

Our Reference: 2024-047-06-B

Flood Risk and Drainage Solutions Ltd
144 New Lane
Oswaldtwistle
Lancashire
BB5 3QW
Tel: 07961477330
Email: info@floodrisk-drainage.co.uk



Date: 06/11/25

Flood Risk and Drainage Impact Assessment to Support the Proposed Modular Youth Hub at Field of Os, Claridge Road, Chorlton-cum-Hardy, Manchester

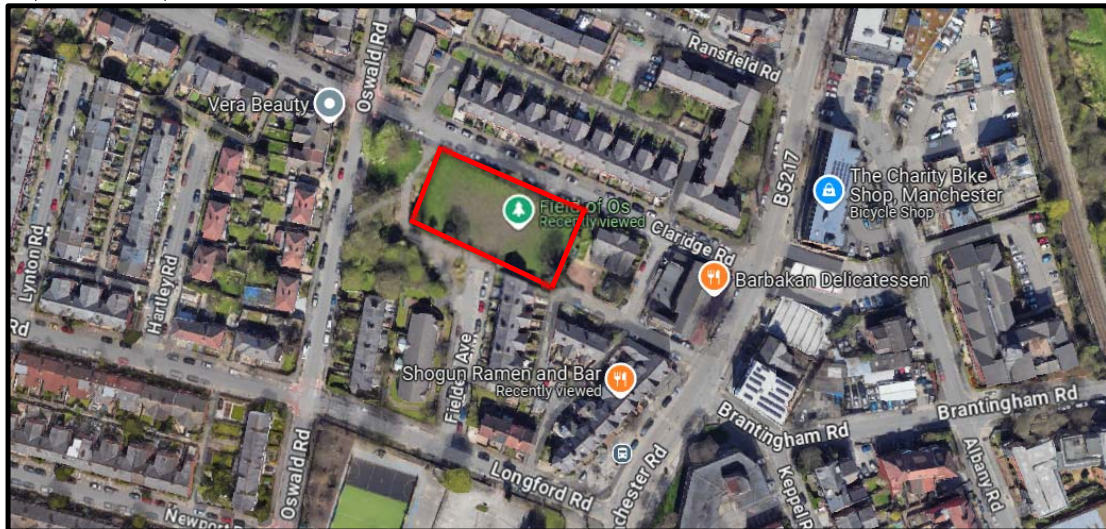
Introduction

Flood Risk and Drainage Solutions Ltd have been commissioned by YIF Youth Investment Fund to provide a Flood Risk and Drainage Impact Assessment to support the planning application for the proposed modular Youth Hub at Field of Os, Claridge Road, Chorlton-cum-Hardy, Manchester.

Existing Site

The existing site currently comprises of open grass land associated with Manchester Unity Arts, located on the south side of Claridge Road.

Proposed Development Site



Development Proposals

Development proposals comprise of the erection of a Modular Youth Hub Building located within the east proportion of the site.

Flood Risk Assessment

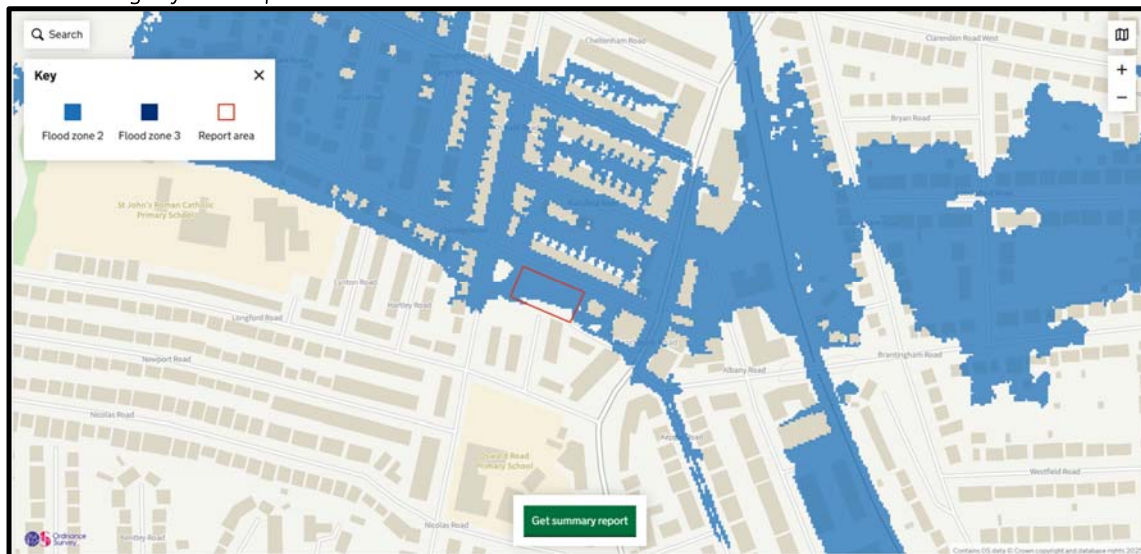
Sources of Flooding

Source/Pathway	Significant?	Comment/Reason
Fluvial	Yes	Flood Zone 2
Canal	No	Not Applicable
Tidal/Coastal	No	Not Applicable
Reservoir	No	EA Map shows flooding from reservoirs as unlikely
Pluvial (urban drainage)	Yes	Site will require a new SUDS Strategy
Groundwater	No	SFRA Map states that the site is located within an area affected by groundwater rebound
Surface Water Flooding	Yes	The application site is considered to have a high risk of surface water flooding.
Overland Flow	Yes	The application site is considered to have a high risk of surface water flooding.
Blockage	No	Not Applicable
Infrastructure failure	No	Not Applicable
Rainfall Ponding	No	Topography onsite to be levelled during construction phase.

Fluvial Flooding

The application site is located within Flood Zone 2; therefore, the risk of fluvial flooding is considered to be medium.

Environment Agency Flood Map



- Flood Zone 2 represents land with a moderate risk of flooding, specifically land that has a 0.1% to 1% (1 in 1000 to 1 in 100) annual probability of river flooding or a 0.1% to 0.5% (1 in 1000 to 1 in 200) annual probability of sea flooding.

Due to the site being located within Flood Zone 2 Environment Agency Flood Data was obtained to determine flood depths onsite. Both undefended and defended scenarios were provided, therefore the highest level out of both has been used to determine the worst-case scenario.

Chorlton Platt Gove

The EA Data provided shows various nodes on-site and associated flood levels and depths. The lowest proportion of the site is along the north boundary, the node that best represents this is Node 20, therefore this node has been used to determine flood levels and depths at the site.

Defended 1 in 100 Year Event

- Node 20, Flood Level = N/A, Flood Depth = N/A

Undefended 1 in 100 Year Event

- Node 20, Flood Level = N/A, Flood Depth = N/A

Following a review of flood levels and depths during the 1 in 100 year event associated with Charlton Platt Gove determined that the site will remain unaffected and is not located within Flood Zone 3.

Defended 1 in 100 Year + 41% Climate Change Event

- Node 20, Flood Level = 27.330m AOD, Flood Depth = 0.260m

Undefended 1 in 100 Year + 41% Climate Change Event

- Node 20, Flood Level = 27.330, Flood Depth = 0.260m

Following a review of flood levels and depths during the 1 in 100 year + 41% climate change event associated with Charlton Platt Gove determined that the site will be partially flooded at the north of the site up to a height of 27.330m AOD at a depth of 0.260m, during both the defended and undefended scenarios.

Defended 1 in 1000 Year Event

- Node 20, Flood Level = 27.540m AOD, Flood Depth = 0.470m

Undefended 1 in 1000 Year Event

- Node 20, Flood Level = 27.570m AOD, Flood Depth = 0.500m

Following a review of flood levels and depths during the 1 in 1000 year event associated with Charlton Platt Gove determined that the site will be flooded to a level of 27.570m AOD resulting in a depth of 0.500m during the undefended scenario. Therefore, the site is located within Flood Zone 2 concurring with the EA Flood Map.

It is noted that fluvial flooding resulting from Corn Brook has a low chance of affecting the site during the 1 in 100 year and 1 in 1000 year event.

Provided that Mitigation Measures outlined within this report are incorporated into the building, flooding from this mechanism can be suitably managed.

Reservoir Flooding

The Environment Agency's Flooding from Reservoirs Map identifies the site to be located outside of the area affected by this flooding mechanism.

Flooding from reservoirs is extremely unlikely. An area is considered at risk if people's lives could be threatened in the event of a dam or reservoir failure.

Pluvial (Urban Drainage)

Following development the site will require a new SUDS Drainage Strategy, which will manage surface water resulting from the site.

Groundwater Flooding

Map GW 2.1 from the Manchester City, Salford City and Trafford Council Level 2 Strategic Flood Risk Assessment shows that the application site is located outside of areas considered to be at risk of groundwater, have shallow groundwater or at risk of groundwater rebound

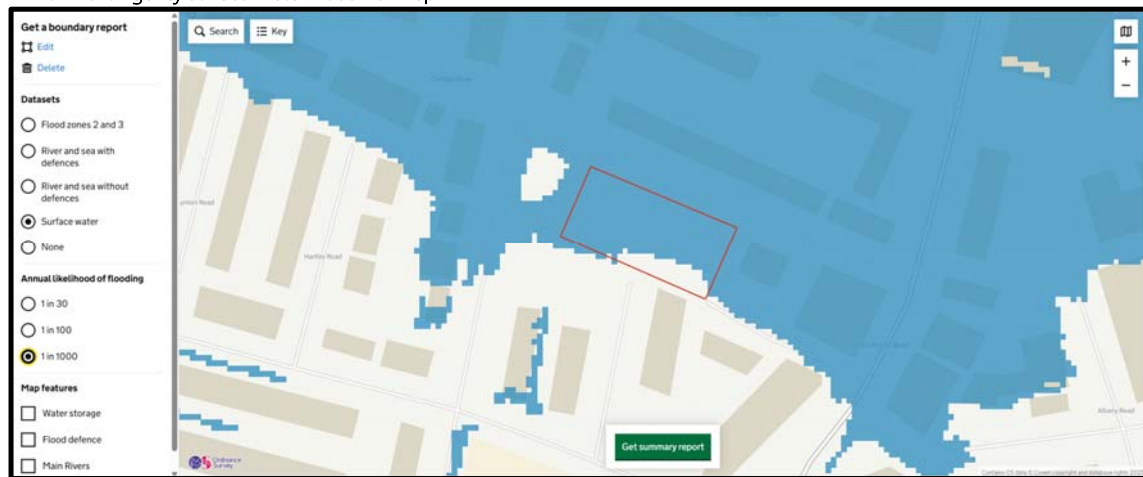
Taking the above into consideration the risk of groundwater flooding is considered to be low.

Surface Water Flooding

The Environment Agency's Surface Water Flood Map identifies the proposed development site to be located within an area considered to be a high risk.

- A high risk of surface water flooding means an area has a greater than 3.3% (1 in 30) chance of flooding each year due to rainwater not draining away properly

Environment Agency Surface Water Flood Risk Map



Following a review of the Environment Agency's Surface Water Flood Map during the worst-case scenario i.e. the 1 in 1000 year event the flood envelope extends over the majority of the site, apart from the far most southern extent.

The flood outline is considered similar to the flood outline which defines the 1 in 1000 year fluvial event.

