

High Speed Rail (Crewe – Manchester)

Background information and data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

High Speed Rail (Crewe – Manchester)

Background information and data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data



Department for Transport

High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

High Speed Two (HS2) Limited,
Two Snowhill
Snow Hill Queensway
Birmingham B4 6GA

Telephone: 08081 434 434

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.hs2.org.uk

A report prepared for High Speed Two (HS2) Limited:

ARUP+ ERM | FOSTER + PARTNERS | JACOBS
RAMBOLL | TYPSPA | COSTAIN

MWJV

Mott MacDonald | WSP

High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.

© High Speed Two (HS2) Limited, 2022, except where otherwise stated.

Copyright in the typographical arrangement rests with High Speed Two (HS2) Limited.

This information is licensed under the Open Government Licence v3.0. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/version/3 **OGL** or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: psi@nationalarchives.gsi.gov.uk. Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.



Printed in Great Britain on paper containing at least 75% recycled fibre.

Background Information and Data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

Contents

1	Introduction	3
2	Receptor information	4
3	Minerals data	18
4	Geological Sites of Special Scientific Interest and local geological sites	19
5	Other sources of data and information	20
5.2	Local authorities contaminated site data	20
5.3	Environment Agency	20
5.4	Other regulatory data	20
6	Site visit records	21
7	References	22

Tables

Table 1:	Receptors – former depots grouped for assessment (on-site)	5
Table 2:	Receptors – former and current laundries and former breweries grouped for assessment (on-site)	5
Table 3:	Receptors – former gas works (on-site)	6
Table 4:	Receptors – former metal manufacturing and plating (on-site)	6
Table 5:	Receptors – current tank and former/current fuel stations grouped for assessment (on-site)	6
Table 6:	Receptors – garage workshop (on-site)	7
Table 7:	Receptors – former brick field (on-site)	7
Table 8:	Receptors – electrical sub-station (on-site)	8
Table 9:	Receptors – current and former railway land, tram depot and goods yard grouped for assessment (on-site)	8
Table 10:	Receptors – former timber yards and sawmills grouped for assessment (on-site)	9
Table 11:	Receptors – embankments grouped for assessment (on-site)	10
Table 12:	Receptors – mine shaft (on-site)	10
Table 13:	Receptor – waste transfer facility (on-site)	10
Table 14:	Receptors – former police and fire station and current hospital grouped for assessment (off-site)	11
Table 15:	Receptors – current railway land and former tram depot grouped for assessment (off-site)	11
Table 16:	Receptors – former heavy industry and manufacturing sites grouped for assessment (off-site)	12

Background Information and Data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

Table 17: Receptors –former engineering works grouped for assessment (off-site)	13
Table 18: Receptors – current and former depots grouped for assessment (off-site)	13
Table 19: Receptors – current and former oil depots, fuel stations and tank grouped for assessment (off-site)	14
Table 20: Receptors – scrap yard (off-site)	15
Table 21: Receptors – former timber yards grouped for assessment (off-site)	15
Table 22: Receptors – former cemetery (off-site)	16
Table 23: Receptors – embankment (off-site)	16
Table 24: Receptors – former farm (off-site)	17
Table 25: Receptors – former laundry (off-site)	17
Table 26: Regulatory data summary	20

Background Information and Data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

1 Introduction

- 1.1.1 This report presents land quality baseline data highlighting areas of contamination originating from historical and current land use, and mineral and geoconservation resources in the study area.
- 1.1.2 Baseline data have been collected for the Proposed Scheme in relation to the Davenport Green to Ardwick area. The baseline data in this report has been used to inform the land quality assessment which is set out in the Environmental Statement (see Volume 5, Land quality report, Appendix: LQ-001-0MA07)¹.
- 1.1.3 Sites (for example MA07-173) referred to throughout this report are contained in the Volume 5 Map Book (see Environment Statement, Volume 5 Land quality Map Book, Maps LQ-01-322b to LQ-01-327a)².
- 1.1.4 The Environmental Impact Assessment Scope and Methodology Report (SMR) (see Environment Statement, Volume 5, Appendix CT-001-00001³) should be referred to for details of the land quality assessment methodology.

