### SITE AT

### **CHAPEL HILL, LONGRIDGE**

### FLOOD RISK ASSESSMENT

### **FINAL**



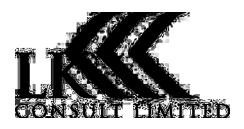
### Prepared for:

United Utilities Property Solutions Coniston Buildings Lingley Mere Business Park Lingley Green Avenue Warrington. WA5 3UU

### By:

Leyden Kirby Associates Ltd The Corn Exchange Fenwick Street Liverpool L2 7QL

Date: December 2011



### **LK Consult Ltd**

### **Document Verification**

Site Address	Chapel Hill, Longridge		
Report Title	Flood Risk Assessment		
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Reviewed By	M Hartley – Geo- Environmental Eng.	Signature	M. Hartley
Authorised By	C Crompton – Associate Director	Signature	Cr lar

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Appendix C Correspondence with Consultees

LK Consult December 2011

Ref: L007-002 - Final

### **EXECUTIVE SUMMARY**

### Scope and Background

This Flood Risk Assessment (FRA) has been undertaken by LK Consult to support a planning application for development at Chapel Hill, Longridge. The proposals are to construct a low-density housing scheme that is sympathetic to the planning designation. This will include surfaced access, manoeuvring areas, parking, and landscaping, etc.

This report has been prepared in accordance with *Planning Policy Statement 25:* Development and Flood Risk (PPS25) Annex E and the guidance set out in the Practice Guide of December 2009. It summarises the methodology and results of the assessment.

In considering the proposals the following key principles have therefore been applied:-

- Identification of flood risks.
- Protection of users of the new development.
- No increased flood risk to third parties.

### **Consultations**

The Environment Agency (EA) was consulted during the preparation of this report and has supplied flood risk information. There is no record of flooding on the site and no risk of fluvial flooding. Details obtained from their website and correspondence are included in Appendix B.

Ribble Valley Borough Council (RVBC) was consulted concerning flood risk, the availability of Strategic Flood Risk Assessment (SFRA) information and the progress of their Local Development Framework (LDF). They are not aware of any flood issues in the local area.

United Utilities (UU) were consulted during the preparation of this report and provided recommendations concerning the discharge of foul and surface water flows into local sewers. They require that the site is drained on a 'separate' system with surface water not draining to the combined sewerage system.

UU Operations staff were consulted, in association with wildlife interests, concerning the use of existing surface water culverts to the south of the site, but discussions have not been conclusive. Negotiations will continue during project development to obtain the most acceptable and sustainable solution to surface water discharge.

### Flood Risk

The site itself is not potentially vulnerable to fluvial flooding. Site inspection shows the site to be elevated in relation to any potential sources. UU and RVBC are unaware of any local flooding issues.

The EA flood mapping shows the site to be well outside flood risk Zones 3 and 2, and therefore within Flood Zone 1 (annual probability of flooding less than 0.1%).

### Mitigation

### Design

United Utilities would prefer that surface water is not discharged to the foul/combined systems and is attenuated as far as possible to alleviate capacity issues that they have downstream in surface water culverts. This option is currently being pursued along with a suitable method of attenuation and discharge. The EA prefers the use of Sustainable Drainage Systems (SuDS) where feasible.

The feasibility of soakaways is not proven but, subject to ground conditions being suitable, there do not appear to be any barriers to their use.

Site falls will be arranged to allow reasonably level access for occupants and visitors and allowing the site to be free-draining in case of local flooding or heavy rainfall. The buildings will be constructed with floor levels above local ground level so there is no risk to buildings from any temporary local ponding in periods of high rainfall.

### Access

Vehicular and pedestrian access is intended to be from Chapel Hill. The access is elevated from likely flood levels and will always provide safe and dry access to and from the site under any foreseeable flood conditions.

### Conclusion

The development, as proposed, is at very low risk from fluvial flooding because site levels are elevated above likely flood levels. It is unlikely that flood resilience measures will need to be incorporated into the building designs by the developer or be required by building control. The feasibility of soakaways will be further investigated during the detailed design stages. The surface water drainage system will be designed to attenuate flows to the limits set by United Utilities and the EA for acceptance into their surface water system and watercourses.

### 1. INTRODUCTION

Government policy with respect to development in flood risk areas is contained within the Department of Communities and Local Government Planning Policy Statement 25 (PPS25) 'Development and Flood Risk' which was issued in December 2006 and revised in April 2010.