Following a review of pluvial flooding it is concluded that mitigation measures provided to reduce the risk associated with fluvial flooding will also help reduce the risk associated with pluvial flooding.

It must also be highlighted that the application site is located within the Conurbation Core Critical Drainage Area within Mapp SS 4.5 of the Manchester City, Salford City and Trafford Level 2 SFRA.

Flood Mitigation Measures

Finished Floor Levels

The existing ground level central to the proposed building was derived using LIDAR Data which shows a level of 27.403m AOD.

Due to the site being affected during the 1 in 100 year + 41% climate change event finished floor levels should be elevated a minimum of 300mm above this design flood level.

- 1 in 100 Year + 41% Climate Change Level (27.330m AOD) + 300mm = 27.630m AOD

As such, finished floor levels should be elevated to no less than 27.630m AOD.

Flood Resilience/Resistance Measures

Providing that finished floor levels are elevated to 27.6530m AOD, there is no requirement to incorporate flood resilience/resistance measure into the building.

Environment Agency Flood Warnings

Due to the site being located within Flood Zone 2, it is advised that staff sign up to receive flood warnings.

It is essential that all persons evacuate the property immediately upon receipt of the Flood Warnings prior to the on-set of flooding.

The Flood Warning's Direct Service is a free service which enables the Environment Agency to send a direct message when flooding is expected and may affect the development. Flood warnings are designed to provide businesses/properties the time to prepare for flooding. Flood warnings can be sent by telephone, mobile, email SMS text message or fax.

The Environment Agency also provides the Floodline 0845 988 1188 service, where occupants can listen to recorded flood warning information for the area or speak to an operator for advice 24 hours a day.

Should a flood event reach the level where development is at risk of inundation, then the Environment Agency will issue a Severe Flood Warning.

Using the latest available technology, the Environment Agency is able to monitor rainfall, river levels and sea conditions 24 hours a day and use this information to forecast the possibility of flooding.

If flooding is forecast, they are able to issue warnings using a set of three different warning types.

Environment Agency Flood Warning Codes

Flood Warning Code	What it means	When it's used	What to do
	Flooding is possible. Be prepared.	2 hours – 2 days in advance of flooding.	• Be prepared to act on your flood plan • Prepare a flood kit • Monitor local water levels and the flood forecast of the EA website
	Flooding is expected. Immediate action is required.	½ hour – 1 day in advance of flooding.	• Move people to a safe place • Turn off gas, electricity and water supplies if safe to do so • Put flood protection equipment in place
	Severe flooding. Danger to life.	When flooding poses a significant threat to life.	• Stay in a safe place with means of escape • Be ready to evacuate • Co-operate with the emergency services • Call 999 if you are in immediate danger
Warnings no longer in force	No further flooding is currently expected in your area	When river or sea conditions begin to return to normal	• Be careful as flood water may still be around for several days • If you have been flooded, ring your insurance company as soon as possible

How are Flood Warnings issued?

- Direct to you – receive warnings by phone, text, email or fax. Sign up for the Environment Agency's FREE Floodline Warnings Direct service via this website link: <https://fwd.environment-agency.gov.uk/app/olr/register> or by calling Floodline on 0845 988 1188.
- On the flood warnings website – view up-to-date information about flood warnings in force, monitor the river or sea levels in your area and check out the latest flood risk forecast for your county.
- By calling Floodline on 0845 988 1188 – you can listen to recorded information on the latest warnings and predictions or speak to an operator for more general information 24 hours a day. Environment Agency operators can also provide a quick dial number which gives you faster access to information for your area.
- Through the media – you may see or hear Environment Agency warnings on television and in radio broadcasts. You can also view the latest warnings on Digital Ceefax page 405.
- Flood Wardens – in some areas Flood Wardens are there to alert and support their local community when a flood warning is issued. Call Floodline on 0845 988 1188 to find out if this service is available in your area.
- Sirens/loudhailers – in some areas the Environment Agency uses loudhailer or siren systems to warn people that a flood warning has been issued. Call Floodline on 0845 988 1188 to find out if this type of service operates in your area.
- Flood warning feeds – Flood warning (RSS) feeds shows national and regional flood warnings in force and are updated every 15 minutes. The feeds contain a brief summary and link to the full information on the Environment Agency website.

Evacuation Route

It is recommended that persons on site are prepared to evacuate away from the property immediately, if advised to do so by the EA Flood Warning Service, the emergency services and/or local authority, in the advance of the onset of any flooding.

Evacuation away from the site during fluvial flood events should be directed to an appropriate location within Flood Zone 1 available at the south boundary of the site onto Fielden Avenue.

Flood Signage

In order to make persons on-site aware of the potential risk of the site flooding, it is recommended that appropriate signage is incorporated within the site highlighting the proposed evacuation route, which should be adhered to upon receipt of the Environment agency Flood Warnings.

Business Flood Plan

It is also recommended that staff create a business flood plan. This is a simple document that assists the occupant to prioritise actions required at the property before, during and following a flood event.

A copy of a Business Flood Plan Template has been provided within the appendices of this report.

Drainage Impact Assessment

Existing Drainage

The application site comprises of existing building surrounded by grassed area.

United Utilities Sewer Records



United Utilities Sewer Records identify the following sewers within close proximity to the site.

- Public 300mm Combined Sewer located within Claridge Road north of the site
- Public 300mm Combined Sewer located along the south boundary of the site

No public surface water sewers are located within the vicinity of the site.

*United Utilities Sewer Records provided as an attachment

Hierarchy of Surface Water Disposal

The hierarchy for disposal of surface water from new developments is outlined within the Building Regulations Approved Document H and specifies the following methods in order of preference:

- Infiltration via soakaway or other suitable infiltration device
- Discharge to watercourse
- Discharge to public surface water sewer
- Discharge to public combined sewer

Infiltration

A review of Soilscape Maps identify that the underlying ground is described as 'Naturally wet very acid sandy and loamy soils'.

Local borehole logs approx. 500m west suggest the presence of clay down to below 4.5m BGL.

Taking the above into consideration the use of infiltration methods such as soakaways is unlikely to be considered viable for inclusion within the drainage strategy.

Watercourse

There are no watercourses within a suitable distance in which surface water from the site could be disposed.

Sewer

Due to the fact that the use of soakaways and discharge to watercourse are considered to be unfeasible, surface water from the proposed development site could be directed to the public combined sewer located either within Claridge Road or the sewer along the south boundary of the site.

Greenfield Ruoff Rates

Greenfield runoff rates have been calculated using the total redline boundary which equates to 0.175Ha using the IH124 Method.

- $Q_{bar} = 1.05l/s$

*See attached Greenfield Runoff Calculations

Restricted Discharge Rates

Surface water flows from the site should be restricted to no more than $Q_{bar} 1.05l/s$, however this would result in an aperture within the flow control device of less than 50mm which would cause blockage and siltation. As such, flows from the site should be restricted to no more than 5l/s during the 1 in 100 year + 50% climate change event.

Indicative Attenuation Volumes

Indicative attenuation volumes have been calculated using an impermeable area of 0.066Ha during the 1 in 100 year + 50% climate change event for both scenarios.

Discharge to Public Sewer 5l/s

- 1 in 100 Year + 50% Climate Change Volume = $14m^3 - 24m^3$

Sustainable Drainage Systems

SuDS act to reduce the impact of surface water runoff from the development by limiting runoff volumes and rates from leaving the site.

Undertaking an assessment using the SUDS Planner a number of different methods could be used within the development. A summary of the results is tabulated overleaf:

SUDS Planner

SUDS Criteria	Rank 1	Rank 2	Rank 3
Hydrological	Green Roof	Permeable Paving	On/offline Storage
Land Use	Infiltration Trench/Soakaway	Bioretention Area	On/offline Storage
Site Features	Green Roof	Permeable Paving	Filtration Techniques
Community & Environment	Bioretention Area	Infiltration Trench/Soakaway	Stormwater Wetlands
Economics & Maintenance	Wet Ponds	Grassed Swales	Dry Detention
Total	Green Roof	Permeable Paving	On/offline Storage

1. Source Control

The inclusion of source control in SUDS schemes is one of the more important principles of SUDS design, and source control components should be upstream of any pond, wetland or other SUDS component.

Source control can help provide interception storage which can handle and treat some of the more frequent but smaller, polluting events (at least 5mm).

Most source control components will be located within the private properties or highway areas. Their purpose is to manage rainfall close to where it falls, not allowing it to become a problem elsewhere.

The main types of source control include:

- Green roofs
- Rainwater harvesting
- Permeable paving
- Other permeable surfaces

Source control methods look to maximize permeability within a site to promote attenuation, treatment and infiltration, thereby reducing the need for off-site conveyance.

a) Green Roofs

Green roof solutions generally comprise of a multi-layered system that covers the roof of a building with vegetation cover, and/or landscaping over a drainage layer, designed to intercept and retain rainfall.

The incorporation of green roofs is to be decided by the architect/developers during the final design stage and is largely dependent on the final building design.

The likelihood of green roofs being utilised is considered to be low due to the increase in structural cost of the development.

b) Rainwater Harvesting

Rainwater harvesting provides a source of non-potable water, for purposes such as car washing; and landscaped area irrigation etc... and can be used for some industrial processes to reduce consumption of water from conventional supplies.

This SUDS solution, like green roof technology, is also designed to provide interception storage i.e. acts to reduce the volume of surface water leaving the proposed development; thereby helping to alleviate the current pressures on the receiving watercourse.

Rainwater harvesting can be installed at relatively low costs dependant on the chosen structure providing that the development site has scope.

c) Permeable Paving

Pervious surfaces can be either porous or permeable. The important distinction between the two is:

Porous surfacing is a surface that infiltrates water across the entire surface. Permeable surfacing is formed of material that is itself impervious to water but, by virtue of voids formed through the surface, allows infiltration through the pattern of voids.

Pervious surfaces provide a surface suitable for pedestrian and/or vehicular traffic, while allowing rainwater to infiltrate through the surface and into underlying layers.

The water can be temporarily stored before infiltration to the ground, reused, or discharged to a watercourse or other drainage system. Surfaces with an aggregate sub-base can provide good water quality treatment.

2. On/offline Storage

This is a traditional form of surface water attenuation and may be provided via online or offline structures such as oversized pipes; or shallow attenuation structures such as geo-cellular crate systems e.g. Hydro-International's Stormcell System or similar. These structures may be easily placed within either hardstanding or landscaped areas to provide ease of access for maintenance purposes.

Preliminary Surface Water Drainage Strategy

Surface water flows from the roof and areas of hardstanding could be collected via rainwater down pipes and gullies before being discharged into the public combined sewer within either Claridge Road or the south of the site, to be determined during the detailed design phase.

Flows to be restricted via means of a flow control chamber to no more than 5.0l/s during the 1 in 100 year + 50% climate change event, flows in excess of this could be attenuated within a geo-cellular tank and or permeable paving.

Foul Flows

Foul flows from the proposed development should be directed into the public combined sewer within either Claridge Road or the south of the site, to be determined during the detailed design phase.

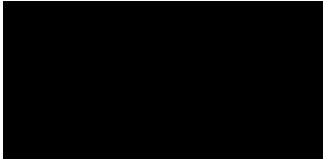
The proposed drainage strategy is to be finalised during the detailed design phase. Principles outlined within this report determined that surface water resulting from the development proposals can be suitably drained.

