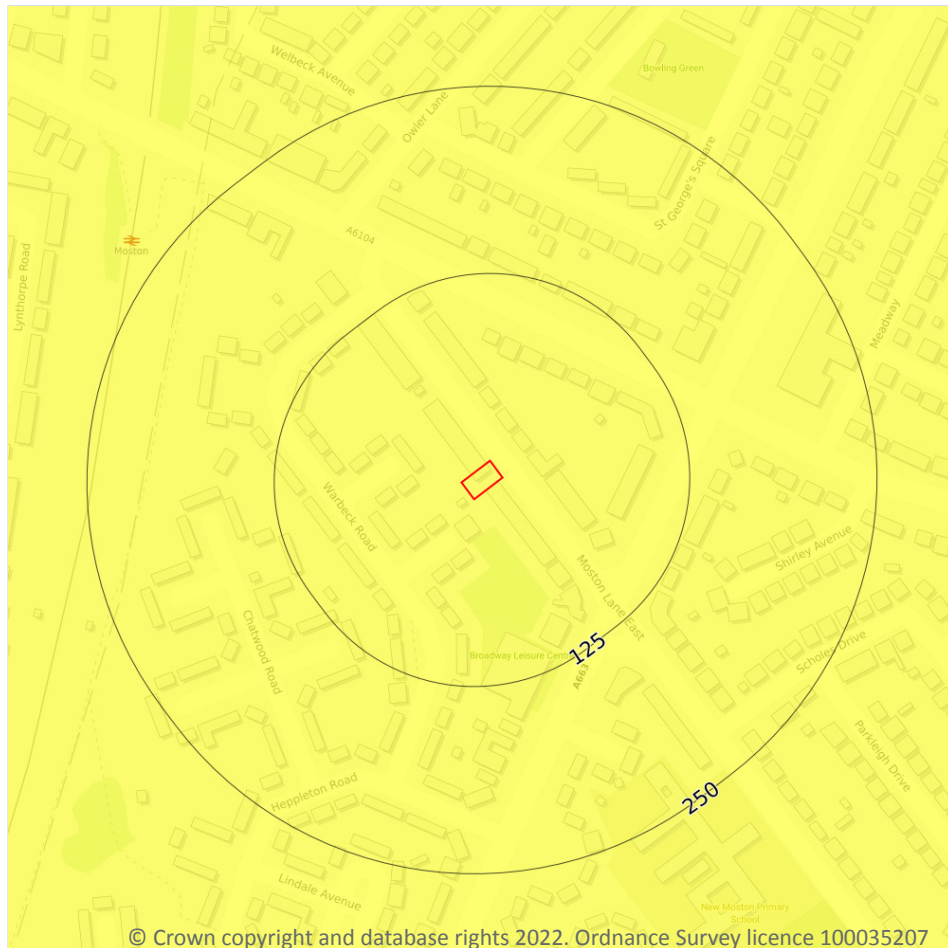
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 79**

