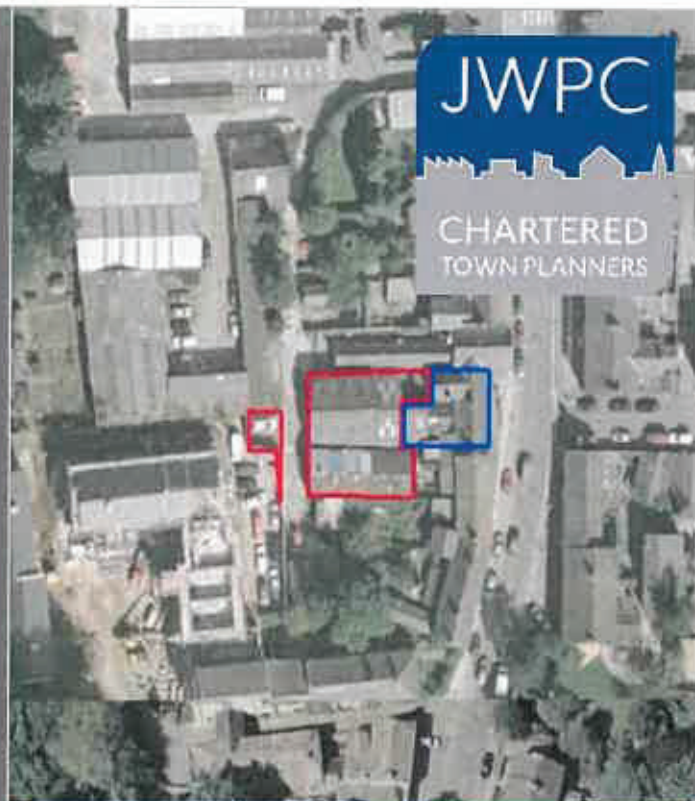


Rear of 19-21 King Street Whalley

Demolition of industrial and
storage buildings and
regeneration of site to provide
3 no. two-storey dwellings

Client:
Mr Jim King



JWPC

CHARTERED
TOWN PLANNERS



Flood

Risk

Sequential

Test

Contents

- 1. Introduction**
- 2. Planning Guidance**
- 3. Defining the Catchment Area and Search Criteria**
- 4. The Sequential Test**
- 5. Additional Considerations**
- 6. Conclusions**

Appendix 1: Map of Sites Considered

Appendix 2: Sales Details of Sites Identified from Rightmove Commercial Website

1. Introduction

- 1.1 This document provides evidence to allow the Local Planning Authority (LPA) to undertake a Flood Risk Sequential and Exceptions Test related to a planning application for the demolition of industrial and storage buildings and regeneration of site to provide 3 no. two-storey dwellings, to the rear of 19-21 King Street, Whalley. It should be read alongside the site-specific Flood Risk Assessment by Michael Lambert Associates, which studies the detailed Environment Agency Flood Mapping and concludes that the site falls within Flood Zone 2.

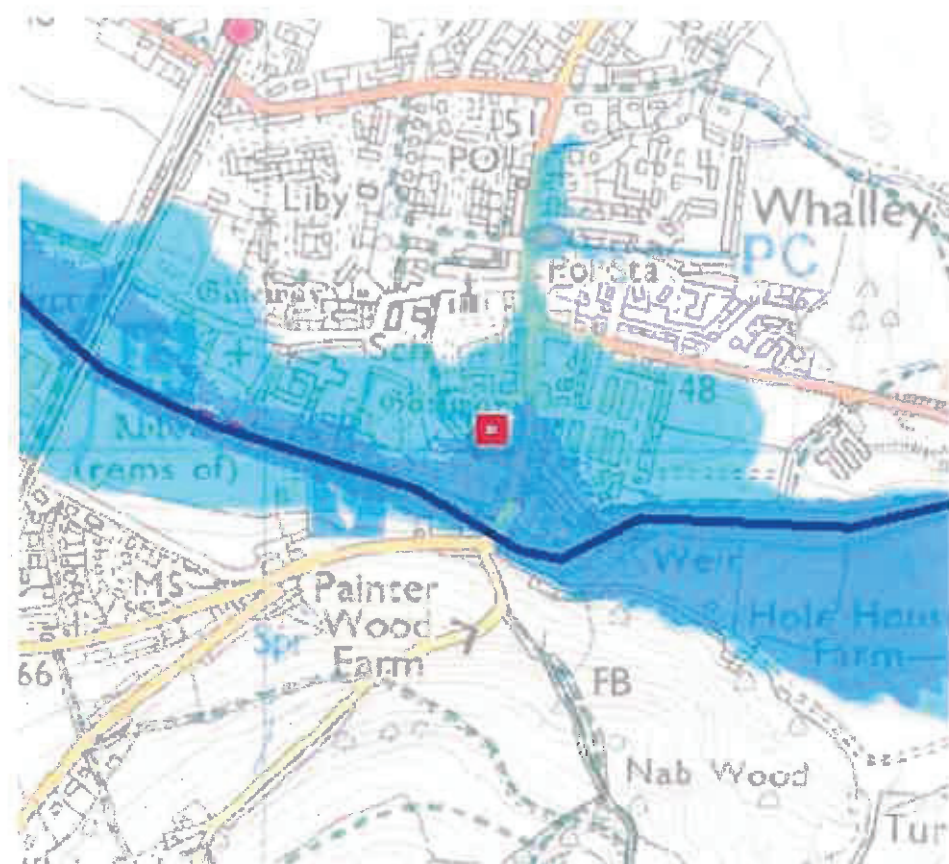


Figure 1: Extract from Environment Agency Flood Map, showing Whalley and the Planning Application Site

- 1.2 The document has been prepared specifically acknowledging guidance contained within the National Planning Policy Framework (NPPF), the National Planning Practice Guidance (NPPG) and the Development Plan for the Ribble Valley Borough. It demonstrates that there are no other reasonably available sites within a suitable area that could be considered as being more suitable and appropriate for the development. Moreover, the proposed development provides wider regeneration and sustainability benefits which outweigh flood risk. The development will also be safe for its lifetime, without increasing flood risk elsewhere.

- 1.3 Evidence submitted within the following Chapters enables the LPA to adopt a 'pragmatic approach' towards the availability of alternative sites, having regard to the scale and nature of the proposed development. It should be read alongside the site-specific Flood Risk Assessment by Michael Lambert Associates.**

2. Planning Guidance

- 2.1 Flood risk is considered on the basis of the following Flood Zones and probability of flooding defined by the Environment Agency, as set out in Table 1: Flood Zones of the NPPG (Paragraph: 065 Reference ID: 7-065-20140306).

Flood Zone 1 – Low Probability

Flood Zone 2 – Medium Probability

Flood Zone 3a – High Probability

Flood Zone 3b – Functional Floodplain

- 2.2 Table 2 of the NPPG (Paragraph: 066 Reference ID: 7-066-20140306) groups different development types into different vulnerability classifications, being either 'less', 'more' or 'highly' vulnerable to potential flooding. The proposed development is a Class C3 Use (dwelling houses) and is therefore defined as a 'more vulnerable' land use, which is a compatible use within Flood Zone 2 areas, subject to the Sequential Test.
- 2.3 The overriding aim of the Sequential Test is to steer new development to the areas with the lowest probability of flooding. Whilst the Sequential Test is a risk-based approach to development, available guidance within the NPPF and the NPPG acknowledge that the planning system should not fundamentally restrict development on sites with flood risk. Instead, it should ensure that an assessment is undertaken of other possible sites and, where necessary, mitigation and prevention measures to reduce risk are included as part of the planning process.
- 2.4 The Sequential Test itself is undertaken by the decision-maker, and information submitted by the Applicant is intended to provide evidence for the Council to test the application site. Guidance provided at national level is not rigidly defined and provides for the decision-maker to adopt a pragmatic approach towards the assessment of suitable sites. Indeed, it is stated at Paragraph 033 Reference ID: 7-033-20140306 of the NPPG that:

"For individual planning applications where there has been no sequential testing of the allocations in the development plan, or where the use of the site being proposed is not in accordance with the development plan, the area to apply the Sequential Test across will be defined by local circumstances relating to the catchment area for the type of development proposed. For some developments this may be clear, for example, the catchment area for

a school. In other cases it may be identified from other Local Plan policies, such as the need for affordable housing within a town centre, or a specific area identified for regeneration. For example, where there are large areas in Flood Zones 2 and 3 (medium to high probability of flooding) and development is needed in those areas to sustain the existing community, sites outside them are unlikely to provide reasonable alternatives.

[JWPC emphasis]

3. Defining the Catchment Area and Search Criteria

Catchment Area

- 3.1 The Planning Support Statement which is submitted alongside the planning application details how Whalley is considered a sustainable settlement, providing quick access to a range of shops, services, community facilities and public transport links. Indeed, this perception is supported by its identification within the Ribble Valley Core Strategy as a principal settlement. Whalley consequently forms one of three locations within the Borough which under Policy DS1 should be the focus of new housing growth.
- 3.2 Whilst the status of Whalley does not overrule the need for the Sequential Test and Exceptions Test, it is important that sites are considered which fall within walking distance of the village centre. This will enable future occupants to take advantage of local services and will ultimately promote sustainable communities, consistent with the general principles of the NPPF and policies of the Development Plan. Looking towards sites within isolated open countryside locations or outside of Whalley would not help to achieve these wider aims for the settlement.
- 3.3 As such, it is considered appropriate to undertake a search of land available with a radius of one mile of Whalley town centre. This covers all existing urban areas within the settlement, as well as the adjacent land. Consistent with guidance contained within the NPPG, the catchment area has been defined by clear local circumstances.

Search Criteria

- 3.4 Since the proposed development involves the erection of three dwellings, it is considered appropriate for the size of the land to be 0.1ha or less. Available land which is over 0.1ha would be too large for the scale of the proposal. Sites must also be considered accessible and promote walking and cycling to Whalley town centre.

4. The Sequential Test

4.1 Taking into account the above planning guidance, searches have been undertaken to review available sites through:

- Reviewing the latest Strategic Housing Land Monitoring Report;
- Online searches via Rightmove Commercial (which details land and premises which are currently for sale).

4.2 Potential sites identified have been assessed against the search criteria established within Chapter 3 and their appropriateness as alternatives for the proposed development. A satellite image is provided at Appendix 1, which identifies the location of each site considered as part of the Sequential Test.

Strategic Housing Land Availability Assessment (SHLAA)

4.3 048 Land north of Hayhurst Road, Whalley

A wooded/grass/scrub site of 0.29ha which is too large for the proposed development and would require considerable work to clear and prepare.

TOO LARGE

4.4 052 Land south of Wiswell Lane

An area of land which is part agricultural and part built upon. At 1.36ha it is considerably larger than the proposed development site.

TOO LARGE

4.5 053 Land north of Wiswell Lane

An area of land of 5.86ha, currently used as fields, screened by trees. Again, it is very considerably larger than the site sought. The site fails one test of suitability for housing development.

TOO LARGE

4.6 054 Land at Broad Lane, Whalley

A linear site which is an overgrown area at the side of a viaduct. The site fails one suitability test. At 0.42ha it is considered too large for the proposal.

TOO LARGE, UNSUITABLE SITE

4.7 059 Land north of Whalley

This site comprises 10.14ha of grazing land next to a business park. It is very considerably larger than the site sought.