¹ High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Environmental Statement, Land quality report*, Volume 5, Appendix LQ-001-0MA07. Available online at:

<https://www.gov.uk/government/collections/hs2-phase-2b-crewe-manchester-environmental-statement>.

² High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Environmental Statement, Volume 5 Land quality Map Book*. Available online at: <https://www.gov.uk/government/collections/hs2-phase-2b-crewe-manchester-environmental-statement>.

³ High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Environmental Statement, Environmental Impact Assessment Scope and Methodology Report*, Volume 5, Appendix CT-001-00001. Available online at: <https://www.gov.uk/government/collections/hs2-phase-2b-crewe-manchester-environmental-statement>.

2 Receptor information

- 2.1.1 This section provides further receptor information for sites that have been evaluated in stages C and D of the land quality assessment and assessed for the Davenport Green to Ardwick area (see Environmental Statement, Volume 5, Appendix LQ-001-0MA07)¹.
- 2.1.2 For each site or group of sites, further information on each site receptor can be found in Table 1 to Table 25.
- 2.1.3 For clarity, 'on-site' in this report means 'within the land required for the construction of the Proposed Scheme' and 'off-site' refers to land beyond this boundary, but within the study area. The sites and groups of sites for assessment in this area include:
- on-site:
 - former depots;
 - former and current laundries and former breweries;
 - former gas works;
 - former metal manufacturing and plating;
 - current tank and current/former fuel stations;
 - garage workshop;
 - former brick field;
 - electrical sub-station;
 - current and former railway land, tram depot and goods yard;
 - former timber yard and sawmills;
 - embankments;
 - mine shaft; and
 - waste transfer facility.
 - off-site:
 - former police station and fire station and current hospital;
 - current and former railway land and tram depot;
 - former heavy industry and manufacturing sites;
 - former engineering works;
 - current and former depots;
 - current and former oil depots, fuel stations and tank;
 - scrap yard;
 - former timber yards;
 - former cemetery;
 - embankment;
 - former farm; and
 - former laundry.

Background Information and Data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

Table 1: Receptors – former depots grouped for assessment (on-site)

Site title (Site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface course	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Former depot (MA07-173)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) – glacial till Secondary B Aquifer– Manchester Marls Formation	River Medlock (350m north-west)	None	Commercial buildings (existing and adjacent*)	None
Former depot (MA07-182)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Principal Aquifer – Collyhurst Sandstone Formation	River Medlock (280m north-west)	None	Commercial buildings (existing and adjacent*)	None

* adjacent site receptors located outside the land required for the construction of the Proposed Scheme (off-site) remain and are therefore included in the construction stage assessment. This applies to human and property receptors only.

Table 2: Receptors – former and current laundries and former breweries grouped for assessment (on-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Former laundry (MA07-69)	Commercial (existing and adjacent* site users) Residential (adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Principal Aquifer – Chester Formation	None	None	Commercial buildings (existing and adjacent*) Residential properties (adjacent*)	None
Former Ardwick brewery (MA07-174)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Principal Aquifer – Chester Formation	River Medlock (280m north-west)	None	Commercial buildings (existing and adjacent*)	None
Former public laundry (MA07-175)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Principal Aquifer – Chester Formation	River Medlock (270m north)	None	Commercial buildings (existing and adjacent*)	None
Victoria brewery (MA07-189)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Principal Aquifer – Chester Formation	River Medlock (140m north-west)	None	Commercial buildings (existing and adjacent*)	None

Background Information and Data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Current laundry (MA07-210)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Principal Aquifer - Chester Formation	River Medlock (270m north)	None	Commercial buildings (adjacent*)	None

* adjacent site receptors located outside the land required for the construction of the Proposed Scheme (off-site) remain and are therefore included in the construction stage assessment. This applies to human and property receptors only.

Table 3: Receptors – former gas works (on-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Former gas works (MA07-168)	Commercial (adjacent* site users*)	Secondary (undifferentiated) Aquifer- glacial till Secondary A Aquifer- Halesowen Formation	None	None	Commercial buildings (adjacent*)	None

* adjacent site receptors located outside the land required for the construction of the Proposed Scheme (off-site) remain and are therefore included in the construction stage assessment. This applies to human and property receptors only.

