



**PROPOSED
REDEVELOPMENT OF
STATION WORKS, BURY
ROAD, RADCLIFFE, BURY,
GREATER MANCHESTER**

FLOOD RISK ASSESSMENT

SEPTEMBER 2022

REF: 1557/RE/02-16/01 REVISION A

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CONTRACT

Evans Rivers and Coastal Ltd has been commissioned by Paul Cook Developments (Whitehaven) Ltd to carry out a flood risk assessment for a proposed redevelopment of Station Works, Bury Road, Radcliffe, Bury.

QUALITY ASSURANCE, ENVIRONMENT AND HEALTH AND SAFETY

Evans Rivers and Coastal Ltd operates a Quality Assurance, Environmental, and Health and Safety Policy.

This project comprises various stages including data collection; depth analysis; and reporting. Quality will be maintained throughout the project by producing specific methodologies for each work stage. Quality will also be maintained by providing specifications to third parties such as surveyors; initiating internal quality procedures including the validation of third party deliverables; creation of an audit trail to record any changes made; and document control using a database and correspondence log file system.

To adhere to the Environmental Policy, data will be obtained and issued in electronic format and alternatively by post. Paper use will also be minimised by communicating via email or telephone where possible. Documents and drawings will be transferred in electronic format where possible and all waste paper will be recycled. Meetings away from the office of Evans Rivers and Coastal Ltd will be minimised to prevent unnecessary travel, however for those meetings deemed essential, public transport will be used in preference to car journeys.

The project will follow the commitment and objectives outlined in the Health and Safety Policy operated by Evans Rivers and Coastal Ltd. All employees will be equipped with suitable personal protective equipment prior to any site visits and a risk assessment will be completed and checked before any site visit. Other factors which have been taken into consideration are the wider safety of the public whilst operating on site, and the importance of safety when working close to a water source and highway. Any designs resulting from this project and directly created by Evans Rivers and Coastal Ltd will also take into account safety measures within a "designers risk assessment".

Report carried out by:

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DISCLAIMER

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DRAWINGS	SSL:17004:200:1:1
	22049-JDS-S1-XX-DR-A-1003A
	22049-JDS-S1-00-DR-A-0002

1. INTRODUCTION

1.1 Project Scope

1.1.1 Evans Rivers and Coastal Ltd has been commissioned by Paul Cook Developments (Whitehaven) Ltd to carry out a flood risk assessment for a proposed redevelopment of Station Works, Bury Road, Radcliffe, Bury.

1.1.2 It is understood that this Flood Risk Assessment will be submitted to the Planning Authority and Environment Agency (Agency, hereafter) as part of a planning application. Specifically, this assessment intends to:

- a) Consider the impacts of the 1 in 20 year, 1 in 100 year and 1 in 1000 year flood events (inclusive of climate change), in accordance with NPPF;
- b) Review any literature and guidance specific to this area;
- c) Determine the extents of the aforementioned NPPF Flood Zones across the site, together with depths of floodwater and hazard;
- d) Assess the risks to people and property and propose mitigation measures accordingly;
- e) Review existing evacuation and warning procedures for the area;
- f) Carry out an appraisal of flood risk from any other sources such as groundwater as required by NPPF;
- g) Report findings and recommendations.

1.1.3 This assessment is carried out in accordance with the requirements of the National Planning Policy Framework (NPPF) dated 2021. Other documents which have been consulted include:

- DEFRA/EA document entitled *Framework and guidance for assessing and managing flood risk for new development Phase 2 (FD2320/TR2)*, 2005;
- Communities and Local Government 2007. *Improving the Flood Performance of New Buildings*. HMSO.
- DEFRA/EA document entitled *The flood risks to people methodology (FD2321/TR1)*, 2006;
- EA *Supplementary Note on Flood Hazard Ratings and Thresholds for Development Planning and Control Purpose*, 2008;
- National Planning Practice Guidance – Flood Risk and Coastal Change.
- UK Government's climate change allowances guidance.
- Greater Manchester Surface Water Management Plan – Water Street (SWMP) dated 2013.
- Bury, Rochdale and Oldham Strategic Flood Risk Assessment Level 2 Volume 3 dated 2009.

- Bury, Rochdale and Oldham Strategic Flood Risk Assessment Level 1 Volume 2 dated 2009.
- Bury Council Preliminary Flood Risk Assessment (PFRA) dated 2011.
- Bury Local Flood Risk Management Strategy (LFRMS) dated 2014.

2. DATA COLLECTION

2.1 To assist with this report, the data collected included:

- Ordnance Survey 1:10,000 street view map obtained via Promap (Evans Rivers and Coastal Ltd OS licence number 100049458).
- British Geological Survey, *Online Geology of Britain Viewer*.
- British Geological Survey, *Groundwater Susceptibility Map*.
- 1:625,000 *Hydrogeological Map of England and Wales*, published in 1977 by the Institute of Geological Sciences (now the British Geological Survey).
- Topographical survey of the site carried out by Survey Systems (shown on Drawing Number SSL:17004:200:1:1).
- Filtered LIDAR data at 1m resolution.
- Product 4 flood level data received by the Environment Agency (Appendix A).

3. SITE CHARACTERISTICS

3.1 Existing Site Characteristics and Location

- 3.1.1 The site is located at Station Works, Bury Road, Radcliffe, Bury, Greater Manchester. The approximate Ordnance Survey (OS) grid reference for the site is 378938 407652 and the location of the site is shown on Figure 1.

