320150305P



FLOOD RISK ASSESSMENT

For

Construction of Essential Residential Accommodation,
within the Dunsop Bridge Trout Farm Site,
Dunsop Bridge, Clitheroe, Lancashire
BB7 3AX

10 March 2015

LK Consult Ltd

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LK Consult Ltd

Study Area Address	Land adjacent to Trough Road, Dunsop Bridge, Dunsop Bridge Trout Farm, Dunsop Bridge, Clitheroe, Lancashire BB7 3AX						
Report Title	Flood Risk Assessment						
Job Number	FRA 14 1083	Document Ref.	FRA 14 1083-Final				
Date Issued	March 2015	Report Version	Final				
Prepared By	Robert Brenton - Environmental Consultant	Signature	RIBrenton				
Reviewed By	Phil Hunter - Associate	Signature	ameras				
Authorised By	Mark Jones - Associate	Signature	Mark Jones				

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1.0 Scope

This report contains the details of a Flood Risk Assessment carried out by LK Consult Limited for the proposed residential building at Dunsop Bridge Trout Farm, Dunsop Bridge, Clitheroe, Lancashire, BB7 3AX, henceforth referred to as "the site" in this report.

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All parties to this report do not intend any of the terms of the Contracts (Right of Third Parties Act 1999) to apply to this report. Please note this report does not purport to provide definitive legal advice nor can it be used to demonstrate that the site will never flood in the future.

The Executive Summary contains an overview of key findings and conclusions. However, no reliance should be placed on the Executive Summary until the whole of the report has been read. Other sections of the report may contain information which puts into context the findings noted within the Executive Summary.

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2.0 Executive Summary

This FRA has been carried out in accordance with the 27th March 2012 National Planning Policy Framework (NPPF) amended March 2014. It is to be used to assist the Local Planning Authority (LPA) and the Environment Agency (EA) when considering the flooding issues of the proposed development as part of a planning application.

The proposed development is to create a single rural dwelling for the on-site manager of Dunsop Bridge Trout Farm. It is being put forward as an exception to the Council's general open countryside policies on the basis that an operator needs to be present on a 24 hour basis. The site is mapped on the edge of EA Flood Zone 3, partially within the medium risk and partially within the low risk area as defined on the Risk of Flooding from Rivers and Sea map. The NPPF classification for Flood Zone 3A is high probability of flooding for this part of Langden Brook. The chosen location for the facility is not shown at risk from reservoir flooding.

The existing trout farm and its dependence upon a non-treated fresh water supply could be categorised as a "Water Compatible" land use although the specific term "fish farm" is not included within the technical guidance of the NPPF. The planning application is for essential residential accommodation for staff to manage and safeguard the livestock. This should ensure that nutrients can be managed in order to limit the risk of pollution incidents.

The proposed accommodation is currently on the outer edge of Flood Zone 3 and is occupied by a storage building so is not part of the functional flood plain. Therefore the planning designation will be classified as Flood Zone 3a. So if the development is confirmed as "Water Compatible" it would not require an exception test.

Topographical data shows that the ground level of the site to be above the estimated Flood Zone 3 levels. This is because it is built on a concrete plinth above the surrounding ground. The level of the plinth would place the site within Flood Zone 2.

If the proposal is not confirmed as "Water Compatible" it would be classified as "More Vulnerable" and will require an exception test if it is in Flood Zone 3.

The area is shown as susceptible to surface water flooding on the western edge but the mapping shows only a low risk of shallow surface water flooding. This will be mitigated by the existing building being raised above the surrounding ground and the fall of the ground to the south away from the site. There will be no increased risk of flooding from pluvial flows as the area is impermeable at present.

Based on the small scale of the proposed development, it is considered that the proposed development site, with its mitigation, can be constructed and operated safely in flood risk terms, without increasing flood risk elsewhere. It is therefore considered an appropriate development in accordance with the NPPF.

3.0 Introduction

The site boundary is provided in the location plan in Appendix A. As the majority of the site is shown inside the border of the EA designated Flood Zone 3 adjacent to Langden Brook a flood risk assessment is required to investigate all potential sources of flooding that may constrain the construction.

This FRA combined a desktop study, review of available information, consultations and an assessment of all sources of flooding risk posed to and from the site and proposed development, in accordance with the NPPF. Appropriate flood mitigation measures were then considered, either as already incorporated within the scheme or recommended for inclusion at detailed design stage. The suitability of the proposed development was also reviewed in the context of the NPPF and the technical guidance accompanying the NPPF.

4.0 Purpose of the Report

This FRA has been carried out in accordance with NPPF. It is to be used to assist the Local Planning Authority (LPA) and Environment Agency (EA) when considering any flooding issues that may relate to the proposed development as part of a planning application.

The report provides the following information:

- An assessment of the flood risk posed to the site based on flood information and mapping provide by the EA and Strategic Flood Risk Assessment (SFRA);
- An assessment of the proposed development in terms of surface water run-off and;
- Proposals for measures to mitigate the flood risks posed to and from the development where appropriate.

5.0 Report Information Sources

The information source used to undertake this FRA has been collected from the following sources:

- British Geological Survey Website (accessed December 2014),
- EA Website (accessed December 2014) and correspondence,

- EA modelling Data December 2014,
- Ribble Valley Borough Council Strategic Flood Risk Assessment Level 1. May 2010,
- Anecdotal evidence from local people; and
- Internet mapping and other searches.

6.0 Consultations

Requests for information have been made to Ribble Valley Borough Council (RVBC), Lancashire County Council, the Environment Agency, and United Utilities (See Appendix C).

- United Utilities have replied stating they have no records of flooding. Service Plans are included within Appendix A; showing no sewers covering the area and a water main running adjacent to Trough Road.
- The Environment Agency has not reported any records of flooding. They do not have any
 modelling data for river levels in this area.
- Lancashire County Council have provided information and mapping covering surface water and fluvial flooding. There was one incident of flooding recorded in the area 350m to the north of the site due to blocked gullies. They have verbally advised that the trout farm is likely to be seen as water compatible development and thus any 'Essential Staff Accommodation' should be classified within the same category, but this is subject to confirmation with the local planning authority.
- Ribble Valley Borough Council has not provided any further information at the time of writing this report.

7.0 Overview of British Legislation

7.1 National Planning Policy

The NPPF and accompanying Technical Guidance was published in March 2012 and amended March 2014. This supersedes all Planning Policy Statements (PPS's) and remaining Planning Policy Guidance (PPG's).

Flood risk is retained as a key development consideration and is incorporated within Section 10:

"Meeting the challenge of climate change, flooding and coastal change".

"Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere."

The Sequential and Exception Tests are retained as part of the NPPF. The accompanying NPPF Technical Guidance also includes Tables 2 and 3 (similar to Tables D2 & D3 of PPS25) to assist with flood risk vulnerability classifications and development suitability.

7.2 Local Policy

Ribble Valley Borough Council considers flood risk through relevant environmental and climate change policies which enforce the requirements of the NPPF. The Council's Strategic Flood Risk Assessment is a key source of flood risk specific information for the area. The SFRA provides a more detailed review of flood risks and recommendations for ensuring developments can be constructed and operated safely in accordance with the NPPF.

Ribble Valley Borough Council's Specific Policies

Policy G1 - Development Control.

All development proposals will be expected to provide a high standard of building design and landscape quality. Development which does so will be permitted, unless it adversely affects the amenities of the surrounding area. Specifically;

(k) Development should not require culverting, artificial channelling or destruction of a watercourse. Wherever possible watercourses should be maintained within a reasonable corridor of native vegetation.

Policy G7 - Flood Protection Policy

All development proposals will be expected to:

- i) Protect flood plains.
- ii) Protect areas at risk from flooding as indicated on the proposals map.
- iii) Allow necessary access to watercourses for maintenance.
- iv) Prevent an unacceptable change to surface water run-off.
- v) Protect the continuity and integrity of existing fluvial defences.

POLICY DME6: WATER MANAGEMENT

Development will not be permitted where the proposal would be at an unacceptable risk of flooding or exacerbate flooding elsewhere.

Applications for development should include appropriate measures for the conservation, protection and management of water such that development contributes to:

- 1. Preventing pollution of surface and/or groundwater.
- 2. Reducing water consumption.
- 3. Reducing the risk of surface water flooding (for example the use of sustainable drainage systems (SuDS)).