TOO LARGE

4.8 060 Land off Mitton Road, Whalley

A site of 1.34ha, which is too big for the proposed development. The site is currently used for temporary office accommodation (portacabins).

TOO LARGE

4.9 061 Land off Kingsmill Avenue, Mitton Road, Whalley

This land lies 1.6 miles from Whalley town centre and is therefore too far from the proposed location; at 0.26ha it is also larger than desired.

TOO LARGE; TOO FAR FROM WHALLEY

4.10 136 Land off Clitheroe Road, Whalley

A large 12.07ha site neighbouring the A59 near Clitheroe Road, currently used as fields. The site is considerably larger than that sought, given its potential capacity is suggested as 482.

TOO LARGE

4.11 412 Clitheroe Road, Whalley

A site of almost 13ha which has the capacity for over 500 houses, which is considerably too large for the proposed development. At a mile from the town centre, it is on the very edge of the search area.

TOO LARGE, TOO FAR

4.12 413 Land at Bridge Terrace, Mitton Road, Whalley

Unused open space which at 0.7ha has the capacity for 28 houses and is therefore too large for the proposed development.

TOO LARGE

4.13 414 Land at The Crescent, Whalley

Two linear sections of land adjoining an existing residential area totalling 5.2 ha, larger than the proposed development and almost a mile from the town centre.

TOO LARGE

Online Searches via Rightmove Commercial

4.14 Rightmove Commercial has been used to identify sites which are currently for sale on the open market. The search parameters include:

- Vacant and agricultural land
- Offices and retail
- Leisure and hospitality
- Industrial and warehousing

4.15 The map extract below shows the location of sites identified within a one-mile radius of Whalley (search made on 30/07/2015). These are reviewed further below, in order of their distance from the planning application site. They are referenced on the map at Appendix 1 as RMC_00 and copies of the sales particulars are contained at Appendix 2.

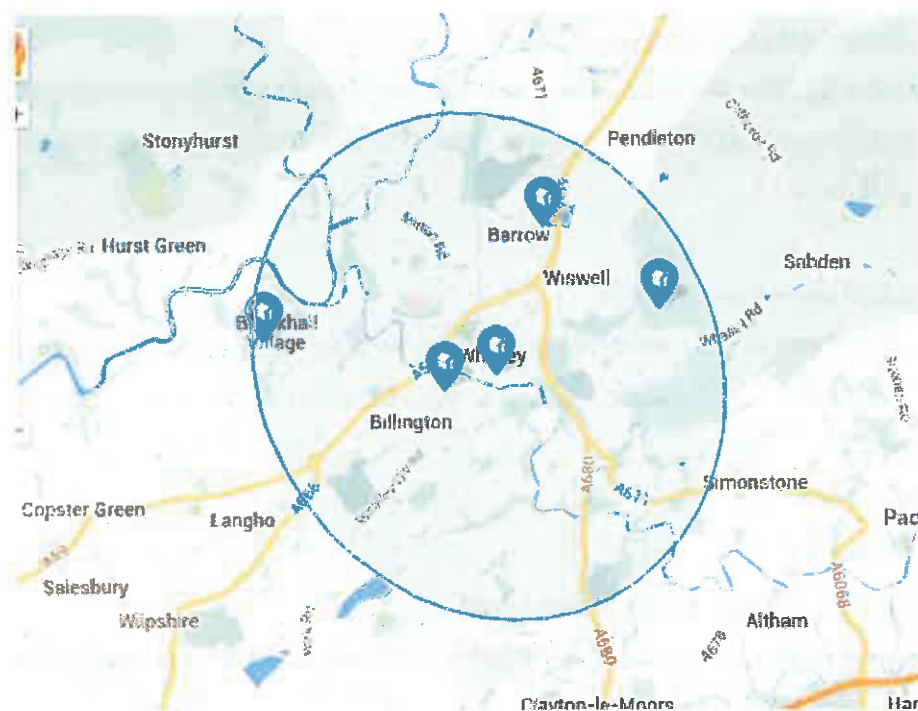


Figure 2: Extract from Rightmove Commercial, identifying sites for sale within 1 mile of the Planning Application Site (c/o Rightmove)

4.16 RMC 01 Office suite above 53 King Street, Whalley

Two offices on the second floor above estate agents in Whalley.

TOO SMALL; INAPPROPRIATE USE CLASS; SECOND FLOOR PROPERTY

4.17 RMC 02 Land at Dale View, Whalley

A 0.846ha parcel of agricultural land and former allotments with planning permission for 39 houses.

Two planning applications have already been approved and a third is under consideration.

TOO LARGE; PLANNING PERMISSION ALREADY GAINED FOR MEDIUM-SCALE HOUSING DEVELOPMENT

4.18 RMC 03 Pendle View Fisheries, Whalley

A well-established commercial coarse fishery business with three stocked lakes and accommodation comprising office/shop, owner's home and two holiday chalets. At 1.2 miles from Whalley it falls outside the search area of 1 mile.

TOO LARGE; WRONG USE CLASS; ALREADY WELL-ESTABLISHED COMMERCIAL USE; TOO DISTANT

4.19 RMC 04 AND 05 Two plots, Clerk Hill Road, Wiswell

Two plots of land, each 0.13ha, 1.7m from Whalley. It is clear from the sales particulars that planning permission has been sought for some time and has finally been achieved with outline permission granted for two prestigious 4,000 sq ft detached houses, one on each site.

TOO LARGE; PLANNING PERMISSION ALREADY GAINED FOR ONE LARGE HOUSE ON EACH SITE; TOO DISTANT FROM WHALLEY; NOT ACCESSIBLE VIA PUBLIC TRANSPORT

4.20 RMC 06 The Old Bowling Green, Cherry Drive, Brockhall Village

Building plot with planning permission for one large detached dwelling approximately 1.8 miles from Whalley

TOO FAR FROM WHALLEY, SIZE OF PLOT NOT GIVEN

5. Additional Considerations

- 5.1 The site specific Flood Risk Assessment details that upon further investigation the site is considered to fall within Flood Zone 2. Whilst it is therefore not necessary for the development to also pass the Exceptions Test, it is felt relevant to consider the proposal in light of the much wider benefits to the community as a result of the proposed development, which are recognised under Paragraph 102 of the NPPF.
- 5.2 In this instance, the application will result in significant improvements to the character and setting of the Whalley Conservation Area and an improvement in outlook for existing neighbouring residents. The change of use to a less intensive Use Class such as Class C3 is likely to result in a reduced level of noise and disturbance, improving the amenity of users of surrounding land and buildings. The regeneration of brownfield land which focuses occupants towards the village centre, where there is a good provision of shops, services and public transport links, ultimately supports sustainable communities. The planning application will also result in a reduction in the built footprint and consequently help to reduce flood risk for neighbouring developments.
- 5.3 The above issues are considered in much greater detail within the submitted Planning Support Statement and the Heritage Asset Statement. Notwithstanding the conclusions of the Sequential Test above, considerable material weight should be accorded to the wider benefits to the community and the planning application should be supported.

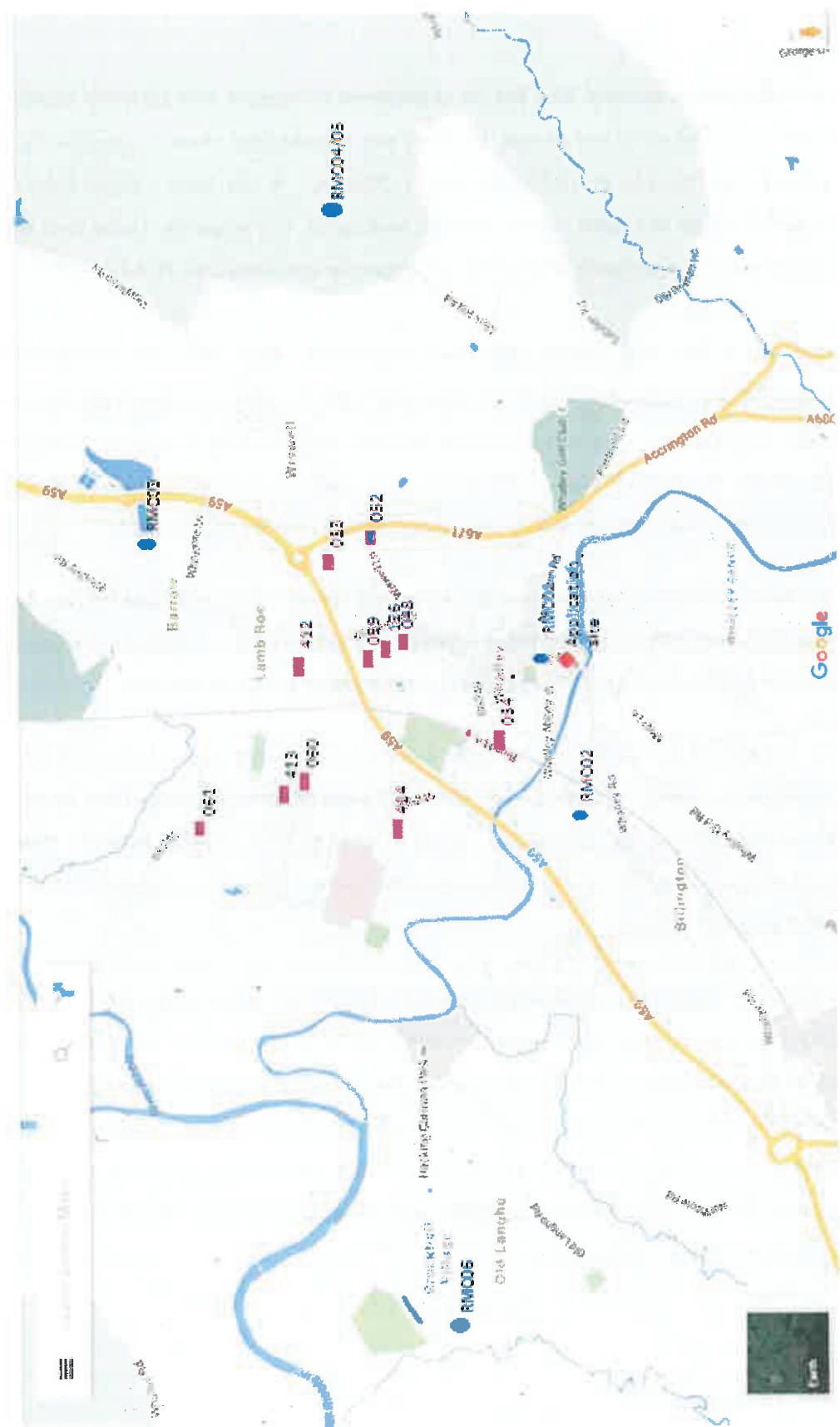
6. Conclusions

- 6.1 This Flood Risk Sequential Test has been prepared in support of a planning application for the demolition of industrial and storage buildings and regeneration of site to provide 3 no. two-storey dwellings, to the rear of 19-21 King Street, Whalley. It has been informed by the guidance contained within the NPPF, NPPG and the findings of a site-specific Flood Risk Assessment by Michael Lambert Associates, which concludes that the site falls within Flood Zone 2.
- 6.2 A review of the local context has been undertaken which sets the catchment area for the development to within one mile of Whalley, which is recognised by Ribble Valley Borough Council as a Tier 1 settlement. The search criteria limit the size of the land to 0.1ha, which is considered appropriate for developments of this scale. Alternative sites would also have to be accessible and well-related to the existing provision of services within Whalley village centre.
- 6.3 Sites which have previously been promoted to Ribble Valley Borough Council within the latest SHLAA have been reviewed. Using the Rightmove Commercial website, a further search was undertaken of available land and buildings which could form alternative development sites.
- 6.4 The assessment provided within Chapter 4 demonstrates that none of the identified sites can be considered to form a suitable alternative or have a lesser risk of flooding. Clear reasons are given as to why the sites are not appropriate, mostly relating to their size and location. None of the sites could be considered as a more appropriate alternative. Thus, it is considered that the Sequential Test is passed.
- 6.5 In adopting a pragmatic approach towards the Sequential Test, it is trusted that the LPA will also accord material weight to the wider community benefits as a result of the regeneration of the site. Whilst this is explored in detail throughout the Planning Support Statement and Heritage Asset Statement, the planning application will deliver significant improvements to the setting of the Whalley Conservation Area and improve amenity for surrounding occupants; and the village centre location will help to promote sustainable communities as a result of accessibility of local shops, services and public transport links.