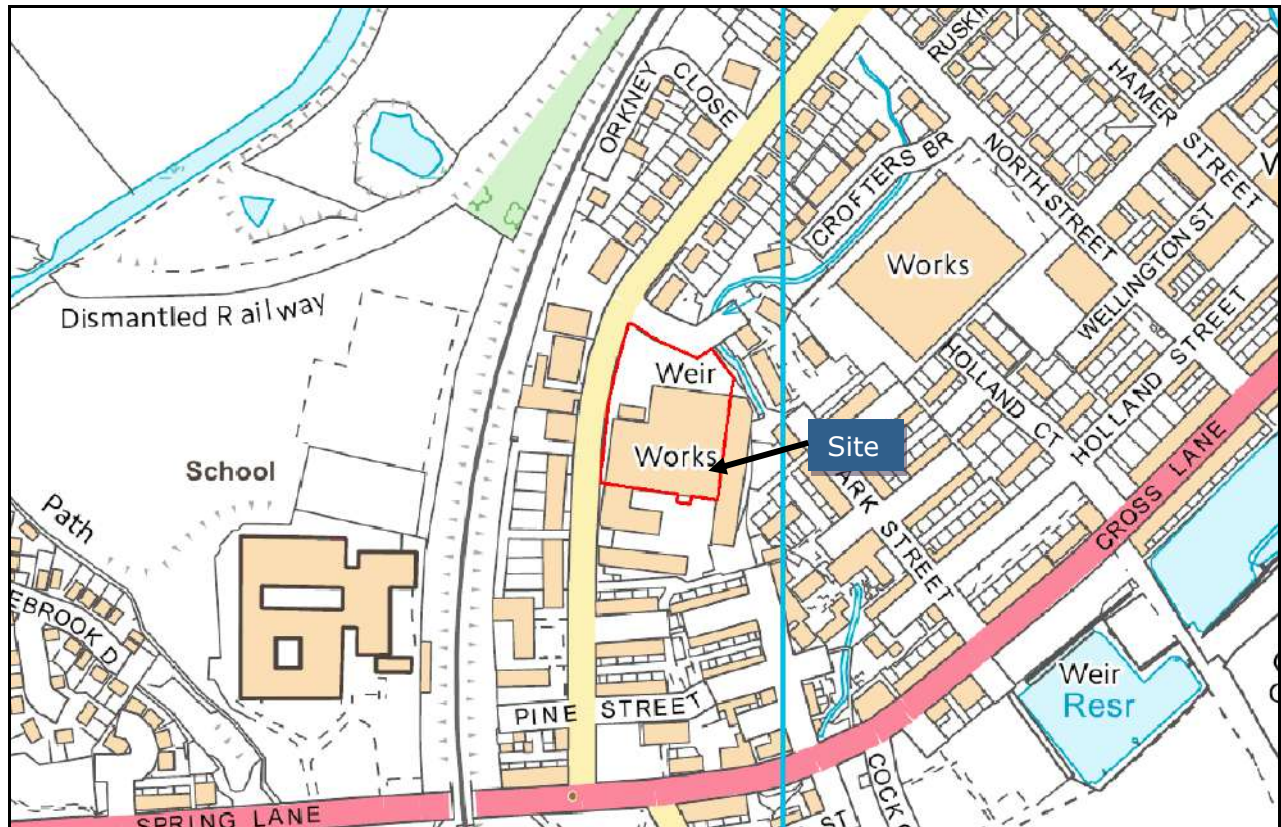


Figure 1: Site location plan (Source: Ordnance Survey)

- 3.1.2 The site is approximately square in shape and currently comprises the former Station Works site which was used for commercial and industrial operations.
- 3.1.3 It is understood from the topographical survey and on-site inspections that the existing buildings across the site have been demolished, and that the surface of the site is predominantly covered by concrete, with an area towards the northern frontage of the site covered by vegetation and unmade ground.
- 3.1.4 The site is bounded by Bury Road along its western frontage which runs in a north to south direction and provides access onto the site. The northern frontage of the site is bounded by Newbridge Close and the eastern frontage of the site is bounded in part by Crow Trees Farm Brook which flows in a southerly direction and an existing commercial/industrial building. The southern frontage of the site is bounded by other (demolished) concrete areas of the former Station Works site.
- 3.1.5 A topographical survey has been carried out at the site by Survey Systems (shown on Drawing Number SSL:17004:200:1:1). By consulting the topographical survey it can be seen that ground levels across the site fall in an easterly to south easterly direction.

3.1.6 Filtered LIDAR data at 1m resolution has been obtained in order to illustrate the topography across the site (Figure 2).



Figure 2: Filtered LIDAR survey data at 1m resolution where higher ground is denoted by red and orange colours and lower ground is denoted by blue colours

3.2 Site Proposals

- 3.2.1 It is the Client's intention to redevelop the site by providing 30 residential units, together with parking areas, access roads and garden areas. Access will continue to be provided from Bury Road.
- 3.2.2 The finished floor levels of the buildings will be between 69.60m AOD and 70m AOD as shown on Drawing Number 22049-JDS-S1-XX-DR-A-1003A. The site proposals can be seen on Drawing Number 22049-JDS-S1-00-DR-A-0002.

4. BASELINE INFORMATION

4.1 Environment Agency Flood Zone Map

- 4.1.1 The Environment Agency's Flood Zone Map (Figure 3) shows that the site is located within Flood Zone 2 and 1.
- 4.1.2 The Flood Zone 2 'Medium Probability' floodplain is defined as having between a 1 in 100 year annual probability and 1 in 1000 year annual probability of flooding. The threshold of the Flood Zone 2 floodplain is the 1 in 1000 year extreme event.
- 4.1.3 The Flood Zone 1 'Low Probability' comprises land as having less than a 1 in 1000 year annual probability of fluvial flooding (i.e. an event more severe than the extreme 1 in 1000 year event).