As a part of the consideration of water management issues and in parallel with flood management objectives, the Authority will also seek the protection of the borough's water courses for their biodiversity value. All applications for planning permission should include details for surface water drainage and means of disposal based upon sustainable drainage principles. The use of public sewerage systems is the least sustainable form of surface water drainage and therefore development proposals will be expected to investigate and identify more sustainable alternatives to help reduce the risk of surface water flooding and environmental impact.

It is important to ensure the water environment including the use of water, pollution and flood risk can be adequately controlled through the development management process to deliver the development strategy and its strategic framework as envisaged in the Core Strategy.

8.0 Site Status and Environmental Setting

8.1 Site Location and Status

The trout farm is in a rural location adjacent to Langden Brook south of Dunsop Bridge village centre. It is 2.05ha in size and the proposed essential accommodation covers 0.015 ha. The accommodation will replace an existing storage building adjacent to the nearby housing off Trough Road. The site's nearest postcode is BB7 3AX.

The site location can be seen in Appendix A.

The site of the proposed essential accommodation is an existing storage building within a surfaced access area associated with the trout farm. There is existing residential single storey accommodation in close proximity to the proposed development. It is considered that there has to be a presence on site by the operatives, to monitor and react to any potential harm that may befall the stock of fish and to minimise any potential pollution incidences to the watercourse. Presently the site operative utilises a temporary caravan for overnight welfare accommodation.

8.2 Current Site Description

The following description is based on information made available from internet mapping and aerial photography. The location of the proposed site is within the existing area of the trout farm. The proposed essential accommodation is within a surfaced yard and storage area, behind a former barn, towards the eastern edge of the trout farm. There are existing single story residences immediately to the south of the existing building.

The nearest borehole showed River Deposits (Alluvium) over Mudstone bedrock with no groundwater recorded. It is likely that the groundwater level will be influenced by the adjacent river.

8.3 Existing Flood Risk

Fluvial and Tidal

There are no natural surface water features present on the site but there are a large number of water tanks for the fish to the west of the proposed essential accommodation. These are fed by a controlled through rate of flow and will be of minimal risk to the residence.

The main watercourse is Langden Brook which runs southwards to the west of the site beyond the trout farm tanks.

The location of the proposed residence places it on the outer edge of Flood Zone 3 on the EA website. A more detailed map has been provided by Lancashire County Council which confirms the site is partially within Flood Zone 2. The location of the proposed residence is as far to the east as practicable from the watercourse but remaining within the trout farm area.

Flood Modelling Data is not available from the EA but the flood zone extents are modelled by comparison of the extreme modelled river flows with LiDAR ground level data (remote ground level measurement); this has been compared to the topographical data supplied by the client. The 1 in

1000 year mapped flood extent is coincident with a ground level of 116.6m AOD at this location, with the 1 in 100 year level being 116.3m AOD. The existing building is on a concrete plinth at a level of between 116.43m and 116.50m AOD raised above the surrounding ground. This would put the existing building plinth within Flood Zone 2.

The Flood Risk Maps, provided by EA and LCC, showing the extent of tidal and fluvial sources of flooding can be seen in Appendix B. The comparison of the mapping data with the topographical Information is shown in Appendix C.

A summary of the key mapping for the site is provided in Table 1:

Table 1: Summary of mapping

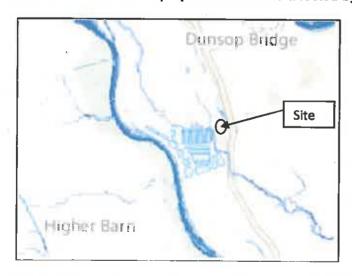
Drawing / Figure	Site Specific Designation / Description			
EA Flood Zone Plan (supplied by EA)	Site is located in Flood Zones 2 &3			
Flood Zone Plan (supplied by LCC)	Site is located in Flood Zones 2 &3			
Areas susceptible to ground water flooding.	Site is within the potential 50-75% risk of groundwater flooding.			
Areas susceptible to surface water flooding.	The western edge is within a low risk susceptible area for surface water flooding.			
Location of highway guilles	Highway gullies are located immediately to the south of the proposed essential accommodation.			

Pluvial

There is no record of pluvial flooding in the area. The map received from LCC indicated a number of road gullies to the south of the plot indicating there is some form of highway drainage. The road is within a slight dip adjacent to the gullies. There is one record of flooding from rainfall in Dunsop Bridge but this was adjacent to the village and 350m north of the site.

Surface Water

The mapping from LCC indicates that the area has a as low risk of susceptibility to surface water flooding along the western edge. The surface water flooding maps from the EA show only a limited area to the west of the proposed residence affected by potential surface water flooding.



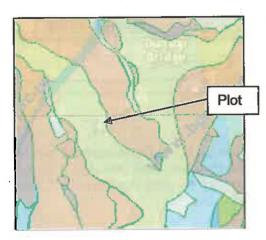
EA surface water mapping, accessed January 2015

Groundwater

The Ribble Valley SFRA does not indicate any groundwater flooding incidents on or close to the site. The SFRA does not consider the risk from ground water to be significant. There is however a 50-75% chance of groundwater flooding shown on the plans provided by LCC. The site is shown as above a Secondary A superficial and bedrock aquifer. There are no documented records of groundwater flooding within LCC records.

Much of the surrounding study area is covered by a blanket of Alluvium, which has the potential to behave as a limited aquifer. This area therefore has the potential for groundwater flooding in excavations as it may be in hydraulic continuity with the water course.

The superficial geology of the site is shown as Alluvium (Sand and Silt) coloured yellow. The brown River Terrace Deposits (Sand and Gravel).



Superficial Geology screenshot, accessed January 2015

There are no records from the existing site users of the site being flooded as result of groundwater. The proposed development does not include any works which could increase the risk of flooding to or from the development from groundwater sources.

Artificial Sources of Flooding

The only sources of artificial flooding are the trout lakes/tanks as these are raised above the surrounding ground but these are unlikely to flow towards the proposed residential accommodation to the north and east of the tanks as the ground falls to the south and west. The development site is outside of the zone considered to be at risk from reservoir flooding on the EA mapping.

Other Sources of Flooding (Infrastructure)

The site is remote from any public surface water and foul sewers; there is visual evidence of highway drainage to the south of the plot in Trough Lane although the gullies are at a lower topographical level than the site. There are existing private drains and gullies associated with the existing building and the nearby residences, these appear to flow towards the south away from the plot. There is a water main running within Trough Lane with connections to the adjacent accommodation if there is a burst from this the flow will be limited due to its size and the overland flow is likely to southwards away from the site towards the existing gullies.

Flood History

From available information including the SFRA, the site has not been inundated by recent historic flood events.

Key Flooding Sources

A summary of the key flooding sources relative to the site that have been identified from the available data is provided in Table 2. Those sources discounted in above sections have been excluded:

Table 2: Summary of Flooding Sources and Pathway / Risk

Flooding Source	Potential	Comments on Pathway Likelihood
Fluvial / Tidal	Low	Site is shown within the edge of the EA Flood Zone 3 but the plot levels show that the site is above the 1 in 100 year flood level but below the 1 in 1000 year flood level as it is constructed on a concrete plinth. This would put it in Flood Zone 2.
Groundwater	Low	There is no evidence of any groundwater flooding in the area but there may be continuity in the water table from the adjacent river. The mapping supplied by LCC shows the area modeled as between 50% and 75% risk of groundwater emergence.
Surface Water	Low/Very Low	Part of the site is shown on the EA website and LCC mapping as having a low potential for Surface Water flooding.

9.0 Assessment of Proposed Development

9.1 Proposed Development

The proposed development is to construct an essential residential property for the manager of the trout farm. This will be his sole residence, and so that there can be a permanent presence on site. This will enable the manager to monitor the welfare of the stock, and be available to deal with any breakdown in the processing; that may cause a pollution incident within the nearby watercourse. The location of the site is as far to the east away from the river so as to still remain within the trout farm. This will serve towards minimising the risk of flooding.