Attachments

- Development Proposals
- LIDAR Site Level
- Environment Agency Flood Data
- United Utilities Sewer Records
- Desk Top Ground Conditions
- Greenfield Runoff Rates
- Indicative Attenuation Volumes
- Business Flood Plan

We trust that the above is acceptable and look forward to hearing from you in due course; however, should you have any queries, please do not hesitate to contact me.

Yours Sincerely,



Chris Vose BSc

Managing Director
Flood Risk and Drainage Solutions Ltd



NORTH

0

2.0

4.0

6.0

8.0

10.0

20.0m

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P-02 Site plan amended following end user comments

P-01 Site plan amended following end user meeting

P-00 Planning Issue

Rev Description

20.03.25 LC CH

14.02.25 LC CH

20.08.24 SK LC

Date

Draw

CHK

Client
YIF
Youth Investment Fund

Project
Modular Youth Hub
Unity Arts, Field of Os M21 9QD

Drawing Title
Proposed Site Plan

Drawing Status
PLANNING

Corstorphine & Wright

Tamworth Studio
5 Aldergate, Tamworth, B79 7DJ
01827 671123
corstorphine-wright.com

Drawing No.
23519-0322

Drawn
SK

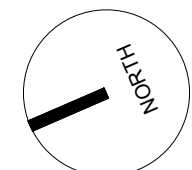
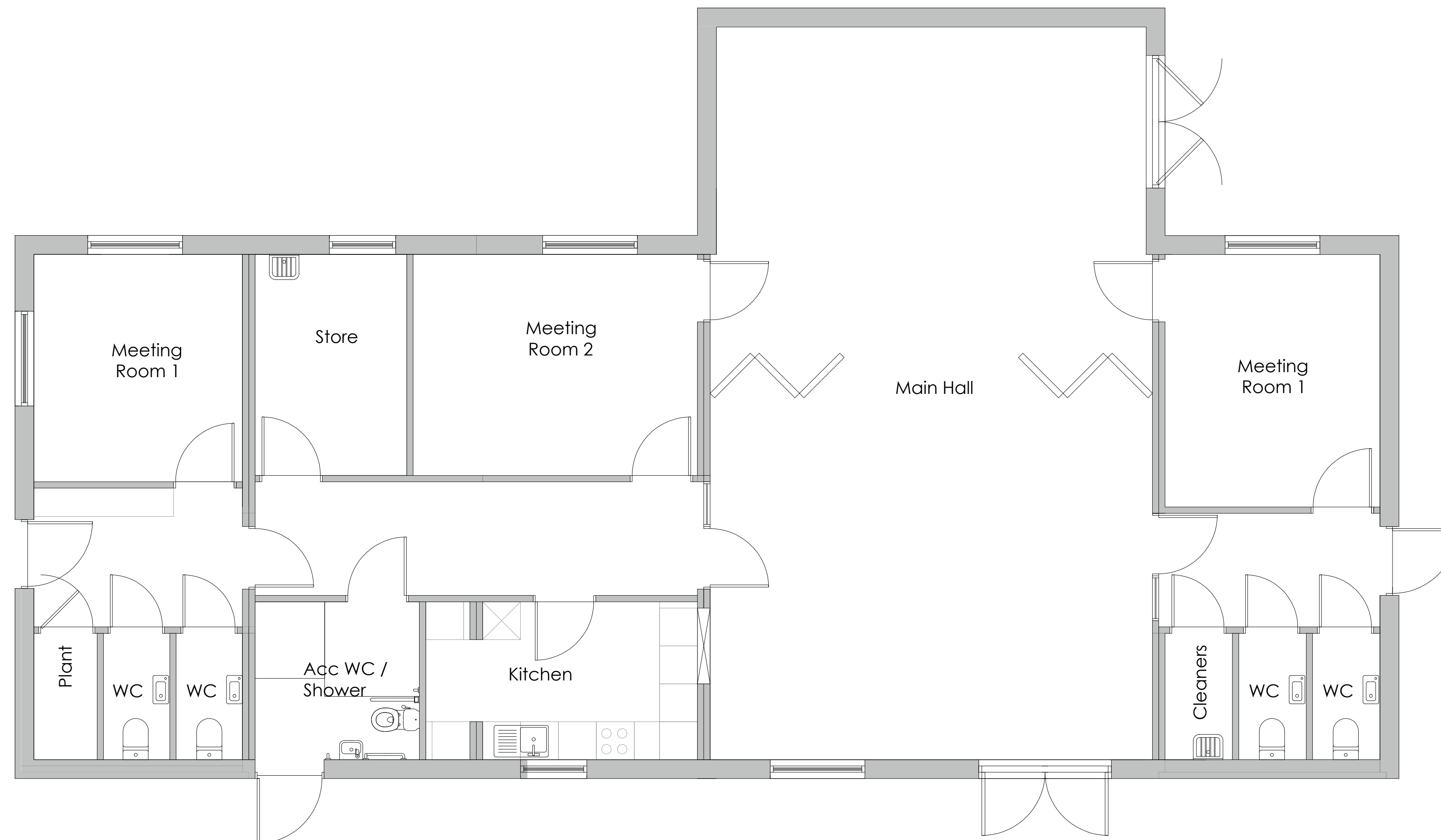
Checked
LC

Paper Size
A1

Scale
1:200

Date
19.03.24

Revision
P-02



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P-02	Updated following end user comments	20.03.25	LC	CH
P-01	Updated following end user meeting	14.02.25	LC	CH
P-00	Planning Issue	24.07.24	LC	CH
Rev.	Description	Date	Drw.	Chk.

Plans in accordance with Modular provider constraints.
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Client
YIF
Youth Investment Fund
Project
Modular Youth Hub
Unity Arts, Field of Os
Drawing Title
Proposed Floor Plans

Drawing Status
PLANNING

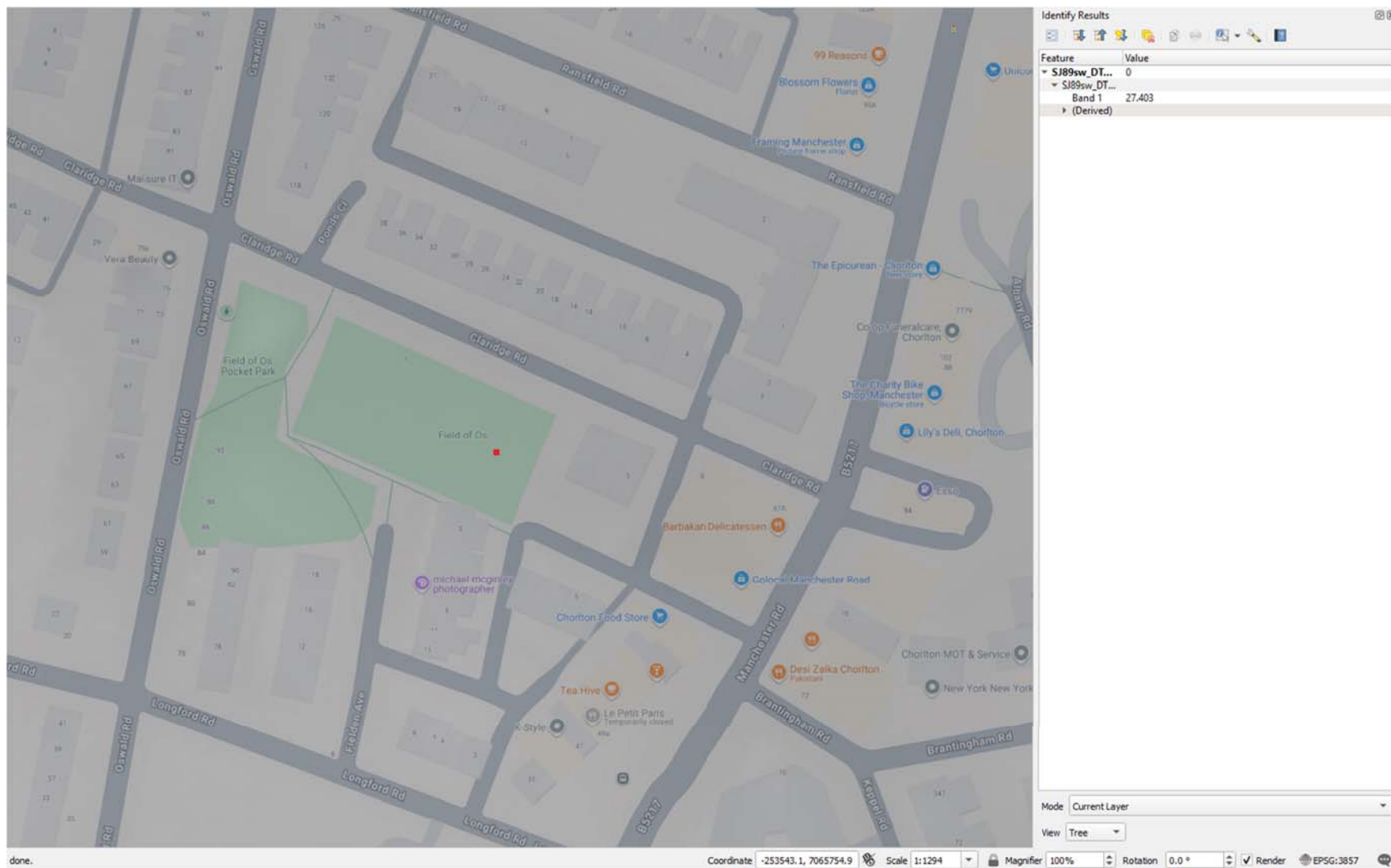
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Tamworth Studio
5 Aldergate, Tamworth, B79 7DJ
01827 671 23
corstorphine-wright.com

Drawing No.
23519-0372

Revision
P-02

Drawn	Checked	Paper Size	Scale	Date
LC	CH	A1	1:50	20.05.24



Flood risk assessment data



Location of site: 381546 / 394394 (shown as easting and northing coordinates)

Document created on: 3 November 2025

This information was previously known as a product 4.

Customer reference number: 9KPV6EC2C2HW

Map showing the location that flood risk assessment data has been requested for.



How to use this information

You can use this information as part of a flood risk assessment for a planning application. To do this, you should include it in the appendix of your flood risk assessment.

We recommend that you work with a flood risk consultant to get your flood risk assessment.

Included in this document

In this document you'll find:

- how to find information about surface water and other sources of flooding
- information on the models used
- definitions for the terminology used throughout
- flood map for planning (rivers and the sea)
- modelled data
- information about strategic flood risk assessments
- information about this data
- information about flood risk activity permits
- help and advice

Information that's unavailable

This document **does not** contain:

- past floods
- flood defences and attributes

We do not have past flooding data for this location.

Please note that:

- flooding may have occurred that we do not have records for
- flooding can come from a range of different sources
- we can only supply flood risk data relating to flooding from rivers or the sea

You can contact your Lead Local Flood Authority or Internal Drainage Board to see if they have other relevant local flood information. Please note that some areas do not have an Internal Drainage Board.

We aren't able to display flood defence locations and attributes as there are no formal flood defences in the area of interest.