Table 4: Receptors – former metal manufacturing and plating (on-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Former aluminium works (MA07-185)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Principal Aquifer – Chester Formation Secondary B Aquifer- Manchester Marls Formation	River Medlock (150m north-west)	None	Commercial buildings (existing and adjacent*)	None

Table 5: Receptors – current tank and former/current fuel stations grouped for assessment (on-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Current tank (MA07-179)	Commercial (adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Secondary B Aquifer-	River Medlock (270m north-west)	None	Tank (existing) Commercial buildings (adjacent*)	None

Background Information and Data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
		Manchester Marls Formation				
Former fuel station (Ardwick Service Station) (MA07-186)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Secondary B Aquifer- Manchester Marls Formation	River Medlock (240m north-west)	None	Commercial buildings (existing and adjacent*)	None
Current fuel station (MA07-206)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Principal Aquifer - Chester Formation	River Medlock (270m north)	None	Commercial buildings (existing and adjacent*)	None

* adjacent site receptors located outside the land required for the construction of the Proposed Scheme (off-site) remain and are therefore included in the construction stage assessment. This applies to human and property receptors only.

Table 6: Receptors – garage workshop (on-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Garage (MA07-184)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Principal Aquifer - Chester Formation	River Medlock (140m north-west)	None	Commercial buildings (existing and adjacent*)	None

* adjacent site receptors located outside the land required for the construction of the Proposed Scheme (off-site) remain and are therefore included in the construction stage assessment. This applies to human and property receptors only.

Table 7: Receptors – former brick field (on-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Former brick field (MA07-176)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Principal Aquifer - Collyhurst Sandstone Formation	River Medlock (390m north-west)	None	Commercial buildings (existing and adjacent*)	None

* adjacent site receptors located outside the land required for the construction of the Proposed Scheme (off-site) remain and are therefore included in the construction stage assessment. This applies to human and property receptors only.

Background Information and Data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

Table 8: Receptors – electrical sub-station (on-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Electrical sub-station (MA07-183)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Secondary B Aquifer– Manchester Marls Formation	River Medlock (230m north-west)	None	Electrical sub-station buildings (existing) commercial buildings (adjacent*)	None

* adjacent site receptors located outside the land required for the construction of the Proposed Scheme (off-site) remain and are therefore included in the construction stage assessment. This applies to human and property receptors only.

Table 9: Receptors – current and former railway land, tram depot and goods yard grouped for assessment (on-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Current Manchester South Junction and Altrincham Railway (MA07-41)	Residential and commercial (adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Secondary A Aquifer– glaciofluvial sheet deposit Secondary B Aquifer– Tarporley Siltstone Formation	Baguley Brook on-site (culverted) Spring 120m south-west	SBI - Blackcarr Wood and Baguley Bottoms (adjacent*, south), Round Wood (200m north-west)	Railway lines (existing) Residential properties and commercial buildings (adjacent*)	None
Current Manchester South Junction and Altrincham Railway (MA07-45)	Residential and commercial (adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Secondary A Aquifer– glaciofluvial sheet deposit Secondary B Aquifer– Tarporley Siltstone Formation	Baguley Brook (190m west) Pond (210m north) Pond (235m south-west)	SBI - Round Wood (120m north), Blackcarr Wood and Baguley Bottoms (200m south-west)	Railway lines (existing) residential properties and commercial buildings (adjacent*)	None
Tram depot (MA07-92)	Commercial (existing and adjacent* site users) School (adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Principal Aquifer – Collyhurst Sandstone Formation SPZ 3 (60m west)	Cringle Brook (400m south)	None	Commercial building (existing and adjacent*) School building (adjacent*)	None

Background Information and Data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Former freight terminal and goods yard (MA07-166)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Principal Aquifer – Collyhurst Sandstone Formation	None	None	Commercial buildings and depots (existing and adjacent*)	None
Current London and North Western Railway (MA07-167)	Commercial (existing and adjacent* site users) and residential (adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Principal Aquifer – Collyhurst Sandstone Formation	River Medlock (375m north-west)	None	Railway lines (existing), commercial buildings and residential properties (adjacent*)	None

* adjacent site receptors located outside the land required for the construction of the Proposed Scheme (off-site) remain and are therefore included in the construction stage assessment. This applies to human and property receptors only.