The essential accommodation is to be built on the site of an existing store/garage that is raised above the surrounding ground on a concrete plinth. The immediate surroundings are paved with concrete and bituminous surfacing so there will be no increase in impermeable area due to the construction of the residence. The existing surfacing and roof are drained by a gully system. The trout farm can arguably be classified as 'Water Compatible' as it was located to utilise the water from the nearby watercourse for the husbandry of the fish although fish farms are not specifically mentioned. The essential accommodation can similarly be considered as water compatible in line with Table 2 of the Planning Practice Guidance.

Given the scheme is to use the site of an existing building without compromising the available flood plain; no compensatory storage should be required.

9.2 Flood Resilience

The following flood resilient measures are to be incorporated as appropriate:

A minimum finished floor level of 117.2m is recommended, this is based upon 0.6m above
the estimated 1 in 100 year flood level plus an additional 0.3m to allow for uncertainty in the
extent of the flood zone. This will allow for the potential influence of climate change and is

- above the estimated 1 in 1000 year flood level. Consider the use of solid concrete flooring to aid in recovery after events beyond the scope of this assessment.
- Any electrical supply connections should be fed down from upper levels. Sockets and switches to be as high as practicable in order to minimise damage if flood waters inundate the property.

The final construction requirements should be confirmed with the RVBC building control officers.

9.3 Flood Risk Vulnerability

The site and surroundings are already in "Water Compatible use". The proposal is to reduce the risk to fish stock, improve welfare facilities, and reduce the potential for a significant pollution incident.

Flood Risk Vulnerability and Flood Zone 'Compatibility'

Flood Risk Vulnerability Classification		The second secon	Water compatible			Less Vuinerable
Flood Zone	1					
Flood Zone	2			Exception Test required		
	3a	Exception Test required			Exception Test required	
	3b	Exception Test required				

According to the NPPF retained Flood Risk Vulnerability Classification, the proposed land use could be classified as "Water Compatible."

9.4 Sequential Test Summary

The sequential test is a guidance designed to ensure that areas at little or no risk of flooding are developed in preference to areas at higher risk.

The site has been determined to be within Flood Zone 2. The proposal is to replace an existing building. Flood Zone 2 is land assessed as having less than a 1 in 100 annual probability of river flooding (1%), or less but greater than 1 in 1,000 annual probability of flooding (0.1%) in any year. This is classified as low risk on the EA risk of flooding map. The proposed essential accommodation is as distant as it can be from the river whilst still remaining within the trout farm. The remainder of the trout farm is within Flood Zone 3 but this area has been determined to be within the Flood Zone 2 area near the road. The provision of more substantial overnight accommodation than the caravan that is currently utilised for the function will be a safer option.

9.5 Exception Test

If RVBC agree that it is a "Water Compatible development" and the essential accommodation is necessary for the operation of the trout farm, the welfare of the fish, and minimising any potential pollution incident. Then an Exception Test should not be required.

If it is classified as "More Vulnerable" in Flood Zone 2 then an exception test would not be required.

The Exception test is a method to demonstrate and help ensure that flood risk to people and property will be managed satisfactorily, while allowing necessary development to go ahead in situations where suitable sites at lower risk of flooding are not available. Also to show that it will provide wider sustainability benefits to the community that outweigh flood risk, and that it will be safe for its lifetime, without increasing flood risk elsewhere.

The provision of the essential accommodation will provide sustainable benefits to the community by the potential to lessen the effects of accidental spillages and improved availability of stock care and animal husbandry for the trout. It has been located where it will minimise any potential to increase flood risk to others and it will reduce the "vulnerability category" of the existing welfare accommodation.

9.6 Refuge and Evacuation

The Trout Farm is in a flood alert area operated by the EA. It is recommended that the operators register with the EA to receive alerts as a precautionary measure. The vehicular access to the east is just within Flood Zone 2 but Flood Zone 1 is only a few meters to the north of this position. The depth of flood waters will be less than 300mm for a 1 in 100yr and 1 in 1000yr fluvial events so safe refuge should be available at all times.

Outline Evacuation Plan

An outline evacuation plan should be provided for all "Water Compatible developments" as a precautionary measure. An evacuation plan may be in place for the Trout farm that could be adapted.

9.7 Surface Water Runoff - Flood Risk from the Development

In accordance with the NPPF, this FRA also considers the risks posed from the development to surrounding areas.

The existing area is covered in buildings or impermeable surfacing so any changes to the structure will not increase the risk to users or the surrounding area. The existing building has rainwater fittings and surface water gullies. There are no development plans available at the time of compiling this report but if a garden area is to be provided or rainwater harvesting to be incorporated then a reduction of runoff could be achieved.

Given the small scale of the proposal it is considered likely that the development will have a negligible effect on surrounding infrastructure. There will not be any significant increase in overland flow from the site and, given the site setting, no other sensitive assets would likely be affected.

9.8 Climate Change

The impact of climate change, in accordance with the NPPF, is likely to be an increase in the rainfall intensity in the future, which will increase peak storm runoff flows. It is considered that the flows in the future are not likely to have a significant impact, even with an allowance for climate change. The recommended Finished Floor Level includes an additional allowance for climate change.

Confirmation of the requirements from the Lead Local Flood Authority should be sought as appropriate.

10.0 Conclusion

• The site is considered to be generally at a low risk from all sources of flooding;

• The EA mapping shows the site to be partially within Flood Zone 2 and Flood Zone 3. Topographical data indicates the site is in Flood Zone 2 (low probability). and only likely to be inundated in the 1 in 100 to 1 in 1000 year extreme events range;

If the proposed development is confirmed as "Water Compatible" in accordance with the NPPF; it is therefore an appropriate type of development within all Flood Zones, thus no

Exception Test should be required;

 The proposed scheme can incorporate suitable flood resilience measures to aid recovery in case of extreme events beyond the scope of this assessment;

All future users could be evacuated to areas within Flood Zone 1 that are in close proximity

of the site;

 An emergency evacuation plan should be developed in case of flood warnings, but the trout farm may already have one in place for general operations;

 Based on the likely flooding risk, it is considered that the proposed development can be constructed and operated safely in flood risk terms, without increasing flood risk elsewhere and is therefore appropriate development in accordance with the NPPF.

10.1 Recommendations for Further Work

Consider ways of reducing storm water runoff as part of the residential design.

Register for flood warnings with the EA.

Amend or provide flood evacuation plans for the Trout Farm.

