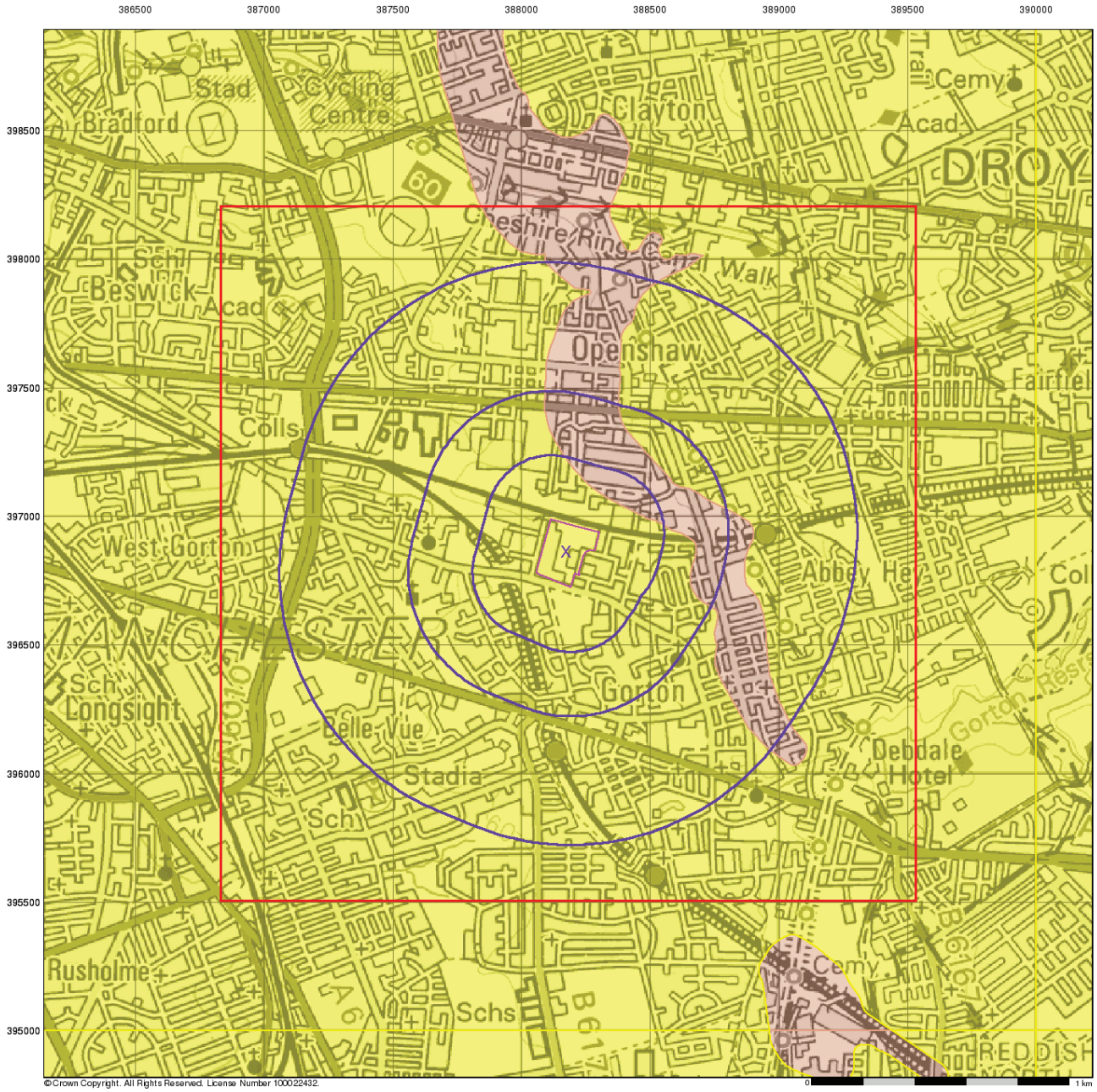


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Superficial Aquifer Designation

General

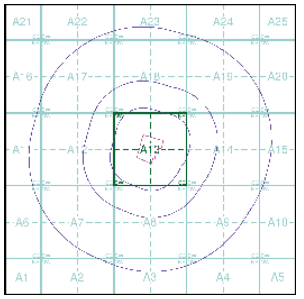
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A

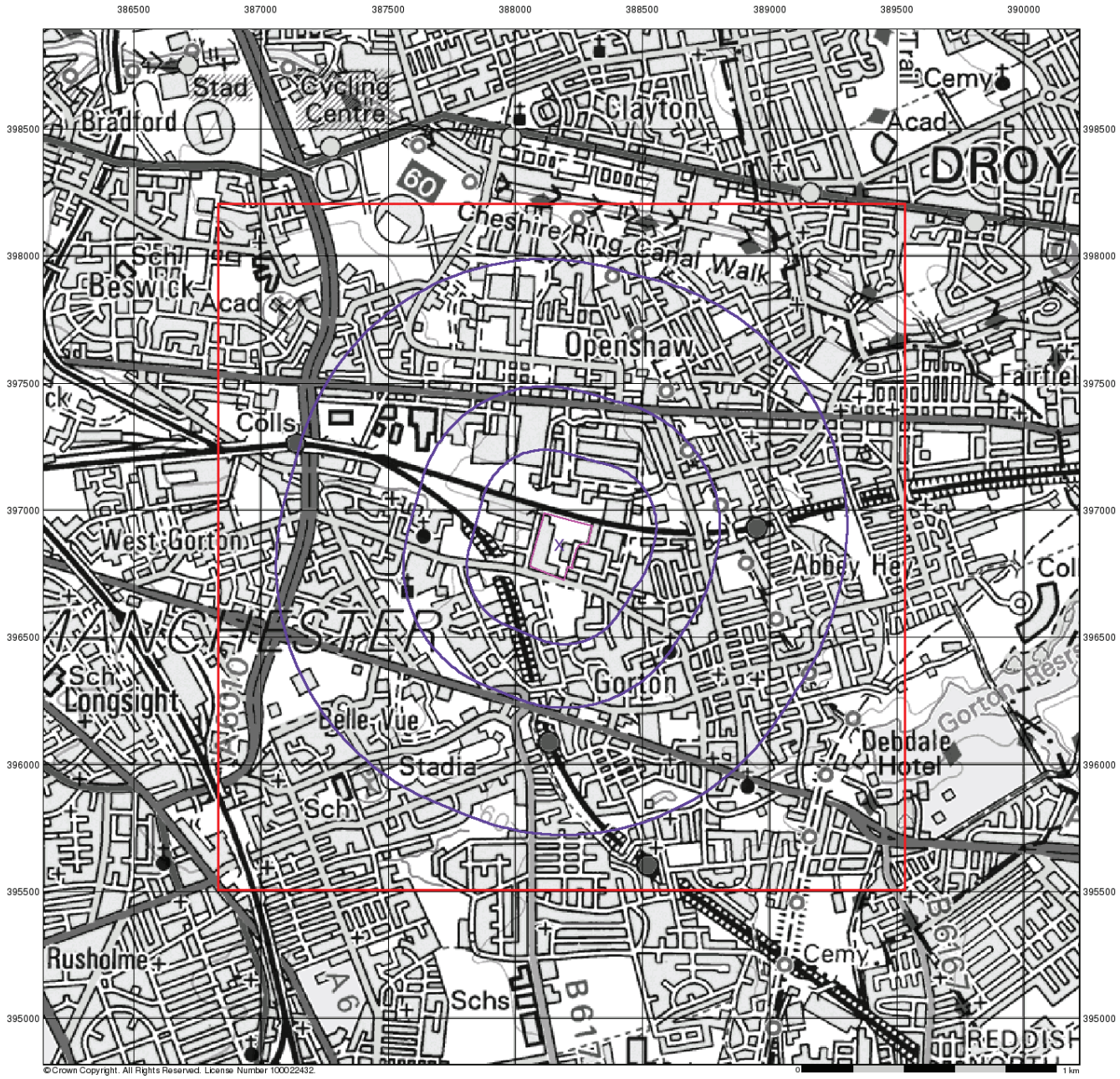


Order Details

Order Number:	174869711_1_1
Customer Ref:	P068065.000
National Grid Reference:	388170, 396860
Slice:	A
Site Area (Ha):	3.81
Search Buffer (m):	1000

Site Details

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Source Protection Zones

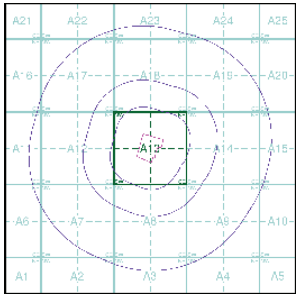
General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)

Site Sensitivity Context Map - Slice A



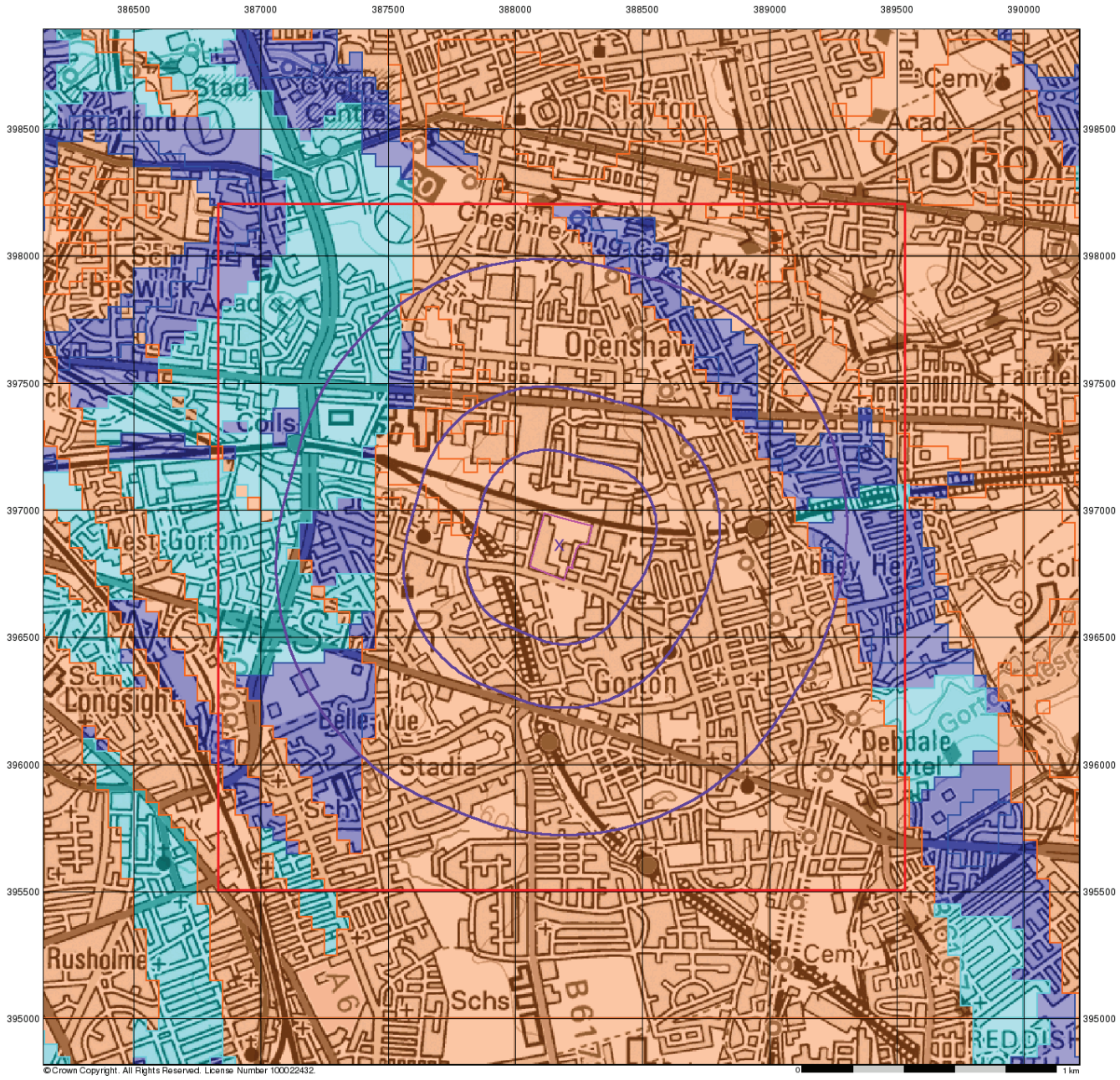
Order Details

Order Number:	174869711_1_1
Customer Ref:	P068065.000
National Grid Reference:	388170, 396860
Slice:	A
Site Area (Ha):	3.81
Search Buffer (m):	1000

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BGS Flood GFS Data

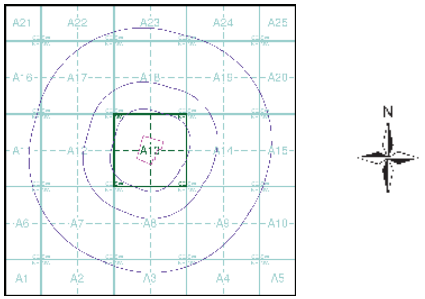
General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice A

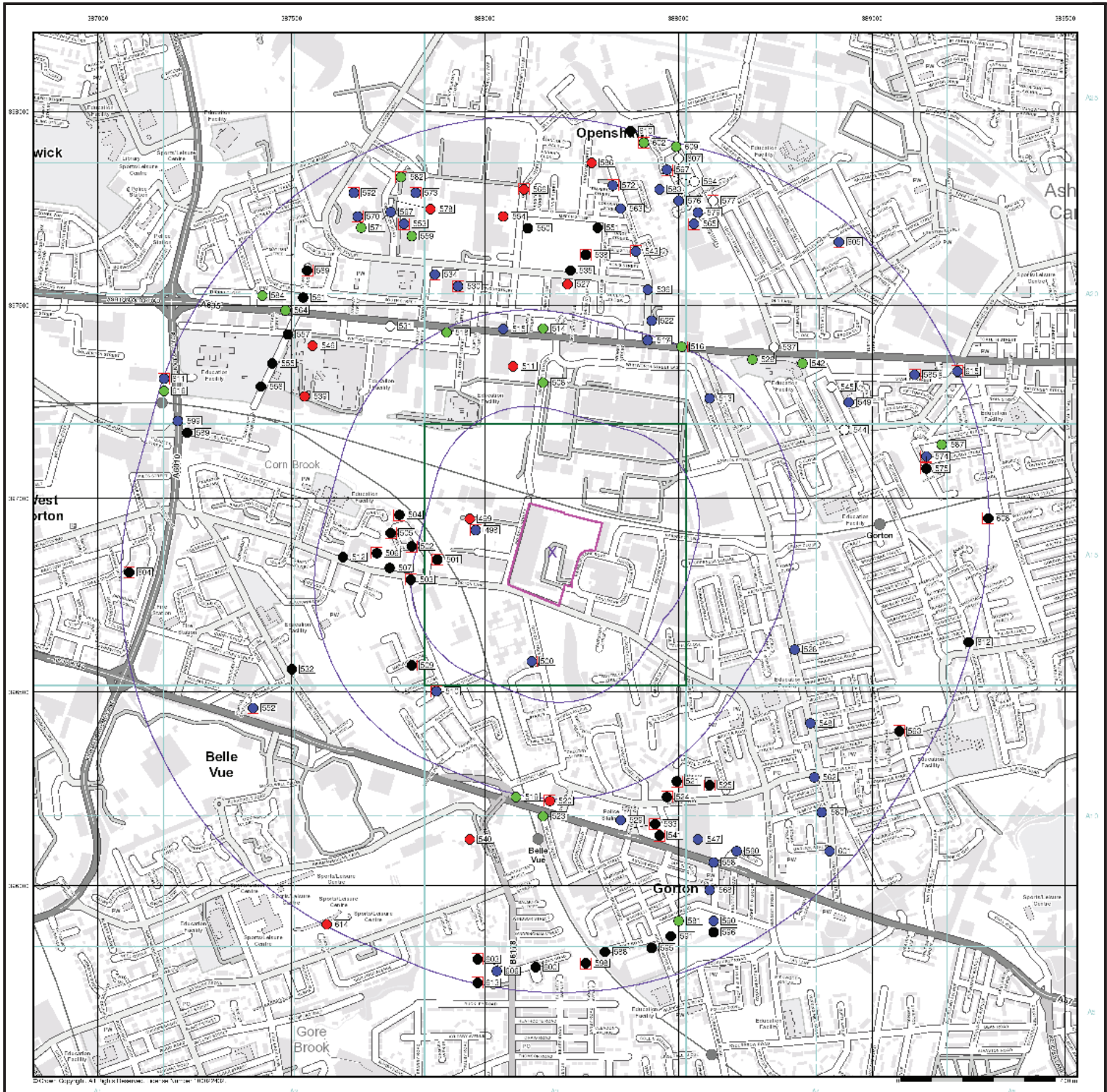


Order Details

Order Number:	174869711_1_1
Customer Ref:	P068065.000
National Grid Reference:	388170, 396860
Slice:	A
Site Area (Ha):	3.81
Search Buffer (m):	1000

Site Details

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General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location

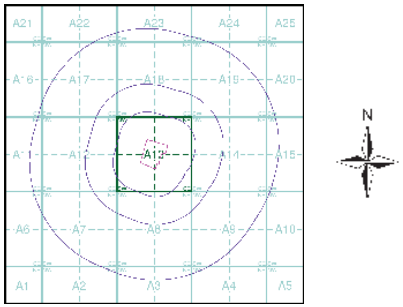
Agency and Hydrological (Boreholes)

- BGS Borehole Depth 0 - 10m
- BGS Borehole Depth 10 - 30m
- BGS Borehole Depth 30m +
- Confidential
- Other

For Borehole information please refer to the Borehole .csv file which accompanied this slice.