PPS25 builds on the previous guidance contained in Planning Policy Guidance Note 25 (PPG25) 'Development and Flood Risk' which was issued on July 17, 2001, itself based on the DoE Circular 30/92 (MAFF Circular FD 1/92).

LK Consult has prepared this Flood Risk Assessment (FRA) in line with PPS25 Annex E and the guidance set out in the Practice Guide of December 2009.

This FRA has been prepared to support the planning applications for housing development on Chapel Hill. It is intended to construct a low-density housing scheme that is sympathetic to the planning designation. The site will have surfaced access, manoeuvring areas, parking and landscaping, etc. Location plan, site plan and the current indicative development plan are included in Appendix A.

The Local Planning Authority (LPA) will make the final decision with regard to any planning application. PPS25, paragraph 26, confirms that 'Following the coming into force, on 1<sup>st</sup> October 2006, of the amendment to Article 10 of The Town and Country Planning (General Development Procedure) Order1995 (the "GDPO"), LPAs are required to consult the Environment Agency on all applications for development in flood risk areas \*except minor development), including those in areas with critical drainage problems and for any development on land exceeding 1 hectare outside flood risk areas.' Since the site area is greater than 1.0ha, the EA should be consulted by the LPA.

### 2. PROPOSED DEVELOPMENT SITE

### 2.1 The Site

The site is located immediately south of the B6243 (Chapel Hill) on the south side of Longridge, at National Grid Reference 360400, 436620. It is 3.36 ha in size, of which approximately 2.75ha comprises the largely 'greenfield' development area (see Appendix A). It is bounded to the west and north by Chapel Hill, to the east by housing on Chapel Brow, and to the south by a United Utilities drinking water reservoir (Alston Reservoir No2).

Main access is from Chapel Hill on the north side and a farm access is available from the south-east corner onto Chapel Brow, an un-surfaced lane that provides access from Chapel Hill to properties bordering the east of the site and which meets Pinfold Lane to the south. The site is currently divided north/south by a substantial hedge. The eastern side is largely pasture with a small rectangular area encroaching on the southern boundary, possibly containing reservoir-related valve-work and chambers. The western side has a rectangular area delineated in the north-east corner comprising a derelict farmhouse, outbuildings and garden, etc. The rest of this side is also pasture. With the exception of the farmhouse area it is expected that the site is currently permeable.

The River Ribble lies some 2.5km to the south-east of the site. A number of brooks and watercourses drain the area to the south of the site and adjacent Altham Reservoir complex towards the river.

### 2.2 Site and Access Levels

A topographic survey to OS GPS datum has been recently undertaken for the site and access. It is not included with this FRA but can be supplied on request. Levels are given here in metres above Ordnance Datum (GPS).

The site will be accessed from Chapel Hill on the northern boundary at around 107.9m. The northern edge of the site rises from 107.0m close to the derelict farmhouse to 108.1m at its northernmost extent on Chapel Hill. The road then falls from the farmhouse to the west and south such that the south-westernmost point of the site is around 98.7m. The southern boundary of the site along the reservoir boundary rises slightly in the centre to 101.0m before falling to 99.0m in the south-eastern corner. It was noted during the site walkover that the local topography generally falls to the south towards the river Ribble.

### 2.3 Development Proposals

A proposed indicative development plan is included in Appendix A. It is understood that the proposals are to construct a low-density housing scheme with associated access, etc and open green-space on the eastern side incorporating a pond. A buffer zone for wildlife benefit will be created along the southern boundary.

### 2.4 Vulnerability

The proposed uses of the site can be classified within the 'More Vulnerable' categories in Table D2 of PPS 25. The EA Flood Mapping shows that the site is within Flood Zone 1. Table D3 of PPS25 confirms that this development is appropriate for Zones 1 and 2 and for Zone 3a.

### 2.5 The Sequential and Exception Tests

PPS 25 requires that the Sequential Test be applied to proposals in Zones 2 and 3 to determine if there are any 'reasonably available' and suitable alternative sites at lower flood risk. Since the site is in Zone 1, and at low risk of flooding within that zone, a Sequential Test for suitable alternative sites is therefore unnecessary. The issues of safety and reduction in flood risk to others required by an Exception Test are addressed in this document.

### 3 ASSESSMENT OF FLOOD RISK

The level of detail entered into in any flood risk assessment is dependent upon the scale and potential impact of the proposed development (PPS25 Annex E), and the vulnerability classification of the proposed land-use (PPS25 Annex D).

The Client is seeking planning consent to construct buildings which can be classified within the 'More Vulnerable' categories in Table D2 of PPS25.