11.0 Appendices

A. Site Location.

B. Correspondence

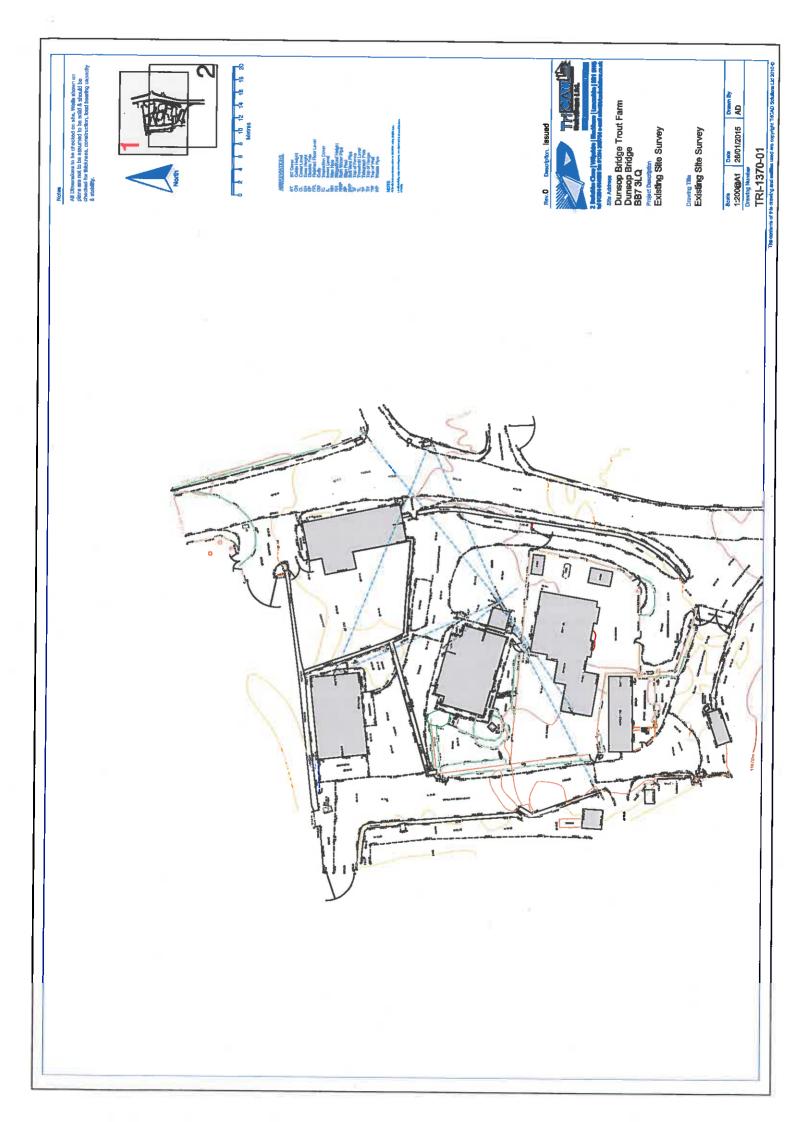
C Reports & Plans

Appendix A

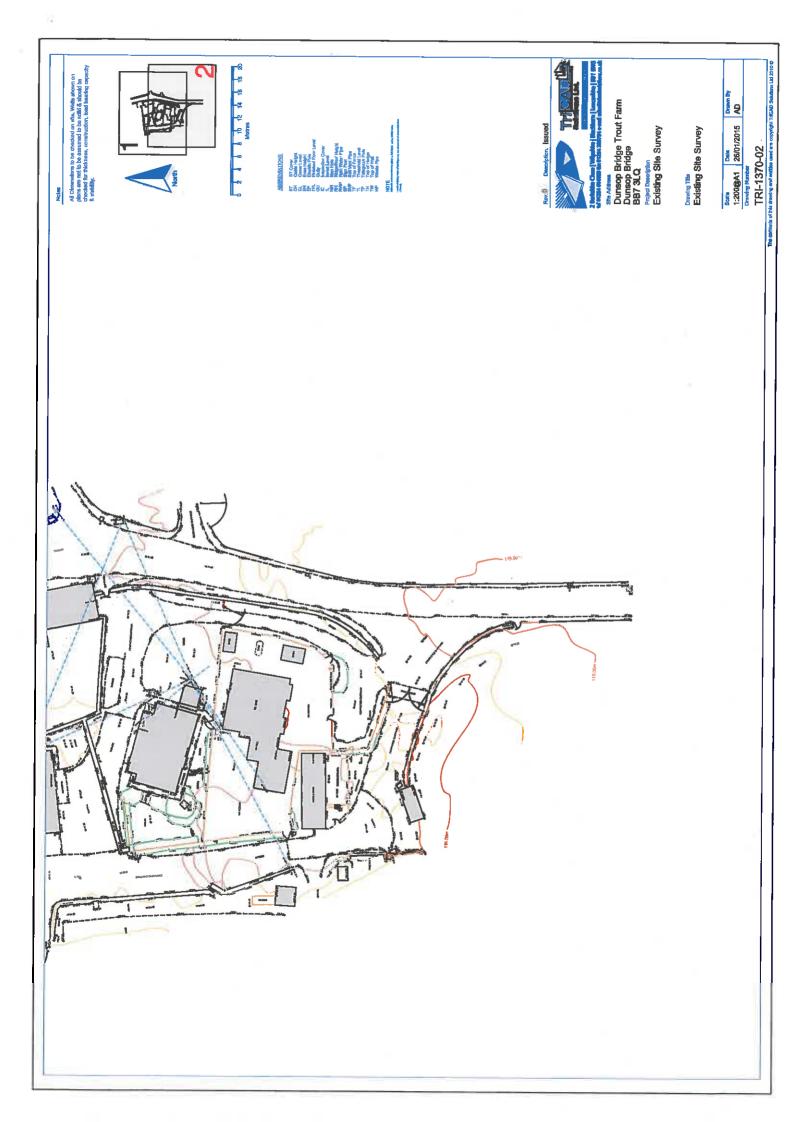














Appendix B

From:

CMBLNC Info Requests <Inforequests.cmblnc@environment-agency.gov.uk>

Sent:

02 January 2015 15:11

To:

Rob Brenton

Cc:

CMBLNC Info Requests

Subject:

CL3489MG Response from the Environment Agency Trout Farm, Dunsop Bridge

Attachments:

Standard_Notice.pdf

Robert

Enquiry regarding Trout Farm, Dunsop Bridge

Thank you for your enquiry which was received on 2 December 2014.

We respond to requests under the Freedom of Information Act 2000 and Environmental Information Regulations 2004.

I can confirm the site is on the boundary of flood zone 2 and 3, but lies just within the boundary of flood zone 3.

We do not hold any fluvial level data for the watercourses in this area at the moment and also hold no record of any historic flooding. There is no further information available for the site in relation to this request.

I have attached our Standard Notice or licence which explains the permitted use of this information.

Please get in touch if you have any further queries or contact us within two months if you'd like us to review the information we have sent.

Yours Sincerely

Mark Goucher | Customers and Engagement Officer

Customers and Engagement Team | Cumbria and Lancashire + Greater Manchester, Merseyside and Cheshire

Environment Agency | Richard Fairclough House, Knutsford Road, Warrington WA4 1HT

Contact | 01925 542980 | Internal: 721 2980



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From:

CMBLNC Info Requests <Inforequests.cmblnc@environment-agency.gov.uk>

Sent:

08 January 2015 14:45

To:

Rob Brenton

Cc:

CMBLNC Info Requests
CL3489MG Trout Farm, Dunsop Bridge - MAP SUPPLIED

Subject: Attachments:

CL3489 - Dunsop Bridge.pdf

Rob

Trout Farm, Dunsop Bridge

As requested, a map to support our statement that while the site lies on the border of zone 2/3 it falls within flood zone 3, is attached.

Mark

Mark Goucher | Customers and Engagement Officer
Customers and Engagement Tearn | Cumbria and Lancashire
Environment Agency | Richard Fairclough House, Knutsford Road, Warrington WA4 1HT
Contact | 01925 542980 | Internal: 721 2980



From: Rob Brenton [mailto:R.Brenton@thelkgroup.com]

Sent: 02 December 2014 10:35

To: Enquiries, Unit

Subject: Trout Farm, Dunsop Bridge - Information Request

Dear Sir/Madam

LK Consult has been commissioned to undertake a Flood Risk Assessment, (FRA) of a site located at Dunsop Bridge Trout Farm, Dunsop Bridge, Clitheroe, Lancashire, BB7 3AX. The site is located approximately 330m to the southeast of St Hubert's Church and is currently used as a storage shed for the adjacent Dunsop Bridge Trout Farm. The Ordinance Survey Grid Reference for the centre of the site is SD 65783 49785 and is bound by fields to the north, a barn to the east off an unnamed road. To the west a track which runs alongside the ponds within where the Trout are farmed and to the south are two bungalows with fields beyond. The area of interest measuring approximately 0.041 ha in size and is shown on attached location plan. The proposed end use for this plot of land is a single residential dwelling for the live-in operational care of the Trout Farm.

The site is in Flood Zone 2/3 according to the EA website and therefore requires a Flood Risk Assessment as part of the planning application.

Could you please confirm that this site is in Flood Zone 2/3 and provide us with any information in your possession regarding any incidences of, or possible problems with, flooding associated with any and all sources in the area of the site? Also, if there are any modelled flood and flow levels within the vicinity it would be appreciated if you could provide copies of them to aid the assessment.

We will be in contact with Ribble Valley Borough Council as the Local Planning Authority, Lancashire County Council as the Lead Local Flood Authority as well as United Utilities as the Water Company to obtain all appropriate information relating to the FRA.

Thank you for your assistance. If you require any further information please do not hesitate to contact me.

Please let us know as soon as possible if there is a charge for this information so that we can raise the necessary payment.