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

Borehole Map - Slice A



Order Details

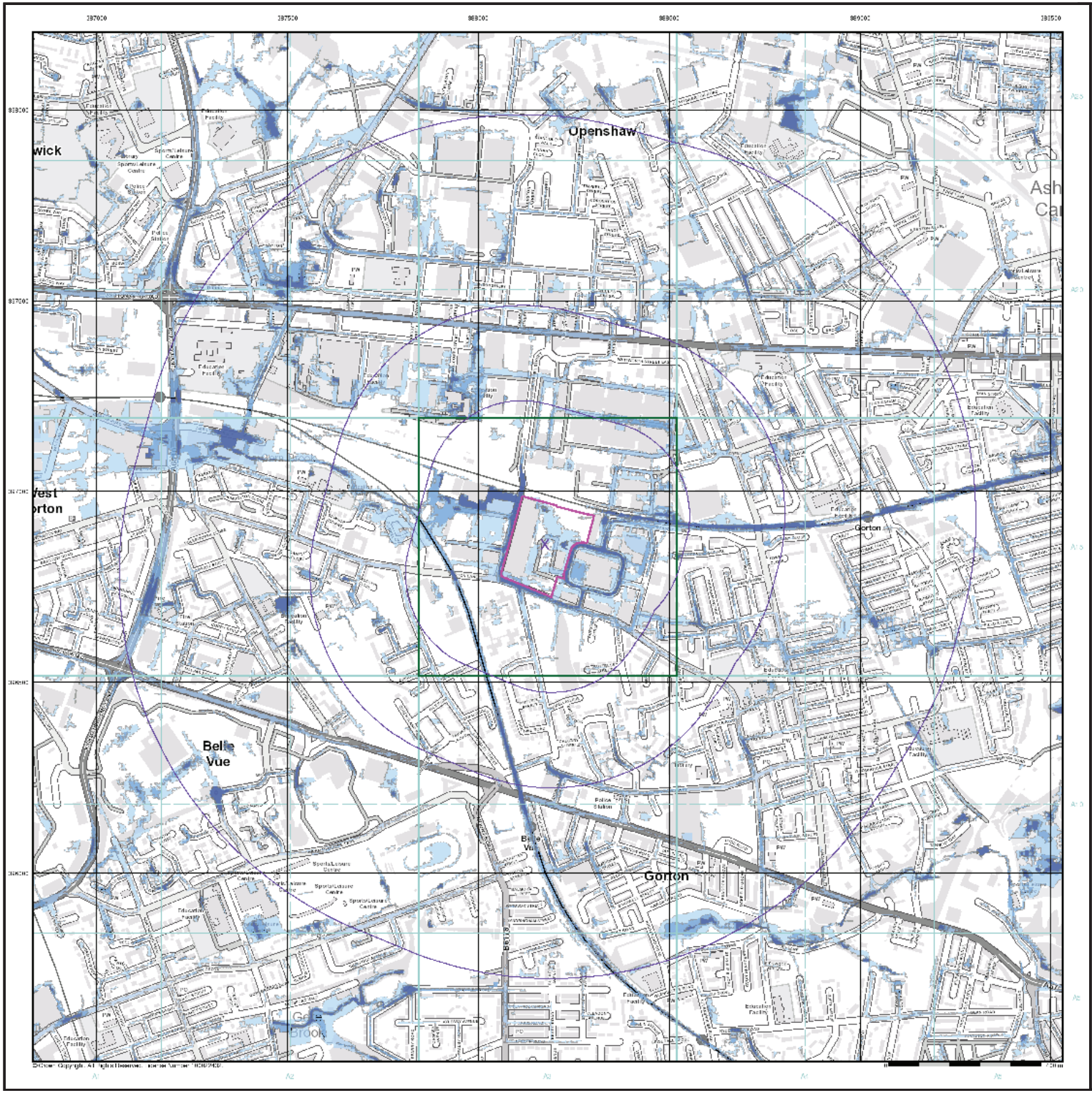
Order Number:	174869711_1_1
Customer Ref:	P068065.000
National Grid Reference:	388170, 396860
Slice:	A
Site Area (Ha):	3.81
Search Buffer (m):	1000

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General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Risk of Flooding from Surface Water

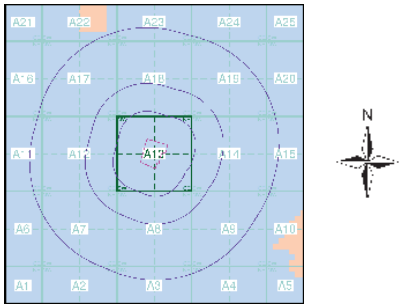
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

EA/NRW Suitability Map - Slice A



Order Details

Order Number:	174869711_1_1
Customer Ref:	P068065.000
National Grid Reference:	388170, 396860
Slice:	A
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Geology 1:50,000 Maps Legends

Artificial Ground and Landslip

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	MGR	Made Ground (Undivided)	Artificial Deposit	Not Supplied - Holocene
	WMGR	Infilled Ground	Artificial Deposit	Not Supplied - Holocene

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Not Supplied - Holocene
	TILLD	Till, Devensian	Diamicton	Not Supplied - Devensian
	GFDUD	Glaciofluvial Deposits, Devensian	Sand and Gravel	Not Supplied - Devensian
	GFICD	Glaciofluvial Ice Contact Deposits, Devensian	Sand and Gravel	Not Supplied - Devensian

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	CHES	Chester Formation	Sandstone	Not Supplied - Olenekian
	MM	Manchester Marls Formation	Mudstone	Not Supplied - GUADALUPIAN
	CS	Collyhurst Sandstone Formation	Sandstone	Not Supplied - Cisuralian
	HA	Halesowen Formation	Mudstone, Siltstone and Sandstone	Not Supplied - Westphalian
	GML	Great Mine Limestone	Limestone	Not Supplied - Westphalian
	HTS	Holt Town Sandstone Bed	Sandstone	Not Supplied - Westphalian
	PUCM	Pennine Upper Coal Measures Formation	Mudstone, Siltstone and Sandstone	Not Supplied - Westphalian
	OPS	Openshaw Sandstone	Sandstone	Not Supplied - Westphalian
	ETM	Etruria Formation	Sandstone and Mudstone	Not Supplied - Westphalian
		Faults		
		Rock Segments		

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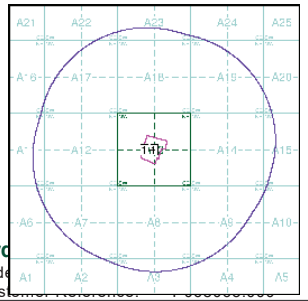
Geology 1:50,000 Maps

This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.
The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

Geology 1:50,000 Maps Coverage

Map ID:	1
Map Sheet No:	085
Map Name:	Manchester
Map Date:	2010
Bedrock Geology:	Available
Superficial Geology:	Not Available
Artificial Geology:	Not Available
Faults:	Not Supplied
Landslip:	Not Available
Rock Segments:	Not Supplied

Geology 1:50,000 Maps - Slice A



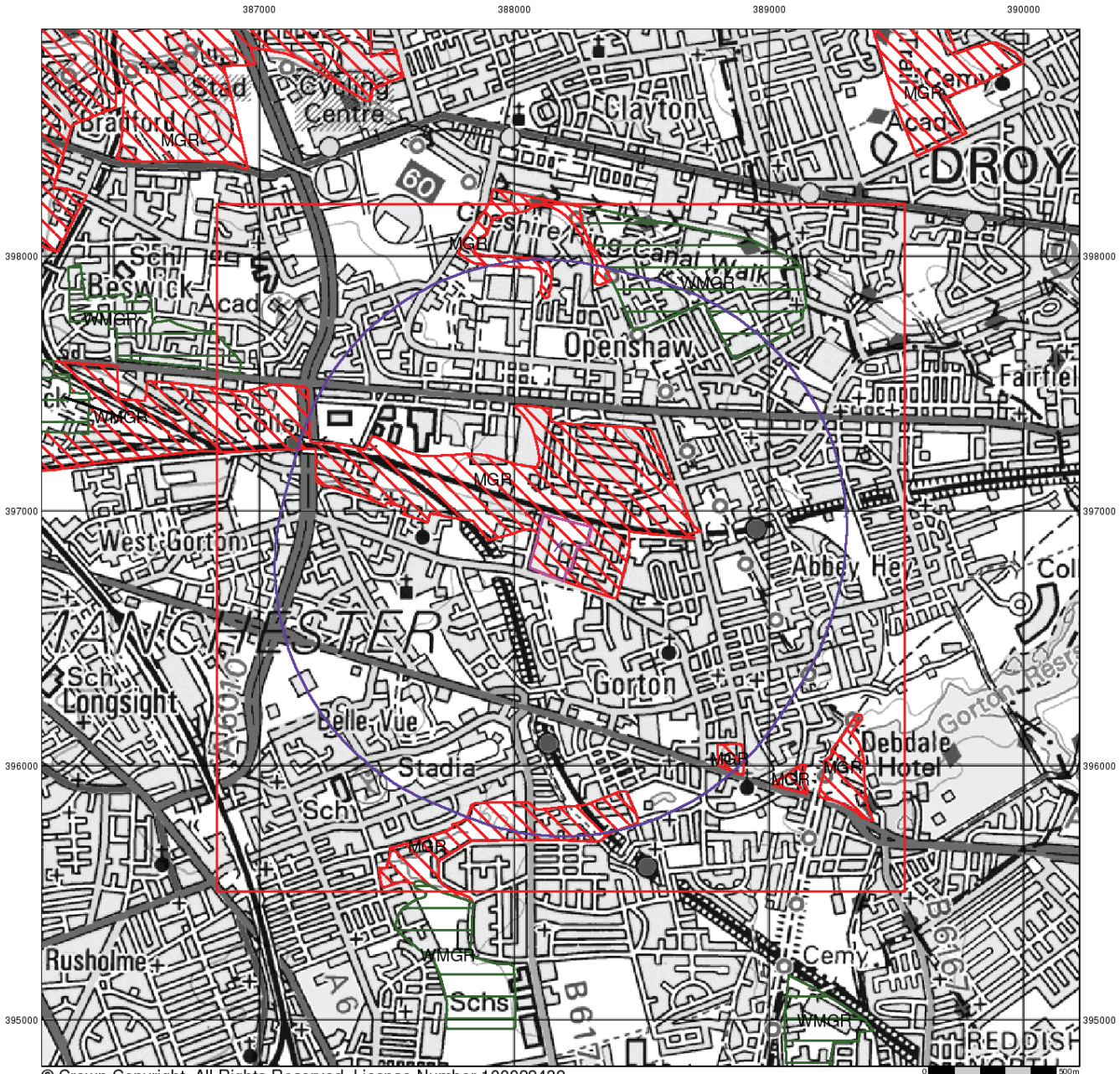
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National Grid Reference: 388170, 396860
Slice: A
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Search Buffer (m): 1000

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Artificial Ground and Landslip

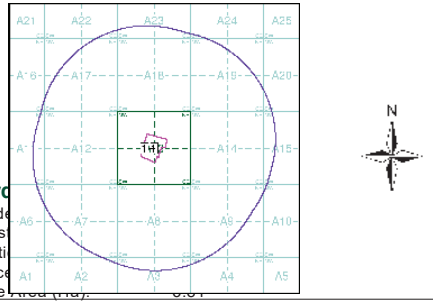
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

Artificial ground includes:

- Made ground - man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground - areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground - areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground - areas where the surface has been reshaped.
- Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

Artificial Ground and Landslip Map - Slice A

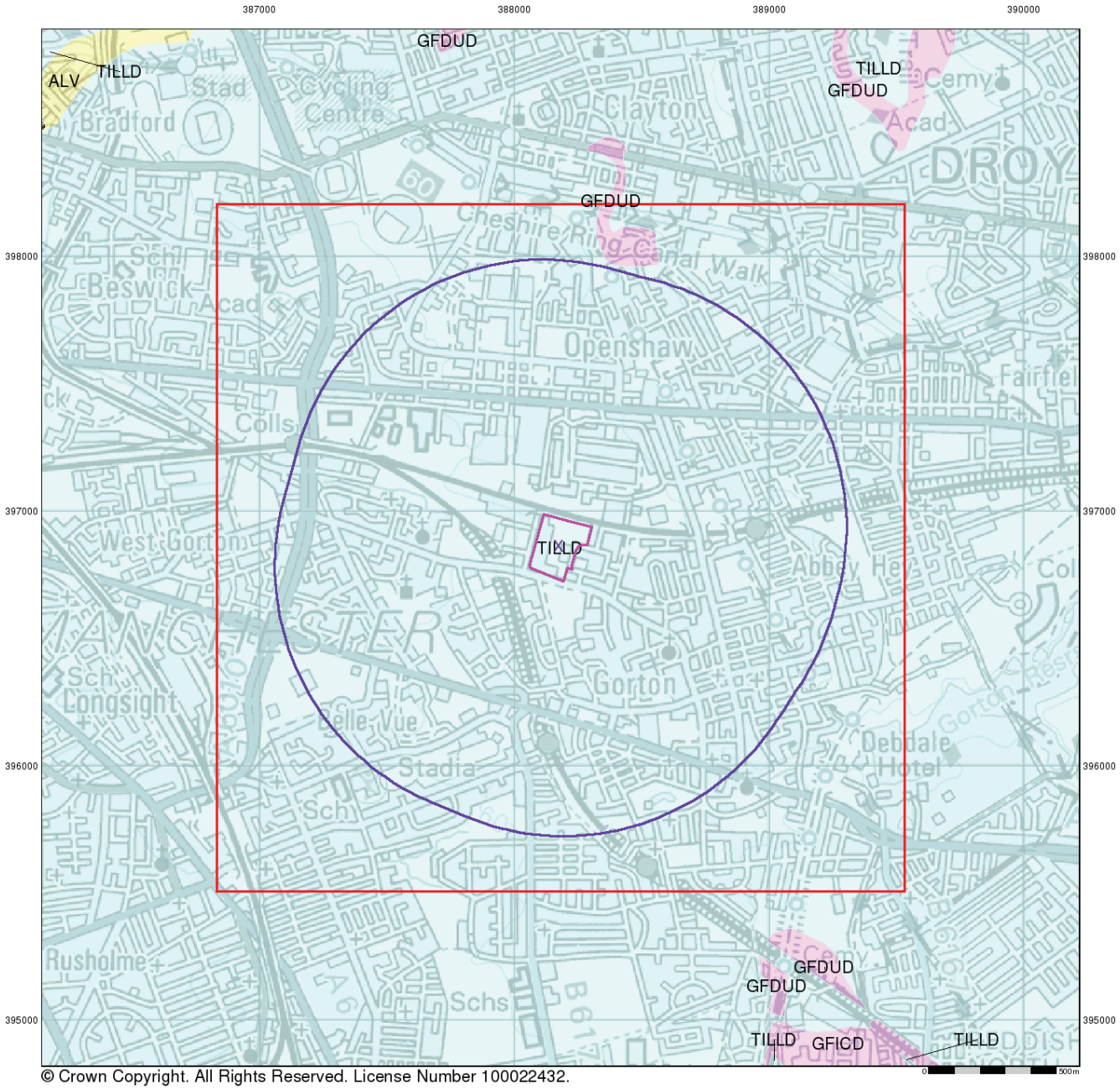


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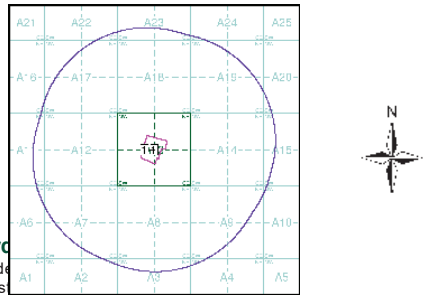
Superficial Geology