Surface water and other sources of flooding

When using the surface water map on the [check your long term flood risk service](#) the following considerations apply:

- surface water extents are suitable for use in planning
- surface water climate change scenarios may help to inform risk assessments, but the available data fall short of what is required to assess planned development
- surface water depth information should not be used for planning purposes

To find out about other factors that might affect the flood risk of this location, you should also check:

- [reservoir flood risk](#)
- groundwater flood risk - you could use the [British Geological Survey groundwater flooding data](#), [groundwater: current status and flood risk](#) and the guide on [mining and groundwater constraints for development](#) - further information may be available from the lead local flood authority (LLFA)
- your local planning authority's SFRA, which includes future flood risk

Your Lead Local Flood Authority is Manchester District.

For information about sewer flooding, contact the relevant water company for the area.

About the models used

Model name: Chorlton Platt Gore 2024

Scenario(s): Defended fluvial, defences removed fluvial, defended climate change fluvial, defences removed climate change fluvial

Date: 15 April 2024

Model name: Corn Brook 2017

Scenario(s): No defences exist fluvial, no defences exist climate change fluvial

These models contain the most relevant data for your area of interest.

Terminology used

Annual exceedance probability (AEP)

This refers to the probability of a flood event occurring in any year. The probability is expressed as a percentage. For example, a large flood which is calculated to have a 1% chance of occurring in any one year, is described as 1% AEP.

Metres above ordnance datum (mAOD)

All flood levels are given in metres above ordnance datum which is defined as the mean sea level at Newlyn, Cornwall.

Flood map for planning (rivers and the sea)

Your selected location is in flood zone 2.

Flood zone 3 shows the area at risk of flooding for an undefended flood event with a:

- 0.5% or greater probability of occurring in any year for flooding from the sea
- 1% or greater probability of occurring in any year for fluvial (river) flooding

Flood zone 2 shows the area at risk of flooding for an undefended flood event with:

- between a 0.1% and 0.5% probability of occurring in any year for flooding from the sea
- between a 0.1% and 1% probability of occurring in any year for fluvial (river) flooding

It's important to remember that the flood zones on this map:

- refer to the land at risk of flooding and do not refer to individual properties
- refer to the probability of river and sea flooding, ignoring the presence of defences
- do not take into account potential impacts of climate change



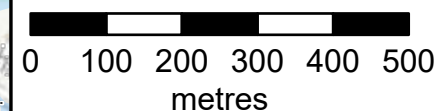
Flood map for planning

Location (easting/northing)
381546/394394

Scale
1:10,000

Created
3 Nov 2025

-  Selected area
-  Main river
-  Flood defence
-  Flood Zone 3
-  Flood Zone 2



Modelled data

This section provides details of different scenarios we have modelled and includes the following (where available):

- outline maps showing the area at risk from flooding in different modelled scenarios
- map(s) showing the approximate water levels for the return period with the largest flood extent for a scenario and table(s) of sample points providing details of the flood risk for different return periods

Climate change

The climate change data included in the models may not include the latest [flood risk assessment climate change allowances](#). Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

The Environment Agency will incorporate the new allowances into future modelling studies. For now, it's your responsibility to demonstrate that new developments will be safe in flood risk terms for their lifetime.

Modelled scenarios

The following scenarios are included:

- Defended modelled fluvial: risk of flooding from rivers where there are flood defences
- Defences removed modelled fluvial: risk of flooding from rivers where flood defences have been removed
- No defences exist modelled fluvial: risk of flooding from rivers where there are no flood defences
- Defended climate change modelled fluvial: risk of flooding from rivers where there are flood defences, including estimated impact of climate change
- Defences removed climate change modelled fluvial: risk of flooding from rivers where flood defences have been removed, including estimated impact of climate change
- No defences exist climate change modelled fluvial: risk of flooding from rivers where there are no flood defences, including estimated impact of climate change



Defences removed climate change modelled fluvial extent

Location (easting/northing)
381546/394394

Scale Created
1:10,000 3 Nov 2025

Model name
**Chorlton Platt Gore
2024**

 Selected area

 Main river

Modelled flood extent

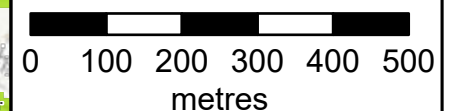
 1% AEP (+41%)

 1% AEP (+53%)

 1% AEP (+85%)

 0.1% AEP (+53%)

Flood extents may not be
visible where they overlap
other return periods





Defences removed modelled fluvial extent

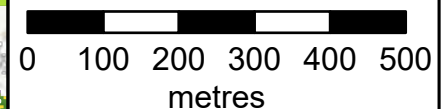
Location (easting/northing)
381546/394394

Scale Created
1:10,000 3 Nov 2025

Model name
**Chorlton Platt Gore
2024**

-  Selected area
-  Main river
- Modelled flood extent
 -  5% AEP
 -  2% AEP
 -  1.33% AEP
 -  1% AEP
 -  0.5% AEP
 -  0.1% AEP

Flood extents may not be
visible where they overlap
other return periods





Defended climate change modelled fluvial extent

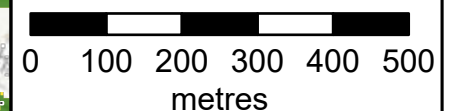
Location (easting/northing)
381546/394394

Scale Created
1:10,000 3 Nov 2025

Model name
**Chorlton Platt Gore
2024**

-  Selected area
-  Main river
- Modelled flood extent**
 -  50% AEP (+53%)
 -  5% AEP (+53%)
 -  1% AEP (+41%)
 -  1% AEP (+53%)
 -  1% AEP (+85%)
 -  0.1% AEP (+53%)

Flood extents may not be
visible where they overlap
other return periods





Defended modelled fluvial extent

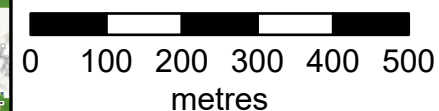
Location (easting/northing)
381546/394394

Scale Created
1:10,000 3 Nov 2025

Model name
**Chorlton Platt Gore
2024**

-  Selected area
-  Main river
- Modelled flood extent
-  5% AEP
 -  2% AEP
 -  1.33% AEP
 -  1% AEP
 -  0.5% AEP
 -  0.1% AEP

Flood extents may not be
visible where they overlap
other return periods





No defences exist climate change modelled fluvial extent

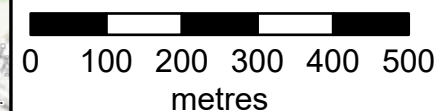
Location (easting/northing)
381546/394394

Scale Created
1:10,000 3 Nov 2025

Model name
Corn Brook 2017

-  Selected area
-  Main river
- Modelled flood extent
 -  0.1% AEP (+30%)

Flood extents may not be
visible where they overlap
other return periods





No defences exist modelled fluvial extent

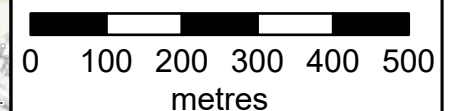
Location (easting/northing)
381546/394394

Scale Created
1:10,000 3 Nov 2025

Model name
Corn Brook 2017

-  Selected area
-  Main river
- Modelled flood extent
-  0.1% AEP

Flood extents may not be
visible where they overlap
other return periods





Defended modelled fluvial extent and height

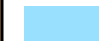
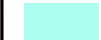
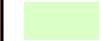
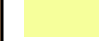
Location (easting/northing)
381546/394394

Scale Created
1:500 3 Nov 2025

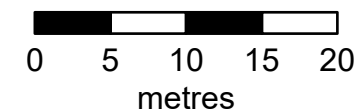
Model name
**Chorlton Platt Gore
2024**

-  Selected area
-  Main river

Modelled 2D grid
Water level in mAOD

-  0 - 3.5
-  3.5 - 7.0
-  7.0 - 10.5
-  10.5 - 14.0
-  14.0 - 17.5
-  17.5 - 21.0
-  21.0 - 24.5
-  24.5 - 28.0
-  28.0 - 31.5

This map shows the
0.1% AEP height data



Defended

[illegible]

[illegible]

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height	Height	Height	Height	Height
25	381556	394412	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	27.12	27.53
26	381520	394424	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	27.07	27.52
27	381532	394424	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	27.10	27.52
Max value in selected area:			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	27.13	27.56

Data in this table comes from the Chorlton Platt Gore 2024 model. Height values are shown in mAOD, and depth values are shown in metres.

Any blank cells show where a particular scenario has not been modelled for this location.

Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.

'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

Defended

[illegible]

[illegible]

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
25	381556	394412	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.17	0.58
26	381520	394424	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.08	0.52
27	381532	394424	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.13	0.55
Max value in selected area:			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.07	0.48

Data in this table comes from the Chorlton Platt Gore 2024 model. Height values are shown in mAOD, and depth values are shown in metres.

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Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.

'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.



Defences removed modelled fluvial extent and height

Location (easting/northing)
381546/394394

Scale Created
1:500 3 Nov 2025

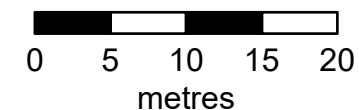
Model name
**Chorlton Platt Gore
2024**

-  Selected area
-  Main river

Modelled 2D grid
Water level in mAOD

-  0 - 3.5
-  3.5 - 7.0
-  7.0 - 10.5
-  10.5 - 14.0
-  14.0 - 17.5
-  17.5 - 21.0
-  21.0 - 24.5
-  24.5 - 28.0
-  28.0 - 31.5

This map shows the
0.1% AEP height data



Defences removed

[illegible]

[illegible]

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height	Height	Height	Height	Height
25	381556	394412	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	27.17	27.56
26	381520	394424	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	27.12	27.55
27	381532	394424	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	27.15	27.55
Max value in selected area:			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	27.18	27.59

Data in this table comes from the Chorlton Platt Gore 2024 model. Height values are shown in mAOD, and depth values are shown in metres.

Any blank cells show where a particular scenario has not been modelled for this location.

Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.

'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

Defences removed

[illegible]

[illegible]

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
25	381556	394412	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.22	0.61
26	381520	394424	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.13	0.55
27	381532	394424	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.17	0.58
Max value in selected area:			NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.12	0.51

Data in this table comes from the Chorlton Platt Gore 2024 model. Height values are shown in mAOD, and depth values are shown in metres.

Any blank cells show where a particular scenario has not been modelled for this location.

Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.

'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.