Kind regards,

Robert Brenton

Environmental Consultant



CONTACT NUMBERS:

BURY 0161 763 7200 | LIVERPOOL 0151 235 8716 | GLASGOW 0141 773 6269

GROUP WEBSITES:

theikgroup.com | code4homes.com | sapcalc.com | lksustainability.co.uk | invasiveplantcompany.com

LK GROUP - COMPANY ACCREDITATIONS:



REGISTERED OFFICE:

Bury Business Centre, Kay Street, Bury. BL9 6BU

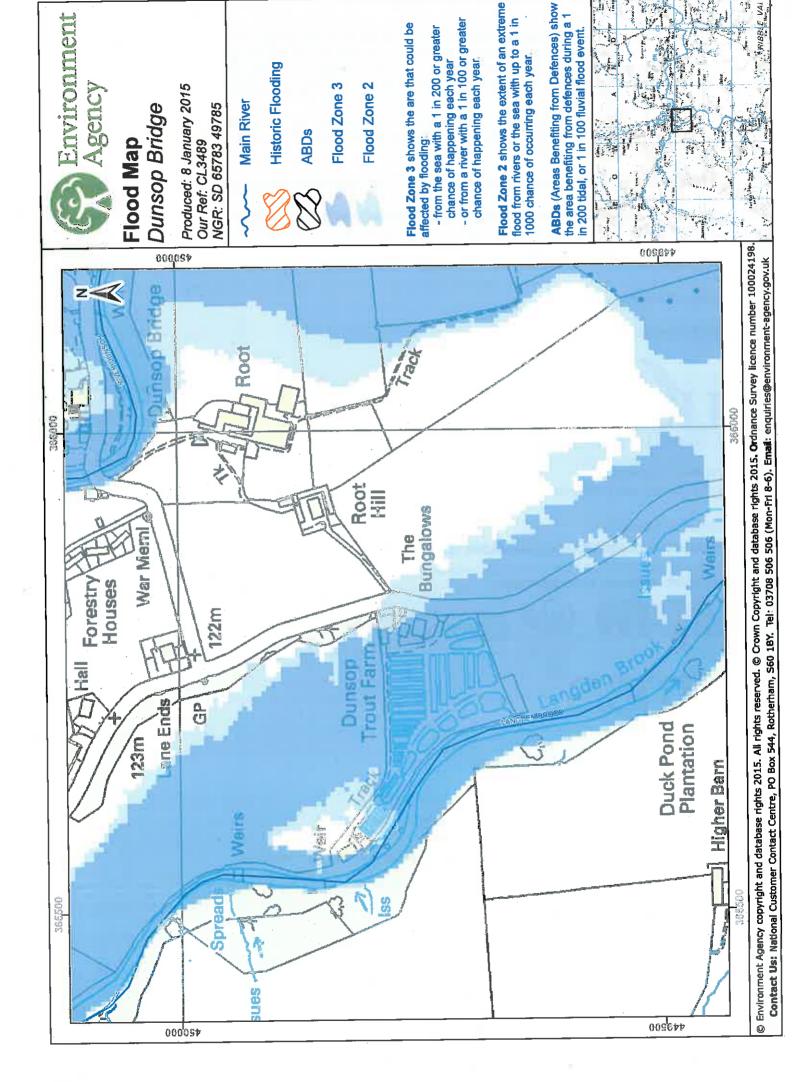
Liverpool Office: The Corn Exchange, Fenwick Street, Liverpool. L2 7QL Glasgow Office: The Wright Business Centre, Lonmay Road, Glasgow. G33 4EL

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154) 900)

1923 1Jho t



From:

Rob Brenton

Sent:

08 January 2015 12:04

To:

'john.edwards@ribblevalley.gov.uk'

Subject:

Trout Farm, Dunsop Bridge - Information Request

Attachments:

Site Location.jpg

Dear John,

It was nice talking to you again. Regarding our earlier conversation, would you be able to provide a comment including anything you deem to be relevant for the attached site. A more formal request was sent to the contact centre on the 2nd December can be seen below. I do not want to push you but if you could get the information across at your earliest convenience it would be appreciated.

We, at LK Consult Ltd. have been commissioned to undertake a Flood Risk Assessment, (FRA) of a site located at Dunsop Bridge Trout Farm, Dunsop Bridge, Clitheroe, Lancashire, BB7 3AX. The site is located approximately 330m to the southeast of St Hubert's Church and is currently used as a storage shed for the adjacent Dunsop Bridge Trout Farm. The Ordinance Survey Grid Reference for the centre of the site is SD 65783 49785 and is bound by fields to the north, a barn to the east off an unnamed road. To the west a track which runs alongside the ponds within where the Trout are farmed and to the south are two bungalows with fields beyond. The area of interest measuring approximately 0.041 ha in size and is shown on attached location plan. The proposed end use for this plot of land is a single residential dwelling for the live-in operational care of the Trout Farm.

The site is in Flood Zone 3 according to the EA and therefore requires a Flood Risk Assessment as part of the planning application.

Could you provide us with any information in your possession regarding any incidences of, or possible problems with, flooding associated with any and all sources in the area of the site?

We will be in contact with The Environment Agency as Statutory Consultee, Lancashire County Council as the Lead Local Flood Authority as well as United Utilities as the Water Company to obtain all appropriate information relating to the FRA.

Thank you for your assistance. If you require any further information please do not hesitate to contact me.

Please let us know as soon as possible if there is a charge for this information so that we can raise the necessary payment.

Kind regards,

Robert Brenton

Environmental Consultant



CONTACT NUMBERS:

BURY 0161 763 7200 | LIVERPOOL 0151 235 8716 | GLASGOW 0141 773 6269

GROUP WEBSITES:

thelkgroup.com | code4homes.com | sapcalc.com | lksustainability.co.uk | invasiveplantcompany.com

From:

ENV Flood Risk Management <FRM@lancashire.gov.uk>

Sent:

08 January 2015 11:54

To:

Rob Brenton

Subject:

RE: Trout Farm, Dunsop Bridge - Information Request LCC FRM Historical Flood Information Trout Farm.pdf

Hello Rob.

Attachments:

Please see attached Historical Flood Information Request for Trout Farm.

Kind Regards,

Flood Risk Management Team

Environment Directorate Lancashire County Council

2: 01772 533709

令: www.lancashire.gov.uk

From: Rob Brenton [mailto:R.Brenton@thelkgroup.com]

Sent: 09 December 2014 15:56 To: ENV Flood Risk Management

Subject: RE: Trout Farm, Dunsop Bridge - Information Request

Dear Sir/Madam,

Regarding the below information request I have popped the requested information and payment in the post, first class and therefore should be with you shortly for your consideration.

I assume the £41.50 payment is inclusive of VAT?

Kind regards,

Robert Brenton

Environmental Consultant



CONTACT NUMBERS:

BURY 0161 763 7200 | LIVERPOOL 0151 235 8716 | GLASGOW 0141 773 6269

GROUP WEBSITES:

thelkgroup.com | code4homes.com | sapcalc.com | lksustainability.co.uk | invasiveplantcompany.com

LK GROUP - COMPANY ACCREDITATIONS:

From:

Perry, Graham < Graham.Perry@uuplc.co.uk>

Sent:

23 December 2014 14:05

To:

Rob Brenton

Subject:

FW: DE0662 rec 9/12 FW: Trout Farm, Dunsop Bridge - Information Request

Attachments:

Wastewater_predevelopment_enquiry.pdf; UU Clean Water.pdf; Location Plan.pdf;

Ariel Image.pdf

Hello Robert

We do not appear to have any wastewater assets within the vicinity of the site and as such we have no flooding information available nor can we offer advice of the disposal of foul or surface water.

Thanks

Graham Perry

Development Engineer
Developer Services and Planning
Business Operations
United Utilities
T: 01925 679405 (internal 79405)
united utilities.com

From: Wastewater Developer Services **Sent:** 10 December 2014 08:50

To: Perry, Graham

Subject: DE0662 rec 9/12 FW: Trout Farm, Dunsop Bridge - Information Request

Susan King
Developer Service Analyst
Developer Services & Planning
Business Operations
United Utilities
T 01925 679413 (int 79413)

From: Rob Brenton [mailto:R.Brenton@thelkgroup.com]

Sent: 09 December 2014 11:56 **To:** Wastewater Developer Services

Subject: RE: Trout Farm, Dunsop Bridge - Information Request

Dear Sir/Madam,

Please see the attached requested documents.

Kind regards,

Robert Brenton

Environmental Consultant



To: Wastewater Developer Services

Subject: RE: Trout Farm, Dunsop Bridge - Information Request

Morning Kirsty,

With regard to the above site would there be any restrictions on the discharge of foul and/or surface water (in particular) from the proposed site into nearby United Utilities sewers?