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

Superficial Geology Map - Slice A



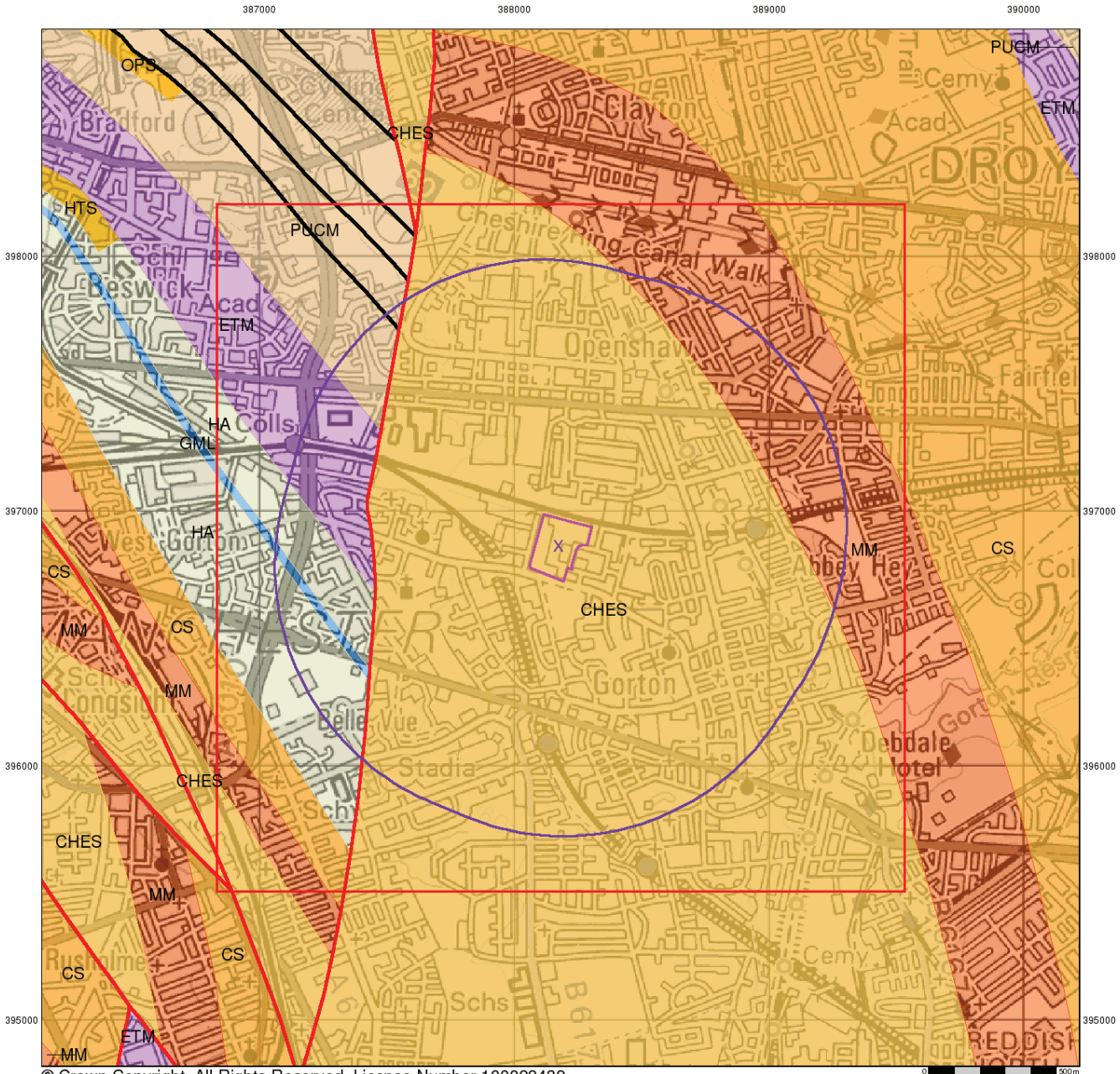
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National Grid Reference: 388170, 396860
Slice: A
Site Area (Ha): 3.81
Search Buffer (m): 1000

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Bedrock and Faults

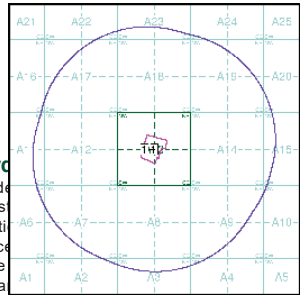
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

Bedrock and Faults Map - Slice A

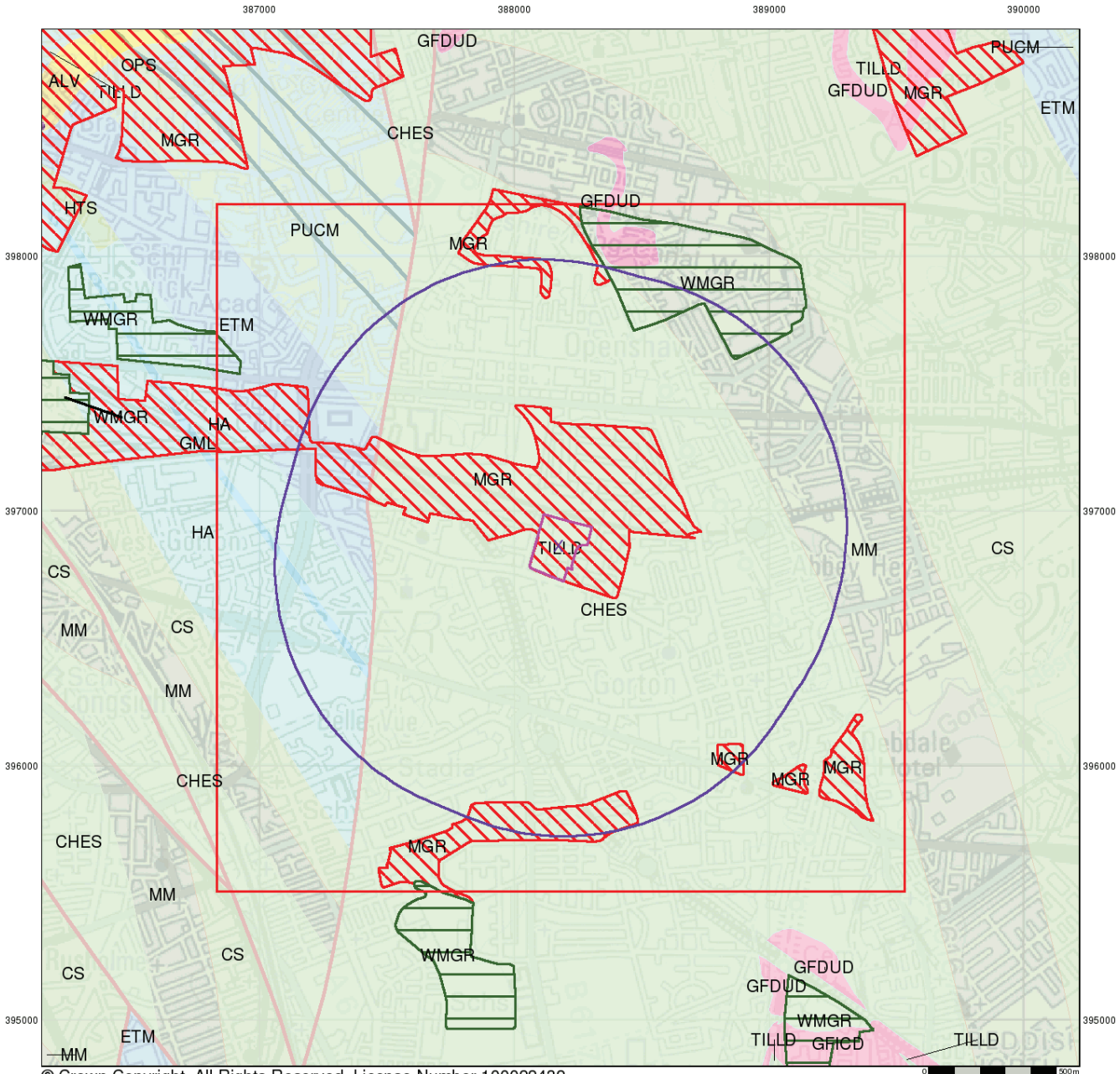


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Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

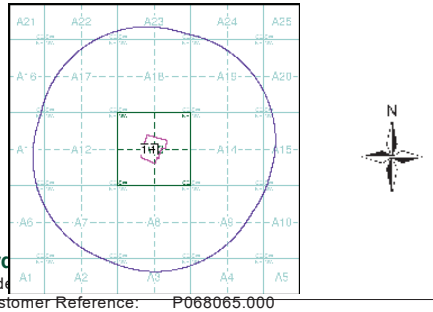
Additional Information

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

Contact

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Keyworth
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NG12 5GG
Telephone: 0115 936 3143
Fax: 0115 936 3276
email: enquiries@bgs.ac.uk
website: www.bgs.ac.uk

Combined Geology Map - Slice A

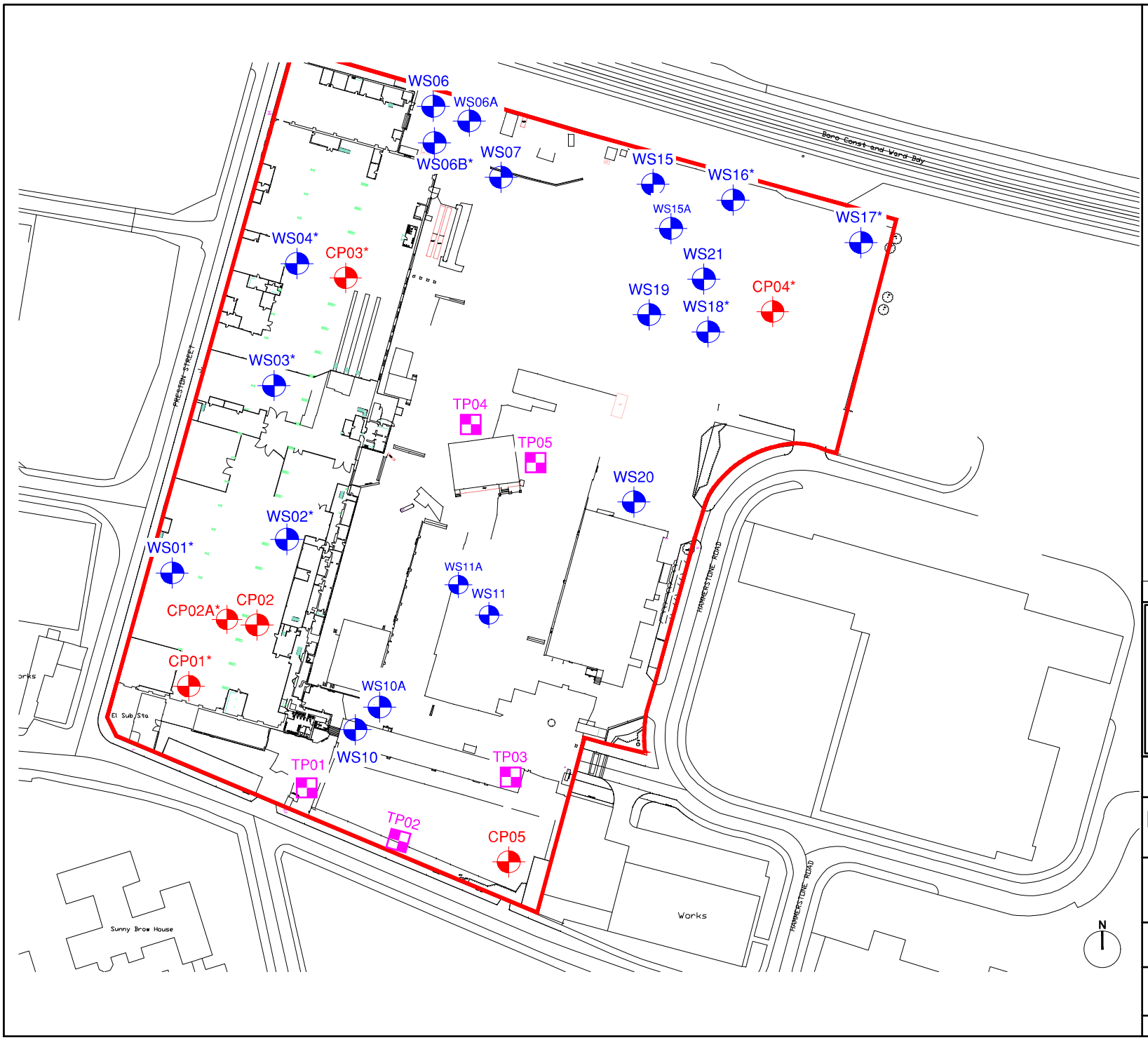


Order Details:

Customer Reference:	P068065.000
National Grid Reference:	388170, 396860
Slice:	A
Site Area (Ha):	3.81
Search Buffer (m):	1000

Site Details:

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Window sample borehole locations

Cable Percussive borehole locations

* Installs

Trial Pit locations

Rev:	Description:	Date:	By:	Chkd:

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t: 0161 236 2394
e: manchester@curtins.com
www.curtins.com

Structures - Civils - Environmental - Infrastructure - Transport Planning - Sustainability - Expert Advisory Services
Birmingham - Bristol - Cardiff - Douglas - Edinburgh - Kendal - Leeds - Liverpool - London - Manchester - Nottingham

Status: INFORMATION

Project: HAMMERSTONE ROAD DEPOT, MANCHESTER

Drg Title: EXPLORATORY HOLE LOCATION PLAN

Scale:	Size:	First Issue:	Drawn:	Checked:
NTS	A3	29/01/19	ST	NF

Drg No: 068065-CUR-00-XX-DR-GE-003-V01

Rev: V01

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Merchants Exchange
Manchester
M1 5WG

Borehole Log

Borehole No.
CP01
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type CP
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 15/01/2019 - 15/01/2019	Logged By ST

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.20			MADE GROUND: Concrete (required coring).
		0.60	ES					MADE GROUND: Blackish brown gravelly SAND. Sand is fine. Gravels are fine to coarse angular of brick fragments and slag.
		1.20		N=8 (4,3/3,2,2,1)				
		2.00		N=10 (5,4/3,3,2,2)				
		3.00		N=10 (3,4/3,3,2,2)				
		4.00		N=10 (3,3/2,3,3,2)				
		5.00		N=2 (1,1/1,0,1,0)	4.80			Very soft brown with grey mottling slightly gravelly CLAY. Gravels are fine subrounded to subangular of mixed lithologies.
		5.00 - 5.10	D					
		6.50 - 6.95	U		6.50			Stiff brown slightly gravelly CLAY. Gravels are fine angular of coal.
		6.90 - 7.00	D					
		8.00		N=23 (4,5/5,5,6,7)				*8.00 to 10.00mbgl Clay becomes silty slightly gravelly and slightly sandy.*
		8.00 - 8.45	D					
		9.50 - 9.95	U					
		9.90 - 10.00	D		10.00			End of borehole at 10.00 m

Remarks
Concrete coring from 0.0 to 0.20mbgl. Hand excavated service inspection pit to 1.20mbgl. No groundwater encountered.

AGS

17-19 Whitworth Street West Merchants Exchange Manchester M1 5WG	**Borehole Log**		Borehole No. **CP02** Sheet 1 of 1
Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type CP
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 16/01/2019 - 16/01/2019	Logged By ST

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.40			MADE GROUND: Concrete (required coring) depth not proven. End of borehole at 0.40 m

Remarks
Concrete coring from 0.0 to 0.40mbgl. Hole repositioned due to depth of concrete slab.