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.4 Collapsible deposits

Records within 50m

1

The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

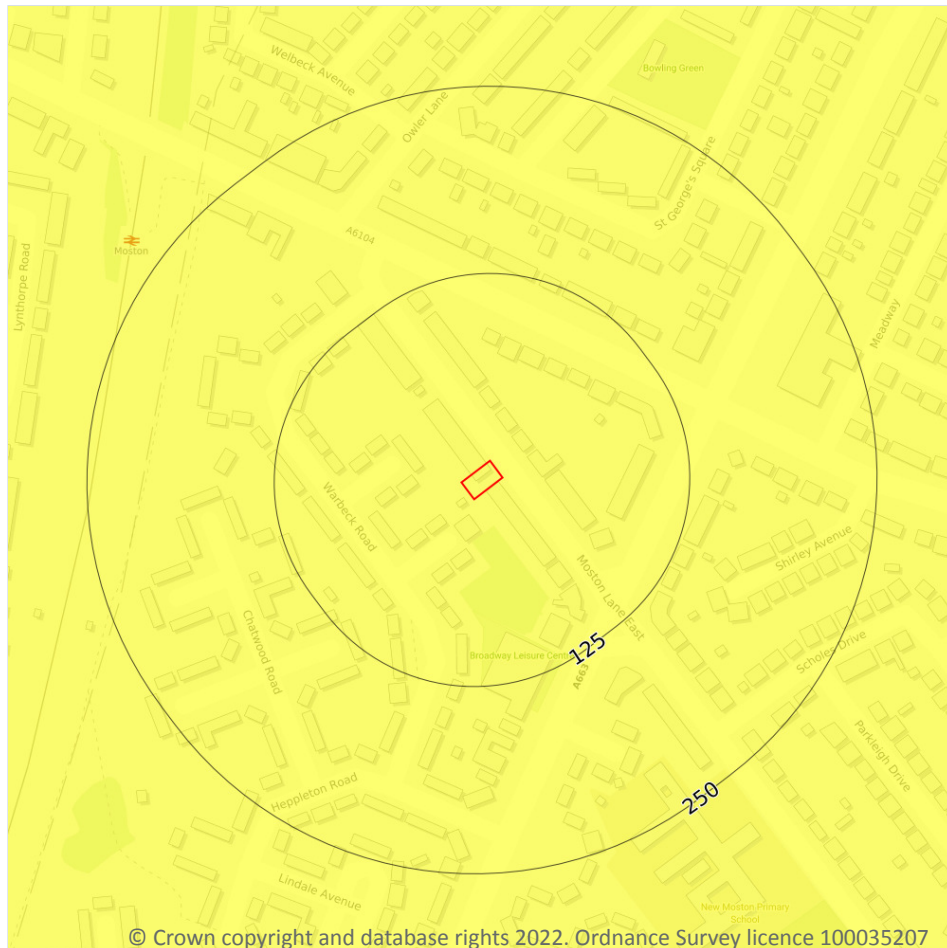
Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 80**

Location	Hazard rating	Details
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.5 Landslides

Records within 50m

1

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

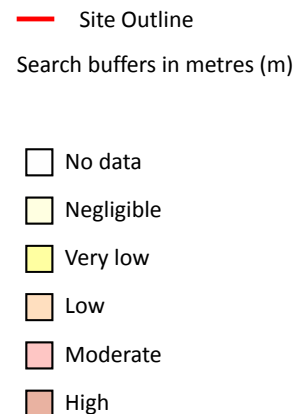
Features are displayed on the Natural ground subsidence - Landslides map on **page 81**

Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

1

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

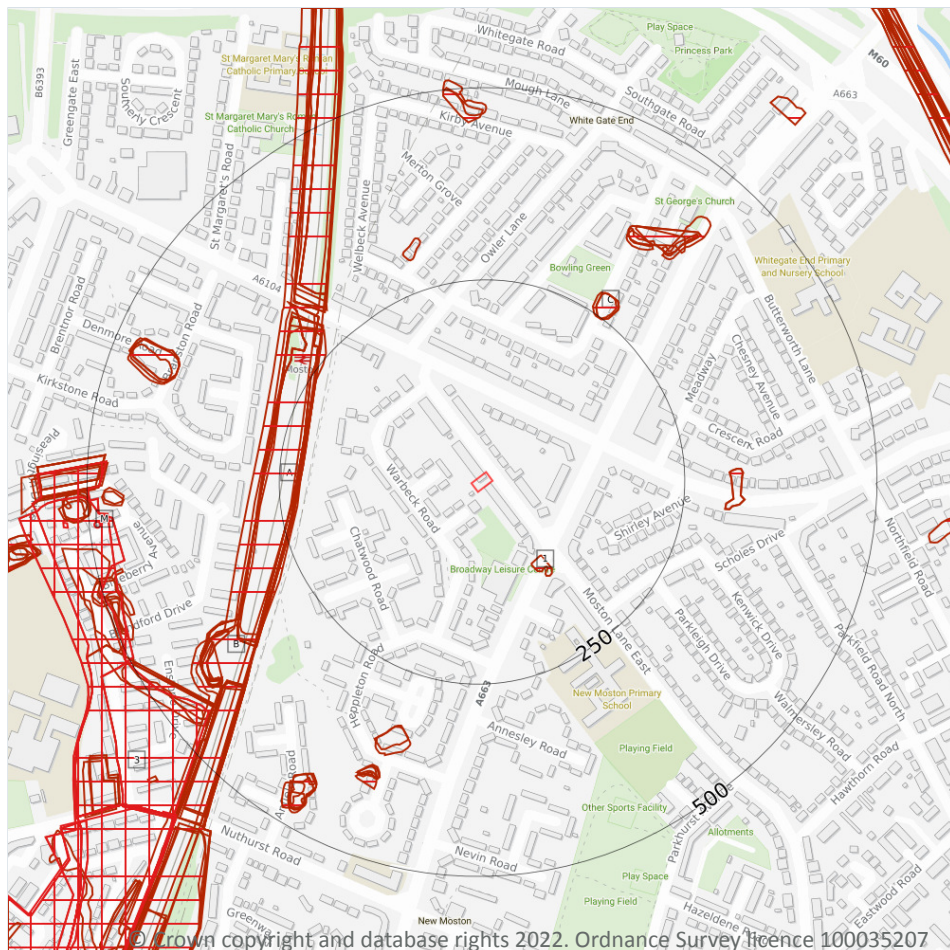
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 82**

Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.

This data is sourced from the British Geological Survey.



18 Mining, ground workings and natural cavities



- Site Outline
- Search buffers in metres (m)
- Natural cavities (Area)
- Natural cavities (Point)
- BritPits
- Surface ground workings
- Underground workings
- Historical Mineral Planning Areas
- Mining Cavities
- Non Coal Mining
- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

18.1 Natural cavities

Records within 500m

0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m

0

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m

16

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining, ground workings and natural cavities map on **page 83**

ID	Location	Land Use	Year of mapping	Mapping scale
1	115m SE	Pond	1906	1:10560
A	220m W	Cuttings	1938	1:10560
A	220m W	Cuttings	1933	1:10560
A	220m W	Cuttings	1915	1:10560
A	220m W	Cuttings	1906	1:10560
A	222m W	Cuttings	1923	1:10560
A	222m W	Cuttings	1891	1:10560
B	223m W	Cuttings	1956	1:10560
B	224m W	Cuttings	1980	1:10000
B	224m W	Cuttings	1966	1:10560
B	224m W	Cuttings	1988	1:10000
B	224m W	Cuttings	1975	1:10000
A	228m W	Cuttings	1851	1:10560
C	248m NE	Pond	1923	1:10560
C	249m NE	Pond	1915	1:10560
C	249m NE	Pond	1906	1:10560

This data is sourced from Ordnance Survey/Groundsure.



18.4 Underground workings

Records within 1000m

11

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

Features are displayed on the Mining, ground workings and natural cavities map on **page 83**

ID	Location	Land Use	Year of mapping	Mapping scale
3	453m SW	Collieries	1891	1:10560
P	474m W	Collieries	1906	1:10560
M	486m W	Unspecified Old Shaft	1933	1:10560
M	528m W	Unspecified Old Shaft	1938	1:10560
S	575m SW	Unspecified Mines	1966	1:10560
S	577m SW	Collieries	1933	1:10560
S	577m SW	Collieries	1915	1:10560
S	577m SW	Collieries	1923	1:10560
S	665m SW	Collieries	1956	1:10560
-	823m E	Colliery	1923	1:10560
-	877m E	Colliery	1906	1:10560

This data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m

0

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.



18.6 Non-coal mining

Records within 1000m

0

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m

0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

18.8 JPB mining areas

Records on site

0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.9 Coal mining

Records on site

1

Areas which could be affected by past, current or future coal mining.

Location	Details
On site	The site is located within a coal mining area as defined by the Coal Authority. A Consultants Coal Mining Report is recommended to further assess coal mining issues at the site. This can be ordered directly through Groundsure or your preferred search provider.

This data is sourced from the Coal Authority.