Kind regards,

Robert Brenton

Environmental Consultant



CONTACT NUMBERS:

BURY 9161 763 7200 | LIVERPOOL 9151 235 8716 | GLASGOW 9141 773 6269

GROUP WEBSITES:

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From: Wastewater Developer Services [mailto:WastewaterDeveloperServices@uuplc.co.uk]

Sent: 03 December 2014 10:10

To: Rob Brenton

Subject: RE: Trout Farm, Dunsop Bridge - Information Request

Dear Sir/Madam

I can confirm that there are no recorded historical sewer flooding issues within the vicinity of the proposed development site.

Please note that United Utilities Water plc (UUW) can only record and check flooding events which are reported to us and we have to comply with our Regulators instructions on the qualification of flooding events to place on the 'at risk' register.

Also, this does not include any sewer flooding events caused by blockages or collapses which are the result of third party actions, natural events or other actions over which UUW has no control and not a facet of sewer capacity.

Should you require any further information please do not hesitate to contact me.

Many Thanks Kirsty

From: Rob Brenton [mailto:R.Brenton@thelkgroup.com]

Sent: 02 December 2014 11:54

To: Planning Liaison

Subject: Trout Farm, Dunsop Bridge - Information Request

Dear Sir/Madam

LK Consult has been commissioned to undertake a Flood Risk Assessment, (FRA) of a site located at Dunsop Bridge Trout Farm, Dunsop Bridge, Clitheroe, Lancashire, BB7 3AX. The site is located approximately 330m to the southeast of St Hubert's Church and is currently used as a storage shed for the adjacent Dunsop Bridge Trout Farm. The Ordinance Survey Grid Reference for the centre of the site is SD 65783 49785 and is bound by fields to the north, a barn to the east off an unnamed road. To the west a track which runs alongside the ponds within where the Trout are farmed and to the south are two bungalows with fields beyond. The area of interest measuring approximately 0.041 ha in size and is shown on attached location plan. The proposed end use for this plot of land is a single residential dwelling for the live-in operational care of the Trout Farm.

The site is in Flood Zone 2/3 according to the EA website and therefore requires a Flood Risk Assessment as part of the planning application.

Could you provide us with any information in your possession regarding any incidences of, or possible problems with, flooding associated with any and all sources in the area of the site?

We will be in contact with Ribble Valley Borough Council as the Local Planning Authority, The Environment Agency as Statutory Consultee as well as Lancashire County Council as The Lead Local Flood Authority to obtain all appropriate information relating to the FRA.

Thank you for your assistance. If you require any further information please do not hesitate to contact me.

Please let us know as soon as possible if there is a charge for this information so that we can raise the necessary payment.

Kind regards,

Robert Brenton

Environmental Consultant



CONTACT NUMBERS:

BURY 0161 763 7200 | LIVERPOOL 0151 235 8716 | GLASGOW 0141 773 6269



Appendix C





Flood Risk Information Request

Trout Farm, Dunsop Bridge, Clitheroe



Introduction

Lancashire County Council is the Lead Local Flood Authority (LLFA) for the County Council's administrative area. The Flood and Water Management Act (FWMA) sets out the requirement for the LLFA to manage local flood risk within their area.

It is advised that flooding from "local" sources (surface water, groundwater and flooding from ordinary watercourses) is taken into consideration, where possible, and especially where there is a known flooding issue in an area.

This package includes:
Historical flood maps
Flood zones 2
Flood zones 3
Flood warning areas
Ground Water Susceptibility
Surface Water Susceptibility
Main rivers
Fluvial flood areas

Tidal flood area

Flood defences

Flood storage areas

Reservoirs

Highway drainage nodes

Highway drainage pipes

Highway drainage ponds

Highway Gullies

Ecology Standing Advice Consultation Zones

Public Enquiry Management System

Section 19 Flood Investigation records

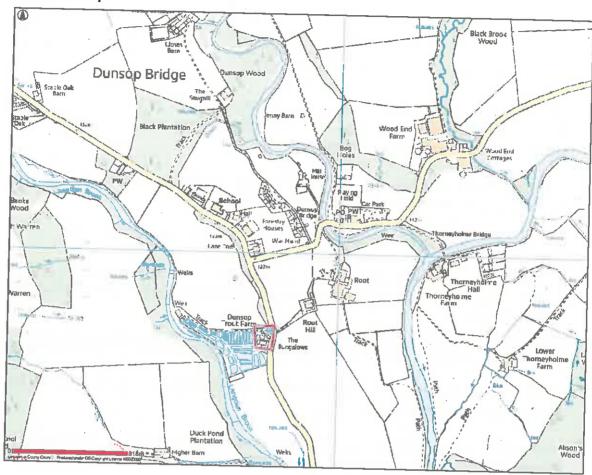
Ordinary Watercourse Consenting and Enforcement register

Request

Lancashire County Council have been instructed to execute a search for historical flooding to contribute to a Flood Risk Assessment for the site.

Could you provide us with any information in your possession regarding any incidences of, or possible problems with, flooding associated with any and all sources in the area of the site?

Location Map



Grid Reference: 365785 E 449785 N

Response

The site located at Dunsop Bridge, Clitheroe is located in Flood Zone 2 and Flood Zone 3 (Appendix A); it is not located in a flood warning area. The Flood Risk Management (FRM) Team have no records of historic flooding for the site.

The site is susceptible to groundwater flooding (Appendix B), as being <50-75% average chance of groundwater flooding. The FRM Team have no record of any recent groundwater flooding occurring at this site.

The site is partly susceptible to surface water flooding (Appendix C). The FRM team has no record of any recent surface water flooding occurring at this site.

There is a Main River within the surrounding area of the site (Appendix D).

The site is in the fluvial flood watch area for The River Ribble, Hodder and other watercourses, from Settle to Samlesbury including Clitheroe, Gisburn, Sawley, Waddington and Ribchester.

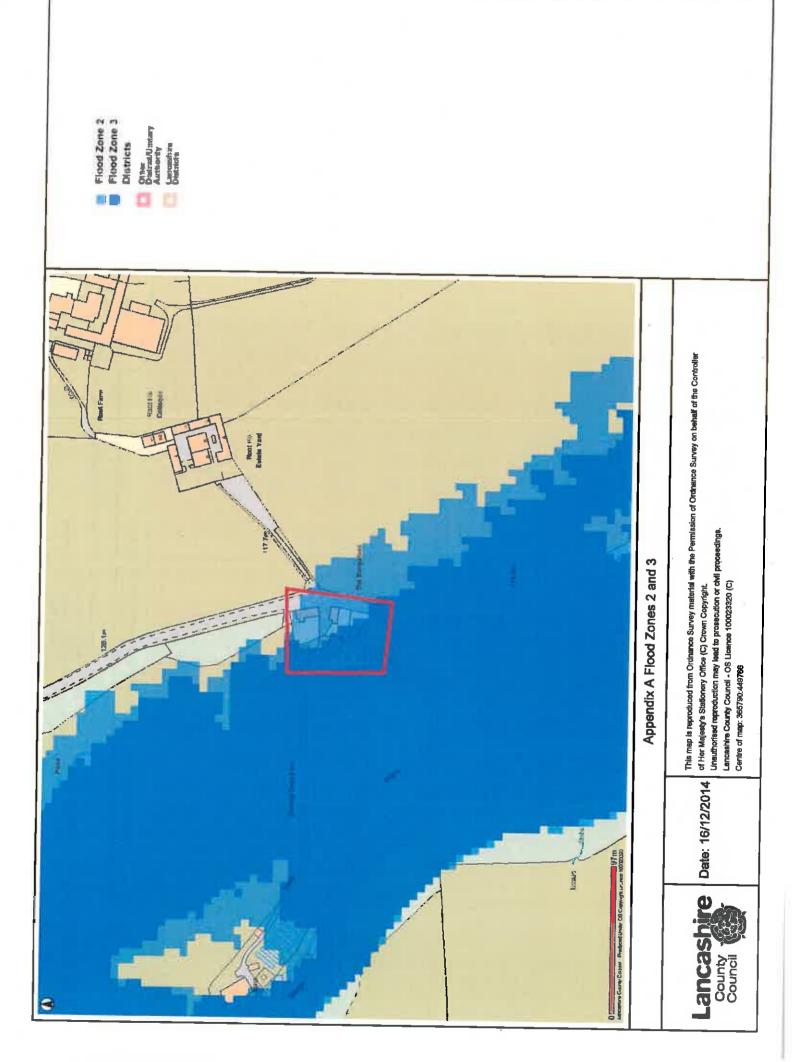
There are no flood defences, flood storage area or reservoirs located near to the site.