17-19 Whitworth Street West
Merchants Exchange
Manchester
M1 5WG

Borehole Log

Borehole No.
CP02A
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type CP
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 16/01/2019 - 16/01/2019	Logged By ST

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.20			MADE GROUND: Concrete (required coring).
		0.50 - 0.60	ES					MADE GROUND: Blackish brown very gravelly fine to coarse SAND. Gravels are fine to coarse angular of brick fragments, ash, tile, slag and clinker.
		1.20		N=4 (2,1/1,1,1,1)				
		2.00		N=8 (2,2/2,2,2,2)				
		3.00		N=7 (2,1/2,2,1,2)				
		4.00		N=22 (4,10/13,6,2,1)				
					4.30			NO RECOVERY.
	▼	5.00		N=22 (3,3/4,5,6,7)				
		5.40 - 5.50	D		5.30			Stiff brown with grey mottling slightly gravelly CLAY. Gravel is fine angular of coal and chert.
		6.50 - 6.95	U					
		7.00 - 7.10	D					
		8.00		N=30 (4,5/6,7,8,9)				
		8.00 - 8.45	D					
		9.50 - 9.95	U					
		10.00	D		10.00			End of borehole at 10.00 m

Remarks
Concrete coring from 0.0 to 0.20mbgl. Hand excavated service inspection pit to 1.20mbgl. Groundwater seepage encountered at 4.90mbgl. No recovery recorded at 4.30-5.30mbgl due to possible pushed slag cobble.

AGS

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Merchants Exchange
Manchester
M1 5WG

Borehole Log

Borehole No.
CP03
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type CP
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 17/01/2019 - 17/01/2019	Logged By ST

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.21			MADE GROUND: Concrete (required coring).
		0.60	ES					MADE GROUND: Brown very sandy cobbly fine to coarse angular GRAVEL of brick fragments, slate, sandstone and slag. Sand is fine to coarse of ash. Angular cobbles of slag.
		1.20		50 (3,5/8,20,22,)				
		2.00		50 (25 for 70mm/50 for 150mm)				
		3.00		50 (25 for 125mm/50 for 150mm)				
					3.70			Firm brown with grey mottling silty slightly gravelly CLAY. Gravels are fine subrounded to subangular of mudstone.
	▼	4.00 - 4.45	U					
		4.50 - 4.60	D					
		5.00		N=36 (3,5/6,11,9,10)				*Clay becomes very stiff.*
		5.00 - 5.45	D					
		6.50 - 6.95	U					
		7.00	D					
		8.00		N=26 (7,4/4,6,8,8)				*Clay becomes stiff.*
		8.00 - 8.45	D					
		9.50 - 9.95	U					
		10.00	D		10.00			End of borehole at 10.00 m

Remarks
Concrete coring from 0.0 to 0.21mbgl. Hand excavated service inspection pit to 1.20mbgl. Groundwater seepage encountered at 4.00mbgl.

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Borehole Log

Borehole No.
CP04
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type CP
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 14/01/2019 - 14/01/2019	Logged By ST

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.10			MADE GROUND: Concrete (required coring).
					0.20			MADE GROUND: Brown angular COBBLES of mixed lithologies.
		0.80	ES					MADE GROUND: Dark brown very sandy clayey GRAVEL. Gravel is fine to coarse angular of brick fragments, slate and slag. Contains pieces of metal.
		1.20		50 (25 for 145mm/50,,,)				*At 0.90mbgl fire brick fragments.*
		2.00		N=6 (4,3/2,1,1,2)				
		3.00		N=18 (3,4/5,4,4,5)				
		3.50 - 3.55	D		3.40			Stiff brown with grey mottling slightly gravelly CLAY. Gravels are fine subrounded to subangular of mixed lithologies.
		4.00 - 4.45	D					
		4.00 - 4.45	U					
		5.00	D					*5.00 to 5.20mbgl Clay becomes very gravelly.*
		5.00		N=30 (5,5/5,7,9,9)				
		5.10 - 5.20	D					
		6.50 - 6.95	U					
		7.00	D					
		8.00		N=30 (5,5/7,8,7,8)				*8.00 to 10.00mbgl Clay becomes sandy. Sand is fine.*
		8.00 - 8.45	D					
		9.50 - 9.60	D					*9.50 to 10.00mbgl Clay becomes gravelly.*
		9.50 - 9.95	U					
					10.00			End of borehole at 10.00 m

Remarks
Concrete coring from 0.0 to 0.10mbgl. Hand excavated service inspection pit to 1.20mbgl. No groundwater encountered.

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17-19 Whitworth Street West Merchants Exchange Manchester M1 5WG	**Borehole Log**		Borehole No. **CP05** Sheet 1 of 1
Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type CP
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 18/01/2019 - 18/01/2019	Logged By ST

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.20			MADE GROUND: Concrete (required coring).
		0.60	ES					MADE GROUND: Brown very sandy cobbly fine to coarse angular GRAVEL. Gravel consists of brick fragments, ash, slate, sandstone and slag. Sand is fine to coarse. Cobbles of slag.
		1.20		N=7 (3,4/2,2,1,2)				
		1.70	D		1.60			Soft dark brown slightly gravelly CLAY. Gravels are fine angular of mixed lithologies.
		1.80	ES					
		2.00		N=12 (1,2/3,3,3,3)				
		2.00 - 2.45	D					
		3.00	D		2.80			Stiff brown slightly gravelly CLAY. Gravels are fine rounded to angular of coal and mudstone.
		3.00 - 3.45	U					
		4.00		N=33 (3,4/6,8,10,9)				
		4.00 - 4.45	D					
		5.00 - 5.45	U					
		5.50	D					
		6.50		N=24 (5,5/5,5,7,7)				
		6.50 - 6.95	D					
		8.00 - 8.45	U					
		8.50	D					
		9.00		N=23 (3,4/5,5,6,7)				
		9.50 - 9.95	D					
					10.00			End of borehole at 10.00 m

Remarks
Concrete coring from 0.0 to 0.20mbgl. Hand excavated service inspection pit to 1.20mbgl. No groundwater encountered.

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Trial Pit Log

Trialpit No
TP01
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: - Level:	Date 18/01/2019
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Dimensions (m): Depth 3.00	Scale 1:50
Client: Morgan Sindall			Logged ST

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
	Depth	Type	Results				
				0.35			MADE GROUND: Asphalt over concrete and brick fill.
	0.80	ES		0.90			MADE GROUND: Dark brown to black very gravelly very sandy CLAY. Gravel is fine to coarse angular to subrounded of slack, brick fragments, clinker, tile, glass and pottery. Sand is fine to coarse including ash.
				1.00			MADE GROUND: Reddish orange very sandy gravelly CLAY. Sand is fine to coarse. Gravels are fine to medium subrounded to subangular of mixed lithologies including ash.
				1.35			Soft grey sandy gravelly CLAY. Sand is fine. Gravels are fine angular to subrounded of mixed lithologies.
	2.20	D					Stiff light brown mottled grey very gravelly sandy cobbly CLAY. Gravels are fine to coarse subrounded to angular of mudstone. Sand is fine to coarse. Cobbles are rounded of mixed lithologies.
				3.00			End of pit at 3.00 m

Remarks: No groundwater encountered.

Stability: Pit remained open and stable.

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Trial Pit Log

Trialpit No
TP02
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: - Level:	Date 18/01/2019
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Dimensions (m): Depth 0.60	Scale 1:50
Client: Morgan Sindall			Logged ST

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.60	ES		0.60			MADE GROUND: Brown sandy cobbly bouldery slightly clayey GRAVEL. Gravel is fine to coarse angular of mixed lithologies.
							At 0.60mbgl Unknown service running adjacent and parallel to the southern wall. Disused electrical service running parallel through the centre.
							End of pit at 0.60 m

Remarks: No groundwater encountered. Trial pit terminated due to services.

Stability: Pit remained open and stable.

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Trial Pit Log

Trialpit No
TP03
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: - Level:	Date 18/01/2019
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Dimensions (m): Depth 0.10	Scale 1:50
Client: Morgan Sindall			Logged ST

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
				0.10			MADE GROUND: Asphalt over GRAVEL. Gravel is fine to coarse angular of concrete.
							End of pit at 0.10 m

1 2 3 4 5 6 7 8 9 10

Remarks: No groundwater encountered. Trial pit terminated due to a railway line running east west.

Stability: Pit remained open and stable.

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Trial Pit Log

Trialpit No
TP04
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: - Level:	Date 18/01/2019
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Dimensions (m): Depth 3.30	Scale 1:50
Client: Morgan Sindall			Logged ST

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.50	ES		0.35			MADE GROUND: Concrete.
							MADE GROUND: Brown very sandy clayey cobbly fine to coarse subrounded to angular GRAVEL of brick fragments, slag, clinker and sandstone. Sand is fine to coarse. Angular cobbles of slag. *At 0.40mbgl railway sleeper. Hydrocarbon odour.*
				1.60			Stiff orangish brown mottled grey very gravelly sandy CLAY. Gravel is fine to medium rounded to subangular of mudstone. Sand is fine to coarse.
				2.20			Soft dark grey silty slightly sandy slightly gravelly organic CLAY. Sand is fine. Gravel is fine to medium.
				2.80			Stiff brown mottled grey very gravelly sandy slightly silty CLAY. Gravels is fine to medium rounded of chert, mudstone and coal. Sand is fine to medium identified in pockets.
				3.30			End of pit at 3.30 m

Remarks: No groundwater encountered.

Stability: Pit remained open and stable.

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Trial Pit Log

Trialpit No
TP05
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: - Level:	Date 18/01/2019
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Dimensions (m): Depth 1.40	Scale 1:50
Client: Morgan Sindall			Logged ST

Water Strike	Samples and In Situ Testing: Depth	Type	Results	Depth (m)	Level (m)	Legend	Stratum Description
	0.40	ES		0.35			MADE GROUND: Concrete with re bar.
							MADE GROUND: Dark brown sandy clayey cobbly GRAVEL. Gravel is fine to coarse angular of brick fragments, concrete, slag, fire brick, wood and metal.
							Concrete step at western edge of pit.
							Concrete step at centre of pit.
				1.35			Stiff brown with grey and orange mottling very gravelly sandy CLAY. Gravels are fine to medium subrounded to subangular of mixed lithologies.
				1.40			End of pit at 1.40 m

Remarks: No groundwater encountered. Trial pit terminated due to concrete obstructions.

Stability: Pit remained open and stable.

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Borehole Log

Borehole No.
WS01
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 16/01/2019 - 16/01/2019	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.15			MADE GROUND: Grey concrete (required coring).
					0.37			MADE GROUND: Grey concrete with brick fragments.
		1.20 1.20	D	N=3 (1,1/1,0,1,1)				MADE GROUND: Black and dark brown gravelly fine to coarse SAND. Gravel is fine to coarse angular of brick, concrete, clinker, slag and ash.
		2.00		N=2 (1,0/0,1,0,1)				
		3.00		N=8 (1,2/2,2,2,2)				
	▼	4.00		N=0 (1,0/0,0,0,0)				
		4.60	ES		4.50			MADE GROUND: Very soft dark greyish-brown slightly gravelly, sandy CLAY. Gravel is fine to medium of brick, concrete, coal, ash and clinker.
		5.00 5.10	ES	N=19 (3,3/4,4,5,6)	5.00			Stiff brown mottled grey slightly sandy, slightly gravelly CLAY. Gravel is fine to medium, sub-angular to sub-rounded sandstone.
					6.00			End of borehole at 6.00 m

1 2 3 4 5 6 7 8 9 10

Remarks
Service inspection pit excavated to 1.20m bgl. Groundwater strike encountered at 4.30m bgl.

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Borehole Log

Borehole No.
WS02
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 16/01/2019 - 16/01/2019	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.28			MADE GROUND: Grey concrete (required coring).
		0.50	ES					MADE GROUND: Dark brown gravelly fine to coarse SAND with rare cobbles. Gravel is fine to coarse, angular to sub-angular of concrete, clinker, brick, rare ash, slag. Cobbles are angular to sub-angular of concrete, brick and slag.
		1.20		N=1 (1,0/0,0,1,0)				
					1.70			MADE GROUND: Soft brown slightly gravelly, sandy CLAY with rare cobbles. Gravel is fine to coarse and angular to sub-angular of brick, clinker, coal, ash and sandstone. Cobbles are angular to sub-angular of brick and sandstone.
		2.00		N=12 (4,6/3,3,3,3)				
		3.00		N=7 (1,2/1,2,2,2)				
					3.30			MADE GROUND: Soft dark grey sandy CLAY.
					3.50			Stiff brown mottled grey slightly gravelly, sandy CLAY. Gravel is fine to medium and sub-angular of coal and sandstone.
		4.00		N=23 (3,4/5,6,6,6)				
		4.50	D					
		5.00		N=34 (6,6/8,8,9,9)				*Clay becomes very stiff.*
					5.45			End of borehole at 5.45 m

Remarks
Service inspection pit excavated to 1.20m bgl. No groundwater encountered.

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Borehole Log

Borehole No.
WS03
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 18/01/2019 - 18/01/2019	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.30			MADE GROUND: Grey concrete (required coring).
		0.50	ES					MADE GROUND: Dark brown gravelly slightly silty, gravelly fine to coarse SAND. Gravel is fine to medium and angular to sub-angular of concrete, clinker with rare brick, metal, ash and glass.
		1.20		N=4 (1,1/1,1,1,1)				
		2.00		N=0 (1,0/0,0,0,0)				
		2.80	ES		2.70			Soft grey sandy CLAY. Strong organic odour.
		3.00		N=4 (1,2/1,1,1,1)				
		3.60	ES		3.50			Very stiff brown mottled grey slightly sandy, slightly gravelly CLAY. Gravel is fine to medium and sub-angular to rounded of sandstone with rare plant debris. Hydrocarbon odour in debris and fractures.
		4.00		N=32 (4,5/7,7,8,10)				
		4.60		N=38 (7,8/9,9,10,10)				
					5.05			End of borehole at 5.05 m

Remarks
Service inspection pit excavated to 1.20m bgl. Strong organic odour at 2.70m - 3.50m. Visual and olfactory contamination noted in soils between 3.50 to 4.00mbgl. No groundwater encountered.

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Borehole Log

Borehole No.
WS04
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 16/01/2019 - 16/01/2019	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.26			MADE GROUND: Grey concrete (required coring).
					0.80			MADE GROUND: Dark brown gravelly fine to coarse SAND with rare cobbles. Gravel is fine to coarse and angular to sub-rounded clinker, ash, slate, concrete and slag. Cobbles are angular to sub-rounded of slag.
		1.20		N=1 (1,0/0,1,0,0)	1.40			MADE GROUND: Dark greyish-brown gravelly fine to coarse SAND. Gravel is fine to coarse and angular to sub-rounded of concrete, brick, ash and clinker.
					1.60			MADE GROUND: Black gravelly fine to medium SAND. Gravel is fine to medium angular to sub-angular of clinker, glass and sandstone.
		2.00		N=8 (7,5/3,2,2,1)	1.90			MADE GROUND: Brown gravelly fine to medium SAND. Gravel is fine to coarse of ash, clinker, brick and glass.
					2.10			MADE GROUND: Brown sandy, gravelly soft CLAY with rare cobbles. Gravel is fine to coarse and angular to sub-rounded of brick, concrete, clinker, glass, metal and coal. Cobbles are angular to sub-rounded of brick and slag.
		3.00		N=16 (5,10/6,4,3,3)				
		3.40	ES		3.30			MADE GROUND: Brown gravelly fine to medium SAND. Gravel is fine to coarse of ash, clinker, brick and glass.
		3.80	ES		3.70			Soft grey sandy very CLAY. Strong hydrocarbon odour.
		4.00		N=27 (5,5/6,6,7,8)				Stiff brown slightly gravelly, sandy CLAY. Gravel is fine to medium and sub-angular of sandstone.
					5.00			End of borehole at 5.00 m

Remarks
Service inspection pit excavated to 1.20m bgl. Visual and olfactory on clay surface at 3.30 - 3.50m bgl. No groundwater encountered. evidence recorded in the logs at 3.

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Borehole Log

Borehole No.
WS05
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 16/01/2019 - 16/01/2019	Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.20			MADE GROUND: Concrete.
								End of borehole at 0.20 m

1 2 3 4 5 6 7 8 9 10

Remarks
Concrete coring from 0.0 to 0.20m bgl. Borehole terminated due to metal obstructions.