The site is of medium local scale and of potentially medium impact to others. Since the site is mostly permeable, change in runoff characteristic is likely to be significant and will require management so as not to result in increased risk to others.

### 3.1 Information from the Environment Agency

Flood risk information was requested from the Environment Agency and information has been downloaded from their website and this, with relevant correspondence is included in Appendix B and summarised below:

The initial phase in identifying whether a site is potentially at risk of flooding is to consult the Environment Agency's Flood Zone maps, available on the Environment Agency's website. However, these are (often) based on coarse scale modelling and provide only an initial indication of the flood risk to a site. The Environment Agency Flood Zone maps were developed using a very coarse Digital Elevation Map (DEM), and are superseded by a more detailed analysis of modelled flood levels and topographic survey levels.

In this case the EA has not provided detailed flood zone mapping and modelled flood levels as the sites are in Zone 1; well outside any flood zones and significantly elevated.

The Flood Zones divide the floodplain into three categories of flood risk, and do not take flood defences into account. PPS25 defines the Flood Zones as:-

- Flood Zone 1 little or no risk, with annual probability of flooding from rivers and the sea of less than 0.1% (1 in 1000)
- Flood Zone 2 low to medium risk, with annual probability of flooding of 0.1 to 1.0% from rivers and 0.1 to 0.5% from the sea
- Flood Zone 3 high risk of flooding with an annual probability of flooding of 1.0% or greater from rivers, and 0.5% or greater from the sea.

The EA has no record of flooding at this location. The site does not fall within a flood warning area and is not affected by reservoir flood risk.

The EA was contacted to determine if there were any constraints to discharges or use of soakaways. They had no objection in principle subject to discharges being limited to existing rates and provision being made for the protection of surface waters and groundwaters from pollution.

### 3.2 Information from Other Consultees

The Local Authority, Ribble Valley Borough Council, has been consulted during this FRA process and notes no flooding issues in the area. The Level 1 Strategic Flood Risk Assessment (SFRA) of May 2010 for the area has been used to advise this assessment.

United Utilities (UU) was consulted during the preparation of this report and has provided recommendations concerning the discharge of foul and surface water flows into local sewers. They require that the site is drained on a 'separate' system with surface water not draining to the combined system which is known to be overloaded on occasion. Details of information supplied by UU are included in Appendix C.

Discussions have been had with UU Operations team, UU's conservation and estate representatives and RSPB concerning the use for attenuation of land to the south and east of reservoir No2 currently forming a wildlife wetland. However no conclusion over use has yet been achieved.

Discussions with UU, EA, and environmental interests, along with investigations into the feasibility of soakaways, will continue during the project development and detailed design process to obtain the most sustainable solution.

### 3.3 Information from the Client

The Client has provided development proposals and a topographical survey to OS GPS datum of the existing site and access.

### 3.4 Flood Zone

The site itself is clearly in Flood Zone 1, as confirmed by local topography and data supplied by the EA, and is above indicated EA flood levels. The main risks of flooding are therefore from insufficient capacity in, or failure of, the site drainage system at times of heavy rainfall. However, the elevated nature of the site and falls towards the south would preclude widespread local ponding of rainwater and aid runoff.

### 3.5 Managing Surface Water and SuDS

PPS25 recognises that flood risk and other environmental damage can be managed by minimising changes in the volume and rate of surface run-off from development sites through the use of Sustainable Drainage Systems (SuDS), this being complementary to the control of development within the floodplain.

SuDS will not alleviate flooding in an area prone to flooding; however, properly designed SuDS have the potential to prevent the surface water runoff from new development worsening the flood risk.

PPS25 Annex F paragraph F5 states that 'The effective disposal of surface water from development is a material planning consideration in determining proposals for the development and use of land.'

PPS25 Annex F paragraph F6 states that 'Surface water arising from a developed area should, as far as practicable, be managed in a sustainable manner to mimic the surface water flows arising from the site prior to the proposed development, while reducing the flood risk to the site itself and elsewhere, taking climate change into account. This should be demonstrated as part of the flood risk assessment.'

The Building Regulations Requirement H3 stipulates that rainwater from roofs and paved areas is carried away from the surface to discharge to one of the following, listed in order of priority:

an adequate soakaway or some other adequate infiltration system, a)

- b) a watercourse or, where that is not practicable,
- c) a sewer.

The Groundwater Source Protection Zone mapping from the EA website shows that the site is not within any identified protection zones, and so infiltration methods on the site are unlikely to be constrained by this. In addition, the EA's groundwater protection team has indicated that soakaways will be acceptable on this site subject to suitable protection measures being incorporated.