JWPC Limited

September 2015

Appendix 1: Map of Sites Considered



Appendix 2:

Sales Details of Sites Identified from Rightmove Commercial Website

3 bedroom leisure facility for sale

Pendle View Fishery Barrow, Lancashire, BB7 9DH

Guide Price
£795,000

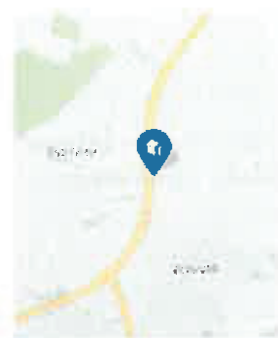


Commercial information

- Business for sale

Key features

- Established profitable business
- 3 well stocked lakes
- 2 timber holiday chalets
- Owner's accommodation
- Office/shop



[Enlarge this map](#)

Nearest stations

- ➔ Whalley (1.2 mi)
- ➔ Colne (2.7 mi)
- ➔ Langthorpe (3.1 mi)

Distances are straight line
measurements from centre of
postcode

[Check Broadband Speed](#)

Full description

Tenure: Freehold

INTRODUCTION

Pendle View Fisheries is probably one of the top commercial coarse fisheries in the north. Just 12 minutes drive from the M65. The fishery comprises of three well stocked fishing lakes, two timber holiday chalets, owner's house and office/shop building together with a successful business.

LOCATION

The fishery is located on the A59 approximately 11 miles from junction 31 of the M6, set in the Ribbles Valley against the backdrop of the famous Pendle Hill.

OWNER'S HOUSE

The property is located on the west side of the Coarse Lake with elevated views over the fishery. Built in 2004 and faced with art stone under a slate roof, the accommodation on two floors comprises:

GROUND FLOOR

Kitchen/dining room
Lounge
Utility room with shower

FIRST FLOOR

Bedroom 1 with en-suite bathroom

Bedroom 2

Bedroom 3

Bathroom

OUTSIDE

Patio area with lawn and borders to the rear of the property.

THE FISHERY

Pendle View Fisheries originally operated as a fish farm and, to a lesser extent, as a fishery prior to 2001. Since then it has been transformed into probably one of the best fisheries in the north of England. Pendle View Fisheries regularly appears in weekly and monthly fishing publications. The fishery benefits from stream and spring water.

Residential Development for sale

DALE VIEW, Whalley, DD7

POA

COMMERCIAL



Key features

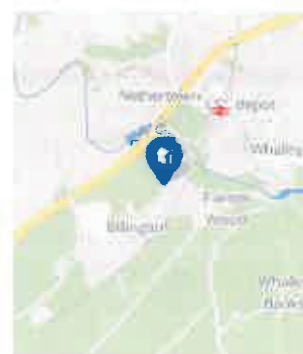
- Planning Permission
- 39 dwellings
- Rural location
- Residential development site

Full description

Tenure: Freehold

LOCATION

The site is situated in an extremely convenient location within the settlement boundary of Billington immediately adjacent to Whalley New Road and approximately 700m to the south west of the centre of Whalley. Billington is located between the settlements of Langho and Whalley and whilst there is only a limited range of services and facilities in Billington a much wider range of shops and facilities can be found in Whalley. A location plan is attached at the back of these sales particulars. It is approximately 8km to the market town of Clitheroe and 11km to Blackburn Town Centre and there is easy access to the M65 and M5 and the wider motorway network beyond.



[Enlarge this map](#)

Nearest stations

- Whalley (0.8 mi)
- Langho (1.8 mi)
- Ramsbottom & Wilpshire (2.8 mi)

Distances are straight line measurements from centre of

DESCRIPTION

The development site comprises a relatively level parcel of agricultural land and former allotments which is located on the edge of the settlement of Billington and is shown edged red on plan Gal/154/1571/01. The site extends to approximately 4.31 acres (1.74Ha) or thereabouts part of which 2.1 acres (0.846Ha) or thereabouts has been granted planning permission for 21 dwellings (15 open market and 6 affordable) under two separate planning applications. The Council resolved on the 16 October 2014 to grant planning permission for a further 18 dwellings (13 open market and 5 affordable) on the remaining area of the site. There will therefore be planning permission for a total of 39 dwellings when the final approval has been issued.

Access to the land is via Dale View a modern housing development to the south of the site and involves no third party land.

The site has been subject to ground investigations which were commissioned by Bloor Homes. The ground report and a topographical survey can be made available to interested parties upon request.

PLANNING

Three planning applications have been submitted for the site and the attached plans show the layouts of each of the three applications. They are as follows:

Planning application: 3/2012/0065 was approved with conditions on the 5 November 2013 and was for the erection of 12 dwellings, 4 of which are affordable units and 8 are open market units.

Planning application: 3/2012/0738 was approved with conditions on the 1 November 2013 and was for the erection of 10 dwellings, 3 of which are affordable units and 7 are open market units. This application removed one of the approved dwellings from the 12 proposed for 3/2012/0065.

Planning application: 3/2014/0779 has not yet been approved as there has been a delay with the conclusion of the Section 106 Agreement, a copy of the report to Committee is attached. The application was for the erection of 18 dwellings, 5 of which are affordable units and 13 are open market units.

Copies of the two completed Section 106 Agreements are available upon request and copies of the two planning consents are attached as are layout plans for each of the three applications.

Land for sale

£300,000

The Old Bowling Green, Cherry Drive, Brockhall Village



Description **Map & Street View** **School Checker** **Market Info**

Key features

- Excellent building plot with planning permission for one large detached dwelling.

Full description

Excellent building plot with planning permission for one large detached dwelling.

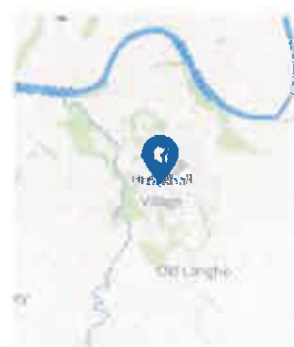
You may download, store and use the material for your own personal use and research. You may not republish, retransmit, redistribute or otherwise make the material available to any party or make the same available on any website, online service or bulletin board of your own or of any other party or make the same available in hard copy or in any other media without the website owner's express prior written consent. The website owner's copyright must remain on all reproductions of material taken from this website.

More information from this agent

- [Brochure](#)

Listing History

Added on Rightmove:
10 July 2015



[Enlarge this map](#)

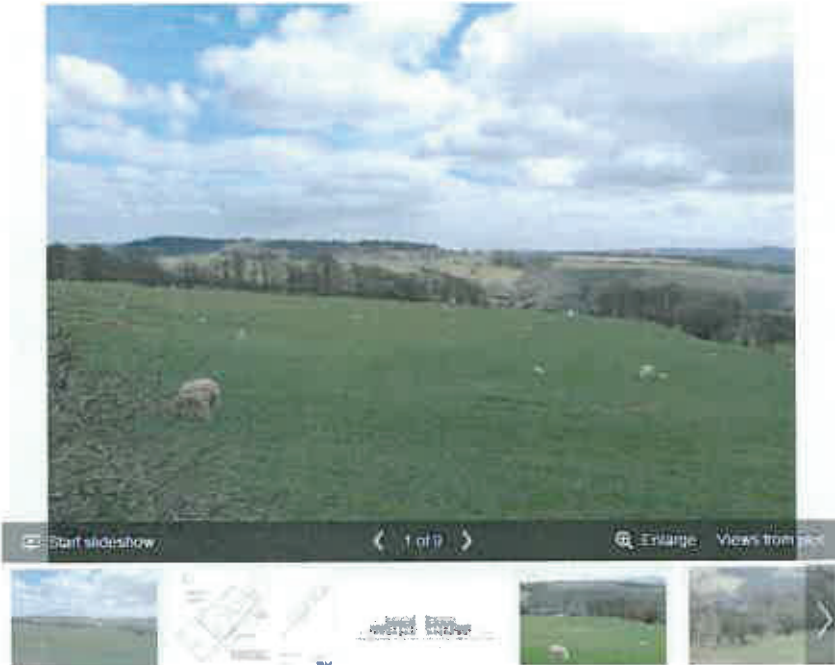
Nearest stations

- Langho (1.4 mi)
- Whalley (1.8 mi)
- Ramsgreave & Wilpshire (3.0 mi)

Plot for sale

0.32 acres | £200,000

Land adjacent to Hambledon View Planning for 4,000 sq ft house Clerk Hill Road, Wiswell, BB7 9FQ



Commercial information

0.32 acres (0.13 hectares)

Key features

- In AREA OF OUTSTANDING NATURAL BEAUTY
- Superb views over open countryside.
- Walking distance of Wiswell & Whalley
- Planning for 4000 sq ft detached house
- 1/3 acre plot or thereabouts
- Quiet rural location

Full description

At last we have received Planning permission for the erection of two 4,000 sq ft detached houses to replace the mistitling 1970's agricultural buildings at this most wonderful location. This gives the purchaser the opportunity to create something truly beautiful on this site close to an AONB area of outstanding natural beauty.

The Plots are part of a larger site of a Farm House & former Abbator and are offered for sale separately at an asking price of £200,000 each.

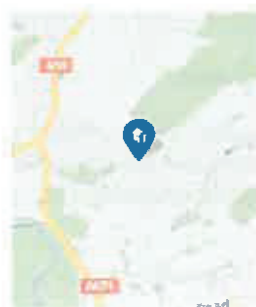
Outline planning permission has been granted with the proposed houses shown edged red and numbered 1 on the plan.
Plot size 1/3 acre or thereabouts

The planning application no is 3/2012/0477 dated 9 May 2012

Appeal Ref: APP/T2350/A/12/2180166
see attached pdf for appeal letter

Listing History

Added on Rightmove:
23 May 2013



Enlarge this map

Nearest stations

- Whalley 13.7 mi
- Clietheroe 13.2 mi
- Lingho 13.5 mi

Distances are straight line measurements from centre of postcode

Check Broadband Speed

Land for sale

Plot for One House Clerk Hill Road, Wiswell BB7 9FQ

0.32 acres | £200,000



Do you like this property?