Table 10: Receptors – former timber yards and sawmills grouped for assessment (on-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Former timber yard and saw-mill (MA07-170)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Principal Aquifer – Chester Formation	River Medlock (380m north-west)	None	Commercial buildings (existing and adjacent*)	None
Former timber yard (MA07-180)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Principal Aquifer – Collyhurst Sandstone Formation	River Medlock (345m north-west)	None	Commercial buildings (existing and adjacent*)	None
Former timber yard and saw-mill (MA07-181)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Principal Aquifer – Collyhurst Sandstone Formation	River Medlock (335m north-west)	None	Commercial buildings (existing and adjacent*)	None

* adjacent site receptors located outside the land required for the construction of the Proposed Scheme (off-site) remain and are therefore included in the construction stage assessment. This applies to human and property receptors only.

Background Information and Data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

Table 11: Receptors – embankments grouped for assessment (on-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Embankment (MA07-05)	Residential (adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Secondary B Aquifer- Sidmouth Mudstone Formation	Fairywell Brook (5m south)	None	Residential properties (adjacent*)	None
Embankment (MA07-43)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Secondary A Aquifer- glaciofluvial sheet deposits Secondary B Aquifer- Tarporley Siltstone Formation	Baguley Brook (130m west)	None	Railway lines, commercial buildings (existing and adjacent*)	None

* adjacent site receptors located outside the land required for the construction of the Proposed Scheme (off-site) remain and are therefore included in the construction stage assessment. This applies to human and property receptors only.

Table 12: Receptors – mine shaft (on-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Limestone shaft (MA07-202)	None	Secondary (undifferentiated) Aquifer- glacial till Secondary A Aquifer- Halesowen Formation	None	None	None	None

Table 13: Receptor – waste transfer facility (on-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Waste transfer facility (MA07-203)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer - glacial till Secondary A - Aquifer Halesowen Formation Principal Aquifer - Collyhurst	River Medlock 450m north west)	None	Commercial buildings (adjacent*)	None

Background Information and Data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
		Sandstone Formation				

Table 14: Receptors – former police and fire station and current hospital grouped for assessment (off-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Former Police and Fire Station (MA07-42)	Commercial (adjacent* site users)	Secondary A Aquifer– glacial till Secondary B Aquifer– Tarporley Siltstone Formation	Drain (250m north-west)	None	Commercial buildings (adjacent*)	None
Current Hospital (MA07-77)	Public building (existing site users), commercial and residential (adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Principal Aquifer – Chester Formation	Drain (180m north-east)	None	Hospital (existing), commercial buildings and residential properties (adjacent*)	None

* adjacent site receptors located outside the land required for the construction of the Proposed Scheme (off-site) remain and are therefore included in the construction stage assessment. This applies to human and property receptors only.

Table 15: Receptors – current railway land and former tram depot grouped for assessment (off-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Current London and North Western Railway (MA07-94)	Residential (adjacent* site users) and commercial (adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Principal Aquifer – Collyhurst Sandstone Formation	Platt Brook, Fallowfield Brook (both culverted beneath the site) Pond (10m north-west)	None	Railways lines (existing), Residential properties (adjacent*) and commercial buildings (adjacent*)	None
Former tram depot (MA07-207)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Principal Aquifer – Collyhurst Sandstone Formation	Cringle Brook (290m south)	None	Commercial buildings (existing and adjacent*)	None

Background Information and Data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
		SPZ 3 (100m west)				

* adjacent site receptors located within the land required for the construction of the Proposed Scheme (off-site) remain and are therefore removed from the construction stage assessment. This applies to human and property receptors only.