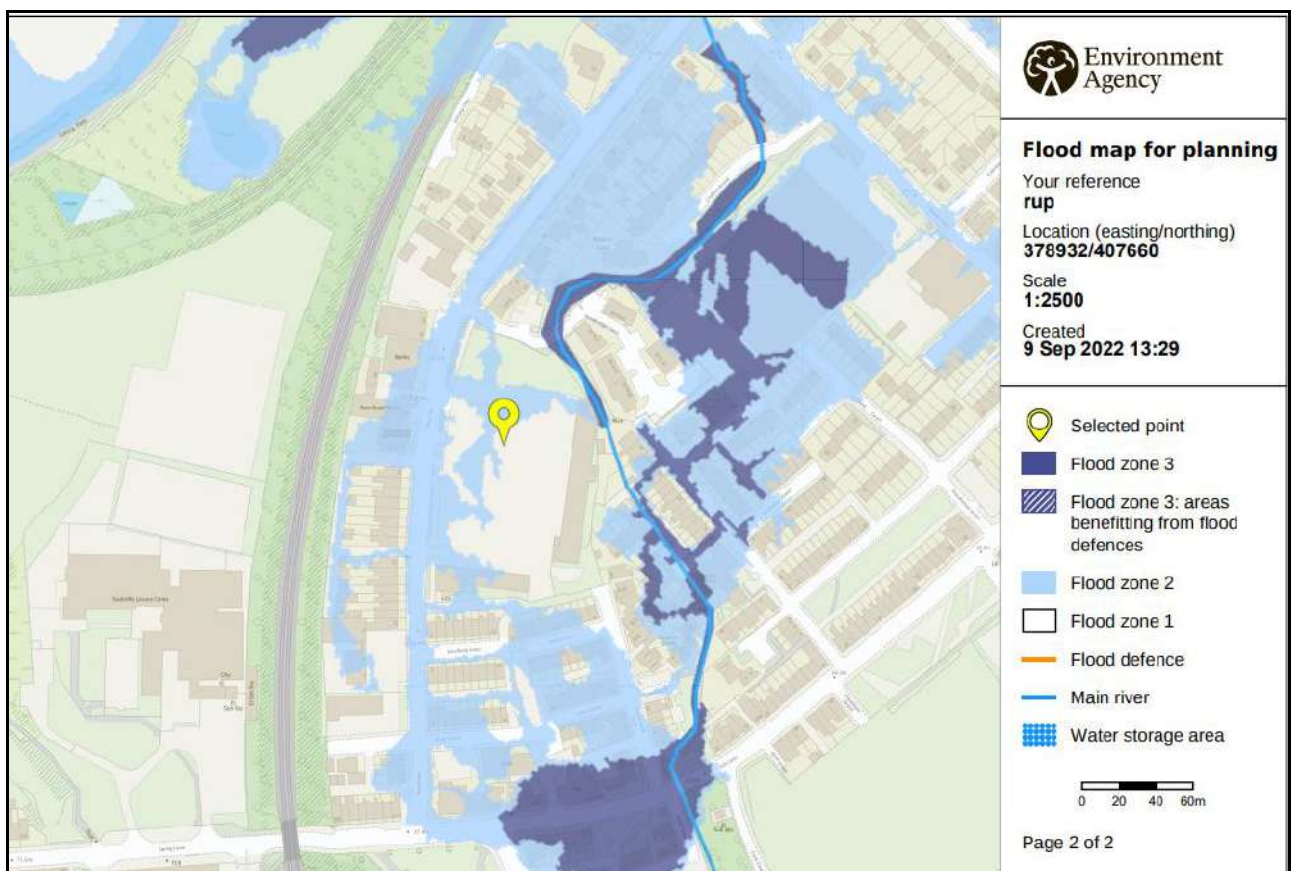


Figure 3: Environment Agency Flood Zone Map (Source: Environment Agency)

4.2 Environment Agency Flood Levels

- 4.2.1 It is understood that there are no Environment Agency flood defences along Crow Trees Farm Brook at this location.
- 4.2.2 Two-dimensional fluvial flood data has been provided by the Agency (Appendix A) and are summarised in Table 1.
- 4.2.3 The UK Government's climate change allowances guidance states that the "Central" climate change allowance should be used in FRA's. The site is located within the Irwell Management Catchment which has a climate change allowance of 35% up to year 2080s.

- 4.2.4 The Agency's modelling includes a 35% climate change allowance which can be used further in this assessment.

Table 1: 2D fluvial flood level data

Node point	1 in 20 year (mAOD)	1 in 100 year (mAOD)	1 in 100 year plus 35% climate change (mAOD)	1 in 1000 year (mAOD)
6	N/A	N/A	N/A	69.60

N/A = event modelled but water did not reach the site

4.3 Flood Warning and Emergency Planning

- 4.3.1 The site is not located within an Environment Agency Flood Warning Area.
- 4.3.2 It is understood that in the event of flooding, evacuation is managed by a multi-agency team in conjunction with the Police. The multi-agency team provides suitable premises for shelter, first aid, refreshments and possible transportation with consideration given to the elderly and vulnerable groups. It is essential that occupants produce robust Emergency Flood Plans to avoid putting themselves or emergency services at risk and that they do not rely solely on emergency services during the event.

5. FLUVIAL FLOOD RISK

- 5.1 The flood levels determined above can be used to assess the flood risk at the site. Table 2 shows the flood depth and hazard across the site.
- 5.2 In order to determine the flood hazard at the site the hazard categories outlined in Table 13.1 of FD2320/TR2 (Figure 4 below), which is defined by the depth and velocity of the floodwater and the ability of people to evacuate once flooding occurs, has been used (assuming 0.5 m/s velocity). It should be noted that the white cells shown on Figure 4 denote a *Very low* hazard.

Table 13.1 Danger to people for different combinations of depth and velocity

Velocity (m/s)	Depth of flooding (m)											
	0.05	0.10	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	2.50
0.00												
0.10												
0.25												
0.50												
1.00												
1.50												
2.00												
2.50												
3.00												
3.50												
4.00												
4.50												
5.00												

Key:
 Danger for some
 Danger for most
 Danger for all

(Source Table 13.1 of FD2320/TR2)

Figure 4: Hazard Classification

Table 2: Flood levels, depths and hazard at the site

	1 in 20 year	1 in 100 year	1 in 100 year plus (35%) climate change (mAOD)	1 in 1000 year (mAOD)
	N/A	N/A	N/A	69.60m AOD
Flood Depth above proposed minimum ground floor level at 69.60m AOD (m)	N/A	N/A	N/A	0
	<i>Very low hazard</i>			
	<i>Dangerous for Some</i>			
	<i>Dangerous for Most</i>			
	<i>Dangerous for All</i>			

- 5.3 Table 2 shows that flooding across the ground floor would not occur during all modelled events thus providing safe (dry) refuge at all times.

6. FLUVIAL FLOOD RISK MITIGATION AND EVACUATION

6.1 Reducing Exposure to the Hazard

- 6.1.1 In order to assess and reduce the exposure to the hazard and the vulnerability to the hazard after the site has been developed, the guidance outlined in the DCLG/DEFRA/EA document entitled *Flood Risk Assessment Guidance for New Development Phase 2; Flood Risks to People, Phase 2; Improving the Flood Performance of New Buildings* has been consulted.
- 6.1.2 Paragraph 060 (ID 7-060-20140306) of the NPPF Planning Practice Guidance states that the first preference is to avoid flood risk by raising floor levels above the design flood level.
- 6.1.3 As discussed in Chapter 5, the proposed ground floor is set above the design climate change (35%) 1 in 100 year flood level and above the extreme 1 in 1000 year flood level thus complying with the NPPG.

6.2 Reducing Vulnerability to the Hazard

- 6.2.1 As the site is not located within a flood warning area, people should not solely rely on the emergency services and should make a judgment on evacuating the site before, during or after the event.
- 6.2.2 The occupants should develop a *Family Flood Plan*. Further guidance is offered in the Environment Agency's guidance document entitled *What to do before, during and after a flood*. The *Family Flood Plan* should consider, for example, information about vital medication needed and a *Flood Kit*.

6.3 Vulnerable Groups

- 6.3.1 The occupants at the site may include vulnerable groups such as elderly people, those with sensory or physical disabilities, minority ethnic groups, or the infirm. Priority will need to be given to these people during the flood event.
- 6.3.2 Vulnerable groups should be identified and priority should be given to these groups.

6.4 Safe Access/Egress

- 6.4.1 Safe refuge is available during all flood events.
- 6.4.2 By comparing the survey data to the Agency's flood level data along Bury Road adjacent to the site, it can be seen that during the climate change 1 in 100 year event the flood hazard would be *Very low* according to the hazard classification outlined on Figure 4 above.