Call 01257 547067

Request Details

[Description](#) [Map & Street View](#) [School Checker](#) [Market Info](#)

Commercial information

0.32 acres (0.13 hectares)

Summary: 0.32 acres (0.13 hectares)

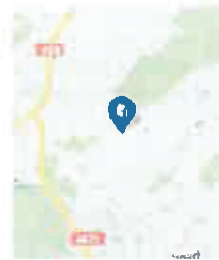
Listing History

Added at Rightmove

23 May 2017

Key features

- Close to AONB area of outstanding natural beauty
- Spectacular views
- Walking distance Village of Whalley
- Walking distance to Wharfedale
- 1/3 acre plot or thereabouts
- 4,000+ sq ft detached house
- Part of larger site to be split



[Enlarge this map](#)

Nearest stations

- ▼ Whalley 11.7 mi
- ▼ Ribblesdale 12.5 mi
- ▼ Langthorpe 12.8 mi

Distance is a straight line
and does not take into account
road distance

[Check Broadband Speed](#)

Full description

Tenure: Freehold

At last we have received Planning permission for the erection of two 4,000 sq ft detached houses to replace the misfitting 1970's agricultural buildings on this most wonderful location.

This gives the purchaser the opportunity to create something truly beautiful on this plot close to an AONB area of outstanding natural beauty.

The Plots are part of a larger site of a Farm House & former Abbatini and are offered for sale separately at an asking price of £200,000 each.

Outline planning permission has been granted with the proposed houses shown edged red and numbered 1 on the plan.
Plot size 1/3 acre or thereabouts.

The planning application no is 3/2012/0477 dated 9 May 2012

Appeal Ref: APF/T2350/A/12/0188/66
see attached pdf of appeal letter

The site is in a rural location accessed along a private road approx 0.2 miles in length.

Commercial Property for sale

53 King Street, Whalley

POA

Full description

Office Suite available To Let

Available immediately

Flexible terms by negotiation

Second floor above estate agents in the heart of the village on the main street

WC and coffee/tea facilities, optional shared office facilities available, telephone answering service if required

Please contact John Atherton for more details on 07977 512210 or email john@athertons-uk.com

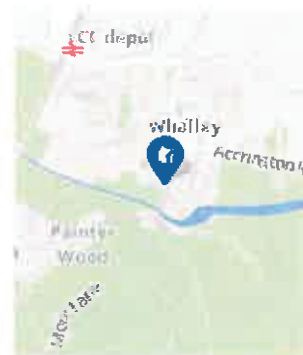
Property ref: 121_1644_3254129

Office One

4m x 3.3m

Office Two

3.5m x 3.2m



[Enlarge this map](#)

Nearest stations

- Whalley (0.3 mi)
- Langley (2.0 mi)
- Clitheroe (3.7 mi)

Distances are straight line measurements from centre of postcode

[Check Broadband Speed](#)

**Existing buildings
rear of 21 King Street
Whalley**

**Replacement with
3 new cottages**

Flood risk assessment

NGR SD 733 360

Postcode BB7 9SZ

Michael Lambert Associates
Pear Tree House
1 Partridge Close
Winsford
Cheshire
CW7 1PY
T/F 01606 862373
M 07958 964054

JWPC
1B Waterview
White Cross
Lancaster
LA1 4XS

Email floodriskengineer@gmail.com
sudsengineers@sky.com

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2.0 Executive summary

3.0 Existing site

4.0 River system and risk level data

5.0 Proposals and drainage

6.0 National Planning Policy Framework and Technical Guidance

7.0 Attachments

1.0 Introduction

Three new cottages are proposed at the rear of 21 King Street, Whalley. The land at the rear of 21 King Street is currently occupied by two industrial buildings and access is from King Street via a roadway between 35 and 37 King Street. The area is historic with Whalley Abbey and the Abbey corn mill nearby.

2.0 Executive summary

The existing site is two industrial buildings in the centre of Whalley near to the Calder. These are to be demolished and three new cottages are to be built. The site is floodzone 2 and new slab levels will be set as high as is feasible consistent with planning requirements and preferably at 1 in 1000 year risk level. New drainage will be separate system and a new connection will be needed plus surface water storage and a vortex flow controller.

Whalley has a flood warning service and all occupants will sign up for the Environment Agency flood warning service and be aware that if a warning is received they can walk to higher ground to the north.

3.0 Existing site

The existing site consists of two industrial buildings at the rear of 21 King Street, Whalley which is to the south of Whalley centre and near to the river Calder. Existing site levels are approx 45 to 45.2 and the site area is approx 400m². King Street road bridge over the Calder is a historic 3 arch stone road bridge and approx 150m upstream is a river weir which was built to enable a waterfeed to the corn mill waterwheel to provide power. The mill stream has a penstock marked on the OS mapping and the feedwater channel flows towards King Street, flows under King Street in culvert, and then to the mill building in open channel with an outfall back into the Calder downstream of the 3 arch road bridge. King Street has a road low point at Abbey Mews where the mill stream passes under.

4.0 River system and risk level data

The Calder flows at the southern edge of Whalley and has a catchment area of 317 km². BFIHOST is 0.395 indicating a less absorbent catchment on average, annual rainfall is 1232 mm, and the storm time length that produces a peak flow at Whalley is approx 9.7 hours. The river has a weir just upstream of the King Street three arch road bridge and this has an outlet to the corn mill. The road bridge has an OS road level of 48.

Environment Agency data sent to us consists of 3 nodes, 2 above the weir and 1 below the road bridge and interpretation of risk levels for the King Street site is affected by two factors:-

1. How much flow passes through the three arches and what the afflux is through the arches in terms of water head drop.
2. What flows spill towards King Street from above the weir- King Street has a low point at Abbey Mews and any spill flows that collect here will pond subject to the overall waterpath back into the Calder downstream of the road bridge.

We estimate the bridge afflux to be approx 0.4m to 0.5m and the weir head drop at high flows to be 0.3m to 0.6m. -based on this we estimate risk levels to be :-

Flow frequency	Node 293	downstream of the road bridge	upstream of the road bridge	downstream of the weir	node 727
1 in 100 year	43.98	44.4	44.6	44.74	45.34
1 in 1000 year	45.78	45.7	46	46.19	46.69

Downstream of the road bridge is the appropriate risk level 'set' for the site subject to any further detailed model data the Agency may have.

5.0 Proposals and drainage

The existing industrial buildings are to be demolished and the three new cottages will have parking bays at the front and gardens to the rear. This will reduce the existing surface water runoff rates from the site. The existing site gross area is approx 390m² and this is all currently hard area which produces surface water runoff. The new hard area will be approx 270m².

The proposal is in floodzone 2. A 1 in 100 year risk level is 44.4, the existing roadway at the cottages is 44.95 to 45.27 and a 1 in 1000 year risk level is 45.7. The slab levels of the new cottages should be set as high as is consistent with planning requirements and we advise a minimum slab level of 45.63 bearing in mind that all front and back door frames are approx 75mm height above slab level. Setting the slabs at 45.7 will give the properties protection against a 1 in 1000 year risk level.

The new drainage will be separate system with separate foul and surface water drains to the last manhole prior to a connection to the public combined drainage system. Application to United Utilities for a new connection is likely to produce the response that a new surface water flow rate of no more than 5 l/sec can be discharged and surface water storage of approx 1 to 2m³ will be needed which can be placed to the rear of the units. This can be cellular storage such as Polystorm units plus a vortex flow controller.

Ground data is not available as yet. The three cottages will each have a rainwater butt and if the rear garden areas are suitable for soakage into the ground then part or all of the roofwater runoff will be discharged to soakaways.

6.0 National Planning Policy Framework and Technical Guidance

The proposed use as a house is classed as 'more vulnerable' in table 2 and this use is 'appropriate' in floodzone 2 as per table 3.

Types of flooding that could affect the site are:-

1. River- the site is in floodzone 2 from the river Calder
1. Sea- no tidal influence
2. Land- no undrained land slopes towards the site.
3. Groundwater- the site is to be investigated, there are no springs or wet areas visible on site.
4. Sewers- no local internet reports of sewer surcharge.
5. Reservoirs canals- Dean Clough reservoir approx 4km away to the southwest
6. Pluvial risk- see below and EA mapping.

Environment Agency mapping is as follows:-

Flood map for Planning- the site is in floodzone 2 above any local 1 in 100 year risk levels.

Risk of flooding from rivers and sea- this shows the effect of any flood defences.

Flood warning- there is a flood warning scheme for the southern part of Whalley

Groundwater- the site is not in a groundwater protection zone.

Risk of flooding from reservoirs- this shows reservoir risk- all utility company reservoirs are maintained to a 1 in 10,000 year risk standard under the Reservoirs legislation and this is a very rare and unlikely risk. Dean Clough reservoir is approx 4km away to the southwest.

Risk of flooding from surface water- this mapping shows surface water flood risk. Pluvial mapping is the subject of a separate EA paper made public in November 2013 and is useful in locating possible ground low points and depressions. We quote- 'the conveyance effect of ordinary watercourses or drainage channels is not explicitly modelled'- so whilst the EA mapping shows pathways this takes no account of the existing drainage and in practice there is a very low risk.

7.0 Attachments

Attachment	Number	Size
Location plans	1, 2	A4
Location plan	3	A3
Public sewer records	4, 5	A3
Existing site	6	A3
Survey	7	A3
Proposals	8, 9	A3
OS mapping	10	A3
EA data	11 to 13	A3
3 arch bridge	14	A4
Corn mill/ hydro scheme	15 to 18	A4
FEH data	19 to 24	A4
Knight Samuels	25 to 27	A4
EA mapping	28 to 34	A3

This report is copyright. Attachments are scanned as A4 and A3 sets and can be put in order using the pencil top numbering. Should you need further data please email floodriskengineer@gmail.com

Email files

150831fra01

150831attach1-A4

150831attach2-A3

150831attach3-A3



Projection: = OSGB36
 xmin = 372930
 ymin = 435700
 xmax = 374000
 ymax = 436300

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 information in MAGIC is a snapshot of the information
 that is being maintained or continually updated by the
 originating organisation. Please refer to the metadata for
 details as information may be illustrative or representative
 rather than definitive at this stage.

Extract from Map of Public Sewers

The position of underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available.

The actual positions may be different from those shown on the plan and private pipes, sewers or drains may not be recorded.