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Borehole Log

Borehole No.
WS05A
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 16/01/2019 - 16/01/2019	Logged By

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.20			MADE GROUND: Concrete.
								End of borehole at 0.20 m

1 2 3 4 5 6 7 8 9 10

Remarks
Concrete coring from 0.0 to 0.20m bgl

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17-19 Whitworth Street West Merchants Exchange Manchester M1 5WG	**Borehole Log**		Borehole No. **WS06** Sheet 1 of 1
Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 17/01/2019 - 17/01/2019	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.10			MADE GROUND: Asphalt (required coring).
					0.18			MADE GROUND: Grey concrete (required coring).
					0.26			MADE GROUND: Light red medium to coarse SAND.
					0.66			MADE GROUND: Greyish-brown gravelly medium to coarse SAND. Gravel is fine to coarse and angular to sub-angular of concrete, brick, clinker, coal, plastic and rare ash. End of borehole at 0.66 m

Remarks
Hand pit terminated at 0.66m bgl due to concrete obstruction at the east and west of hand pit.

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Borehole Log

Borehole No.
WS06A
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 17/01/2019 - 17/01/2019	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.10			MADE GROUND: Asphalt (required coring).
					0.18			MADE GROUND: Grey concrete.
					0.24			MADE GROUND: Brown gravelly medium to coarse SAND. Gravel is fine to coarse and angular to sub-angular of concrete, brick, clinker, coal, plastic and rare ash.
					0.26			MADE GROUND: Unknown obstruction.
								End of borehole at 0.26 m

Remarks
Hand pit terminated on unknown obstruction at 0.26m bgl.

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Borehole Log

Borehole No.
WS06B
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 17/01/2019 - 17/01/2019	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.10			MADE GROUND: Asphalt (required coring).
					0.12			MADE GROUND: Grey gravelly SAND. Gravel of concrete.
		1.00		N=5 (2,1/2,1,1,1)				MADE GROUND: Brown gravelly medium to coarse SAND with rare cobbles. Gravel is fine to coarse and angular to sub-angular of brick, concrete, slate, wood, rare ash and clinker. Cobbles are angular to sub-angular of brick and wood.
					1.30			MADE GROUND: Soft brown slightly sandy CLAY with rare gravel of ash and brick.
		1.50		N=8 (25,21/4,2,1,1)	1.50			MADE GROUND: Brick wall and concrete.
					1.60			MADE GROUND: Dark brown gravelly medium to coarse SAND. Gravel is fine to medium angular to subangular of concrete and bricks.
		2.00		N=7 (2,1/2,2,1,2)				
		3.00		N=6 (1,1/2,2,1,1)	3.00			Very soft brown sandy CLAY. Rare grey mottling.
		3.50	D					
		4.00		N=6 (0,0/6 for 190mm)	4.00			End of borehole at 4.00 m

Remarks
Service inspection pit excavated to 1.20m bgl. No groundwater encountered. Borehole terminated at 4.45m bgl due to continued collapse of Made Ground soils. Borehole could not be cased due to obstructions within Made Ground. No recovery from 2.0mbgl to 3.0mbgl.

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Borehole Log

Borehole No.
WS07
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 15/01/2019 - 16/01/2019	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.10			MADE GROUND: Grey concrete (required coring).
					0.17			MADE GROUND: Light brown gravelly fine to coarse SAND. Gravel is fine to coarse and sub-angular to sub-rounded of concrete and sandstone.
		0.50	ES		0.28			MADE GROUND: Dark brown gravelly fine to coarse SAND. Gravel is fine to coarse angular to sub-angular of concrete, brick and glass with rare ash and clinker.
					0.44			MADE GROUND: Brick cobbles.
		1.20		N=14 (10,5/4,4,3,3)				MADE GROUND: Black and orangish-brown gravelly medium to coarse SAND with rare cobbles. Gravel is fine to coarse and angular to sub-angular of ash, clinker, concrete, brick and slag. Cobbles of slag.
		1.70		N=50 (8,8/10,12,14,14)				
					2.15			End of borehole at 2.15 m

Remarks
Service inspection pit excavated to 1.20m bgl. No groundwater encountered. Borehole terminated at 2.15m due to SPT Refusal.

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Borehole Log

Borehole No.
WS08
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 21/01/2019 - 21/01/2019	Logged By ST

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.20			MADE GROUND: Concrete (required coring).
					0.30			MADE GROUND: Brick fill.
								End of borehole at 0.30 m

Remarks
Concrete coring from 0.0 to 0.30mbgl. No groundwater encountered. Hole terminated due to brick obstruction.

17-19 Whitworth Street West Merchants Exchange Manchester M1 5WG	**Borehole Log**		Borehole No. **WS10** Sheet 1 of 1
Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 18/01/2019 - 18/01/2019	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.40	ES		0.24			MADE GROUND: Grey concrete (required coring).
					0.61			MADE GROUND: Dark brown gravelly fine to coarse SAND. Gravel is fine to coarse angular to sub-angular of concrete, brick ash and clinker with rare glass. End of borehole at 0.61 m

Remarks
Hand pit terminated due to concrete obstruction at the base of the pit.

17-19 Whitworth Street West Merchants Exchange Manchester M1 5WG	**Borehole Log**		Borehole No. **WS10A** Sheet 1 of 1
Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 18/01/2019 - 18/01/2019	Logged By ST

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.30			MADE GROUND: Grey concrete (required coring). End of borehole at 0.30 m

Remarks
Hand pit terminated due to metal obstruction at the base of the pit.

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17-19 Whitworth Street West
Merchants Exchange
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M1 5WG

Borehole Log

Borehole No.
WS11
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 21/01/2019 - 21/01/2019	Logged By ST

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.30			MADE GROUND: Concrete (required coring).
								End of borehole at 0.32 m

Remarks
Concrete coring from 0.0 to 0.32 on concrete obstruction. No groundwater encountered.

17-19 Whitworth Street West
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M1 5WG

Borehole Log

Borehole No.
WS11A
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 21/01/2019 - 21/01/2019	Logged By ST

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.20			MADE GROUND: Concrete (required coring).
		0.50	ES					MADE GROUND: Dark brown very sandy clayey GRAVEL. Gravel is fine to coarse of ash, brick fragments, tile, clinker and slag. Contains cobbles of fire brick.
		1.20		N=12 (1,2/3,4,3,2)				
					1.65			Stiff brown very sandy gravelly CLAY. Sand is fine to coarse. Gravel is fine angular of mixed lithologies.
					1.85			Very soft brown very sandy very gravelly CLAY. Sand is fine to coarse. Gravel is fine angular of brick fragments and clinker. (Possible Made Ground).
		2.00		N=0 (0,0/0,0,0,0)				
		2.30 - 2.40	D					*From 2.00 to 4.00mbgl no anthropogenic fragments.*
					2.80			Firm dark grey with black mottling sandy organic rich CLAY. Sand is fine to coarse.
					3.00			Stiff light brown with yellow and orange mottling silty slightly sandy CLAY. Sand is fine.
					3.20			Stiff brown with grey mottling very gravelly silty CLAY. Gravels are fine to coarse angular to subrounded of sandstone and mudstone.
					4.00			End of borehole at 4.00 m

Remarks
Concrete coring from 0.0 to 0.20mbgl. Hand excavated service inspection pit to 1.20mbgl. No groundwater encountered. SPT at 2.00mbgl self weight penetration.

17-19 Whitworth Street West
Merchants Exchange
Manchester
M1 5WG

Borehole Log

Borehole No.
WS15
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 15/01/2019 - 15/01/2019	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.08			MADE GROUND: Grey concrete (required coring).
					0.27			MADE GROUND: Light greyish-brown gravelly medium to coarse SAND. Gravel is fine to coarse and angular to sub-rounded of concrete and sandstone.
					0.30			MADE GROUND: Grey concrete.
								End of borehole at 0.30 m

Remarks
Hand pit terminated at 0.30m on concrete and metal obstructions.

17-19 Whitworth Street West
Merchants Exchange
Manchester
M1 5WG

Borehole Log

Borehole No.
WS15A
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 15/01/2019 - 15/01/2019	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.08			MADE GROUND: Grey concrete (required coring).
					0.16			MADE GROUND: Light brown gravelly medium to coarse SAND. Gravel is fine to coarse of concrete and sandstone.
					0.24			MADE GROUND: Light greyish-brown gravelly fine to coarse SAND. Gravel is fine to coarse of concrete, brick, ash and rare coal.
					0.37			MADE GROUND: Cobbles of Brick.
					0.42			MADE GROUND: Light greyish-brown gravelly fine to coarse SAND. Gravel is fine to coarse of concrete and sandstone.
					0.44			MADE GROUND: Grey concrete.
								End of borehole at 0.44 m

1 2 3 4 5 6 7 8 9 10

Remarks
Hand pit terminated at 0.44m bgl on concrete obstruction.

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17-19 Whitworth Street West
Merchants Exchange
Manchester
M1 5WG

Borehole Log

Borehole No.
WS16
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 15/01/2019 - 15/01/2019	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.08			MADE GROUND: Grey concrete (required coring).
					0.33			MADE GROUND: Light brown gravelly medium to coarse SAND. Gravel is fine to coarse sub-angular to sub-rounded of concrete, brick and sandstone.
		0.75	ES		0.70			MADE GROUND: Dark brown slightly silty, gravelly fine to coarse SAND. Gravel is fine to coarse angular to sub-angular of brick, concrete, clinker and rare glass.
		1.20		N=13 (2,2/3,2,4,4)				MADE GROUND: Black gravelly medium to coarse SAND. Gravel is fine to coarse angular to sub-rounded of ash, clinker, brick and sandstone.
					1.70			MADE GROUND: Dark brown gravelly fine to coarse SAND. Gravel is fine to medium sub-angular to sub-rounded of ash and concrete with rare clinker.
		2.00		N=3 (1,0/1,0,1,1)	2.00			MADE GROUND: Dark brown and light greyish-brown slightly gravelly, slightly sandy CLAY. Gravel is fine to medium angular to sub-angular of ash, brick and coal.
					2.80			Stiff brown mottled grey slightly sandy, slightly gravelly CLAY. Gravel is fine sub-angular of coal and sandstone.
		3.00		N=21 (3,3/4,5,6,6)				
		4.00	D					*Clay becomes very stiff.*
		4.00		N=32 (4,6/8,8,8,8)				
		4.70		N=49 (8,8/10,11,14,14)				
					5.25			End of borehole at 5.25 m

Remarks
Service inspection pit excavated to 1.20m bgl. No groundwater encountered.

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17-19 Whitworth Street West
Merchants Exchange
Manchester
M1 5WG

Borehole Log

Borehole No.
WS17
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 18/01/2019 - 18/01/2019	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.13			MADE GROUND: Grey concrete (required coring).
		0.50	ES		0.38			MADE GROUND: Sandstone boulder.
								MADE GROUND: Black slightly silty, gravelly fine to coarse very loose SAND. Gravel is fine to coarse of clinker and concrete with rare brick and ash.
		1.20		N=5 (3,3/2,1,1,1)	1.30			
					1.70			Soft brown mottled grey slightly gravelly, sandy CLAY. Gravel is fine to medium and angular to sub-rounded of sandstone, mudstone and coal.
		2.00		N=10 (1,2/2,2,3,3)				Soft grey sandy CLAY with rare gravel of coal and plant debris. Rare pocket of black organic clay with plant debris.
		2.50	D		2.20			Stiff brown mottled grey slightly sandy, slightly gravelly CLAY. Gravel is fine to medium and angular to sub-angular of sandstone and coal with rare plant debris.
		3.00		N=23 (4,4/5,6,6,6)				
		4.00		N=30 (6,6/7,7,8,8)				
					4.45			End of borehole at 4.45 m

1 2 3 4 5 6 7 8 9 10

Remarks
Service inspection pit excavated to 1.20m bgl. No groundwater encountered.

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17-19 Whitworth Street West Merchants Exchange Manchester M1 5WG	**Borehole Log**		Borehole No. **WS18** Sheet 1 of 1
Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 14/01/2019 - 14/01/2019	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.12			MADE GROUND: Grey concrete (required coring).
		0.30	ES		0.25 0.31			MADE GROUND: Dark grey sandy cobbles of concrete.
					0.90			MADE GROUND: Dark grey gravelly medium to coarse SAND. Gravel is fine to coarse and angular to sub-angular of concrete, brick fragments, wood fragments and ash. Hydrocarbon odour.
		1.20		N=20 (4,3/5,5,5,5)	1.25			MADE GROUND: Dark brown gravelly medium to coarse SAND with rare cobbles. Gravel is fine to coarse and angular to sub-angular of brick, concrete, glass and plastic. Cobbles angular to sub-angular of brick.
					1.60			MADE GROUND: Dark brown slightly gravelly medium to coarse SAND with rare white fine-coarse sand. Gravel is fine to coarse and sub-angular of brick and concrete.
		2.00		N=2 (1,1/0,1,1,0)	2.50			MADE GROUND: Dark grey fine to medium medium dense SAND with rare gravel and cobbles. Gravel is of concrete and brick. Cobbles of clinker.
		3.00		N=20 (3,3/5,5,5,5)				MADE GROUND: Dark brown gravelly medium to coarse SAND. Gravel is fine to medium and angular to sub-angular of brick, concrete and coal.
		3.50	D					MADE GROUND: Dark grey and dark brown gravelly medium to coarse SAND. Gravel is fine to coarse of brick, ash and clinker. Occasional cobble of brick, clinker and concrete.
		3.50		50 (8,9/50 for 190mm)	3.80			End of borehole at 3.80 m

Remarks
Service inspection pit excavated to 1.20m bgl. Borehole collapsed within Made Ground. No groundwater encountered. Borehole terminated on brick obstruction at 4.00m bgl.

17-19 Whitworth Street West
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Manchester
M1 5WG

Borehole Log

Borehole No.
WS19
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 14/01/2019 - 14/01/2019	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.16			MADE GROUND: Grey concrete.
					0.28			MADE GROUND: Dark grey sandy cobbles of concrete.
					0.40			MADE GROUND: Dark grey gravelly medium to coarse SAND. Gravel is fine to coarse and angular to sub-angular of slate with occasional cobbles of concrete. Slight organic odour.
		0.80	ES		0.65			MADE GROUND: Dark brown gravelly medium to coarse SAND. Gravel is fine to coarse and angular to sub-angular of brick, concrete and slate with occasional cobbles of brick and concrete.
		1.00		N=49 (7,7/12,12,13,12)				MADE GROUND: Greyish-dark brown gravelly medium to coarse SAND with occasional cobbles. Gravel is fine to coarse and angular to sub-rounded of concrete and brick with rare coal and clinker. Cobbles are angular to sub-rounded of concrete. Rare pocket of greyish-brown slightly sandy reworked clay.
					1.40			End of borehole at 1.40 m

Remarks
Service inspection pit excavated to 1.20m bgl. No groundwater encountered. Window sample casing progressing at deviating angle. Borehole terminated at 1.40m on unknown obstruction.

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17-19 Whitworth Street West
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Borehole Log

Borehole No.
WS20
Sheet 1 of 1

Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 17/01/2019 - 18/01/2019	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.50	ES		0.25			MADE GROUND: Grey concrete (required coring).
					0.26			Geomembrane.
					0.34			MADE GROUND: Grey concrete.
					0.80			MADE GROUND: Black gravelly fine to coarse SAND. Gravel is fine to coarse and angular to sub-angular of concrete and ash with rare clinker, brick and glass.
								End of borehole at 0.80 m

Remarks
Hand pit terminated at 0.80m due to concrete obstructions.

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17-19 Whitworth Street West Merchants Exchange Manchester M1 5WG	**Borehole Log**		Borehole No. **WS21** Sheet 1 of 1
Project Name: Hammerstone Road	Project No. B068065.300	Co-ords: -	Hole Type WS
Location: Hammerstone Road, Gorton, Manchester, M18 8EQ		Level:	Scale 1:50
Client: Morgan Sindall		Dates: 15/01/2019 - 15/01/2019	Logged By MH

Well	Water Strikes	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.17			MADE GROUND: Grey concrete (required coring).
					0.30			MADE GROUND: Dark grey gravelly sandy cobbles of concrete with rare gravel fine to coarse and angular to sub-angular of brick and concrete.
					0.40			MADE GROUND: Dark grey gravelly medium to coarse SAND. Gravel is fine to coarse and angular to sub-angular of brick, concrete and rare ash, concrete and wood fragments.
					0.50			MADE GROUND: Dark grey slightly clayey, gravelly fine to coarse SAND. Gravel is fine to coarse of concrete, brick, wood fragments with rare rootlets. Occasional pocket of dark brown slightly gravelly, sandy clay. Gravel of brick and ash.
					0.52			MADE GROUND: Concrete obstruction. End of borehole at 0.52 m

Remarks
Hand pit terminated at 0.52m bgl due to concrete obstruction.