6.5 Insurance

- 6.5.1 The Association of British Insurers (ABI) published a guidance document in 2012 entitled *Guidance on Insurance and Planning in Flood Risk Areas for Local Planning Authorities in England*.
- 6.5.2 The ABI guidance sets out the requirements of the insurance industry when considering flood risk and insurability of the property. The guidance suggests that properties should

be protected for flood events up to the 1 in 100 year event in order to access insurance at a competitive price.

- 6.5.3 The guidance also states that insurers would of course prefer to cover properties which are not at risk of flooding, however, for those properties which are at risk of flooding insurers would prefer that the properties are raised above the flood level, over resistance measures which prevent floodwater from entering the building, or resilience measures which allows floodwater to enter the building.
- 6.5.4 The proposed ground floor will be set above the climate change 1 in 100 year event and 1 in 1000 year event. Therefore, the ABI's requirement of protection during a 1 in 100 year event will be met and there will be a good chance of the property being insured at a competitive rate.

7. OTHER SOURCES OF FLOODING

7.1 Groundwater Flooding

- 7.1.1 In order to assess the potential for groundwater flooding during higher return period rainfall events, the Jacobs/DEFRA report entitled *Strategy for Flood and Coastal Erosion Risk Management: Groundwater Flooding Scoping Study*, published in May 2004, was consulted, together with the guidance offered within the document entitled *Groundwater flooding records collation, monitoring and risk assessment (ref HA5)*, commissioned by DEFRA and carried out by Jacobs in 2006.

Soil and Geology at the Site

- 7.1.2 The British Geological Survey's *Online Geology of Britain Viewer* indicates that the soils beneath the site comprise sand and gravel deposits overlying Mudstone, Siltstone and Sandstone.

Groundwater Flooding Potential at the Site

- 7.1.3 The SFRA states that there are relatively few reported incidents of groundwater flooding across the study area. There have been no recorded groundwater flood events across the area between 2000 and 2003, as indicated by the Jacobs study. The BGS Groundwater Flooding Susceptibility Map and Figure 5-2 of the PFRA indicates that there is "Potential for Groundwater Flooding to Occur at Surface".
- 7.1.4 It is considered that the proposed hardstanding and building footprints will confine the water table and the groundwater flood risk is low.

7.2 Surface Water Flooding and Sewer Flooding

- 7.2.1 Surface water and sewer flooding across urban areas is often a result of high intensity storm events which exceed the capacity of the sewer thus causing it to surcharge and flood. Poorly maintained sewer networks and blockages can also exacerbate the potential for sewer flooding. Surface water flooding can also occur as a result of overland flow across poorly drained rural areas.
- 7.2.2 Figure 2-3 of the SWMP shows that a combined sewer exists beneath Bury Road adjacent to the western frontage of the site. Figure 4-1 of the PFRA shows that there have been no recorded internal or external sewer flood events at the site or within the immediate vicinity as shown on the United Utilities DG5 register.
- 7.2.3 The Agency's Surface Water Flooding Map (Figure 5) indicates that there is generally a very low surface water flooding risk across the site (i.e. chance of flooding less than 1 in 1000 years).
- 7.2.4 Figure 5 also shows an isolated localised area which has a low surface water flood risk (i.e. chance of flooding of between 1 in 1000 years and 1 in 100 years).
- 7.2.5 The maps generally show lower areas of ground where water may pond during storm events and identify areas which receive subsequent runoff from surrounding land during heavy rainfall events. It is likely that the surface water flood map is showing areas of surface water ponding adjacent to the (now) demolished building which formally occupied this area.

-
- Radcliffe
- Site
- Radcliffe Hall Church of England Methodist Primary School
- St Mary's Church
- 500 m
- Contains OS data © Crown copyright and database rights 2022
- Ordnance Survey
- Extent of flooding from surface water
- High
 - Medium
 - Low
 - Very low

7.3 Reservoirs, Canals And Other Artificial Sources

- 12

8. CONCLUSIONS

- The site is located within Flood Zone 2 and 1.
- The site is located outside of the design climate change (35%) 1 in 100 year flood extent and the finished ground floor level will be set at a minimum of 69.60m AOD which is above the 1 in 1000 year flood level. Therefore, safe refuge will be provided at all times and there will be no flood displacement during the design event.
- Safe refuge will be available across the buildings during all modelled events.
- Safe access/egress can be achieved during the peak of the design event.
- It is considered that there is a low risk of groundwater flooding. There is a low risk from sewers and a very low surface water flooding risk.

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APPENDIX A – EA FLOOD DATA

Undefended																	
Map Reference	Model Node Reference	Easting	Northing	Data	50 % AEP (1 in 2 year)	20 % AEP (1 in 5 year)	10 % AEP (1 in 10 year)	5 % AEP (1 in 20 year)	4 % AEP (1 in 25 year)	2 % AEP (1 in 50 year)	1.33 % AEP (1 in 75 year)	1 % AEP (1 in 100 year)	1 % AEP (1 in 100 year) + 30% increase in flow	1 % AEP (1 in 100 year) + 35% increase in flow	1 % AEP (1 in 100 year) + 70% increase in flow	0.5 % AEP (1 in 200 year)	0.1 % AEP (1 in 1000 year)
1	034_EA13_0226_CROT01_01092	379021	408161	Modelled Water Level (m aodN)	72.88	73.09	73.19	73.24	73.25	73.33	73.37	73.39	73.53	73.54	73.62	73.49	73.67
				Modelled Flow (cumecs)	2.06	2.77	3.23	3.64	3.76	4.16	4.37	4.44				4.52	4.59
2	034_EA13_0226_CROT01_0804C	379029	407916	Modelled Water Level (m aodN)	70.41	70.68	70.90	70.97	71.01	71.15	71.22	71.25	71.33	71.35	71.52	71.31	71.59
				Modelled Flow (cumecs)	2.15	2.73	2.96	3.08	3.13	3.31	3.40	3.45				3.54	3.74
3	034_EA13_0226_CROT01_00476	378987	407673	Modelled Water Level (m aodN)	68.53	68.63	68.66	68.69	68.70	68.73	68.74	68.75	68.79	68.80	68.84	68.78	68.89
				Modelled Flow (cumecs)	2.34	2.96	3.21	3.43	3.48	3.68	3.79	3.88				4.11	5.02
4	034_EA13_0226_CROT01_00270	379021	407487	Modelled Water Level (m aodN)	65.28	66.05	66.10	66.13	66.14	66.16	66.18	66.19	66.23	66.23	66.27	66.22	66.32
				Modelled Flow (cumecs)	2.39	2.53	2.54	2.54	2.54	2.55	2.55	2.55				2.55	2.57