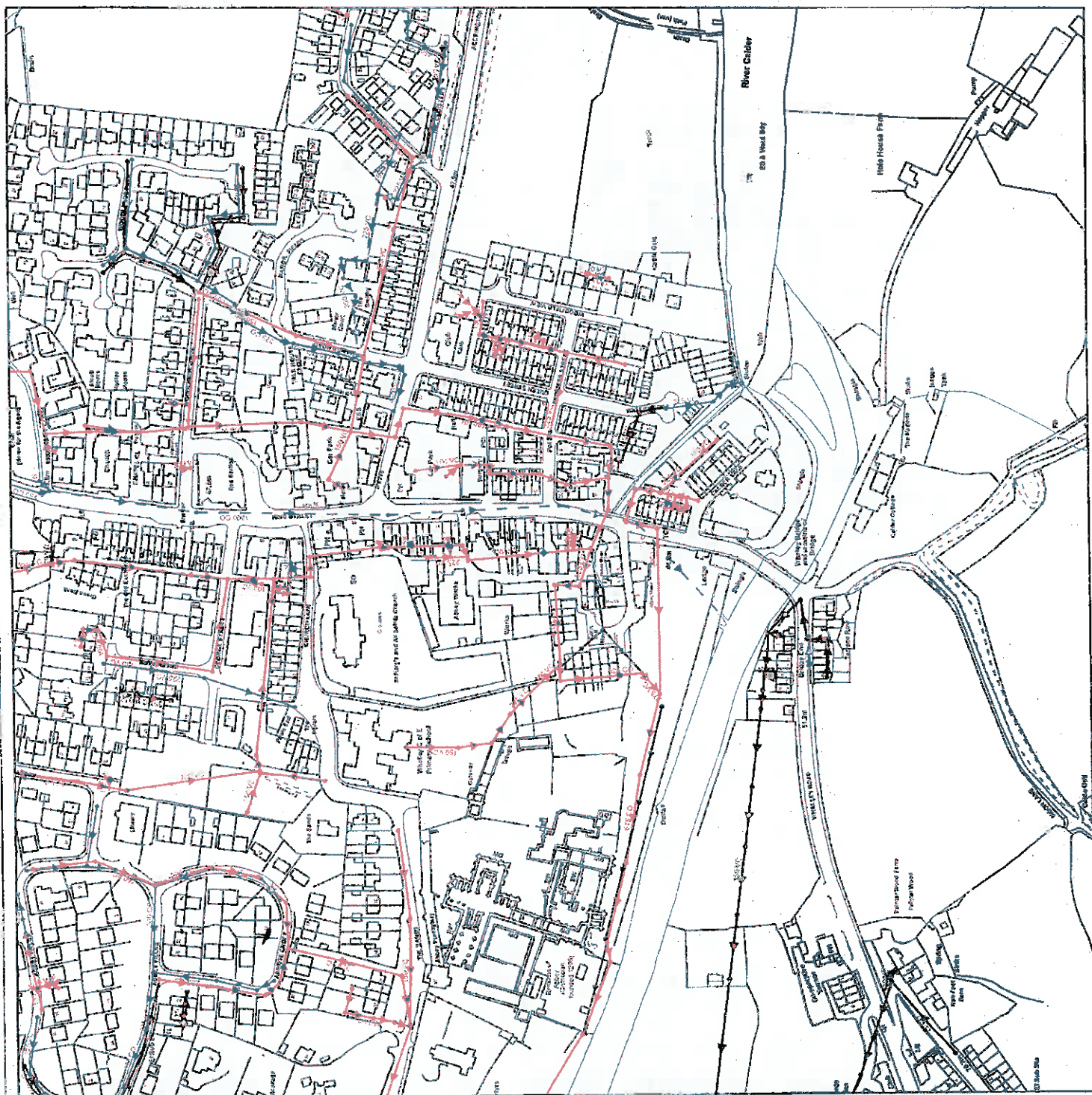
United Utilities will not accept any liability for any damage caused by the actual positions being different from those shown.

United Utilities Water Limited 2014.
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LEGEND

Water Course	--->---	Abandoned	---
Overflow Pipe	--->---	Foul	--->---
Sludge Main	---	Surface Water	---
Highway Drain	---	Combined	---
Public Sewer	---	Public Sewer	---
Private Sewer	---	Private Sewer	---
Section 104	---	Section 104	---
Rising Main	---	Rising Main	---

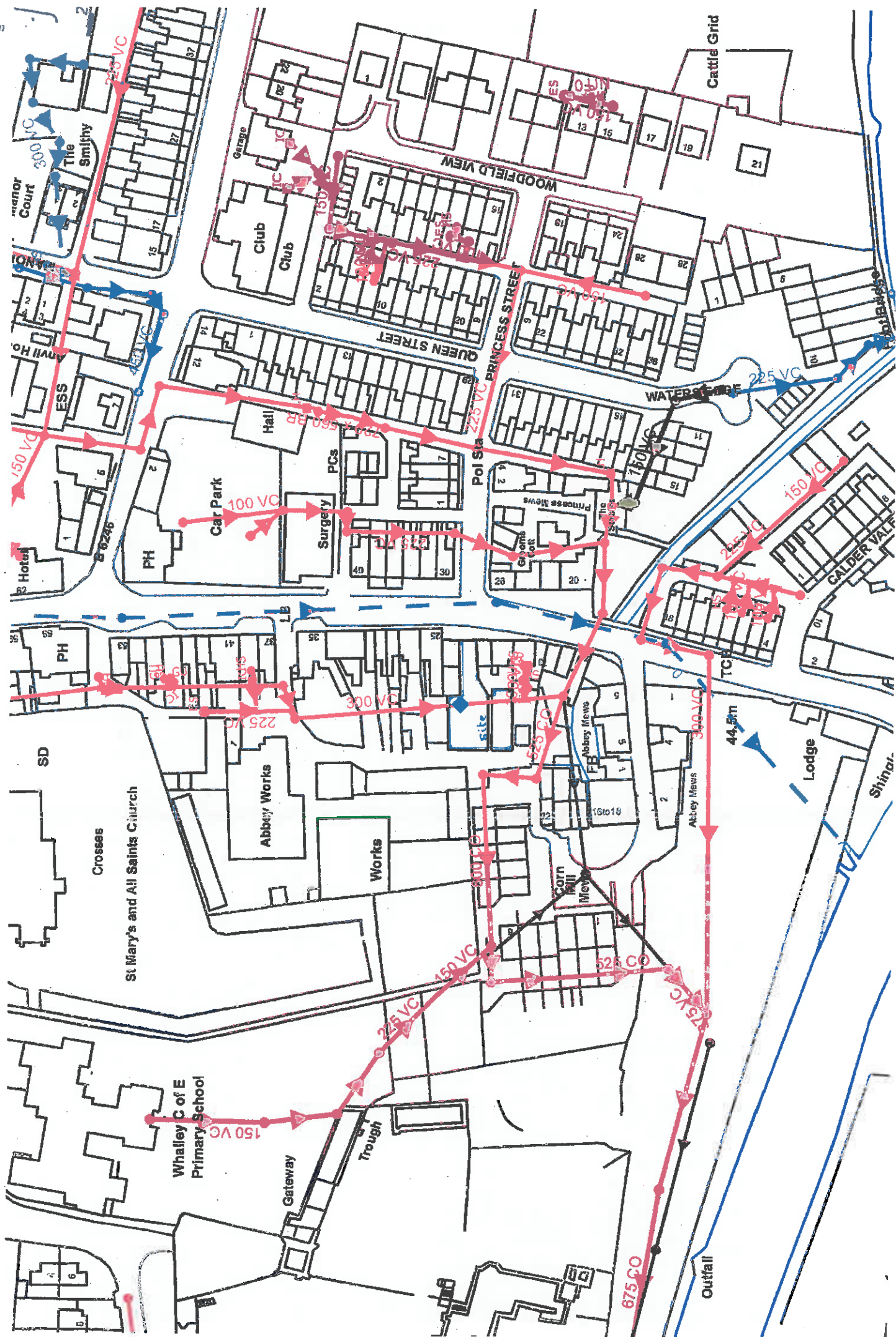
21 King Street,
Whalley

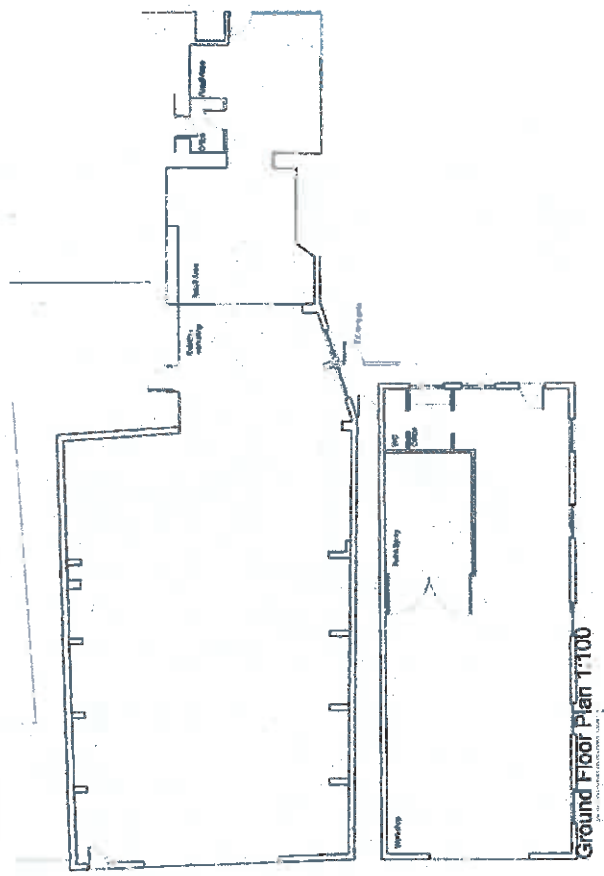
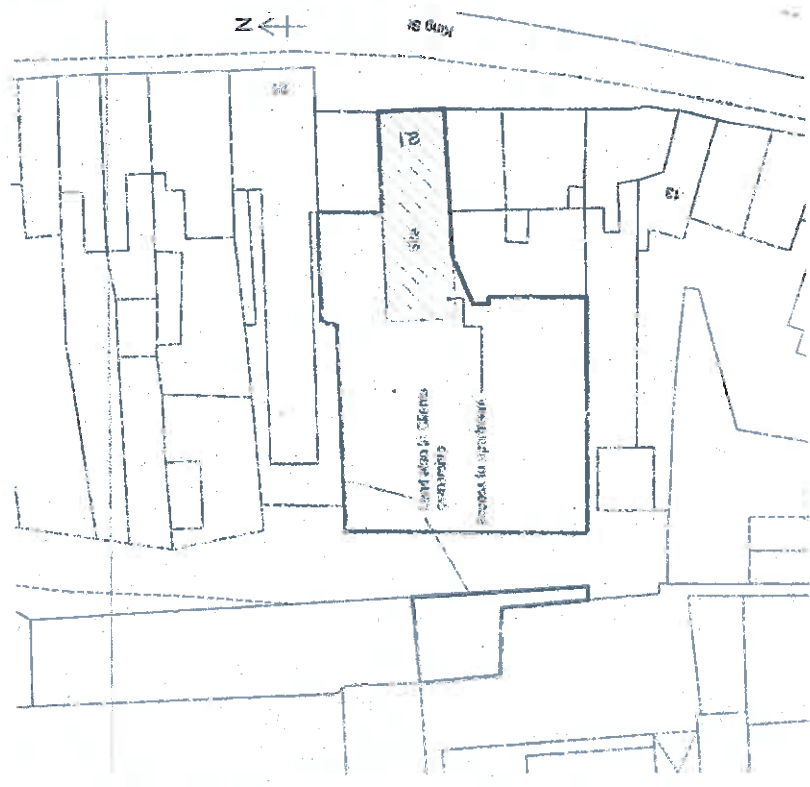
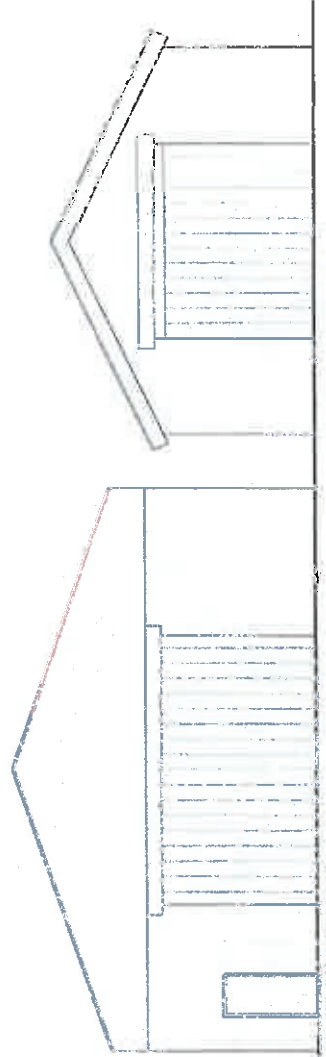
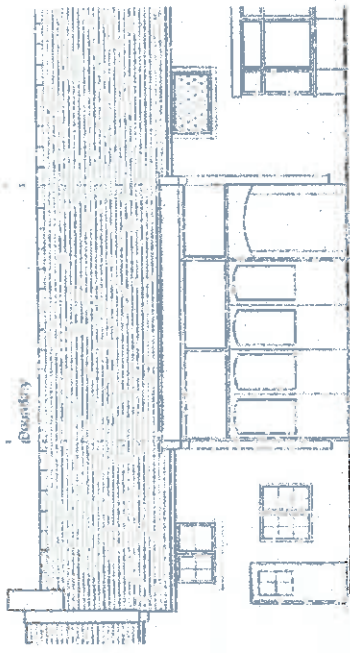