Defended climate change modelled fluvial extent and height

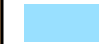
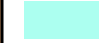
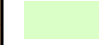
Location (easting/northing)
381546/394394

Scale Created
1:500 3 Nov 2025

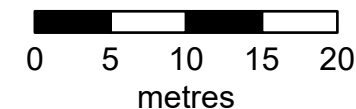
Model name
**Chorlton Platt Gore
2024**

-  Selected area
-  Main river

Modelled 2D grid
Water level in mAOD

-  0 - 3.625
-  3.625 - 7.25
-  7.25 - 10.875
-  10.875 - 14.5
-  14.5 - 18.125
-  18.125 - 21.75
-  21.75 - 25.375
-  25.375 - 29.0
-  29.0 - 32.625

This map shows the
0.1% AEP +53% height data



Sample point data

Defended climate change

Label	Easting	Northing	50% AEP (+53%)	5% AEP (+53%)	1% AEP (+41%)	1% AEP (+53%)	0.1% AEP (+53%)
			Height	Height	Height	Height	Height
1	381556	394364	NoData	NoData	NoData	NoData	NoData
2	381568	394364	NoData	NoData	NoData	NoData	27.82
3	381532	394376	NoData	NoData	NoData	NoData	27.80
4	381544	394376	NoData	NoData	NoData	NoData	27.80
5	381556	394376	NoData	NoData	NoData	NoData	27.81
6	381568	394376	NoData	NoData	NoData	27.42	27.82
7	381580	394376	NoData	NoData	27.36	27.42	27.82
8	381508	394388	NoData	NoData	NoData	NoData	27.79
9	381520	394388	NoData	NoData	NoData	NoData	27.80
10	381532	394388	NoData	NoData	NoData	NoData	27.80
11	381544	394388	NoData	NoData	NoData	NoData	27.80
12	381556	394388	NoData	NoData	NoData	NoData	27.81

Label	Easting	Northing	50% AEP (+53%)	5% AEP (+53%)	1% AEP (+41%)	1% AEP (+53%)	0.1% AEP (+53%)
			Height	Height	Height	Height	Height
13	381568	394388	NoData	NoData	27.33	27.39	27.81
14	381580	394388	NoData	NoData	27.34	27.40	27.81
15	381508	394400	NoData	NoData	NoData	27.35	27.79
16	381520	394400	NoData	NoData	NoData	27.35	27.80
17	381532	394400	NoData	NoData	NoData	27.36	27.80
18	381544	394400	NoData	NoData	27.32	27.37	27.80
19	381556	394400	NoData	NoData	27.32	27.38	27.81
20	381568	394400	NoData	NoData	27.33	27.39	27.81
21	381580	394400	NoData	NoData	27.34	27.39	27.81
22	381520	394412	NoData	NoData	27.29	27.35	27.80
23	381532	394412	NoData	NoData	27.30	27.36	27.80
24	381544	394412	NoData	NoData	27.31	27.37	27.80

Label	Easting	Northing	50% AEP (+53%)	5% AEP (+53%)	1% AEP (+41%)	1% AEP (+53%)	0.1% AEP (+53%)
			Height	Height	Height	Height	Height
25	381556	394412	NoData	NoData	27.32	27.38	27.81
26	381520	394424	NoData	NoData	27.28	27.35	27.80
27	381532	394424	NoData	NoData	27.30	27.36	27.80
Max value in selected area:			NoData	NoData	27.36	27.42	27.82

Data in this table comes from the Chorlton Platt Gore 2024 model. Height values are shown in mAOD, and depth values are shown in metres.

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'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

Defended climate change

Label	Easting	Northing	50% AEP (+53%)	5% AEP (+53%)	1% AEP (+41%)	1% AEP (+53%)	0.1% AEP (+53%)
			Depth	Depth	Depth	Depth	Depth
1	381556	394364	NoData	NoData	NoData	NoData	NoData
2	381568	394364	NoData	NoData	NoData	NoData	0.21
3	381532	394376	NoData	NoData	NoData	NoData	0.11
4	381544	394376	NoData	NoData	NoData	NoData	0.26
5	381556	394376	NoData	NoData	NoData	NoData	0.24
6	381568	394376	NoData	NoData	NoData	0.03	0.41
7	381580	394376	NoData	NoData	0.18	0.23	0.64
8	381508	394388	NoData	NoData	NoData	NoData	0.20
9	381520	394388	NoData	NoData	NoData	NoData	0.34
10	381532	394388	NoData	NoData	NoData	NoData	0.35
11	381544	394388	NoData	NoData	NoData	NoData	0.37
12	381556	394388	NoData	NoData	NoData	NoData	0.39

Label	Easting	Northing	50% AEP (+53%)	5% AEP (+53%)	1% AEP (+41%)	1% AEP (+53%)	0.1% AEP (+53%)
			Depth	Depth	Depth	Depth	Depth
13	381568	394388	NoData	NoData	0.00	0.05	0.47
14	381580	394388	NoData	NoData	0.13	0.19	0.60
15	381508	394400	NoData	NoData	NoData	0.07	0.51
16	381520	394400	NoData	NoData	NoData	0.01	0.46
17	381532	394400	NoData	NoData	NoData	0.00	0.44
18	381544	394400	NoData	NoData	0.04	0.09	0.52
19	381556	394400	NoData	NoData	0.08	0.14	0.56
20	381568	394400	NoData	NoData	0.26	0.32	0.74
21	381580	394400	NoData	NoData	0.23	0.29	0.71
22	381520	394412	NoData	NoData	0.10	0.17	0.62
23	381532	394412	NoData	NoData	0.10	0.16	0.60
24	381544	394412	NoData	NoData	0.34	0.39	0.83

Label	Easting	Northing	50% AEP (+53%)	5% AEP (+53%)	1% AEP (+41%)	1% AEP (+53%)	0.1% AEP (+53%)
			Depth	Depth	Depth	Depth	Depth
25	381556	394412	NoData	NoData	0.37	0.43	0.85
26	381520	394424	NoData	NoData	0.29	0.36	0.80
27	381532	394424	NoData	NoData	0.32	0.38	0.82
Max value in selected area:			NoData	NoData	0.27	0.32	0.75

Data in this table comes from the Chorlton Platt Gore 2024 model. Height values are shown in mAOD, and depth values are shown in metres.

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'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.



Defences removed climate change modelled fluvial extent and height

Location (easting/northing)
381546/394394

Scale Created
1:500 3 Nov 2025

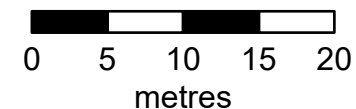
Model name
**Chorlton Platt Gore
2024**

-  Selected area
-  Main river

Modelled 2D grid
Water level in mAOD

-  27 - 27.25
-  27.25 - 27.5
-  27.5 - 27.75
-  27.75 - 28.0
-  28.0 - 28.25
-  28.25 - 28.5
-  28.5 - 28.75
-  28.75 - 29.0
-  29.0 - 29.25

This map shows the
0.1% AEP +53% height data



Sample point data

Defences removed climate change

Label	Easting	Northing	1% AEP (+41%)	1% AEP (+53%)	1% AEP (+85%)	0.1% AEP (+53%)
			Height	Height	Height	Height
1	381556	394364	NoData	NoData	NoData	NoData
2	381568	394364	NoData	NoData	27.60	27.83
3	381532	394376	NoData	NoData	NoData	27.81
4	381544	394376	NoData	NoData	27.57	27.82
5	381556	394376	NoData	NoData	27.58	27.82
6	381568	394376	NoData	27.44	27.60	27.83
7	381580	394376	27.37	27.44	27.60	27.84
8	381508	394388	NoData	NoData	27.56	27.80
9	381520	394388	NoData	NoData	27.57	27.81
10	381532	394388	NoData	NoData	27.57	27.81
11	381544	394388	NoData	NoData	27.58	27.82
12	381556	394388	NoData	27.41	27.58	27.82

Label	Easting	Northing	1% AEP (+41%)	1% AEP (+53%)	1% AEP (+85%)	0.1% AEP (+53%)
			Height	Height	Height	Height
13	381568	394388	27.34	27.41	27.59	27.82
14	381580	394388	27.35	27.42	27.59	27.82
15	381508	394400	NoData	27.38	27.56	27.80
16	381520	394400	NoData	27.38	27.57	27.81
17	381532	394400	NoData	27.39	27.57	27.81
18	381544	394400	27.32	27.40	27.58	27.82
19	381556	394400	27.33	27.40	27.58	27.82
20	381568	394400	27.33	27.41	27.58	27.82
21	381580	394400	27.34	27.42	27.59	27.83
22	381520	394412	27.30	27.38	27.57	27.81
23	381532	394412	27.31	27.39	27.57	27.81
24	381544	394412	27.32	27.39	27.58	27.82

Label	Easting	Northing	1% AEP (+41%)	1% AEP (+53%)	1% AEP (+85%)	0.1% AEP (+53%)
			Height	Height	Height	Height
25	381556	394412	27.33	27.40	27.58	27.82
26	381520	394424	27.30	27.38	27.57	27.81
27	381532	394424	27.30	27.39	27.57	27.81
Max value in selected area:			27.36	27.44	27.60	27.83

Data in this table comes from the Chorlton Platt Gore 2024 model. Height values are shown in mAOD, and depth values are shown in metres.

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Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.

'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

Defences removed climate change

Label	Easting	Northing	1% AEP (+41%)	1% AEP (+53%)	1% AEP (+85%)	0.1% AEP (+53%)
			Depth	Depth	Depth	Depth
1	381556	394364	NoData	NoData	NoData	NoData
2	381568	394364	NoData	NoData	0.00	0.22
3	381532	394376	NoData	NoData	NoData	0.13
4	381544	394376	NoData	NoData	0.04	0.28
5	381556	394376	NoData	NoData	0.02	0.26
6	381568	394376	NoData	0.04	0.19	0.42
7	381580	394376	0.18	0.25	0.42	0.65
8	381508	394388	NoData	NoData	0.02	0.21
9	381520	394388	NoData	NoData	0.11	0.35
10	381532	394388	NoData	NoData	0.12	0.37
11	381544	394388	NoData	NoData	0.14	0.38
12	381556	394388	NoData	0.00	0.17	0.41

Label	Easting	Northing	1% AEP (+41%)	1% AEP (+53%)	1% AEP (+85%)	0.1% AEP (+53%)
			Depth	Depth	Depth	Depth
13	381568	394388	0.01	0.07	0.25	0.48
14	381580	394388	0.14	0.21	0.38	0.61
15	381508	394400	NoData	0.10	0.28	0.52
16	381520	394400	NoData	0.04	0.22	0.47
17	381532	394400	NoData	0.03	0.21	0.45
18	381544	394400	0.04	0.12	0.29	0.54
19	381556	394400	0.08	0.16	0.34	0.58
20	381568	394400	0.26	0.34	0.51	0.75
21	381580	394400	0.24	0.31	0.49	0.72
22	381520	394412	0.11	0.20	0.38	0.63
23	381532	394412	0.11	0.19	0.37	0.62
24	381544	394412	0.34	0.42	0.60	0.84

Label	Easting	Northing	1% AEP (+41%)	1% AEP (+53%)	1% AEP (+85%)	0.1% AEP (+53%)
			Depth	Depth	Depth	Depth
25	381556	394412	0.37	0.45	0.63	0.87
26	381520	394424	0.30	0.39	0.57	0.81
27	381532	394424	0.33	0.41	0.59	0.84
Max value in selected area:			0.27	0.35	0.52	0.76

Data in this table comes from the Chorlton Platt Gore 2024 model. Height values are shown in mAOD, and depth values are shown in metres.

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'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.