Table 16: Receptors – former heavy industry and manufacturing sites grouped for assessment (off-site)

Site title (Site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Former Union Iron Works (MA07-142)	Commercial (existing site users) Residential (adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Secondary A Aquifer– Halesowen Formation	Corn Brook (120m north-east)	None	Industrial buildings, residential properties (adjacent*)	None
Former Iron works (MA07-169)	Commercial (existing site users) Residential and commercial (adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Secondary A Aquifer– Etruria Formation	Corn Brook (130m south-east)	None	Industrial buildings Residential properties (adjacent*)	None
Former Openshaw Dye Works (MA07-177)	Industrial (existing site users) Residential (adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Secondary A Aquifer– Etruria Formation	Corn Brook (400m south-east)	None	Residential properties (adjacent*)	None
Former clothing factory (MA07-193)	Commercial (existing site users), commercial (adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Secondary B Aquifer– Manchester Marls Formation	River Medlock (210m north-west)	None	Commercial buildings (existing and adjacent*)	None
Former Ardwick Lime Works (MA07-196)	Residential (existing site users), commercial (adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Secondary A Aquifer– Halesowen Formation	River Medlock (380m west)	None	Residential properties (existing) commercial (adjacent*)	None

* adjacent site receptors located within the land required for the construction of the Proposed Scheme (on-site) are assumed to have been removed at the construction stage and are therefore not considered in the construction stage assessment. This applies to human and property receptors only.

Background Information and Data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

Table 17: Receptors –former engineering works grouped for assessment (off-site)

Site title (Site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Former works (MA07-191)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Secondary A Aquifer- Halesowen Formation	River Medlock (450m north-west)	None	Commercial and residential properties (adjacent*)	None
Former Lime Bank Works (MA07-197)	Commercial and residential (adjacent site users)	Secondary (undifferentiated) Aquifer- glacial till Secondary A Aquifer- Halesowen Formation	River Medlock (160m west)	None	Commercial and residential (adjacent*)	None

* adjacent site receptors located within the land required for the construction of the Proposed Scheme (on-site) are assumed to have been removed at the construction stage and are therefore not considered in the construction stage assessment. This applies to human and property receptors only.

Table 18: Receptors – current and former depots grouped for assessment (off-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Former depot (MA07-160)	Commercial (existing site users), residential (adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Secondary A Aquifer- Halesowen Formation	None	None	Commercial buildings (existing) residential (adjacent*)	None
Former depot (MA07-165)	Commercial (existing and adjacent* site users*)	Secondary (undifferentiated) Aquifer- glacial till Principal Aquifer – Chester Formation	River Medlock (490m north-west)	None	Commercial buildings (existing and adjacent*)	None
Current depot (MA07-171)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Secondary A Aquifer- Halesowen Formation	None	None	Commercial buildings (existing and adjacent*)	None

* adjacent site receptors located within the land required for the construction of the Proposed Scheme (on-site) are assumed to have been removed at the construction stage and are therefore not considered in the construction stage assessment. This applies to human and property receptors only.

Background Information and Data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

Table 19: Receptors – current and former oil depots, fuel stations and tank grouped for assessment (off-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Current oil depot (MA07-40)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Secondary B-Tarporley Siltstone Formation	Ponds, drains, Baguley Brook (various distances, nearest is unnamed drain 220m south-west)	None	Commercial buildings (existing and adjacent*)	None
Former Tank (MA07-47)	Public building (existing site users), commercial (adjacent* site users)	Secondary A Aquifer– glaciofluvial deposits Secondary B Aquifer– Tarporley Siltstone Formation	Drains (20m north in Round Wood)	None	Religious building (existing), commercial buildings (adjacent*)	None
Former fuel station (MA07-71)	Commercial (existing and adjacent* site users) Residential (adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Principal Aquifer – Chester Formation	None	None	Commercial buildings (existing and adjacent*) Residential properties (adjacent*)	None
Current bus depot and oil tank (MA07-139)	Commercial (existing and adjacent* site users), School and residential (adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Secondary B Aquifer– Manchester Marls Formation	None	None	Depot buildings (existing) commercial buildings (existing and adjacent*), school building and residential properties (adjacent*)	None
Galloways Boiler Works and tanks (MA07-152)	Residential and commercial, (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Principal Aquifer – Collyhurst Sandstone Formation	None	None	Residential and commercial buildings (existing and adjacent*)	None