18.10 Brine areas

Records on site	0
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The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.11 Gypsum areas

Records on site	0
-----------------	---

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0
-----------------	---

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

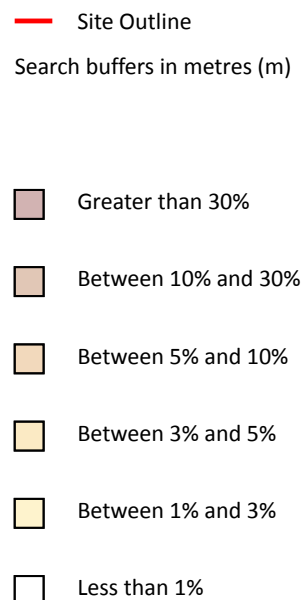
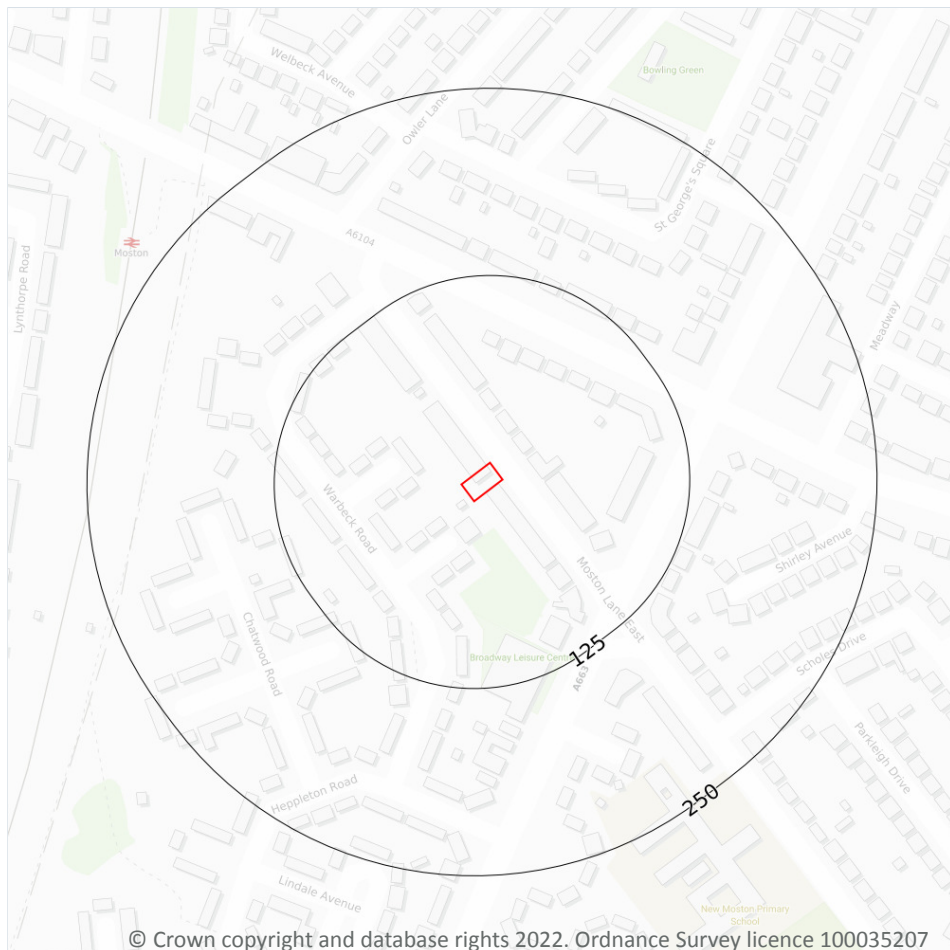
18.13 Clay mining

Records on site	0
-----------------	---

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Radon



19.1 Radon

Records on site

1

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

Features are displayed on the Radon map on **page 88**

Location	Estimated properties affected	Radon Protection Measures required
On site	Less than 1%	None**

This data is sourced from the British Geological Survey and Public Health England.



20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m

3

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

This data is sourced from the British Geological Survey.