Printed By : Property Searches Date: 21/07/2015

DO NOT SCALE
Approximate Scale: 1:2500





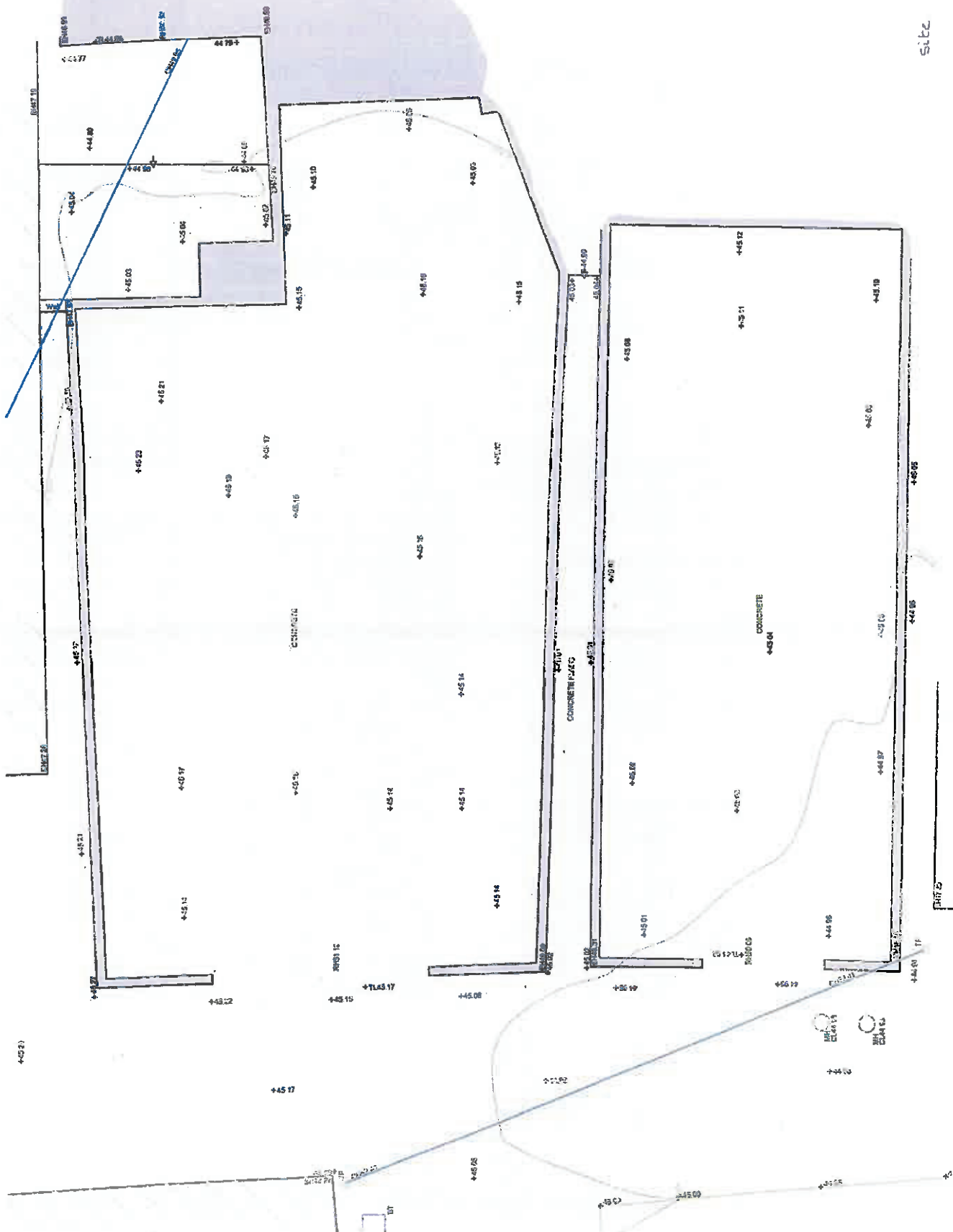


NY 215-150

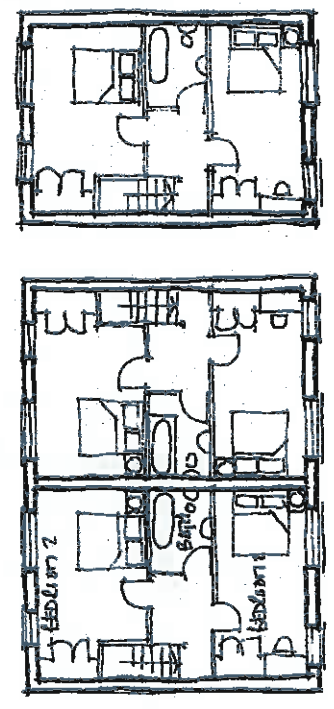
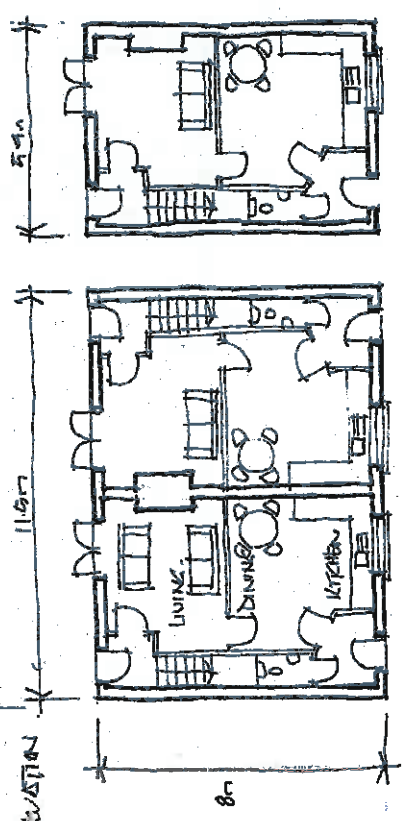
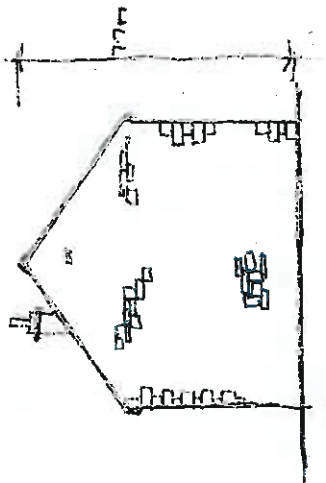
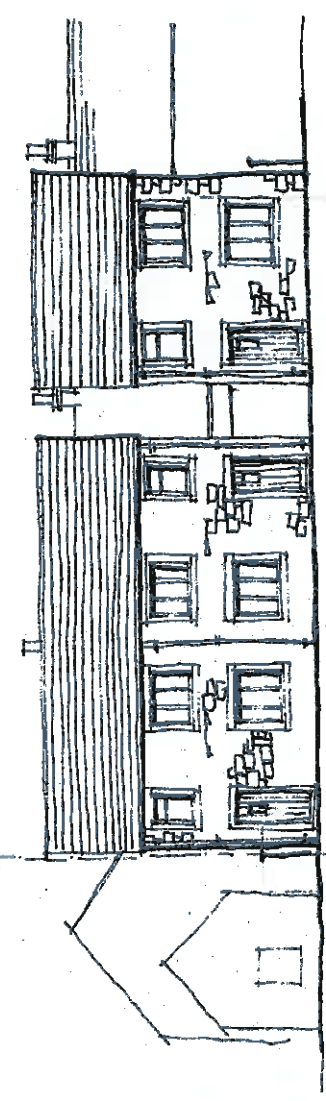
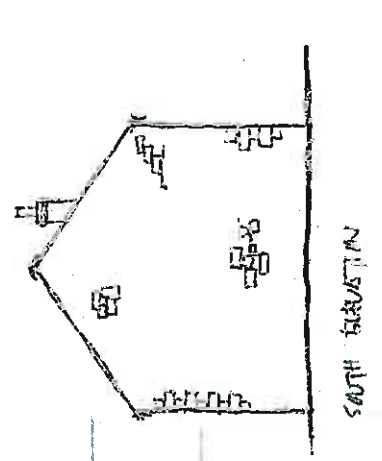
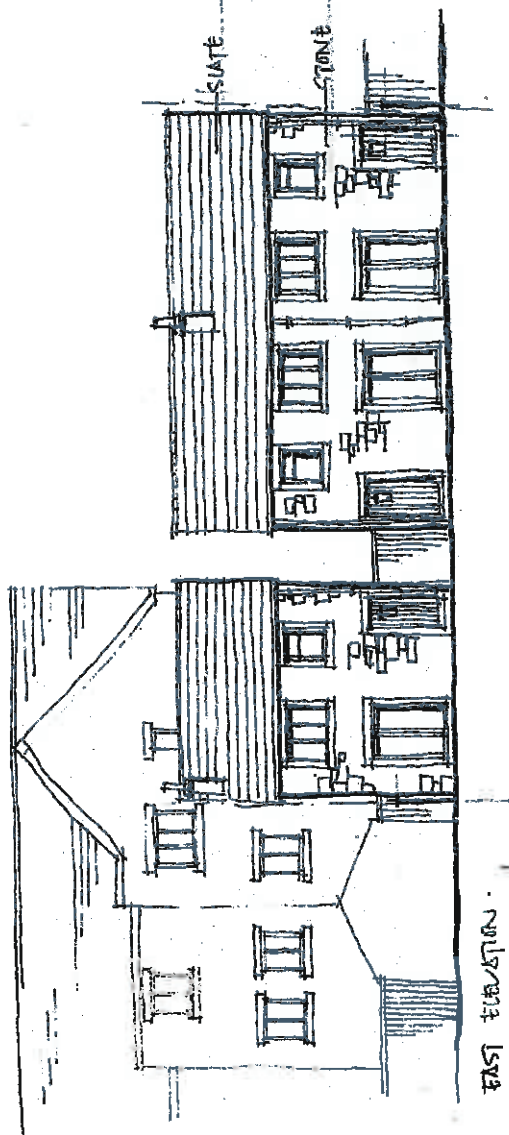
Project: Planning Application to
Local Planning Authority
Date: 18/02/2019
Author: A. Harrison


Scale: 1:100

3980-01



Site survey notes



Client	MR J. KING		
Job Title	PROPOSED REPLACEMENT OF INDUSTRIAL UNITS WITH 50° COTTAGES TO THE REAR OF 21 KING ST WHARF 7		
Drawing Title	PROPOSED PLANS & ELEVATIONS.		
Scale	Ratio	Drawn	Checked
 SUNDERLAND PEACOCK ARCHITECTS ARCHITECTS, PLANNERS, ENGINEERS, INTERIORS, LANDSCAPE ARCHITECTS 10000 CITY FARM ROAD SUNDERLAND, NORTH EAST www.sunderlandpeacock.co.uk			
3980 - 04			



Mr. J. Kling

Proposed Replacement of Existing Industrial Units with 3no Cottages to the Rear of King Street, Whalley

100

Environ Monit Assess (2008) 142:111–120

indications of a possible link between the two.