**No defences exist
climate change
modelled fluvial
extent and height**

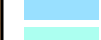
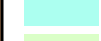
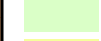
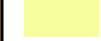
Location (easting/northing)
381546/394394

Scale Created
1:500 3 Nov 2025

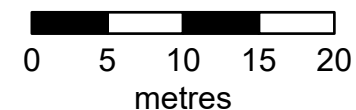
Model name
Corn Brook 2017

-  Selected area
-  Main river

Modelled 2D grid
Water level in mAOD

-  0 - 3.5
-  3.5 - 7.0
-  7.0 - 10.5
-  10.5 - 14.0
-  14.0 - 17.5
-  17.5 - 21.0
-  21.0 - 24.5
-  24.5 - 28.0
-  28.0 - 31.5

This map shows the
0.1% AEP +30% height data



Sample point data

No defences exist climate change

Label	Easting	Northing	0.1% AEP (+30%)	0.1% AEP (+30%)
			Height	Depth
1	381556	394364	NoData	NoData
2	381568	394364	NoData	NoData
3	381532	394376	NoData	NoData
4	381544	394376	NoData	NoData
5	381556	394376	NoData	NoData
6	381568	394376	NoData	NoData
7	381580	394376	27.25	0.13
8	381508	394388	NoData	NoData
9	381520	394388	NoData	NoData
10	381532	394388	NoData	NoData
11	381544	394388	NoData	NoData
12	381556	394388	NoData	NoData

Label	Easting	Northing	0.1% AEP (+30%)	0.1% AEP (+30%)
			Height	Depth
13	381568	394388	NoData	NoData
14	381580	394388	NoData	NoData
15	381508	394400	NoData	NoData
16	381520	394400	NoData	NoData
17	381532	394400	NoData	NoData
18	381544	394400	NoData	NoData
19	381556	394400	NoData	NoData
20	381568	394400	27.23	0.21
21	381580	394400	27.24	0.23
22	381520	394412	NoData	NoData
23	381532	394412	NoData	NoData
24	381544	394412	27.23	0.28

Label	Easting	Northing	0.1% AEP (+30%)	0.1% AEP (+30%)
			Height	Depth
25	381556	394412	27.23	0.38
26	381520	394424	27.20	0.24
27	381532	394424	27.21	0.28
Max value in selected area:			27.25	0.26

Data in this table comes from the Corn Brook 2017 model. Height values are shown in mAOD, and depth values are shown in metres.

Any blank cells show where a particular scenario has not been modelled for this location.

Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.

'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

Strategic flood risk assessments

We recommend that you check the relevant local authority's strategic flood risk assessment (SFRA) as part of your work to prepare a site specific flood risk assessment.

This should give you information about:

- the potential impacts of climate change in this catchment
- areas defined as functional floodplain
- flooding from other sources, such as surface water, ground water and reservoirs

Your Lead Local Flood Authority is Manchester District.

About this data

This data has been generated by strategic scale flood models and is not intended for use at the individual property scale. If you're intending to use this data as part of a flood risk assessment, please include an appropriate modelling tolerance as part of your assessment. The Environment Agency regularly updates its modelling. We recommend that you check the data provided is the most recent, before submitting your flood risk assessment.

Flood risk activity permits

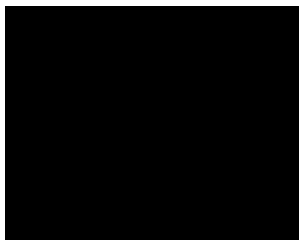
Under the Environmental Permitting (England and Wales) Regulations 2016 some developments may require an environmental permit for flood risk activities from the Environment Agency. This includes any permanent or temporary works that are in, over, under, or nearby a designated main river or flood defence structure.

[Find out more about flood risk activity permits](#)

Help and advice

Contact the Greater Manchester Merseyside and Cheshire Environment Agency team at inforequests.gmmc@environment-agency.gov.uk for:

- [more information about getting a product 5, 6, 7 or 8](#)
- general help and advice about the site you're requesting data for



FAO:

How to contact us:

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

Telephone: 0370 7510101**E-mail: propertysearches@uuplc.co.uk**

**Your Ref: UNITY ARTS
Our Ref: UUPS-ORD-590218
Date: 02/08/2024**

Dear Sirs**Location: 59 OSWALD ROAD, CHORLTON CUM HARDY, MANCHESTER, M21 9QD**

I acknowledge with thanks your request dated 29/07/2024 for information on the location of our services.

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

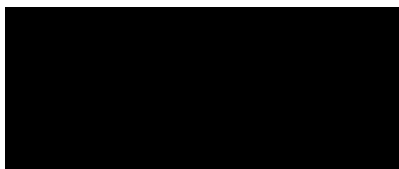
The enclosed plans are being provided to you subject to the United Utilities terms and conditions for both the wastewater and water distribution plans which are shown attached.

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

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

If you have any queries regarding this matter please [contact us](#).

Yours Faithfully,



Karen McCormack
Property Searches Manager

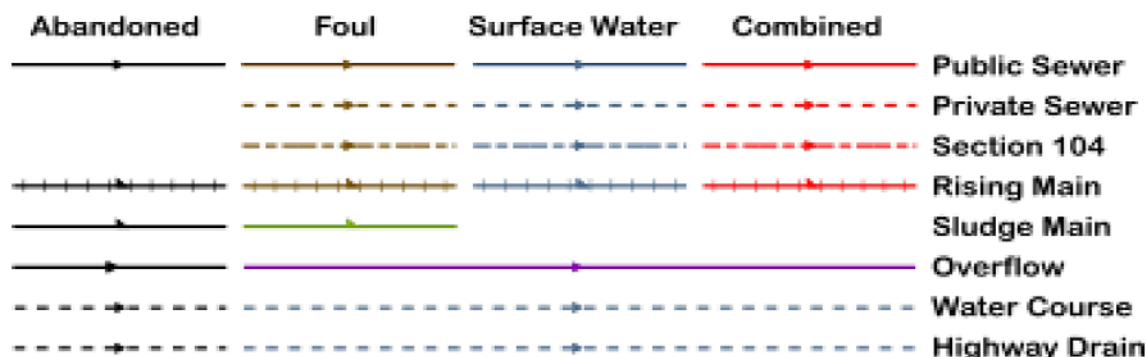
TERMS AND CONDITIONS - WASTEWATER AND WATER DISTRIBUTION PLANS

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

TERMS AND CONDITIONS:

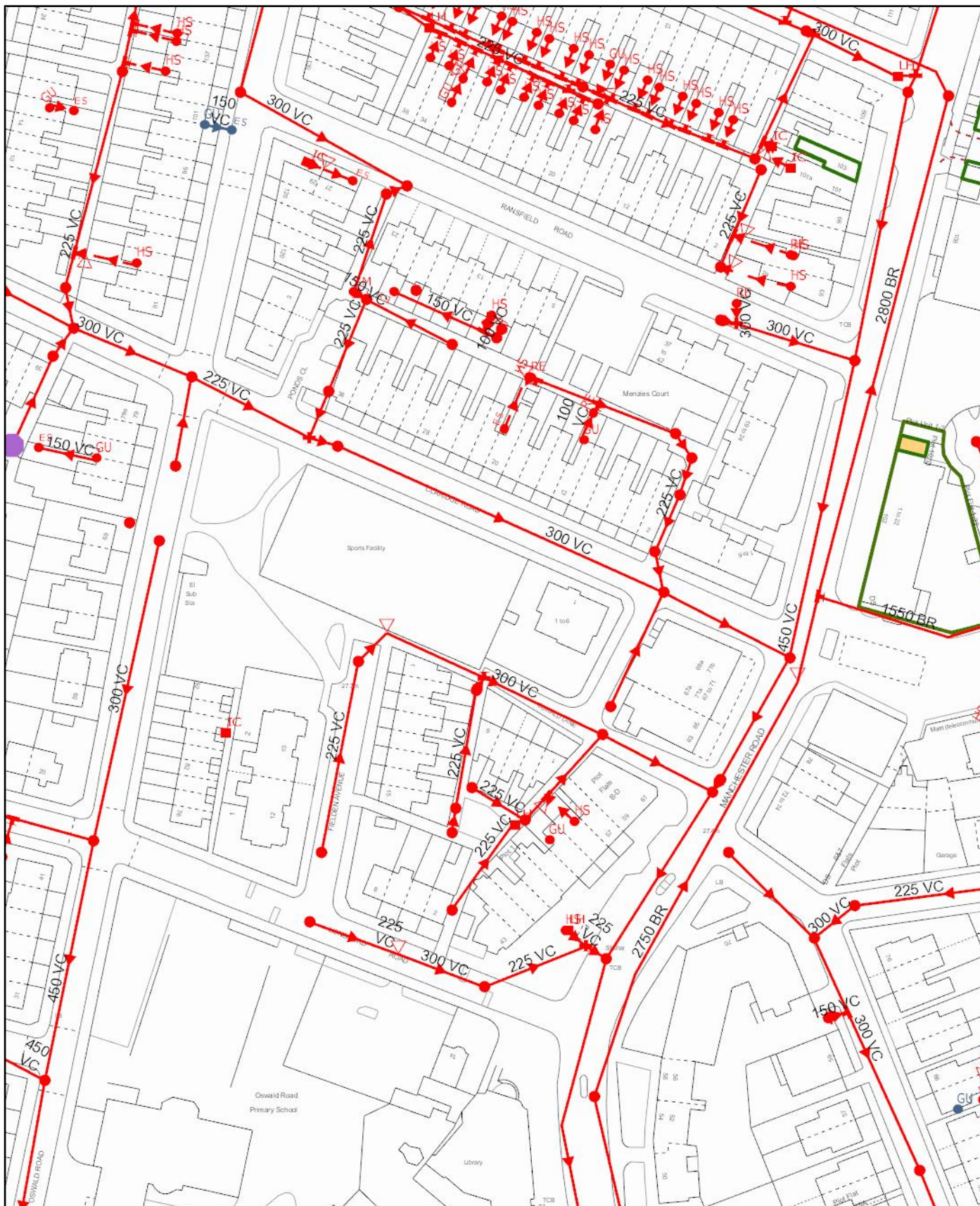
- This Map and any information supplied with it is issued subject to the provisions contained below, to the exclusion of all others and no party relies upon any representation, warranty, collateral contract or other assurance of any person (whether party to this agreement or not) that is not set out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

Wastewater Symbolology



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

Manhole	Side Entry Manhole
Head of System	Outfall
Extent of Survey	Screen Chamber
Rodding Eye	Inspection Chamber
Inlet	Bifurcation Chamber
Discharge Point	Lamp Hole
Vortex	T Junction / Saddle
Penstock	Catchpit
Washout Chamber	Valve Chamber
Valve	Vent Column
Air Valve	Vortex Chamber
Non Return Valve	Penstock Chamber
Soakaway	Network Storage Tank
Gully	Sewer Overflow
Cascade	Ww Treatment Works
Flow Meter	Ww Pumping Station
Hatch Box	Septic Tank
Oil Interceptor	Control Kiosk
Summit	DNM Network Monitoring Point
Drop Shaft	Change of Characteristic
Orifice Plate	