Undefended							
Map Reference	Model Node Reference	Easting	Northing	Data	1 % AEP (1 in 100 year) + 30% increase in flow	1 % AEP (1 in 100 year) + 35% increase in flow	1 % AEP (1 in 100 year) + 70% increase in flow
5	2D Measurements	378898	407690	Modelled Water Level (m aodN)	69.80	69.80	69.83
6		378930	407682	Modelled Water Level (m aodN)			69.53

Model data taken from Crow Trees Farm Brook 2016 Study

AEP - Annual Exceedence Probability

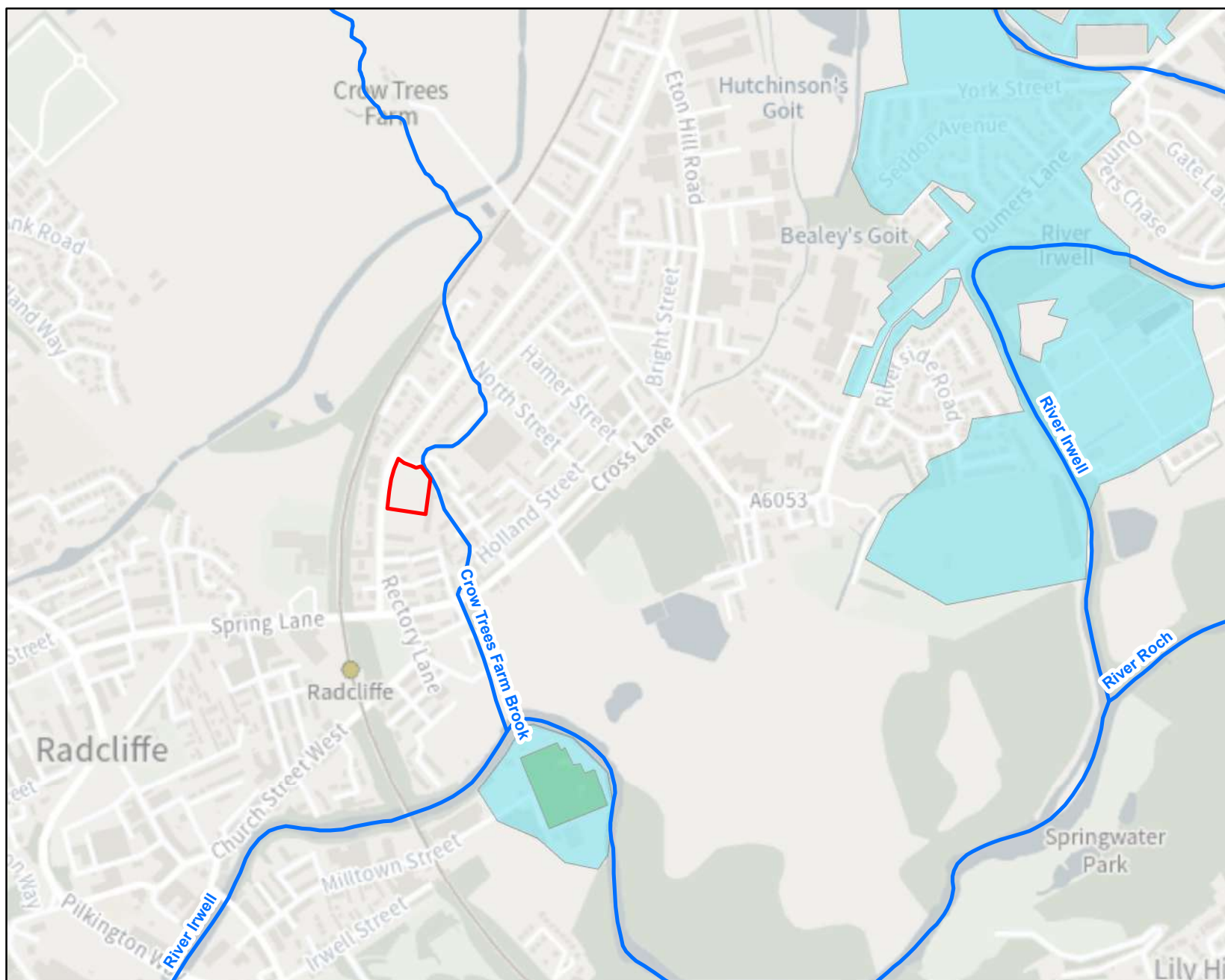
m aodN - metres above ordnance datum Newlyn

cumecs - cubic metres per second

Notes: Climate Change Scenario - 30%, 35% and 70% increases in flow calculated for the 2080's (2070 - 2115). Please see <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances> for more information regarding the new climate change guidance. The location of the site and the type (vulnerability) of development determine the climate change allowances to consider in any flood risk assessment.

Recorded Flood Outlines					
Flood Event Code	Name	Start Date	End Date	Source of Flooding	Cause of Flooding
19075	IRWE	23/10/1998	24/10/1998	Main River	Obstruction/blockage – channel
4079687	Pioneer Mill/Radclyffe and Redvales	26/12/2015	26/12/2015	Main River	Channel capacity exceeded (no raised defences)

**Recorded Flood Outline Map centred on Bury Road, Radcliffe, Bury, Greater Manchester.
Created on 21/07/2022 [GMMC267064AB]**