Appendix E

Lead Local Flood Authority Correspondence

United Utilities Correspondence

Unted Utilities S106 Approval & Confirmation of Extension.

Marta Wolska

From: e.ainsworth@manchester.gov.uk on behalf of floodriskmanagement@manchester.gov.uk
Sent: 28 July 2020 16:42
To: Marta Wolska
Subject: Re: FW: Hammerstone depot Manchester Corn Brook
Attachments: 01 Land Drainage Consent Documentation v2.doc

Hi Marta,

50% brownfield reduction in discharge rate is only applicable if you are reconnecting into an existing outfall into a watercourse. If a new outfall to a watercourse is proposed with no previous connection then runoff should be restricted to greenfield runoff rates. New outfall connections will require Land Drainage Consent and application form is attached.

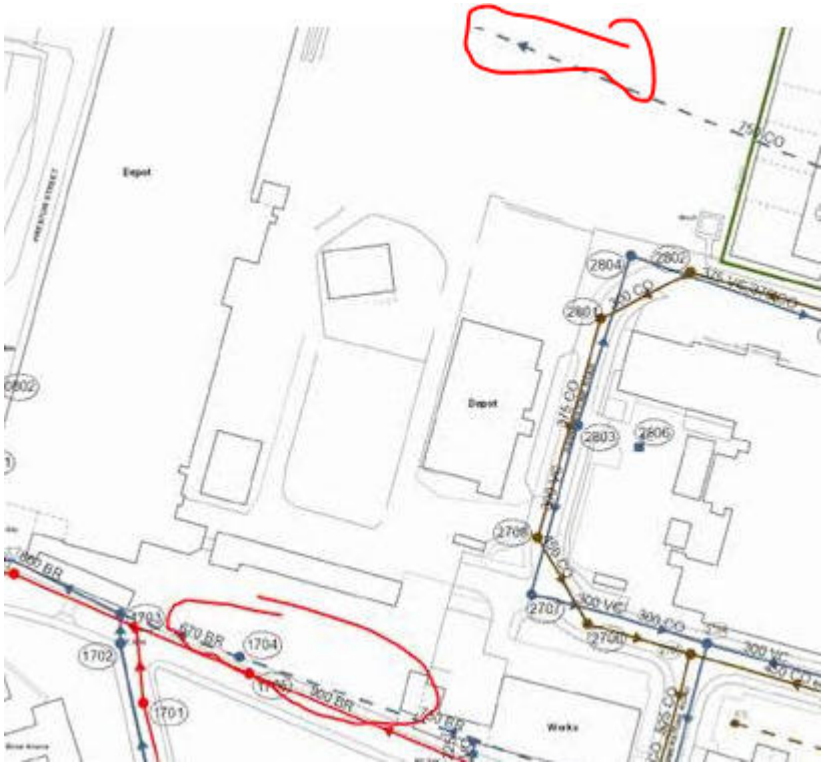
Kind regards

Flood Risk Management
Highways Service, Growth and Neighbourhoods Directorate
Manchester City Council
Tel: 0161 219 6295
Email: floodriskmanagement@manchester.gov.uk
Web: http://www.manchester.gov.uk/

POSTAL ADDRESS: Manchester City Council, Public Realm, The Neighbourhood Service, PO Box 532, Town Hall, Manchester M60 2LA

From: Marta Wolska <marta.wolska@curtins.com>
To: '"floodriskmanagement@manchester.gov.uk"' <floodriskmanagement@manchester.gov.uk>,
Date: 23/07/2020 10:08
Subject: FW: Hammerstone depot Manchester Corn Brook

Dear Madam
There are 2 culverted watercourses on our site to which we will connect to. We have proposed to reduce 50% of existing surface water discharge rates (from the external area) as per MCC guidance. The layout will change slightly, but I want to confirm if 50% reduction from existing still is acceptable for the site.



Do we have to do any application for a new connection to a culverted watercourses?

Marta Wolska Senior Engineer
Curtins
T. 0161 236 2394 | marta.wolska@curtins.com

From: e.ainsworth@manchester.gov.uk <e.ainsworth@manchester.gov.uk> **On Behalf Of** floodriskmanagement@manchester.gov.uk
Sent: 02 July 2020 17:21
To: Marta Wolska <marta.wolska@curtins.com>
Subject: Re: Hammerstone depot Manchester Corn Brook

Hi Marta,

The owner of the site as riparian owner is responsible for the maintenance of the stretch of Corn Brook that is within their land.

Kind regards

Flood Risk Management
Highways Service, Growth and Neighbourhoods Directorate
Manchester City Council
Tel: 0161 219 6295
Email: floodriskmanagement@manchester.gov.uk
Web: http://www.manchester.gov.uk/

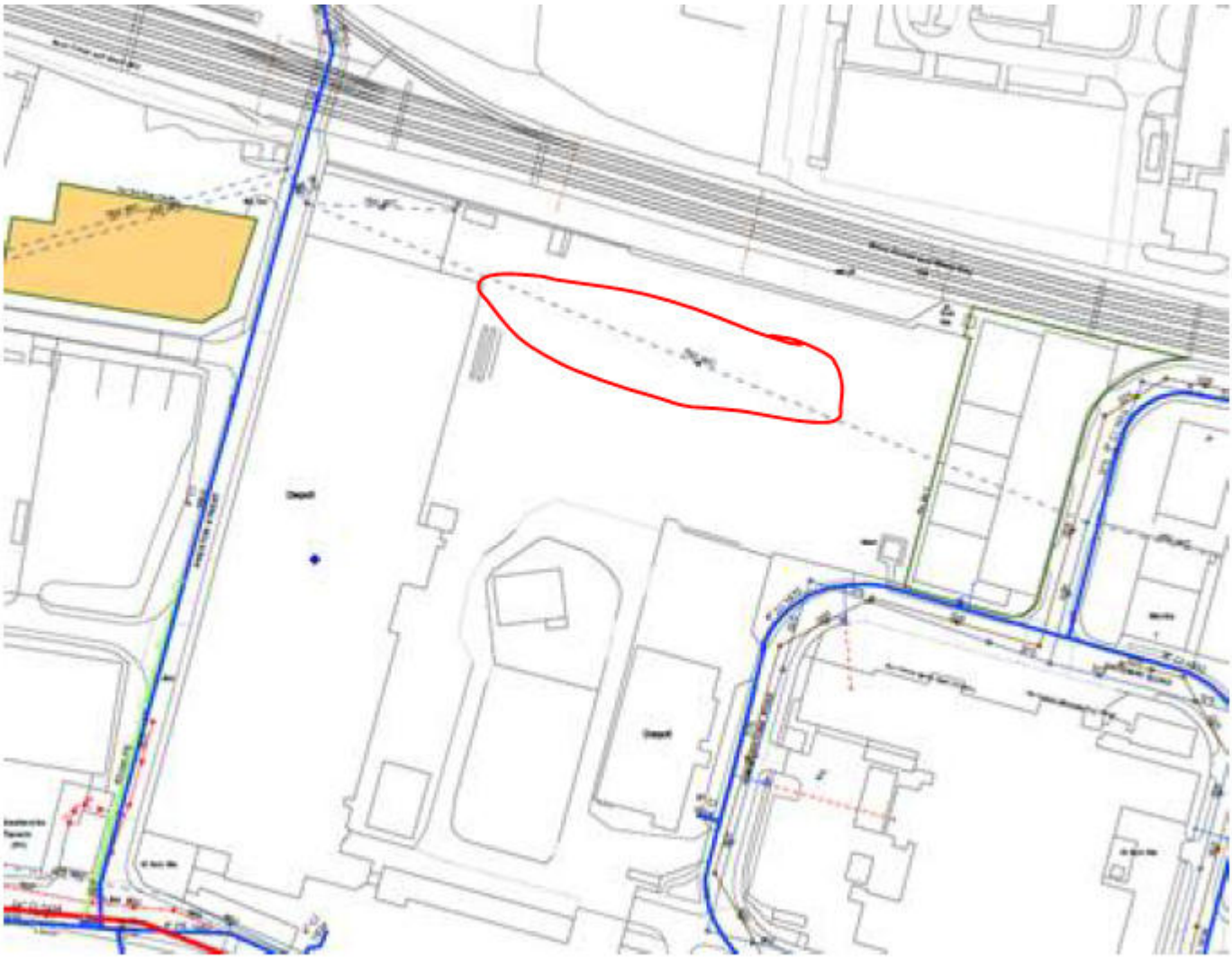
POSTAL ADDRESS: Manchester City Council, Public Realm, The Neighbourhood Service, PO Box 532, Town Hall, Manchester M60 2LA

From: Marta Wolska <marta.wolska@curtins.com>
To: "floodriskmanagement@manchester.gov.uk" <floodriskmanagement@manchester.gov.uk>,

Date: 30/06/2020 09:17
Subject: Hammerstone depot Manchester Corn Brook

Hi Zorica
Please find attached email where my colleague asked you regarding culverted Corn Brook watercourse within our site. I could not find in that email who is responsible for maintenance and repairs of the culverted Corn Brook within our site. Could you please confirm who is the owner of the culvert within our site and who is responsible for maintenance and any repairs.

Hammerstone Rd, Manchester M18 8EQ



Marta Wolska
Senior Engineer
T. 0161 236 2394
marta.wolska@curtins.com

curtins

Merchant Exchange
17-19 Whitworth Street West
Manchester M1 5WG

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Marta Wolska

From: Flood Risk Management <floodriskmanagement@manchester.gov.uk>
Sent: 09 March 2021 17:31
To: Marta Wolska
Subject: RE: Hammerstone depot Manchester

Hi Marta,

Would you be able to forward the CCTV Survey information over (including the a plan of the survey locations), as I am unsure on which specific manholes you are referring to?

In the meantime I would note, that we would not advise breaking covers, as this could cause extensive damage to the existing culvert structure and any fallen debris from the works could result in major blockages downstream.

Thanks

Oliver Timmins
Engineer (Flood Risk Management)
Mobile: 07814082200
Email: oliver.timmins@manchester.gov.uk

Lead Local Flood Authority
Highways
Growth & Development and Neighbourhoods Directorate
Manchester City Council
PO Box 532 Town Hall
Manchester
M60 2LA

Web: http://www.manchester.gov.uk

From: Marta Wolska <marta.wolska@curtins.com>
Sent: 09 March 2021 16:12
To: Flood Risk Management <floodriskmanagement@manchester.gov.uk>
Subject: RE: Hammerstone depot Manchester

Dear Oliver

- The watercourse position is based on records, we do not know if it even located within the site. The CCTV survey neither GRP survey not found a watercourse. As per CCTV company confirmation, the manhole covers within footway could not be mechanically lifted, will have to break the covers, however, there are existing services in the footway which we would not want to affect. I have attached utility survey
- Excavation near the retaining wall in south eastern area will undermine the existing retaining wall and excavation will be in blind
- Even if we excavate on the South Eastern corner to find the watercourse. We will struggle to connect to that location. As it is upstream part of the watercourse the watercourse is expected to be slightly higher. As per the attached levels, the site slopes in opposite direction and the lowest point is more less where the current strategy is, which means that we will have to lay pipe against the slope and as the watercourse based on records is quite shallow we will struggle as the proposed drainage invert level with minimum slope 1:225 will be lower than invert level of a culverted watercourse, not mentioned that the standards say connect soffit to soffit. Therefore we proposed to reuse the existing combined connection to the public sewer

Marta Wolska Senior Engineer
Curtins
T. 07434633755 | marta.wolska@curtins.com

From: Flood Risk Management <floodriskmanagement@manchester.gov.uk>
Sent: 09 March 2021 09:30
To: Marta Wolska <marta.wolska@curtins.com>
Subject: RE: Hammerstone depot Manchester

Hi Marta,

Having had a look over our records, the Corn Brook culvert to the South appears to enter your site within the South Eastern corner. Based on this, we would recommend that a connection to this watercourse should be positioned within this location to avoid being directly beneath the retaining walls.

On the attached drawings it highlights that this culvert (to the South) has not been picked up by any survey (GPR or CCTV)? Does the extent of these survey works include parts of Gorton Lane as well?

If retaining wall structures are to remain on site and if the culverted watercourse is found to be directly beneath this, then it is the landowners responsibility as a riparian owner to ensure that the structural integrity of the culverted watercourse is not compromised by the proposed on site works.

In regards to the oil interceptor, we would advise that a full retention separator is used, this is based on the nature of the development and that we consider all ordinary watercourses to be classed as environmentally sensitive assets.

Any further queries let me know.

Thanks,

Oliver

Oliver Timmins
Engineer (Flood Risk Management)
Mobile: 07814082200
Email: oliver.timmins@manchester.gov.uk

Lead Local Flood Authority
Highways
Growth & Development and Neighbourhoods Directorate
Manchester City Council
PO Box 532 Town Hall
Manchester
M60 2LA

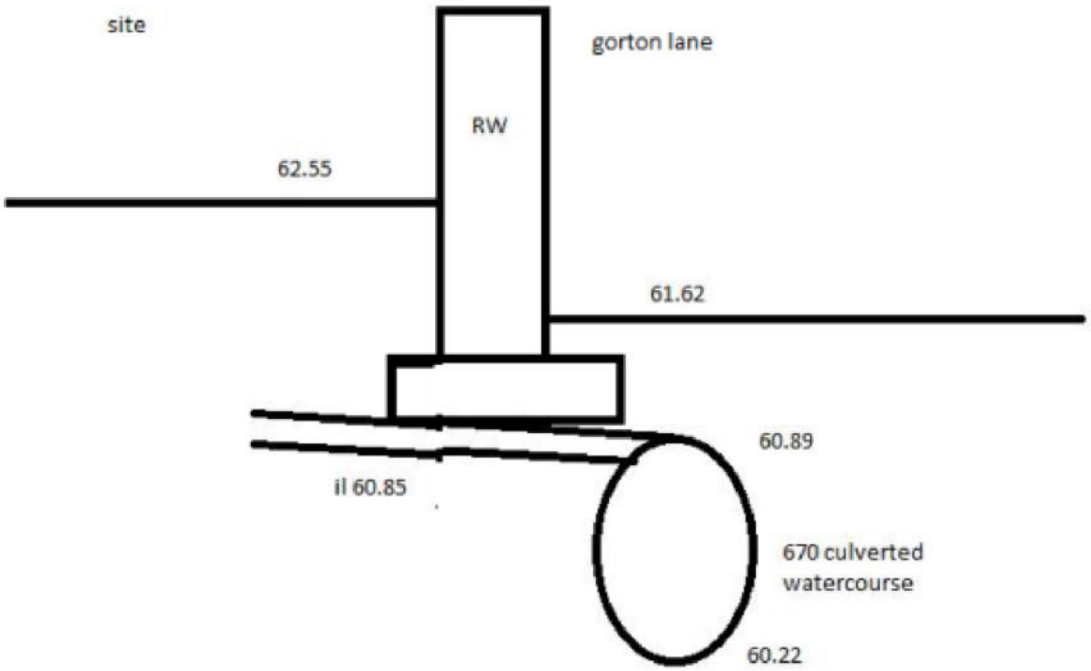
Web: http://www.manchester.gov.uk

From: Marta Wolska <marta.wolska@curtins.com>
Sent: 01 March 2021 11:30

To: Flood Risk Management <floodriskmanagement@manchester.gov.uk>
Subject: RE: Hammerstone depot Manchester

Dear Sir Madam

Connection to southern watercourse
The existing south car park and existing building discharge currently to a combined water sewer within Gorton Lane. The southern culverted watercourse based on UU records runs under and near existing retaining wall. The southern culverted watercourse could not be traced as the covers could not be lifted using hydraulic lifters. Based o UU records the culverted watercourse is quite shallow, invert level is 1.4mbgl, whereas soffit 0.73m. the extected bottom of retaining wall foundation is 0.60mbgl, which means that proposed pipe sofit will be straight below existing retaining wall foundation.



The condition of the retaining wall is clearly in a state of disrepair and as such any works carried out to the wall may affect the ongoing structural integrity of the wall itself which may extend beyond the localised works required to form any new connection. Coupled with this, there is the ongoing maintenance of the pipe work between site and the culvert which must be considered - any settlement to the wall at a critical drainage location could damage the pipe and affect the performance of the overall drainage system to the wider site.
This would also cause major issues with the foundations to the wall and the depth of the connection



We propose to reuse the existing connection from site to combined water sewer with restriction more then 50% reduction for lower car park .Could you please advise if that would be acceptable?

North watercourse Corn Brook

Can you please advise if bypass oil interceptor can be used if there is refuel area connected to surface water drainage discharging to culverted watercourse?