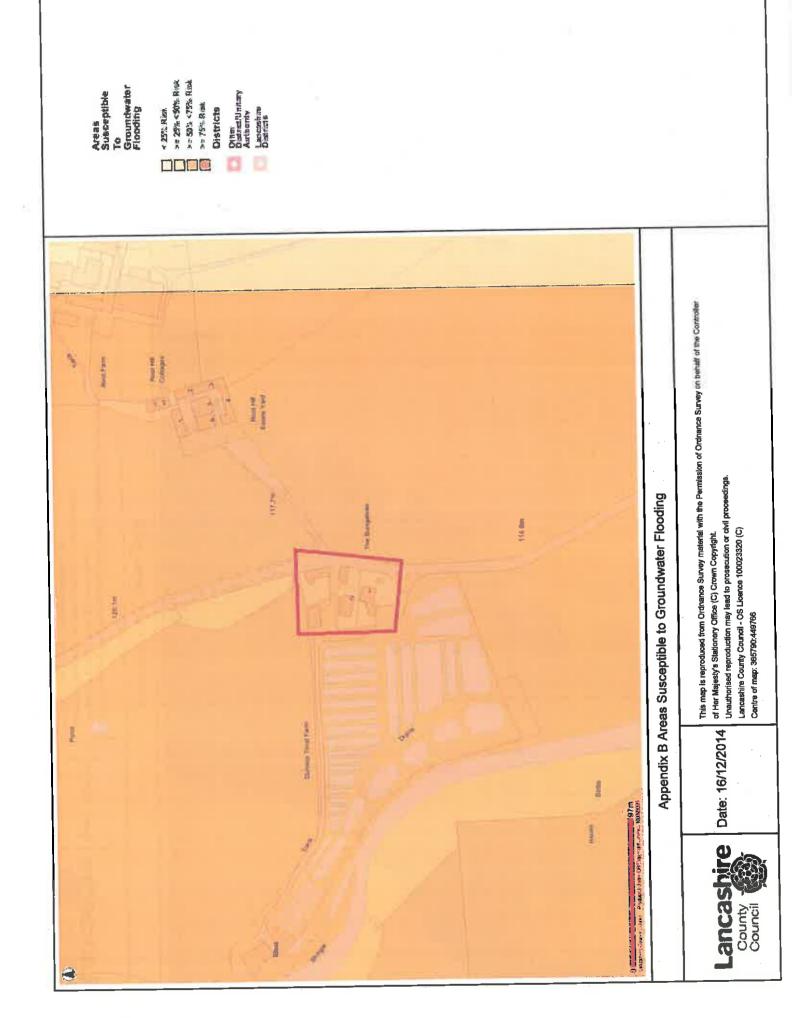
There are no drainage nodes or pipes located within the site area. There are a few gullies located in the area. (Appendix E)

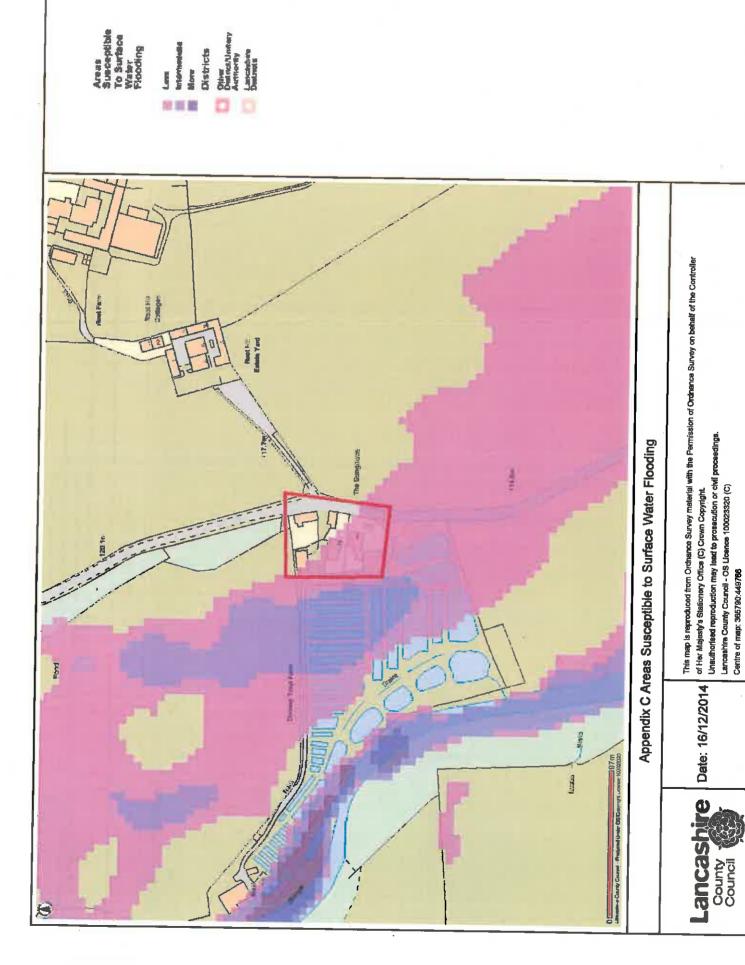
With regards to the ecology, the area is not located within an ecology consultation zone however the site is within bird areas (Appendix F)

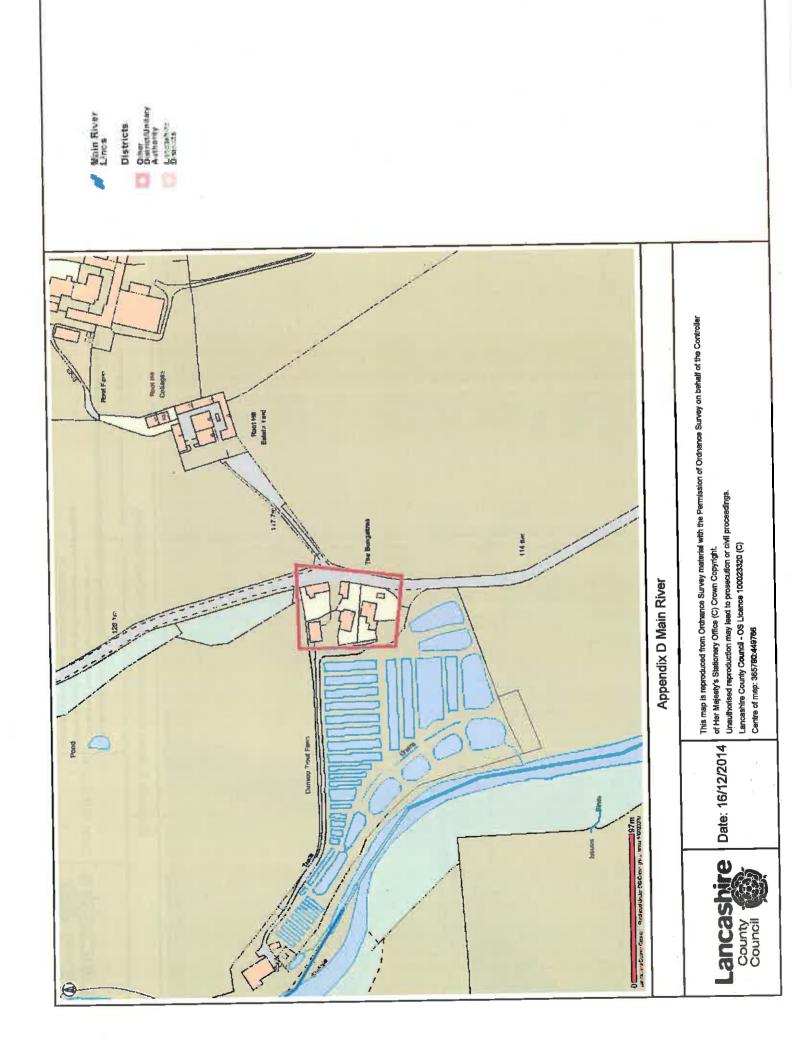
From looking at the County Councils public enquiry management system the FRM team is not aware of issues reported regarding flooding in the area.