1:10,001



Legend

 Site Location

 Main River

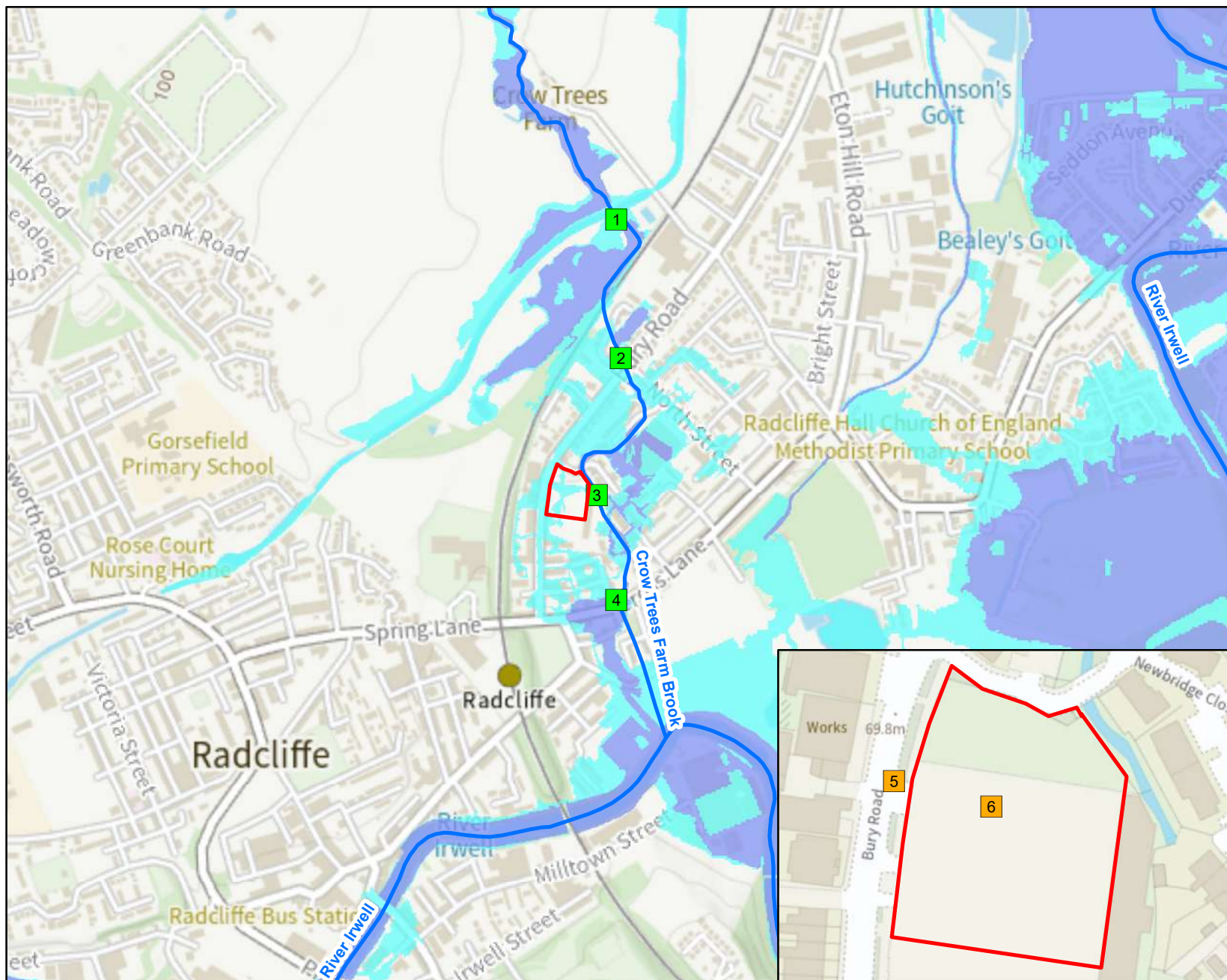
Recorded Flood Outlines

Start Date

 26/12/2015

 23/10/1998

Detailed Flood Outline Map centred on Bury Road, Radcliffe, Bury, Greater Manchester.
Created on 21/07/2022 [GMMC267064AB]



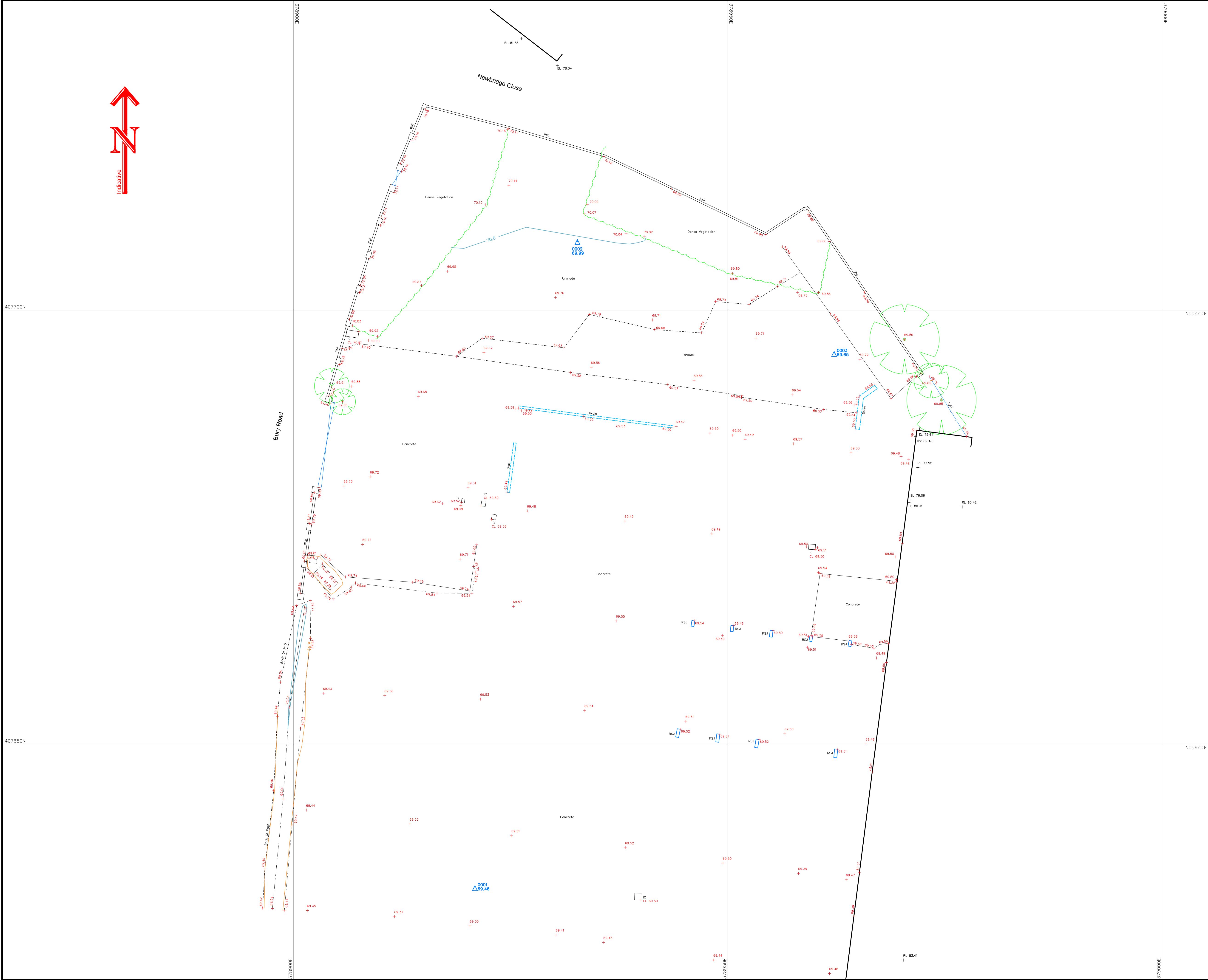
1:10,001



Legend

-  Site Location
-  Model Measurements
-  2D Measurements
-  Main River
-  Flood Zone 3
-  Flood Zone 2