Marta Wolska Senior Engineer
Curtins
T. 07434633755 | marta.wolska@curtins.com

From: e.ainsworth@manchester.gov.uk <e.ainsworth@manchester.gov.uk> **On Behalf Of** floodriskmanagement@manchester.gov.uk
Sent: 02 July 2020 17:21
To: Marta Wolska <marta.wolska@curtins.com>
Subject: RE: Hammerstone depot Manchester Corn Brook

Hi Marta,

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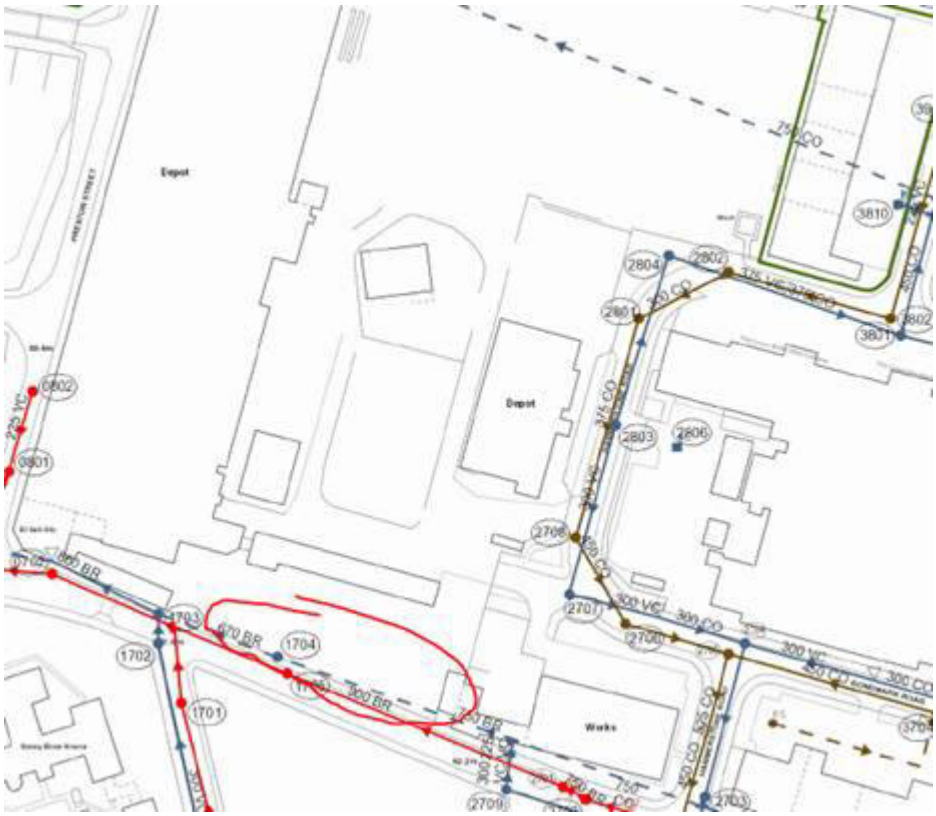
Kind regards

Flood Risk Management
Highways Service, Growth and Neighbourhoods Directorate
Manchester City Council
Tel: 0161 219 6295
Email: floodriskmanagement@manchester.gov.uk
Web: http://www.manchester.gov.uk/

POSTAL ADDRESS: Manchester City Council, Public Realm, The Neighbourhood Service, PO Box 532, Town Hall, Manchester M60 2LA

From: Marta Wolska <marta.wolska@curtins.com>
To: "'floodriskmanagement@manchester.gov.uk'" <floodriskmanagement@manchester.gov.uk>,
Date: 30/06/2020 11:01
Subject: RE: Hammerstone depot Manchester Corn Brook

Dear Zoe
There is also a 670mm brick surface water sewer located in the south of the site, which is labelled on UU records legend as a private sewer.



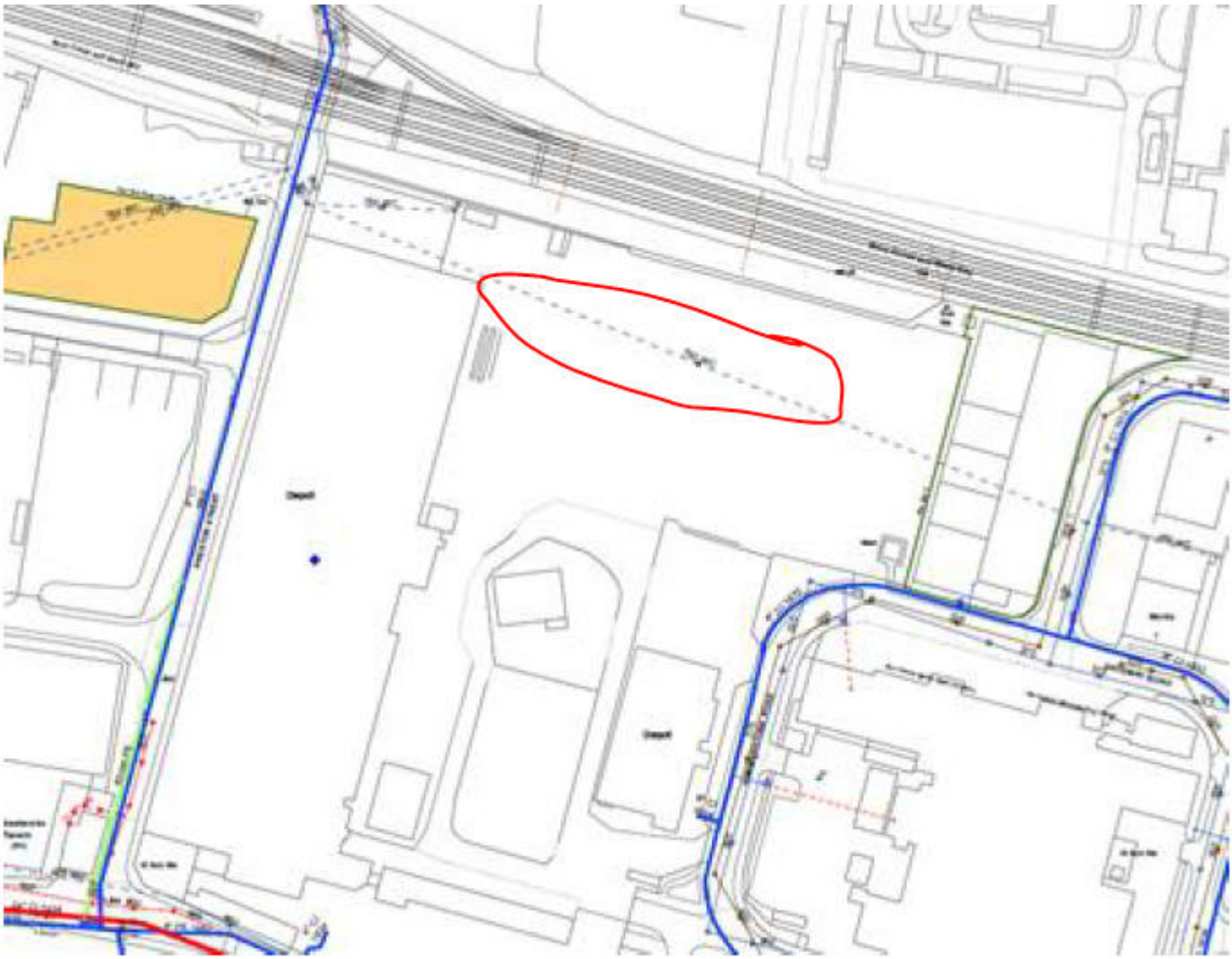
Do you have any records if there is another culverted watercourse in that location?

Marta Wolska Senior Engineer
Curtins
T. 0161 236 2394 | marta.wolska@curtins.com

From: Marta Wolska
Sent: 30 June 2020 09:15
To: floodriskmanagement@manchester.gov.uk
Subject: Hammerstone depot Manchester Corn Brook

Hi Zorica
Please find attached email where my colleague asked you regarding culverted Corn Brook watercourse within our site. I could not find in that email who is responsible for maintenance and repairs of the culverted Corn Brook within our site. Could you please confirm who is the owner of the culvert within our site and who is responsible for maintenance and any repairs.

Hammerstone Rd, Manchester M18 8EQ



Marta Wolska
Senior Engineer
T. 0161 236 2394
marta.wolska@curtins.com

Merchant Exchange
17-19 Whitworth Street West
Manchester M1 5WG

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Marta Wolska

From: Flood Risk Management <floodriskmanagement@manchester.gov.uk>
Sent: 09 March 2021 09:30
To: Marta Wolska
Subject: RE: Hammerstone depot Manchester

Hi Marta,

Having had a look over our records, the Corn Brook culvert to the South appears to enter your site within the South Eastern corner. Based on this, we would recommend that a connection to this watercourse should be positioned within this location to avoid being directly beneath the retaining walls.

On the attached drawings it highlights that this culvert (to the South) has not been picked up by any survey (GPR or CCTV)? Does the extent of these survey works include parts of Gorton Lane as well?

If retaining wall structures are to remain on site and if the culverted watercourse is found to be directly beneath this, then it is the landowners responsibility as a riparian owner to ensure that the structural integrity of the culverted watercourse is not compromised by the proposed on site works.

In regards to the oil interceptor, we would advise that a full retention separator is used, this is based on the nature of the development and that we consider all ordinary watercourses to be classed as environmentally sensitive assets.

Any further queries let me know.

Thanks,

Oliver

Oliver Timmins
Engineer (Flood Risk Management)
Mobile: 07814082200
Email: oliver.timmins@manchester.gov.uk

Lead Local Flood Authority
Highways
Growth & Development and Neighbourhoods Directorate
Manchester City Council
PO Box 532 Town Hall
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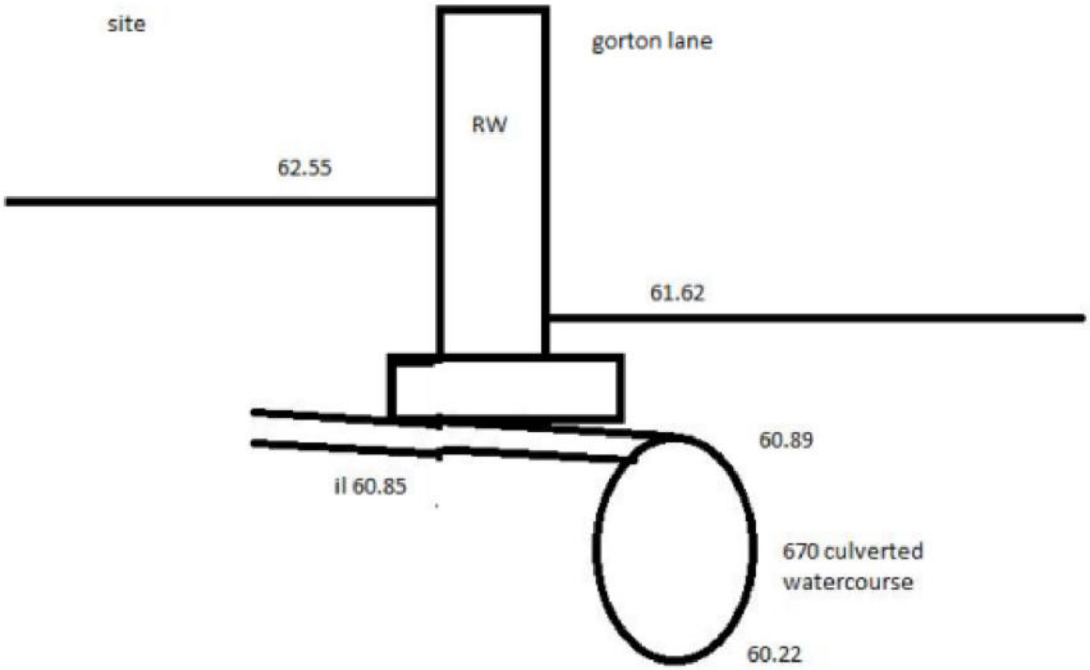
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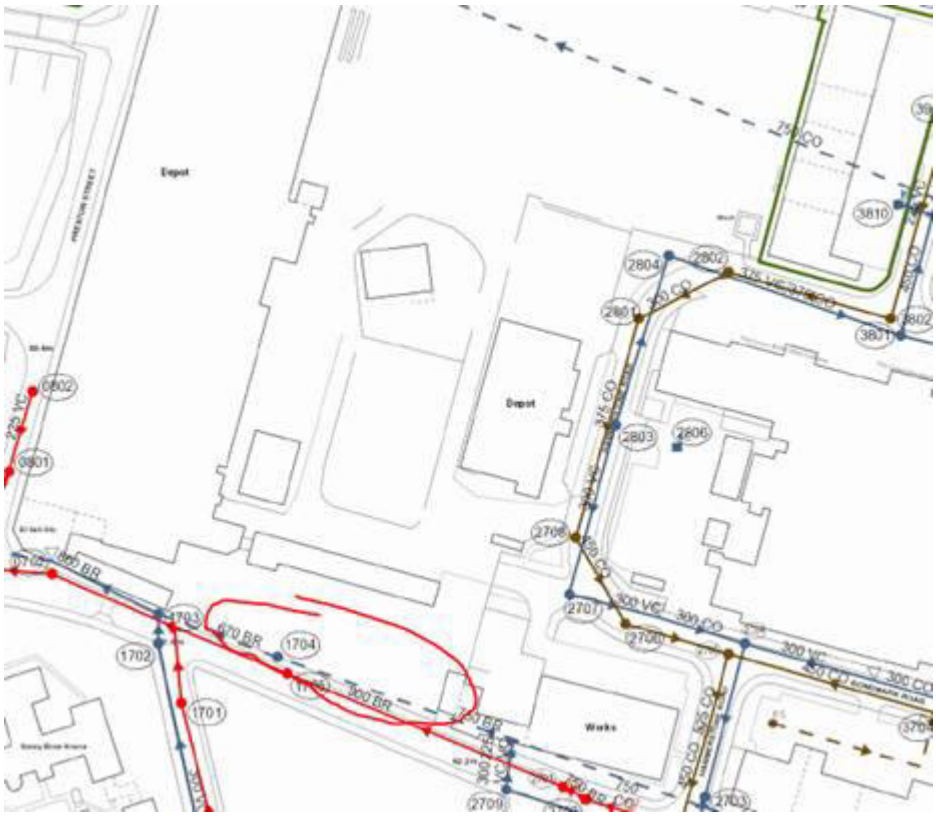
Kind regards

Flood Risk Management
Highways Service, Growth and Neighbourhoods Directorate
Manchester City Council
Tel: 0161 219 6295
Email: floodriskmanagement@manchester.gov.uk
Web: http://www.manchester.gov.uk/

POSTAL ADDRESS: Manchester City Council, Public Realm, The Neighbourhood Service, PO Box 532, Town Hall, Manchester M60 2LA

From: Marta Wolska <marta.wolska@curtins.com>
To: "'floodriskmanagement@manchester.gov.uk'" <floodriskmanagement@manchester.gov.uk>,
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Subject: RE: Hammerstone depot Manchester Corn Brook