Scale: 1:1307
Date: 02/08/2024

SEWER RECORDS

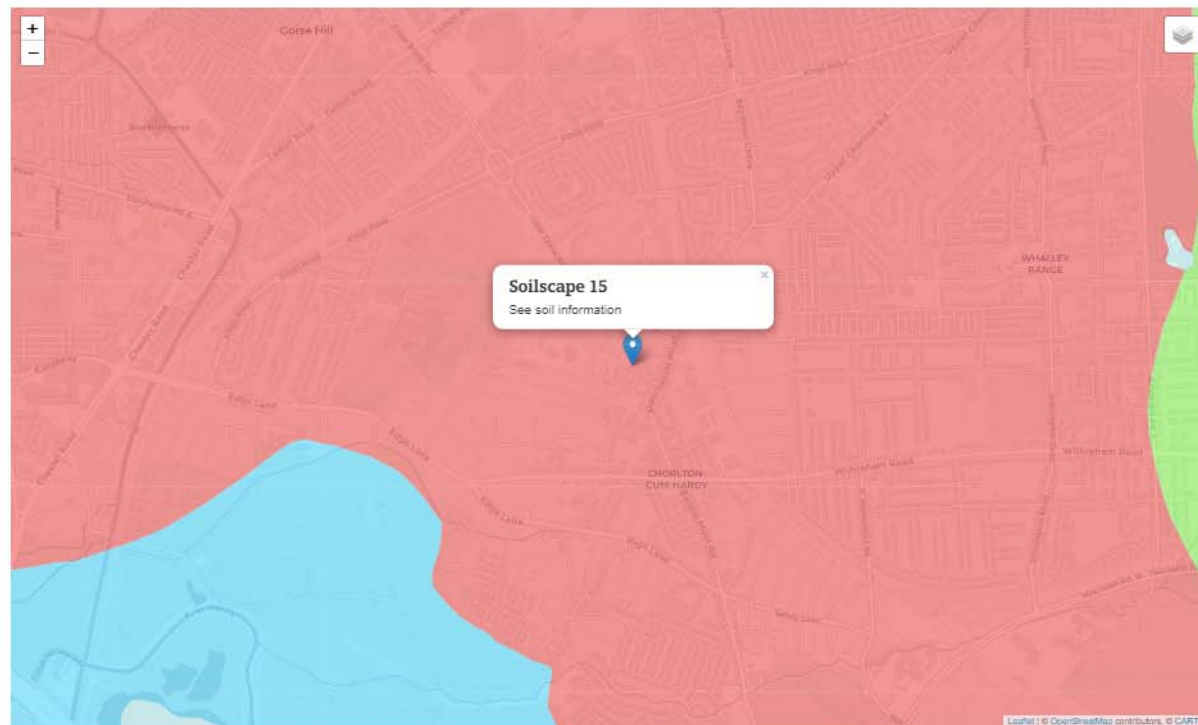


Address or Site Reference: 59 OSWALD ROAD, CHORLTON CUM HARDY, MANCHESTER, M21 9QD

Printed by: Property Searches

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

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Soil Information

Soilscape 15:

Naturally wet very acid sandy and loamy soils

Texture:

Sandy and loamy

Coverage:

England: 1.9%, Wales: 0.2%, England & Wales: 1.7%

Drainage:

Naturally wet

Water table

Fertility:

Very low



Landcover:

Arable and horticulture some wet lowland heath

Habitats:

Mixed dry and wet lowland heath communities

Carbon:

Medium

Drains to:

Shallow groundwater

Water protection:

Where cropped, vulnerable to leaching of nitrate and pesticides to groundwater; cropped land is generally flat; vulnerable to wind erosion during dry weather

General cropping:

Highly productive, where not stony, and suitable for cereals, roots, potatoes and vegetables but droughty and dependent on irrigation; lime and fertilisers are rapidly leached. Winter harvesting of roots will damage weak soil structure and lead to compaction



DUNELM DRILLING CO.

BOREHOLE RECORD

Contract No. C 2224

Client ESSO PETROLEUM CO LTD

Ground Level

Location CHORLTON S/STN - MANCHESTER B

Date 29 JULY 1983

BOREHOLE No. 1

Depth	Thick- ness	Legend	Description of Strata	Type of Sample	C kN/m ²	M %	Ø	Density Kg/m ³	N
0.90	0.90		TAKMAC ON BRICK RUBBLE + OLD FOUNDATIONS						
1.30	0.40		MIXTURE OF SAND WITH CLAY INTRUSIONS	P 1.00					10
2.60	1.30		DK BROWN MEDIUM GRAINED SAND	P 2.50					7
3.50	0.90		DK BROWN SAND + GRAVEL						
4.50	1.00		DK BROWN SAND + GRAVEL MIXED WITH A SOFT RED/BROWN CLAY	P 4.00					13
5.00	0.50		FIRM RED/BROWN BOUNDER CLAY	U 5.00	139.8	12.0	-	2270	
1 HR HAND DIGGING + BREAKING OUT OLD FOUNDATIONS.									

Water Struck at 1.50 m

Standing Water Level 1.50 m

Calculated by: Christian vose

Site name: Claridge Road

Site location: Manchester

Site Details

Latitude: 53.44601° N

Longitude: 2.27935° W

Reference: 598234685

Date: Sep 07 2024 17:26

This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance “Rainfall runoff management for developments”, SC030219 (2013) , the SuDS Manual C753 (Ciria, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Runoff estimation approach

IH124

Site characteristics

Total site area (ha): 0.175

Methodology

Q_{BAR} estimation method: Calculate from SPR and SAAR

SPR estimation method: Calculate from SOIL type

Notes

(1) Is Q_{BAR} < 2.0 l/s/ha?

When Q_{BAR} is < 2.0 l/s/ha then limiting discharge rates are set at 2.0 l/s/ha.

Soil characteristics

	Default	Edited
SOIL type:	4	4
HOST class:	N/A	N/A
SPR/SPRHOST:	0.47	0.47

(2) Are flow rates < 5.0 l/s?

Where flow rates are less than 5.0 l/s consent for discharge is usually set at 5.0 l/s if blockage from vegetation and other materials is possible. Lower consent flow rates may be set where the blockage risk is addressed by using appropriate drainage elements.

Hydrological characteristics

	Default	Edited
SAAR (mm):	846	846
Hydrological region:	10	10
Growth curve factor 1 year:	0.87	0.87
Growth curve factor 30 years:	1.7	1.7
Growth curve factor 100 years:	2.08	2.08
Growth curve factor 200 years:	2.37	2.37

(3) Is SPR/SPRHOST ≤ 0.3?

Where groundwater levels are low enough the use of soakaways to avoid discharge offsite would normally be preferred for disposal of surface water runoff.

Greenfield runoff rates	Default	Edited
-------------------------	---------	--------

Q_{BAR} (l/s):	1.05	1.05
1 in 1 year (l/s):	0.92	0.92
1 in 30 years (l/s):	1.79	1.79
1 in 100 year (l/s):	2.19	2.19
1 in 200 years (l/s):	2.5	2.5

This report was produced using the greenfield runoff tool developed by HR Wallingford and available at www.uksuds.com. The use of this tool is subject to the UK SuDS terms and conditions and licence agreement , which can both be found at www.uksuds.com/terms-and-conditions.htm. The outputs from this tool are estimates of greenfield runoff rates. The use of these results is the responsibility of the users of this tool. No liability will be accepted by HR Wallingford, the Environment Agency, CEH, Hydrosolutions or any other organisation for the use of this data in the design or operational characteristics of any drainage scheme.

Storage Estimate

Return Period (years)

100

OK

Climate Change (%)

50

Cancel

Impermeable Area (ha)

0.066

Update

Peak Discharge (l/s)

5.000

Infiltration Coefficient (m/hr)
(leave blank if no infiltration)

Calc

Required Storage (m³)

Calc

from

14

to

24

With infiltration (m³)

from

to



Environment
Agency

would your business stay afloat?

A guide to preparing your
business for flooding



Flooding is the most common and widespread natural disaster in the UK. Since 1998 there has been at least one serious flood every year. Businesses like yours are more likely to be flooded than destroyed by fire. As our climate changes we can expect to see more extreme weather – and more floods.

We aim to reduce the likelihood of flooding by managing land, rivers, coastal systems and flood defences. While we do everything we can to reduce the chance of flooding, it is a natural process and can never be completely eliminated.

By taking action to prepare in advance for flooding, most businesses can save between 20 and 90 per cent on the cost of lost stock and movable equipment, as well as some of the trouble and stress that goes with such an event.

This is a simple guide to some of the easy actions that you can take to make sure that your business is as well prepared as possible.

It tells you about how to find out if your business is at risk, our flood warning service and what our flood warning codes mean. It also has a simple template to use to design a flood plan for your company.

For more information about flooding, visit our website at **www.gov.uk/flood** or call Floodline on **0345 988 1188**.

Make sure that your business is prepared for flooding.

How do I find out if my business is at risk from flooding?

There are two quick and easy ways for you to find out if you're at risk.

call us on
0345 988 1188

Our Floodline service is open 24 hours, calls are charged at local rate. By taking your postcode, our operators will check and see if your business is in a flood risk area.

Look at our website
www.gov.uk/flood

You need to be aware of flooding and keep an eye on the water levels and weather situation at all times. You can do this by checking the flood forecasts and the river and sea levels on our website.

Our online flood map uses the latest technology and data gathered over many years to give the most accurate view of flooding in your area.

By entering your postcode you can find out if your business is at risk. Areas at risk from flooding are shown in dark blue and areas at risk from extreme flooding in light blue.

My business is at risk from flooding.

What should I do now?

Start preparing now. If the weather conditions are right, flooding can happen at any time.

Remember, floods can happen at any time and any day – make sure you provide a number that can be contacted at all times – even out of working hours.

Sign up for flood warnings.

The first thing you should do is find out if you can receive flood warnings. In areas of high flood risk, we offer a service called Floodline Warnings Direct. This is a free, 24 hour service that sends automated flood warnings by telephone, SMS text, email, fax or pager.

To find out if you can receive this service, call Floodline on 0345 988 1188.

If your business isn't in an area covered by our warnings you can still check the latest flood warnings in force on our website.

When the situation is serious, flood warnings will also be broadcast on local television and radio news.

What practical steps can I take to protect my business?

Now that you've checked your risk and found out about flood warnings, it's time to start thinking about preparing a flood plan specifically for your business.

Taking simple steps can go a long way to protecting your business from flooding. Preparing a flood plan could:

- Significantly reduce financial losses, damage to property and business interruption;
- Help compliance with regulatory requirements (for example, Occupier's Liability Act 1984);
- Reduce exposure to civil or criminal liability;
- Enhance your company's image and credibility with employees, customers, suppliers and the community;
- Help fulfil your moral responsibility to protect employees, the community and the environment;
- Help you to obtain insurance cover.

What is a flood plan?

Just as many businesses have health and safety policies and contingency plans for an emergency, they should also have flood plans.

A flood plan is a written document that outlines how your business will respond to a flood.

This might include a list of steps you will take in case of a flood and the order you will take them in. It could also include the purchase of flood products and insurance.

A written plan can make information **easy** to access during a flood, **easy** to communicate to staff, and **easy** to remember.

Small businesses should make sure there is a plan of action in case of flooding. As the business owner, this may be your responsibility.

If your business is **medium sized**, flood preparation might be the responsibility of a team of people from different areas of the business.

If your business decides to have a flood planning team, this could be led by the business owner or Managing Director.

The leader of the flood planning team will need to let staff know about the plan once it is finished.

All members of the team should also keep a copy of important flood contacts at home for easy access.

Key areas to consider in your flood plan are:

- human resources;
- maintenance/facilities;
- finance and purchasing.

Once you have completed your plan don't forget about it. Look at it regularly and make sure it is up to date and in the event of a flood **use it**.



business flood plan



A written flood plan is recommended for businesses.

It should include:

- A list of important contacts, including Floodline, building services, suppliers and evacuation contacts for staff;
- A description or map showing locations of key property, protective materials and service shut-off points;
- Basic strategies for protecting property, preventing business disruption and assisting recovery;
- Checklists of procedures that can be quickly accessed by staff during a flood.

If a flood is imminent, your main priority is to make sure that your staff are safe. However there may be other actions that you can take to prepare your building and it's contents to minimise damage and post-flood repair and restoration costs.

Business flood plan

Flood plan for _____ dated _____

Registered address _____

Postcode _____

Staff contact list

Name	Address	Telephone/mobile	Emergency contact	Emergency telephone and address

Note staff who may require assistance in the event of a flood.