Existing and Proposed Site Layout Indicating Mains Foul Drain:

BOS

SUNDERLAND PEACOCK
SUNDERLAND PEACOCK & ASSOCIATES LTD.
10000 100th Ave. #10000, CLAYTON, ONTARIO
M3J 1K5
Tel: 905-709-1111 Fax: 905-709-1112
www.sunderlandpeacock.com

Existing

Proposed

3980-06



Flood Map (PRE1736) - River Calder at Whalley

National Grid
Reference:
SD 73500 36000



North West Region - North Area

Lutra House, Dodd Way Off Seedlee Road
Whetton Summit, Bamber Bridge, Preston PR5 8BX
Tel: 03709 506 506 : www.environment-agency.gov.uk

Produced by
Flood Risk Management
Map produced on:
6th October 2014

- Site
- Node Point Locations
- Main River
- Flood Map Defences
- Flood Zone 3
- Flood Zone 2
- Historic Flooding
- 11/12/1989
- 28/10/2000

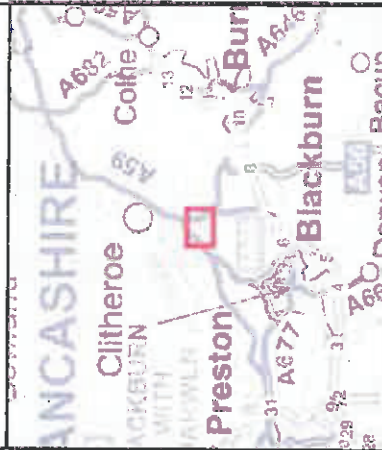


Flood Zone 2: Shows the area that could be affected by flooding from rivers or the sea, if there were no defences. This area could be flooded:

- from the sea by a flood that has a 0.5% (1 in 200) chance or greater of happening each year.
- or from a river by a flood that has a 1% (1 in 100) chance or greater of happening each year.

Flood Zone 2: Shows the additional extent of an extreme flood from rivers or the sea, if there were no defences. These outlying areas are likely to be affected by a major flood, that has up to a 0.1% (1 in 1000) chance of occurring each year.

Historic Flooding:
11/12/1989: Blocked trash screen saw the following flood. No. 82, 76, 74, 28, Cosgroves, Bradford & Bingley, 8, 4, Abbey Lodge, 11, 15 - 24, 28-31 (hairdressers), Dress Agency, Florist, Newsagent, The Dog, The Cottage shop, De Lacy, Thrashers, Climatins, 5, 7, 10 Woodlands Dr, 4, 5 Abbey Mews.
28/10/2000: Flooding due to channel capacity being exceeded.
Other information:
See Tables 01 for details of node points.



The details used in this plan may not have been audited. The Agency cannot ensure that the data in its possession will always be accurate, up to date or valid but the Agency will use reasonable care to ensure an accurate copy of the data. The accompanying disclaimer should be used in conjunction with this plan.

0100200400

Metres

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S

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Node	Undefended levels (mAOD) at Return Period:									
	Q5	Q10	Q25	Q50	Q75	Q100	Q100+CC	Q200	Q1000	
RCALD1_06063	45.65	45.70	45.75	45.80	45.85	46.20	46.20	46.17	46.95	
RCALD1_04727	44.15	44.41	44.77	45.04	45.22	45.34	45.86	45.82	46.69	
RCALD1_04293	43.04	43.24	43.51	43.73	43.88	43.98	44.44	44.40	45.28	

Table 01

Data from Whalley SFRM (2009)



Enter a postcode or place name:

Whalley, Lancashire

Other topics for this area...

Flood Map for Planning (Rivers and Sea)

Flood Map for Planning (Rivers and Sea)

Map legend

Click on the map to see what Flood Zone (National Planning Policy Guidance definitions) the proposed development is in.

☒ Flood Map for Planning (Rivers and Sea)

☐ Flood Zone 3

☐ Flood Zone 2

☐ Flood defences (Not all may be shown*)

☐ Areas benefiting from flood defences (Not all may be shown*)

☒ Main River Line

☐ Main River Line

☒ Other national environmental organisations

☐ Natural Resources Wales Area of responsibility

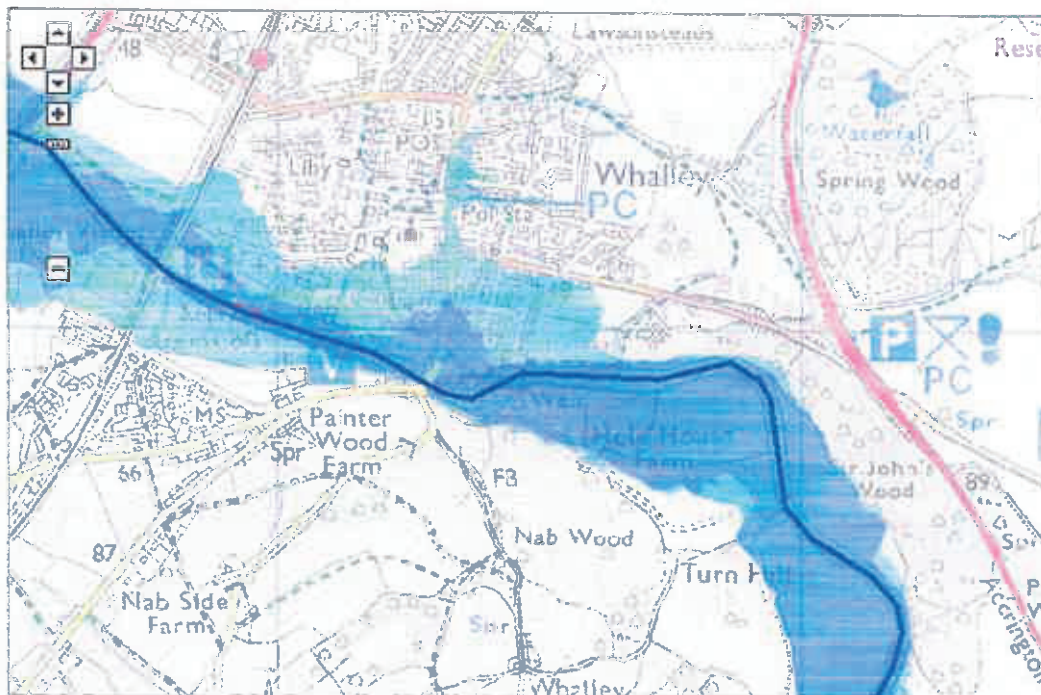
☐ Scottish Environment Protection Agency Area of responsibility

Whalley, Lancashire at scale 1:10,000

Other maps

Data search

Text only version



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More about flooding:

Understanding the Flood Map for Planning (Rivers and Sea)

A more detailed explanation to help you understand the flood map shown above.

Current flood warnings

We provide flood warnings online 24 hours a day. Find out the current flood warning status in your local area.

* **Legend information:** Flood defences and the areas benefiting from them are gradually being added through updates. Please contact your local environment agency office for further details.

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Other topics for this area...



Risk of Flooding from Rivers and Sea

View other Interactive Maps

Risk of Flooding from Rivers and Sea

River flooding happens when a river cannot cope with the amount of water draining into it from the surrounding land. Sea flooding happens when there are high tides and stormy conditions.

The shading on the map shows the risk of flooding from rivers and the sea in this particular area.

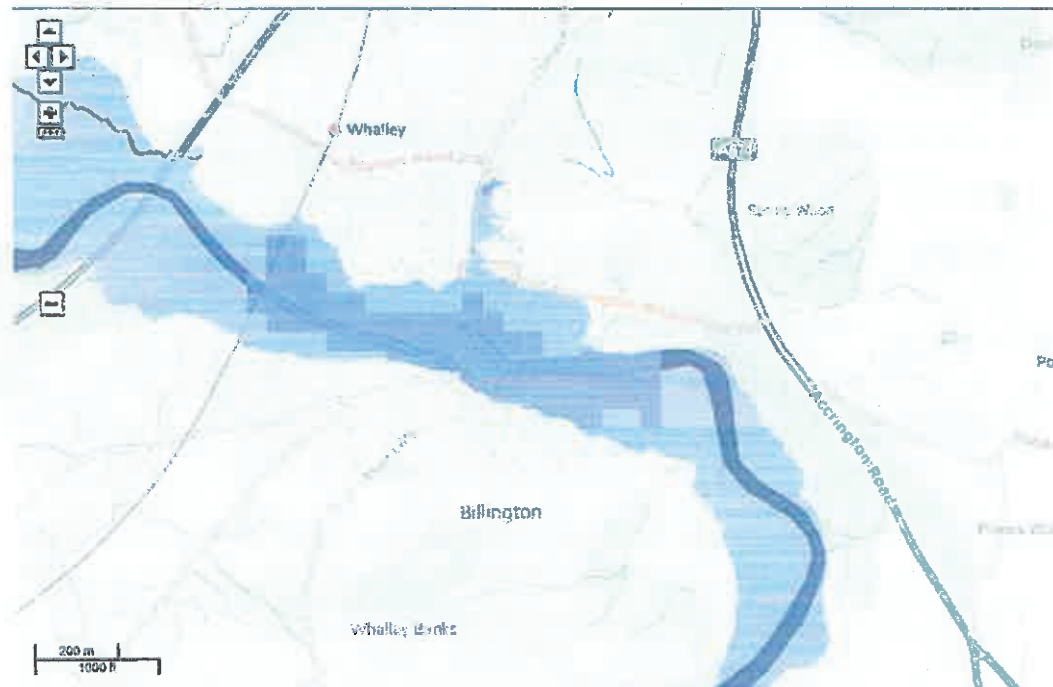
Click on the map for a more detailed explanation.

Map of X: 373,481; Y: 435,952 at scale 1:10,000

Data search

Map legend

<input checked="" type="checkbox"/>	Risk of Flooding from Rivers and Sea
	High
	Medium
	Low
	Very Low
<input checked="" type="checkbox"/>	Other national environmental organisations
	Natural Resources Wales Area of responsibility
	Scottish Environment Protection Agency Area of responsibility



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Enter a postcode or place name:

Other topics for this area...

Groundwater

Groundwater

Map legend

Map of X: 373,481; Y: 435,952 at scale 1:10,000

Other maps

Data search

Text only version

Groundwater source protection zones

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

BGS Aquifer Maps - Superficial Deposits Designation

- ☒ Principal
- ☒ Secondary A
- ☒ Secondary B
- ☒ Secondary (undifferentiated)
- ☒ Unknown (lakes and landslip)

BGS Aquifer Maps - Bedrock Designation

- ☒ Principal
- ☒ Secondary A
- ☒ Secondary B
- ☒ Secondary (undifferentiated)

Groundwater Vulnerability Zones

- ☒ Major Aquifer High
- ☒ Major Aquifer Intermediate
- ☒ Major Aquifer Low
- ☒ Minor Aquifer High
- ☒ Minor Aquifer Intermediate
- ☒ Minor Aquifer Low

Other national environmental organisations

- ☒ Natural Resources Wales Area of responsibility
- ☒ Scottish Environment Protection Agency Area of responsibility



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More about Groundwater

Groundwater Source Protection Zones:

Groundwater provides a third of our drinking water. We ensure that your water is safe to drink defining Source Protection Zones. These zones help to monitor the risk of contamination from any activities that might cause pollution in the area.