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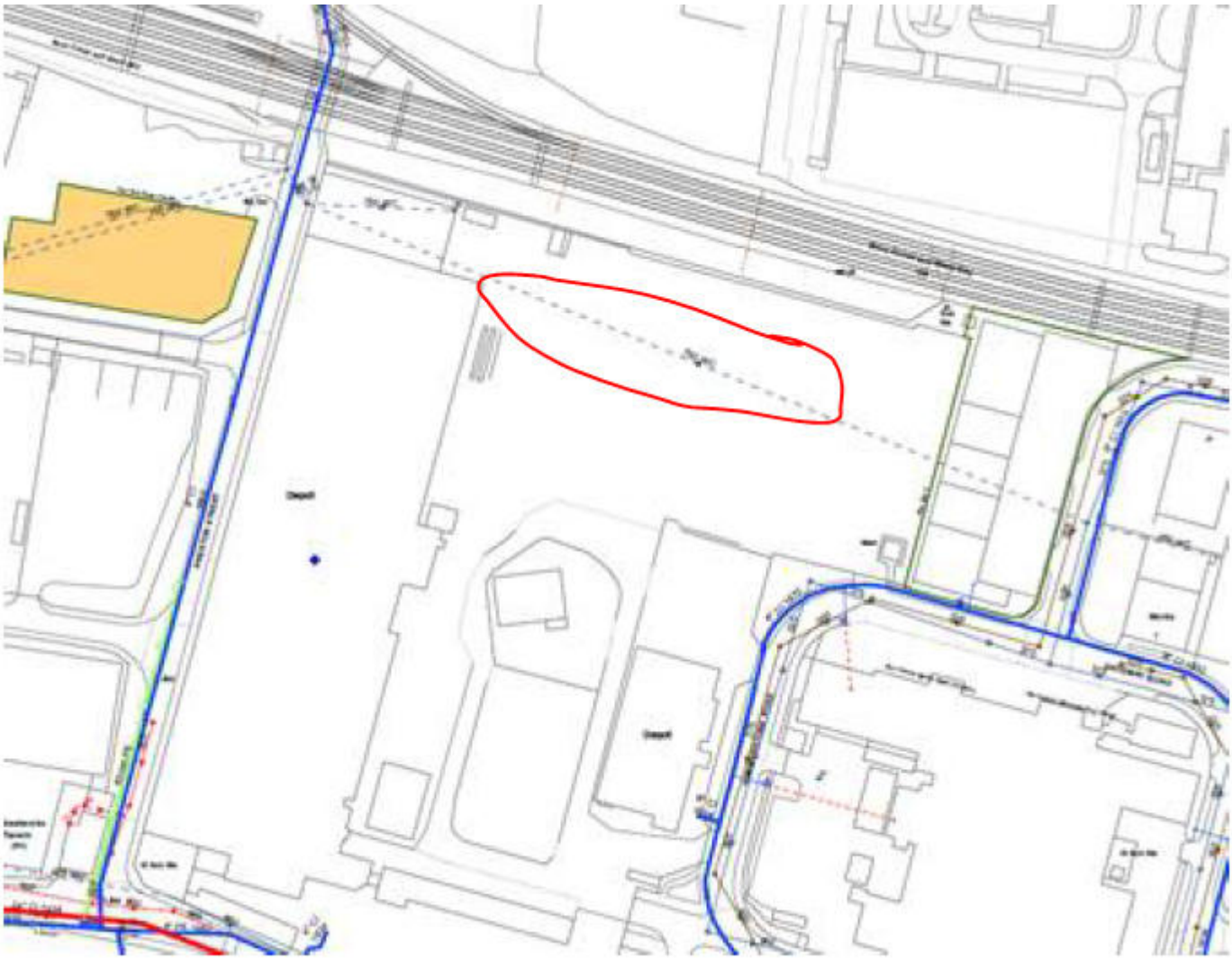
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T. 0161 236 2394 | marta.wolska@curtins.com

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Hammerstone Rd, Manchester M18 8EQ



Marta Wolska
Senior Engineer
T. 0161 236 2394
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Merchant Exchange
17-19 Whitworth Street West
Manchester M1 5WG

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Marta Wolska

From: Oliver Timmins <oliver.timmins@manchester.gov.uk>
Sent: 05 August 2021 09:32
To: Marta Wolska
Subject: RE: FW: Hammerstone depot

Hi Marta,

Thanks for your email.

I can confirm that the existing building will not require additional flow controls, this is on the basis that no external changes (requiring deep excavation works) are proposed for this part of the development and that surface water flows will not exceed that of the existing rates from the building.

Our preferred option would be to either repair the existing drainage from the building or replace the drainage like for like, to ensure that the system drains as existing and does not increase flows.

We would not permit the use of siphonic in this instance, as this would likely increase the outfall discharge rate from the existing building to the watercourse.

Hope this provides clarification.

Kind Regards,

Oliver

Oliver Timmins
Engineer (Flood Risk Management)
Mobile: 07814082200
Email: oliver.timmins@manchester.gov.uk

Lead Local Flood Authority
Highways
Growth & Development and Neighbourhoods Directorate
Manchester City Council
PO Box 532 Town Hall
Manchester
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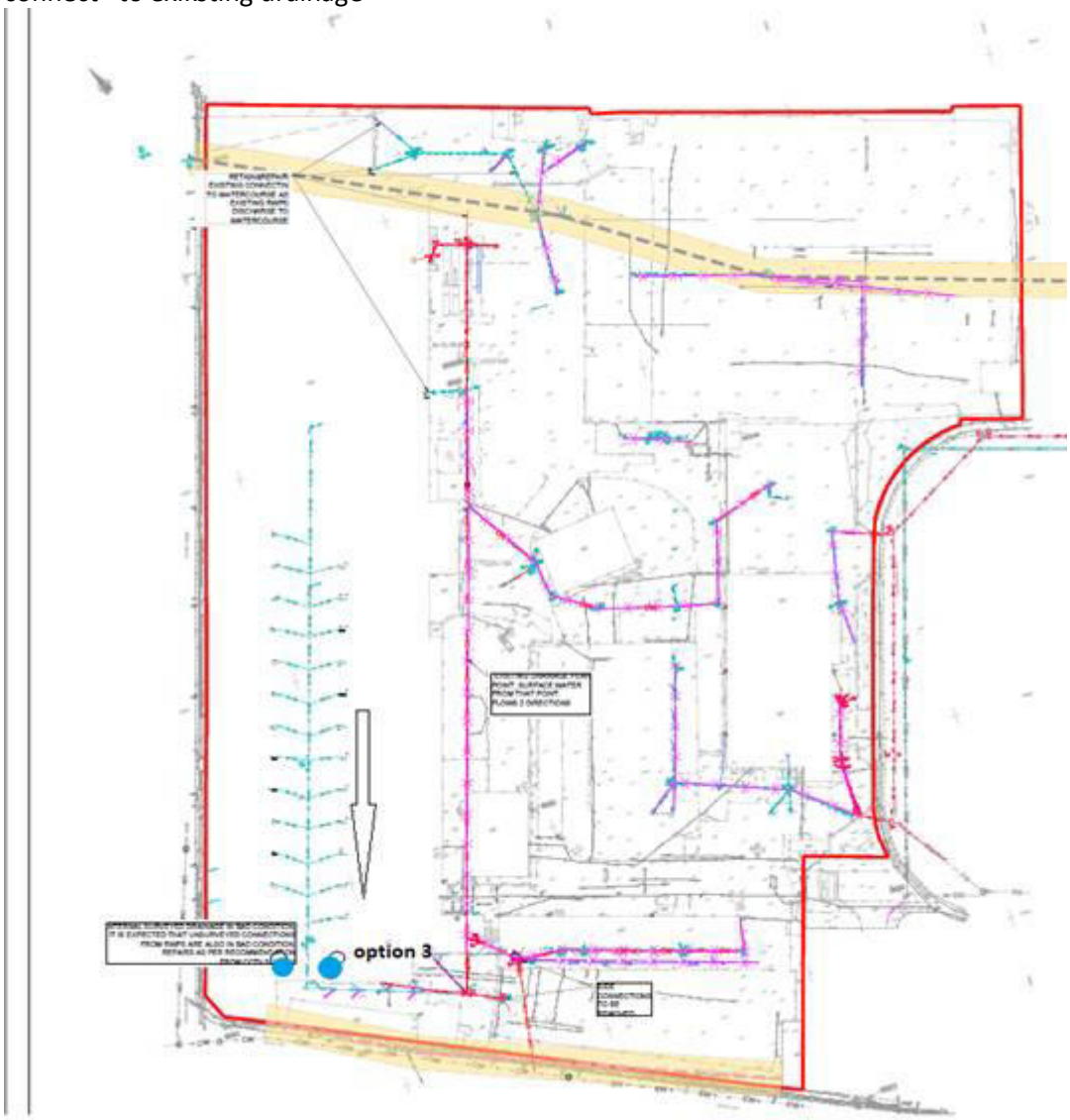
Web: http://www.manchester.gov.uk

From: Marta Wolska <marta.wolska@curtins.com>
Sent: 04 August 2021 10:47
To: Oliver Timmins <oliver.timmins@manchester.gov.uk>
Subject: RE: FW: Hammerstone depot

Dear Oliver
As discussed, the existing building is only refurbished and the impermeable roof area will not change. The existing gravity drainage from the building discharge to part to public sewer part to watercourse
Could you please confirm that surface water from the existing building can be discharged on unrestricted rate from the existing building

The CCTV survey which has been carried out indicates that some existing drainage may require to be repaired
There are 4 options

1. Repair existing drainage
2. Replace existing drainage within building with new like to like as existing
3. Suspend internal RWP towards south building edge connect by gravity to avoid slab excavation and connect to exiksting drainage



4. Change existing gravity to siphon system

As discussed option 1-3 does not change the flows of surface water, therefore can you please confirm that existing building surface water does not have to be limited.
Can you comment on 4 as well as discussed

Marta Wolska Senior Engineer
Curtins
T. 0161 236 2394 | marta.wolska@curtins.com

From: e.ainsworth@manchester.gov.uk <e.ainsworth@manchester.gov.uk> **On Behalf Of** floodriskmanagement@manchester.gov.uk
Sent: 28 July 2020 16:42

To: Marta Wolska <marta.wolska@curtins.com>
Subject: Re: FW: Hammerstone depot Manchester Corn Brook

Hi Marta,

50% brownfield reduction in discharge rate is only applicable if you are reconnecting into an existing outfall into a watercourse. If a new outfall to a watercourse is proposed with no previous connection then runoff should be restricted to greenfield runoff rates. New outfall connections will require Land Drainage Consent and application form is attached.

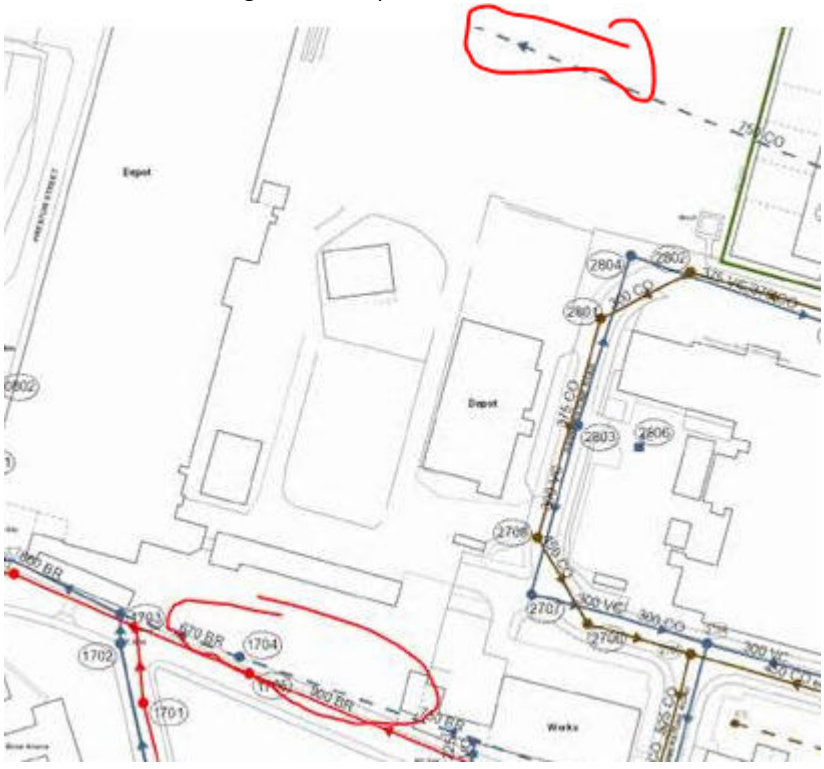
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POSTAL ADDRESS: Manchester City Council, Public Realm, The Neighbourhood Service, PO Box 532, Town Hall, Manchester M60 2LA

From: Marta Wolska <marta.wolska@curtins.com>
To: "'floodriskmanagement@manchester.gov.uk'" <floodriskmanagement@manchester.gov.uk>,
Date: 23/07/2020 10:08
Subject: FW: Hammerstone depot Manchester Corn Brook

Dear Madam
There are 2 culverted watercourses on our site to which we will connect to. We have proposed to reduce 50% of existing surface water discharge rates (from the external area) as per MCC guidance. The layout will change slightly, but I want to confirm if 50% reduction from existing still is acceptable for the site.



Do we have to do any application for a new connection to a culverted watercourses?

Marta Wolska Senior Engineer
Curtins
T. 0161 236 2394 | marta.wolska@curtins.com

From: e.ainsworth@manchester.gov.uk <e.ainsworth@manchester.gov.uk> **On Behalf Of** floodriskmanagement@manchester.gov.uk
Sent: 02 July 2020 17:21
To: Marta Wolska <marta.wolska@curtins.com>
Subject: Re: Hammerstone depot Manchester Corn Brook

Hi Marta,

The owner of the site as riparian owner is responsible for the maintenance of the stretch of Corn Brook that is within their land.

Kind regards

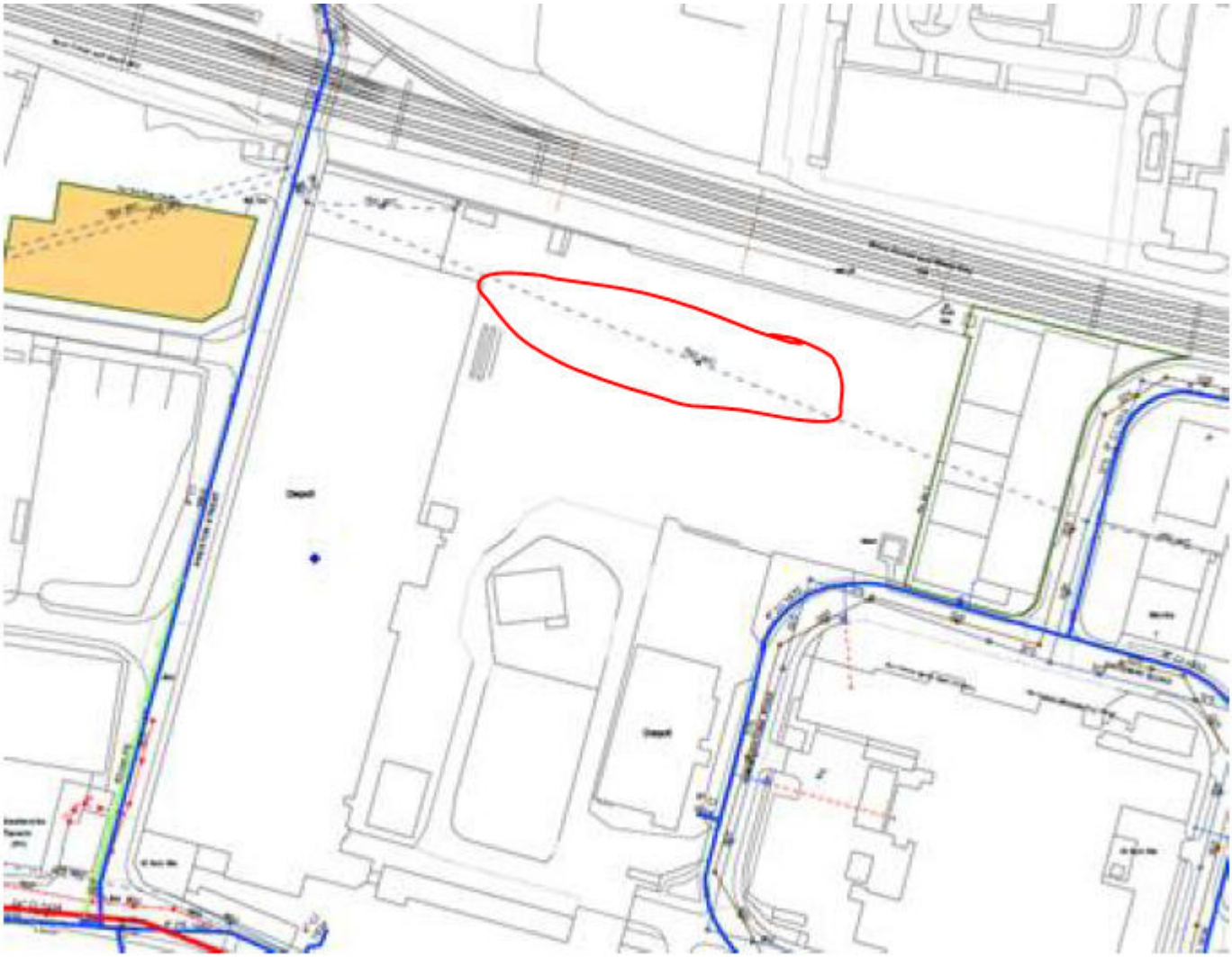
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[attachment "LLFA 1.pdf" deleted by Esther Ainsworth/Corporate.Services/MCC]

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