Name	Office location

Key locations

Service cut-off	Description of location
Electricity	
Gas	
Water	

Answer the following if applicable

	Description of location	How to protect from a flood (for example, move, cover, tie down)
First Aid Kit		
Oil based products (gasoline, oil, cooking oil etc.)		
Chemicals (including cleaning products)		

Protective actions

Identify stock, equipment and possessions that may need special protective measures, and describe the actions you will take to prevent damage in the event of a flood. We have suggested items and ways to protect them, but make sure you follow through on your plans.

think about:

- Computers;
- Tables / heavy furniture;
- Vehicles;
- Paper files;
- Electrical items;
- Chairs / stools;
- Databases;
- Soft furnishings;
- Computer files;
- Staff files.

ways to protect items

- Make a copy of important documentation and store in safe location;
- Raise items above ground level;
- Buy flood protection products;
- Buy new flood-resistant items;
- Move items to a safer location if possible – to an upper level of the building or off site.

Valuable item	Protective action	New location (if applicable)	Done
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐

Suggested basic building materials to help protect your property

If materials are not needed, leave the relevant section blank

Materials	Used for	Items to protect / where to use	Storage location	Done
Sand and sand bags (unfilled), shovel	Creating flood barriers (used with plastic sheeting)			☐
Tools – hammer, nails, saw	Boarding up doors, windows and openings, creating shelves			☐
Wood – plywood, blocks of wood	Boarding up doors, windows and openings, creating shelves			☐
Sturdy plastic sheeting	Sandbag barriers, pulling up around furniture and appliances			☐
Strong plastic bags	Putting around legs of tables and chairs			☐
Pallets	Raising stored stock above flood level			☐
Emergency power generator	Maintaining function of air conditioning units (can help dry out a building), running fridges and freezers, medical equipment if appropriate			☐

Identify people who can help you before, during and after a flood, and what they can do.

We have suggested ways they might be able to help, but you'll need to discuss this with them.

Name	Address	Telephone day	Telephone evening	Mobile

Ways people can help

- assistance with installing flood products;
- assistance with transporting stock/materials to new location if possible;
- provision of emergency storage;
- provision of emergency supplies or medical support if required.

discussion guide

This discussion guide sums up the key areas of flood planning. Some of this information can be found in this pack to help get you started.



Research

- Look at your existing business policies, and think about whether they are appropriate in the event of a flood.

Staff

- Make a list of **employees' contact details in the event of an evacuation**. This might include mobile telephone numbers, or numbers for their home or the home of a friend or relative;
- Think about staff who **may need special assistance** in the event of a flood (for example, elderly, deaf, blind etc.)

Security procedures

- **Locking windows, doors and setting the alarm**. You might need more than one person to help do this;
- Insurance policies – **Are you insured for flood damage**, business interruption and lost revenue?
- Employee manuals – You might **add flood safety to staff information packs**, or adapt job descriptions to include flood warden duties;
- Hazardous materials plan – You must ensure that **chemicals, oils and other substances in your possession are kept safe** and do not contaminate flood water;
- Health and safety assessment – Plan to **check the functioning of flood products and flood warning systems regularly**, just as you do for fire safety equipment.

Check codes and regulations that might apply to your business in the event of a flood. The following could provide guidance on the right actions to take:

- Occupational health and safety regulations;
- Environmental regulations.



Important contacts

Make a list of important telephone numbers, including contacts for gas, electricity, water and telephone providers.

Key locations

- **Know the location** of cut-off points for gas, electricity and water. Ideally, these should be marked on a map that is stored with your flood plan;
- Know the location of chemicals, oils or other materials that could be dangerous or contaminate flood water. These should be stored safe from floods and other damage.

Protective actions

- Note key stock, equipment and possessions that may need special protection from flood water;
- Consider things you may need during or after a flood (for example, sandbags, plastic sheeting, loudspeaker);
- See if it's **possible to move key operations**, such as shipping or customer services, to another building.

Suppliers and external links

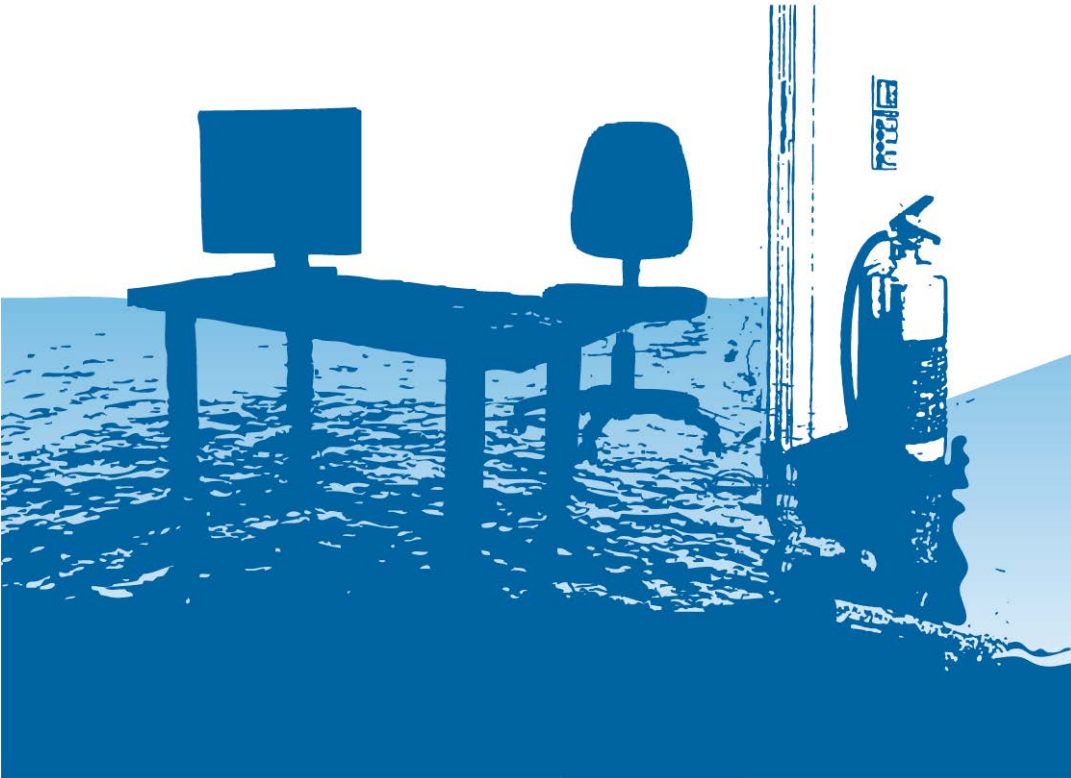
- Identify products and services you won't need in the event of a flood, or which suppliers may not be able to provide. **Make back-up plans** or arrangements for short-notice cancellation of deliveries;
- Consider contracting in advance with companies whose help you may need after a flood.

business checklist

Are you prepared for flooding?

If you answer no to any of the questions overleaf, there may be more you can do to protect your business.

The individual sections will give you valuable information on effective actions you can take to prepare for a flood.



If you can answer yes, please ☒, otherwise leave blank for no.

Know if you're at risk

- ☐ Do you know if you're at risk of flooding?
- ☐ Are flood warnings available in your area?
- ☐ Do you know how you can receive flood warnings?

Preparing a flood plan

- ☐ Do you know how your business will respond to a flood?
- ☐ Do you have a list of useful numbers including Floodline, local authority and insurance company?
- ☐ Do you know how to shut off your gas/electric/water supplies?
- ☐ Are your stock, fittings and valuable equipment stored above flood level?
- ☐ Have you developed flood contingency plans with suppliers and/or clients?
- ☐ Can you call someone to help you in the event of a flood?

Staff training and evacuation

- ☐ Are you aware of correct flood safety procedures for you and your staff?
- ☐ Have you trained your staff on flood safety procedures?
- ☐ Can your staff work quickly and efficiently to protect your business in the event of a flood?

Protecting your property

- ☐ Have you installed flood protection products?
- ☐ Do you have a stockpile of useful materials including plywood, plastic sheeting, sandbags (unfilled), sand, nails, hammer, shovel, blocks of wood and a saw?
- ☐ Have you installed non return valves in your toilets and drains?
- ☐ Do you and your staff have high ground where you can park your cars?
- ☐ Are your electrical sockets above flood level?
- ☐ Do you have computer equipment in the basement?

Flood insurance

- ☐ Do you have sufficient insurance cover in the event of a flood situation?
- ☐ Do you know what information your insurer will require to support a claim?

Evacuation

- ☐ Do you have an easy way to let your staff know about an evacuation?
- ☐ Do you know which roads will stay open in your area during a flood?
- ☐ Have you identified where staff can shelter in the event of a flood?
- ☐ Could you control staff panic during a flood?

understand your flood warning codes

Our warning service has three types of warnings - Flood Alert, Flood Warning and Severe Flood Warning - that will help you prepare for flooding and take necessary actions.

ONLINE FLOOD RISK FORECAST

What it means

Be aware.
Keep an eye on the weather situation.

When it's used

Forecasts of flooding on the Environment Agency website are updated at least once a day.

What to do

- Check weather conditions.
- Check for updated flood forecasts on our website.



FLOOD ALERT

What it means

Flooding is possible.
Be prepared.

When it's used

Two hours to two days in advance of flooding.

What to do

- Be prepared to act on your flood plan.
 - Prepare a flood kit of essential items.
 - Monitor local water levels and the flood forecast on our website.
-



FLOOD WARNING

What it means

Flooding is expected.
Immediate action required.

When it's used

Half an hour to one day
in advance of flooding.

What to do

- Move staff, stock and valuables to a safe place.
 - Turn off gas, electricity and water supplies if safe to do so.
 - Put flood protection equipment in place.
-



SEVERE FLOOD WARNING

What it means

Severe flooding.
Danger to life.

When it's used

When flooding poses a
significant risk to life.

What to do

- Stay in a safe place with means of escape.
 - Be ready should you need to evacuate.
 - Co-operate with the emergency services.
 - Call 999 if you are in immediate danger.
-

WARNING NO LONGER IN FORCE

What it means

No further flooding is
currently expected in
you area.

When it's used

When river or sea
conditions begin to
return to normal.

What to do

- Be careful. Flood water may still be around for several days.
 - If you've been flooded, ring your insurance company as soon as possible.
-

useful contacts

Fill in the contact details you may need if your business floods.
Keep it in a safe place, where you can hold of it quickly.

	Company name	Telephone number/s
Environment Agency Floodline		0345 988 1188
Electricity supplier and meter number		
Gas supplier and meter number		
Water supplier and meter number		
Telephone provider		
Local authority emergency services		
Insurance company 24-hour number and policy number		
Insurance agent		
Local radio station for news alerts and weather updates		
Companies that may be able to help you after a flood		
Electrician		
Plumber		
Builder		
Equipment repair/suppliers		
Security services		
Water pumping services		
Emergency power suppliers		

**Would you like to find out more about us,
or about your environment?**

Then call us on

08708 506 506* (Mon-Fri 8-6)

email

enquiries@environment-agency.gov.uk

or visit our website

www.gov.uk/environment-agency

incident hotline 0800 80 70 60 (24hrs)

floodline 0345 988 1188 (24hrs)

*** Weekday Daytime calls cost 8p plus up to 6p/min from BT Weekend Unlimited. Mobile and other providers' charges may vary.**



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