Background Information and Data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Former petroleum depot (MA07-161)	Commercial (existing site users), residential (adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Secondary A Aquifer- Halesowen Formation	None	None	Commercial buildings (existing), residential properties and commercial buildings (adjacent*)	None
Former fuel station (MA07-205)	Commercial (existing site users), residential (adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Principal Aquifer - Collyhurst Sandstone Formation SPZ 3 (70m west)	Fallowfield Brook (300m south)	None	Commercial buildings (existing), residential properties (adjacent*)	None

* adjacent site receptors located within the land required for the construction of the Proposed Scheme (on-site) are assumed to have been removed at the construction stage and are therefore not considered in the construction stage assessment. This applies to human and property receptors only.

Table 20: Receptors – scrap yard (off-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Scrap yard (MA07-178)	Commercial (existing site users), commercial (adjacent* site users), residential (adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Secondary A Aquifer- Halesowen Formation	River Medlock (450m north-west)	None	Commercial buildings (existing and adjacent*), residential buildings (adjacent*)	None

* adjacent site receptors located within the land required for the construction of the Proposed Scheme (on-site) are assumed to have been removed at the construction stage and are therefore not considered in the construction stage assessment. This applies to human and property receptors only.

Table 21: Receptors – former timber yards grouped for assessment (off-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Former timber yard (MA07-192)	Commercial (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till	River Medlock (380m north-west)	None	Commercial buildings (existing and adjacent*)	None

Background Information and Data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
		Principal Aquifer – Collyhurst Sandstone Formation				
Former timber yard (MA07-194)	Commercial (adjacent* site users*)	Secondary (undifferentiated) Aquifer– glacial till Secondary B Aquifer– Manchester Marls Formation	River Medlock (110m north-west)	None	Commercial buildings (adjacent*)	None

* adjacent site receptors located within the land required for the construction of the Proposed Scheme (on-site) are assumed to have been removed at the construction stage and are therefore not considered in the construction stage assessment. This applies to human and property receptors only.

Table 22: Receptors – former cemetery (off-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Former Ardwick Cemetery (MA07-155)	Commercial (existing site users), school and commercial (adjacent* site users)	Secondary (undifferentiated) Aquifer– glacial till Principal Aquifer – Chester Formation	None	None	Commercial (existing) school and commercial buildings (adjacent)	None

Table 23: Receptors – embankment (off-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Embankment (MA07-36)	Commercial (adjacent* site users)	Secondary A Aquifer– glaciofluvial deposits Secondary B Aquifer– Tarporley Sandstone Formation	Sinderland Brook (50m west)	None	Highways (existing) Commercial (adjacent*)	None

* adjacent site receptors located within the land required for the construction of the Proposed Scheme (on-site) are assumed to have been removed at the construction stage and are therefore not considered in the construction stage assessment. This applies to human and property receptors only.

Background Information and Data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

Table 24: Receptors – former farm (off-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Former Oak House Farm (MA07-72)	Residential (existing and adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Principal Aquifer – Chester Formation	None	None	Residential properties (existing and adjacent*)	None

* adjacent site receptors located within the land required for the construction of the Proposed Scheme (on-site) are assumed to have been removed at the construction stage and are therefore not considered in the construction stage assessment. This applies to human and property receptors only.

Table 25: Receptors – former laundry (off-site)

Site title (site ID)	Sensitive land use (human receptor)	Aquifer designation	Surface watercourse	Geological and ecological designation	Property e.g. buildings and structures	Geoconservation sites
Former laundry (MA07-208)	Residential (existing and adjacent* site users), commercial (adjacent* site users)	Secondary (undifferentiated) Aquifer- glacial till Principal Aquifer – Chester Formation	None	None	Residential properties (existing and adjacent*), commercial (adjacent*)	None

* adjacent site receptors located within the land required for the construction of the Proposed Scheme (on-site) are assumed to have been removed at the construction stage and are therefore not considered in the construction stage assessment. This applies to human and property receptors only.