DRAWINGS



B

Bollard

BS

Bus Stop

BT

Telecommunications

CP/S

Concrete Paving Slabs

CTV

Cable Television Cover

DP

Downpipe

DR

Drain

Elec

Electrical IC

EP

Elec Pole

ER

Earth Road

FF

Flagpole

FM

Floodlight

G

Gully

GS

Gate Post

GV

Gas Valve

Fence Annotation

B/W

Barbed Wire

C/B

Closed Boarded

C/I

Corrugated Iron

C/L

Chain Link

C/P

Concrete Panel

H/R

Hard Rail

I/R

Iron Railings

O/B

Open Boarded

P/C

Post & Chain

P/R

Post & Rail

P/W

Post & Wire

W/M

Wire Mesh

h

Height

Hyd

Hydrant

IC

Inspection Cover

J/S

Junction Box

K/O

Kerb Outlet

LB

Lamp Post

LP

Lamp Post

MP

Mile Post

NP

Name Plate

P

Post

PM

Parking Meter

RE

Rodding Eye

RS

Road Sign

RTW

Retaining Wall

C/L

Fence

Safety Barrier

Gate

Sole

Hedge

Limit of Foliage

& Tree Canopy

RWP

Rain Water Pipe

SP

Soil Pipe

S/S

Slope Paving Slabs

ST

Stop Tap

ST/S

Stop Valve

T/B

Telephone Call Box

TL

Traffic Light

TP

Telegraph Pole

T/S

Traffic Paving Slabs

VP

Vent Pipe

WM

Water Meter

WO

Water Outlet

U/L

Unable To Lift

AL

Arch Level

BL

Bed Level

CL

Cover Level

EL

Eaves Level

FL

Floor Level

IL

Invert Level

OL

Overhead Cable Level

PL

Panopt Level

RL

Roadridge Level

SL

Soft Level

Spr

Arch Springing Level

TF

Top Of Fence Level

TW

Top Of Wall Level

Thr

Threshold Level

WL

Water Level

50.00

Spot Level

50.00

Survey Control Station (coordinated point)

M.T

Multi Trunk

Levels defining edge of carriageway are observed at channel (bottom of kerb). Unless otherwise stated.

Survey Station Coordinates

Stn	Easting	Northing	Level
0001	378920.87	407633.42	69.46
0002	378832.67	407707.85	69.99
0003	378962.24	407694.96	69.65

Please note:
Any discrepancy found between an Ordnance Survey benchmark and an OSGM02 computed orthometric height is likely to be due to bench mark subsidence or uplift and, assuming precise GPS survey has been carefully carried out, the orthometric height given by OSGM02 should be considered correct in preference to archive benchmark heights. OSGM02 converts GPS ellipsoid heights to orthometric heights above mean sea level.

Head and Registered Office

Survey Systems Ltd

Willow Bank House

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Handforth • Wilmslow

Cheshire SK9 3AZ

Tel: 01625 533444

Fax 01625 526815

mail@survsys.co.uk

www.survsys.co.uk

Levels are related to OSGM02

Value n/a

Coordinates are related to National Grid (GPS)

Scale

0 2 4 6 8 10 12 14 16 18

metres

The accuracy of this survey is commensurate with the drawing scale specified within the title block. Copyright in this drawing remains with Survey Systems Ltd. Do not scale from this drawing, work to figured dimensions. Check all dimensions on-site. In the event of any discrepancy, please refer query to Survey Systems Ltd.

Client

Jenkins Design Services Ltd

Title

Topographical Survey

Station Works

Bury Road

Bury, M26 2UG

Surveyed

AL AF

Drawn

AG

Date

January 2016

Checked

AG

File name

17004

Revision No.

Sheet size

A1

Drawing No.

SSL:17004:200:1:1

SURVEYsystems

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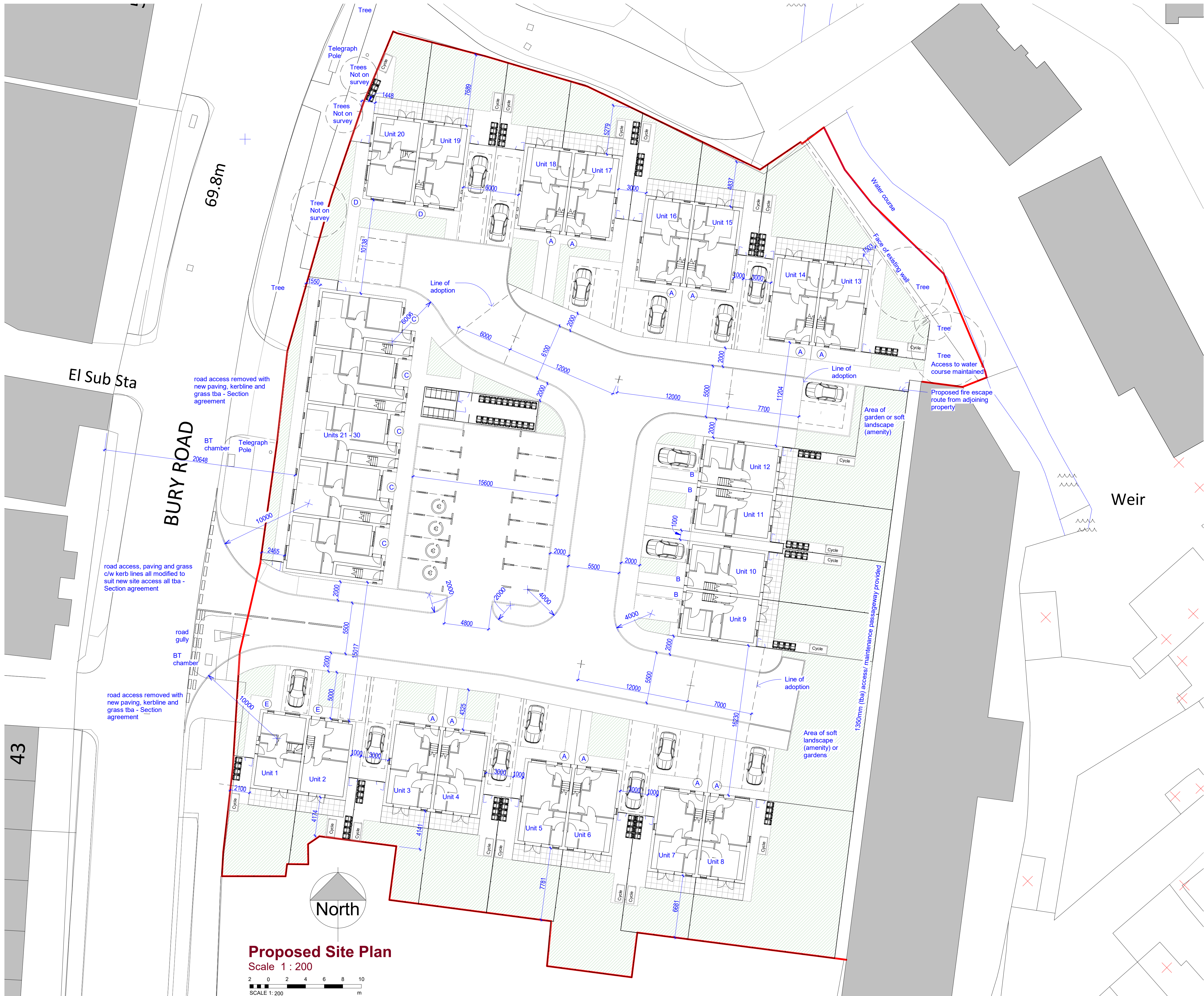
Contractors are to check all levels & dimensions on site prior to site works commencing & report discrepancies to the Designers.