20.3 BGS Measured Urban Soil Chemistry

Records within 50m

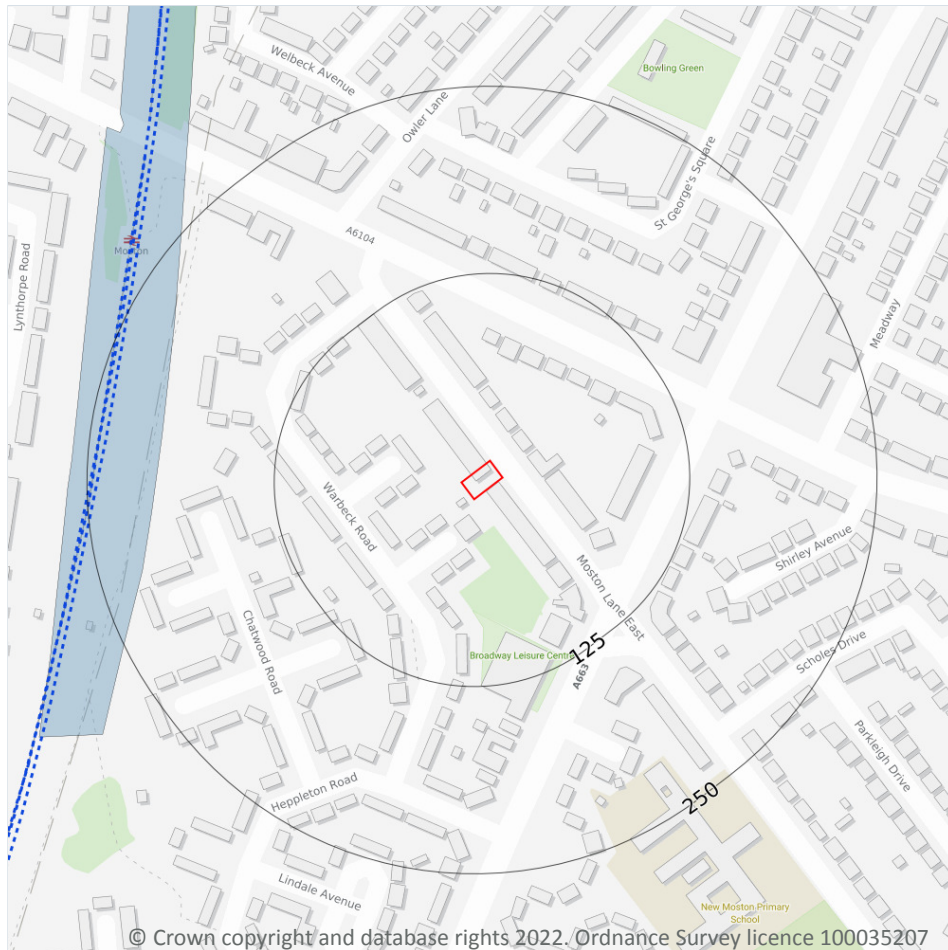
0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km².

This data is sourced from the British Geological Survey.



21 Railway infrastructure and projects



- Site Outline
- Search buffers in metres (m)**
- C1 Crossrail 1 Stations
- Crossrail 1 Route
- Crossrail 1 Worksites
- C2 Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

21.1 Underground railways (London)

Records within 250m

0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

21.2 Underground railways (Non-London)

Records within 250m

0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.



This data is sourced from publicly available information by Groundsure.

21.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m

1

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

Features are displayed on the Railway infrastructure and projects map on **page 90**

Location	Land Use	Year of mapping	Mapping scale
202m W	Railways	1891	-

This data is sourced from Ordnance Survey/Groundsure.

21.5 Royal Mail tunnels

Records within 250m

0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

21.6 Historical railways

Records within 250m

0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.



21.7 Railways

Records within 250m

3

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways. Features are displayed on the Railway infrastructure and projects map on **page 90**

Location	Name	Type
239m W	Caldervale Line	rail
243m W	Caldervale Line	rail
243m W	Not given	Multi Track

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m

0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

21.9 Crossrail 2

Records within 500m

0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m

0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 Ltd.



Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see <https://www.groundsure.com/sources-reference>.

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