The Source Protection Zones are not displayed at scales greater than 1:20,000 (Ordnance Survey 1:50,000 scale) as the data was only modelled to this level and is not accurate past this. They should not be compared against field boundaries.

Understanding Groundwater Source Protection Zones maps

British Geological Survey's Aquifer Maps:

From 1st April 2010 new aquifer designations replace the old system of classifying aquifers as Major, Minor and Non-Aquifer. This new system is in line with our Groundwater Protection Policy (GP3) and the Water Framework Directive (WFD) and is based on British Geological Survey mapping.

The Aquifer Extents are not displayed at scales greater than 1:75,000 (Ordnance Survey 1:250,000 scale) as the data was only modelled to this level and is not accurate past this.

Understanding the British Geological Survey's Aquifer maps

Groundwater Vulnerability Maps:

The Environment Agency are currently updating their groundwater vulnerability maps to reflect improvements in data mapping and understanding of the factors affecting vulnerability. The new maps will be released later in 2015.

The 'New groundwater vulnerability mapping methodology' report provides technical information about how the new maps have been created.

The user guide outlines the kinds of activities the new maps can be used for.

These reports have been published on GOV.UK in advance of the release of the new maps to give users time to understand the new approach and how this differs from the previous groundwater vulnerability maps.

Understanding Groundwater Vulnerability maps



Enter a postcode or place name:

Other topics for this area...

Flood Warning

Flood Warning Areas

Map legend

Map of X: 373,481; Y: 435,952 at scale 1:10,000

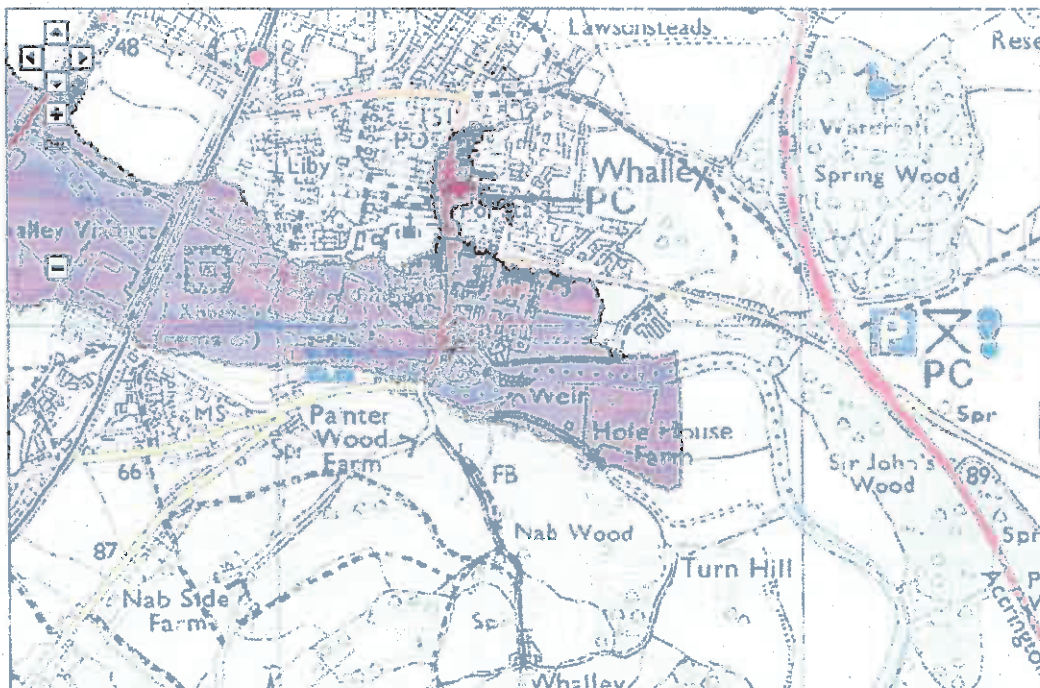
Other maps

Data search

Text only version

Click on an area for details.

- ☒ Flood Warning Areas
- ☐ Areas where we issue flood warnings
- ☐ Flood Alert Areas
- ☐ Areas where we issue flood alerts
- ☐ River and Sea levels
- ☒ River and Sea levels



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More about Flood Warnings:

Flood Warning Areas

If your home or business is within a purple shaded area on the map then you can receive free flood warnings. We issue flood warnings to specific areas when flooding is expected. If you receive a flood warning you should take immediate action.

For further information visit our Flood warning pages.

Flood Alert Areas

If your home or business is within a pink shaded area on the map then you can receive free flood alerts. We issue flood alerts when flooding is possible. In many areas we issue flood alerts for flooding from rivers, the sea and groundwater. If you receive a flood alert you should be prepared for flooding and to take action.

It is very difficult to predict the exact location of flooding from groundwater as it is often related to local geology. We can't say for definite which properties are at risk from groundwater flooding. To help people we provide flood alerts for large areas that could be affected if groundwater levels were high.

For further information visit our Flood warning pages.

River Levels

River level monitoring sensors are placed in the waters at key points and measure changes in water level. This data is recorded at 15 minute intervals; it's then sent back to our offices to be published online at least once a day. The information may be updated more frequently to meet operational needs, for example when water levels are high. This is the most up to date information available about river and sea levels.

For further information visit our River and Sea Levels pages.



Enter a postcode or place name:

Other topics for this area...

Risk of Flooding from Surface Water

View other Interactive Maps

Risk of Flooding from Surface Water

Surface water flooding happens when rainwater does not drain away through the normal drainage systems or soak into the ground, but lies on or flows over the ground instead.

The shading on the map shows the risk of flooding from surface water in this particular area.

Click on the map for a more detailed explanation.

Map of X: 373,481; Y: 435,952 at scale 1:10,000

Data search

Map legend

<input checked="" type="checkbox"/>	Risk of Flooding from Surface Water
	High
	Medium
	Low
	Very Low
<input checked="" type="checkbox"/>	Other national environmental organisations
	Natural Resources Wales Area of responsibility
	Scottish Environment Protection Agency Area of responsibility



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Enter a postcode or place name:

Other topics for this area...

Risk of Flooding from Reservoirs

View other Interactive Maps

Risk of Flooding from Reservoirs

Reservoir flooding is extremely unlikely to happen.

The shading on the map shows the area that could be flooded if a large reservoir were to fail and release the water it holds. A large reservoir is one that holds over 25,000 cubic metres of water, equivalent to approximately 10 Olympic sized swimming pools. Since this is a worst case scenario, it's unlikely that any actual flood would be this large.

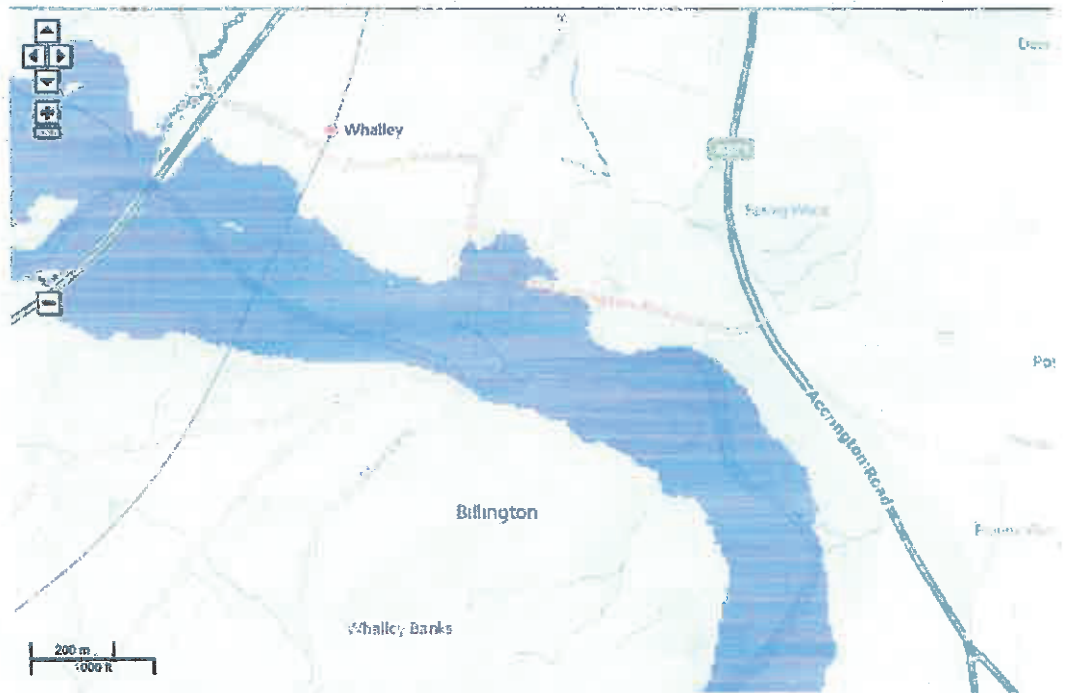
Click on the shading to see details of reservoirs that could cause flooding in this area.

Map of X: 373,481; Y: 435,952 at scale 1:10,000

Data search

Map legend

<input checked="" type="checkbox"/>	Risk of Flooding from Reservoirs
<input type="checkbox"/>	Maximum extent of flooding
<input checked="" type="checkbox"/>	Other national environmental organisations
<input type="checkbox"/>	Natural Resources Wales Area of responsibility
<input type="checkbox"/>	Scottish Environment Protection Agency Area of responsibility



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Interactive Maps

Risk of Flooding from Reservoirs for X:373443, Y:436021

Below are the reservoirs that could affect this area.

Dean Clough Lower				
Risk Designation: To be determined We define a reservoir as high risk, if peoples' lives would be in danger as a result of an uncontrolled release of water from the reservoir.				
Reservoir Owner: United Utilities Water plc				
Reservoir location (grid reference): 371820, 433250	Area: Environment Agency - Cumbria and Lancashire	Local Authority: Lancashire	Additional Comments: If you have questions about local emergency plans for this reservoir you should contact the named Local Authority	View map

Further information

Reservoir flooding is extremely unlikely to happen. There has been no loss of life in the UK from reservoir flooding since 1925. All large reservoirs must be inspected and supervised by reservoir panel engineers. As the enforcement authority for the Reservoirs Act 1975 in England, we ensure that reservoirs are inspected regularly and essential safety work is carried out.

However, in the unlikely event that a reservoir dam failed, a large volume of water would escape at once and flooding could happen with little or no warning. If you live or work in an area that could be affected, you should plan in advance what you would do in an emergency. You may need to evacuate immediately. Consider where you would go to safety, and be ready to follow the advice of emergency services.

To find out about local emergency plans, contact the local authority listed above. Be aware that they may not be able to give you any specific information immediately as developing reservoir emergency plans is a new responsibility.

If you would like to see information on how deep the water could get or how fast it could flow

[View the estimates of the depth of flooding from reservoirs for this area.](#)

[View the estimates of the speed of flooding from reservoirs for this area.](#)

This area may be at risk from other types of flooding.

[Check your risk of flooding from rivers and sea.](#)

[Check your risk of flooding from surface water.](#)

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