DO NOT SCALE FROM THIS DRAWING

PRELIMINARY

A	Flood zone area corrected	NM	TR	12.09.22
Rev	Description	By	Chk	Date
Project:	Station works Bury Road, Radcliffe, M26 2UA			
Title:	Proposed House Unit Floor Levels			
Client:	Payul Cook Developments/ Jigsaw Homes			
Drawn By:	NM	Checked By:	TR	on 12.09.22
Original Size:	A1	Project Number:	22049	
Drawing Number:	S1-XX-DR-A-1003			REV A





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Contractors are to check all levels & dimensions on site prior to site works commencing & report discrepancies to the Designers.

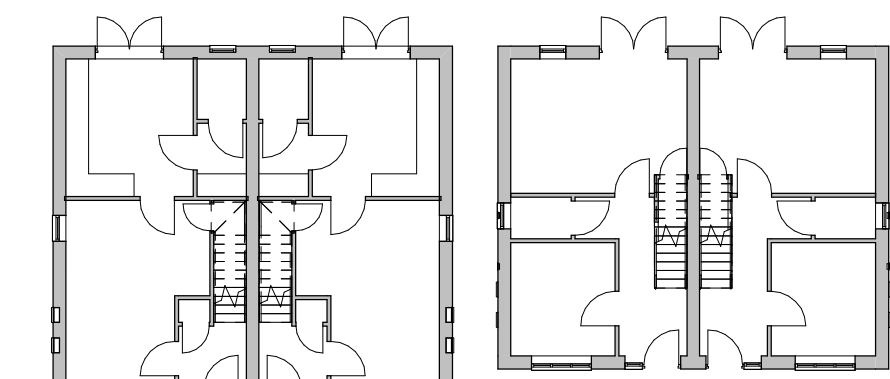
DO NOT SCALE FROM THIS DRAWING

PRELIMINARY

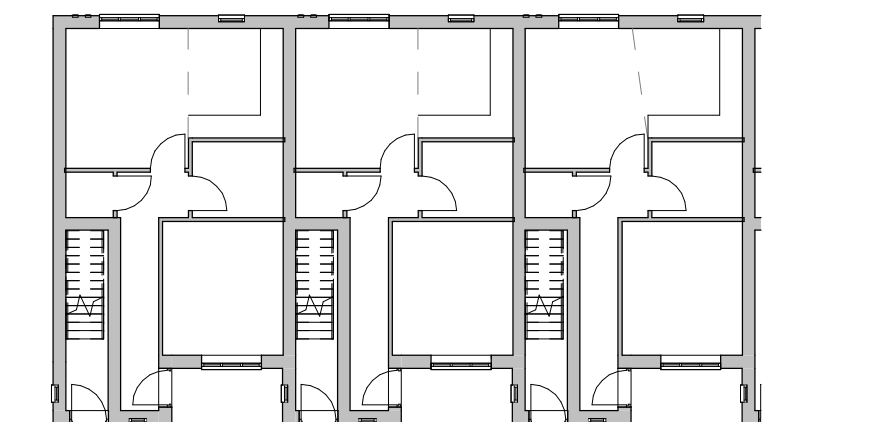
ACCOMMODATION SCHEDULE

- A - 12 No. 3 bed units
- B - 4 No. 2 bed units
- C - 10 No. 1 bed units
- D - 2 No. 3 bed units
- E - 2 No. 2 bed units

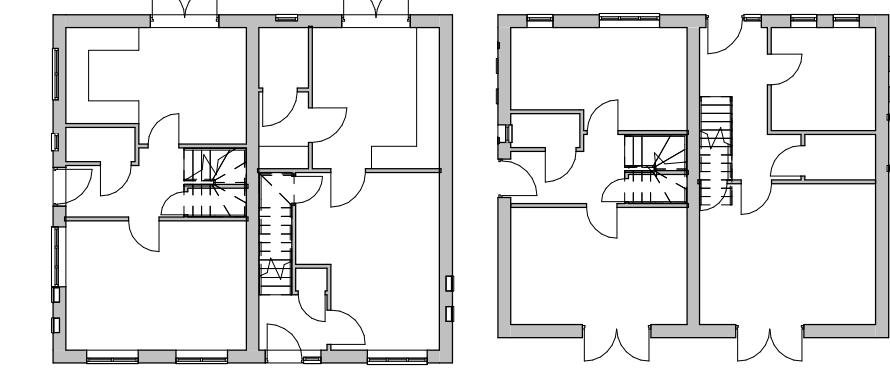
Totalling 30 units



Ground Floor Plan
Ground Floor Plan



Ground Floor Plan
Ground Floor Plan



Ground Floor Plan
Ground Floor Plan

H	Topographical survey added to set site boundary, roads and buildings. Site roads revised to accommodate paving to adoptable standards. Residential plots and house positions moved to suit	NM	TR	22.08.22
G	Layout amended to address Highway comments in relation to estate road adoption requirements	TR	CM	19.07.22
F	Layout amended in response to initial comments received from the Planning Officer	CM	TR	24.03.22
E	Plan layout amended to reflect Jigsaw Homes Group accommodation schedule	DD	TR	07.01.22
D	Plan layout amended to reflect Jigsaw Homes Group drawing received 13.10.21	CN	TR	06.05.21
C	Gated fire door access introduced through site	CM	TR	06.05.21
B	Site boundary adapted in line with Title Plan GM685098	CM	TR	24.02.21
A	Layout updated to align with client feedback	CM	TR	01.02.21
Rev	Description	By	Chk	Date

Project:	Station works				
	Bury Road, Radcliffe, M26 2UA				
Title:	Proposed Site Plan				
Client:	Payul Cook Developments/ Jigsaw Homes				
Drawn By:	NM	Checked By:	TR	on	22.08.22
Original Size:	A1	Project Number:	22049		
Drawing Number:	S1-00-DR-A-0002				REV H