3 Minerals data

- 3.1.1 Limited information about historical limestone mining in Ardwick is available. An on-line source⁴ indicates that limestone has been mined from the Great Mine Limestone within the Halesowen Formation since Roman times. The main mine (in recent times) appears to have been the Ardwick Lime works located to the east of the River Medlock, near Aden Close, outside the land required for the construction of the Proposed Route. The reference indicates that the two main shafts were over 100m deep and that extraction of limestone had ceased by 1900. No reference is made to the shaft (MA07-202) within the study area.
- 3.1.2 All other relevant information associated with minerals, when considered as a resource, is presented in Environmental Statement, Volume 2, Land Quality Community Area report: Davenport Green to Ardwick (MA07), Section 10⁵.

⁴ P. Whitehead (2021), *Ardwick Lime Works*. Available online at: <http://www.pittdixon.go-plus.net/ardwick-lime-works/ardwick-lime-works.htm>.

⁵ High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Environmental Statement, Volume 2, Community Area report: Davenport Green to Ardwick (MA07), Section 10 Land quality*. Available online at: <https://www.gov.uk/government/collections/hs2-phase-2b-crewe-manchester-environmental-statement>.

4 Geological Sites of Special Scientific Interest and local geological sites

- 4.1.1 No geological Site of Special Scientific Interest (SSSI) or Local Geological Sites (LGS) are present in the Davenport Green to Ardwick area.

5 Other sources of data and information

5.1.1 Other sources of baseline data and information that are deemed necessary for the construction of the Proposed Scheme include:

- data gained from local authorities;
- data obtained from the Environment Agency; and
- regulatory data information.

5.2 Local authorities contaminated site data

5.2.1 Manchester City Council (MCC) did not provide any data on potentially contaminated sites within the study area.

5.2.2 Data on fuel stations was obtained and reviewed via Envirocheck reports. The data was used in the assessment of sites MA07-186, MA07-206, which are on-site and sites MA07-71 and MA07-205, which are off-site.

5.3 Environment Agency

5.3.1 The Environment Agency provided a plan of historical and active landfill sites in the MA07 area. None are within the study area.

5.4 Other regulatory data

5.4.1 Regulatory data reviewed includes pollution incidents (major, significant and minor categories), radioactive and hazardous substances consents, environmental permits (integrated pollution control and integrated pollution prevention and control licences), and ecological receptors. Details are provided in Table 26 below.

Table 26: Regulatory data summary

Data	Description
Pollution incidents to controlled waters	There have been 17 incidents of pollution to controlled waters in the study area between 1991 and 1998. All are classed as Category 3 – Minor, except for a single Category 1 – Major incident, described as Miscellaneous pollutants (detergent) to the Ashton Canal in 1996.
Discharge consents	There are 10 licences registered to five individual sites within the study area. The majority are registered to United Utilities and all for discharge of sewage.
Groundwater and Surface Water abstractions	There are seven groundwater licences registered to six locations, including one SPZ3 near Rusholme. The water is used largely for ‘industrial, commercial and public services. There are no surface water abstractions within the study area.
Ecological receptors	There are 10 SBI within the study area. One site, Wrengate Wood, is partially within land that has been identified for the purpose of habitat creation or enhancement, as part of the Proposed Scheme. The remaining sites are off-site or are located in land required for new and diverted minor utilities in the boundaries of existing highways.

Background Information and Data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

6 Site visit records

6.1.1 No site visits have been undertaken in the Davenport Green to Adwick area.

Background Information and Data

Land quality

BID LQ-002-0MA07

MA07: Davenport Green to Ardwick

Land quality baseline data

7 References

Department for Environment, Food and Rural Affairs and Environment Agency (2002), *Potential Contaminants for the Assessment of Land*, R&D Publication CLR8.

High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Environmental Statement*. Available online at: <https://www.gov.uk/government/collections/hs2-phase-2b-crewe-manchester-environmental-statement>.

P. Whitehead (2021), *Ardwick Lime Works*. Available online at: <http://www.pittdixon.plus.net/ardwick-lime-works/ardwick-lime-works.htm>.

High Speed Two (HS2) Limited

Two Snowhill

Snow Hill Queensway

Birmingham B4 6GA

Freephone: 08081 434 434

Minicom: 08081 456 472

Email: HS2enquiries@hs2.org.uk