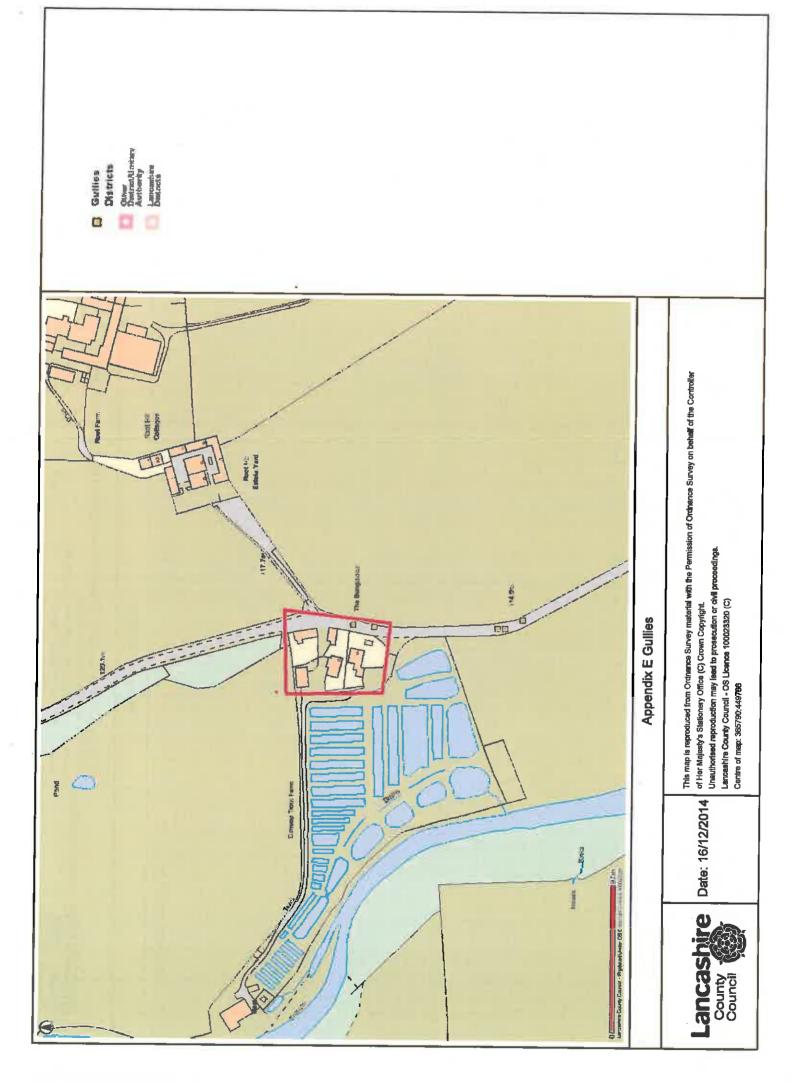
The FRM Team is currently not aware of any flooding incidents in close proximity to the site. However, in the wider area the team is aware of one incident approximately 600m to the north of Trout Road.

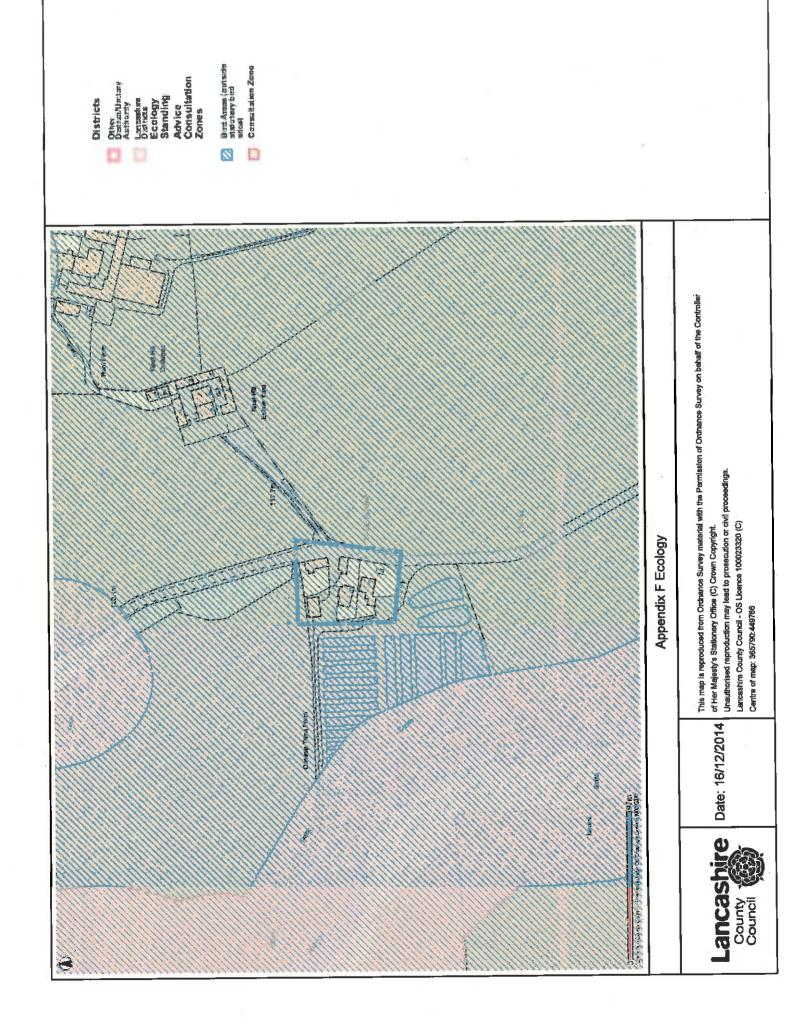


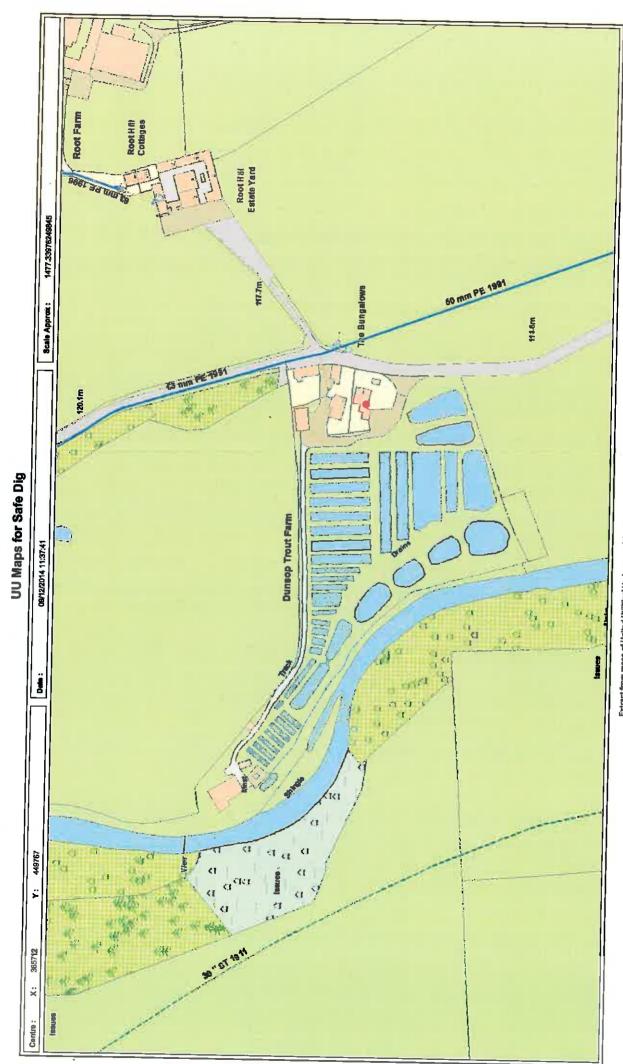












C United Utilities

undernoe with the beat information currently available. The actival positions may be different from those shown on the pien and private privale service plose may be shown by a blue broken line. Unlied Utilises Water will not eccept liability for any Extract from maps of United Utilities' Underground Assets The position of the underground appearatus shown on the plea is approximate only and is given in accordenage caused by the actual position being different from tines shown.