The Groundwater Vulnerability Mapping has been inspected to determine the site's position with respect to any aquifer and the general nature of the overlying soils. The site is shown to be over a minor aquifer on soils of low leaching potential. Minor Aquifers may be fractured or potentially fractured rocks, which do not have a high primary permeability, or other formations of variable permeability including unconsolidated deposits. Although not producing large quantities of water for abstraction they are important for local supplies and in supplying base flow to rivers. Soils of low leaching potential are those in which pollutants are unlikely to penetrate the soil layer because either water movement is largely horizontal, or they have the ability to diffuse pollutants. Lateral flow from these soils may contribute to groundwater recharge elsewhere in the catchment. They generally have high clay or organic matter contents, which may not be suitable for the construction of soakaways. Nevertheless, infiltration will be considered further during ground investigations and detailed design, and may be possible to a limited extent.

United Utilities requires that the site be drained on a separate system, with only foul drainage connected into the combined sewerage system.

It is currently intended that roof-water from the buildings will be discharged to soakaway (if possible) or culvert/watercourse without treatment, but with any necessary attenuation to limit flows. Runoff from site roads, pavements and parking will be discharged via silt trap and interceptor to soakaway if possible, but otherwise to culvert/watercourse. Discharge to the reservoir will not be permitted.

As infiltration methods are currently expected to be limited, the necessary storage volumes required to achieve various levels of attenuation have been estimated for storm return periods of 30 and 100 years. Design standards require that flows from the 30-year event are accommodated without any above-ground surcharge, but the additional flows over the 30-year event and up to the 100-year event may be stored temporarily above ground level if site levels are arranged accordingly and suitable safeguards are incorporated into the design.

Preliminary calculations indicate that approximately 6l/s would be generated as 'green-field' flow from the area proposed for development, and omitting the areas of landscaping. Since the site is all pasture, all of this is presently discharged into the ground and some discharges off-site to east and west into existing surface water sewerage.

Allowing 30% increase in rainfall to allow for climate change, preliminary calculations indicate that some 400 cu m of attenuation storage would be required to limit discharge rates for the 30-year event, and an additional 200 cu m would be required for the 100-year event. There appears to be adequate open area on the site within which attenuation can be situated below ground if necessary, the proposed pond could have an attenuation function, and it would be feasible to incorporate open-water attenuation features within the buffer zone alongside the reservoir boundary, if desired for additional environmental benefit.

Sewerage and attenuation designs will be addressed during the design stage of the project, after current arrangements have been confirmed and after further negotiation with UU, EA and wildlife interests.

### 3.6 Mitigation Measures

### 3.6.1 Proposed Site levels and Development Ground Floor Level

Current Environment Agency guidance recommends that the minimum ground floor levels of residential developments are set at:

- 300mm above the 1% annual probability (1 in 100 year), + 20% fluvial allowance for climate change, flood level (if it is available) or, if there is only a 1% annual probability (1 in 100 year) flood level, then
- 600mm above the 1% annual probability (1 in 100 year) flood level

In this instance, site levels will be elevated above flood level, allowing reasonably level access for occupants and visitors and allowing the site to be free-draining towards the canal in case of local flooding. Buildings will incorporate a nominal freeboard above the surrounding site ground levels to allow for the risk of any limited local ponding due to heavy rainfall, and also for any flows associated with localised surface water runoff which may temporarily not be able to drain. All buildings will be situated well above the 0.1% annual probability flood level.

### 3.6.2 Safe Access

Safe and dry access to the site for vehicles and pedestrians is available under all foreseeable conditions via Chapel Hill and therefore no further mitigation is provided.

### 3.6.3 Flood Resilience and Resistance

No buildings are expected to be affected by flooding and therefore no mitigation is recommended.

### 3.7 Residual Risks

It is impossible to completely guard against flooding since extreme events greater than the design standard event are always possible. However it is feasible to minimise the risk by allowing a freeboard to building floor levels and minimise the consequences by using suitable construction techniques. In this situation any excess water will naturally run off to the south if site levels are arranged suitably.

In this instance it is not intended that flood resistant materials need be used in the construction of the proposed buildings in line with the current recommendations from the ODPM (now Department of Communities and Local Government) 'Preparing for Floods' guidance document.

It is not considered that a formal emergency evacuation plan will be necessary.

### 4.1 SUMMARY & CONCLUSIONS

 The proposed development is not located inside the Environment Agency's zones of flood risk (Zones 2 and 3) and is therefore situated in Zone 1 – minimal risk of flooding.

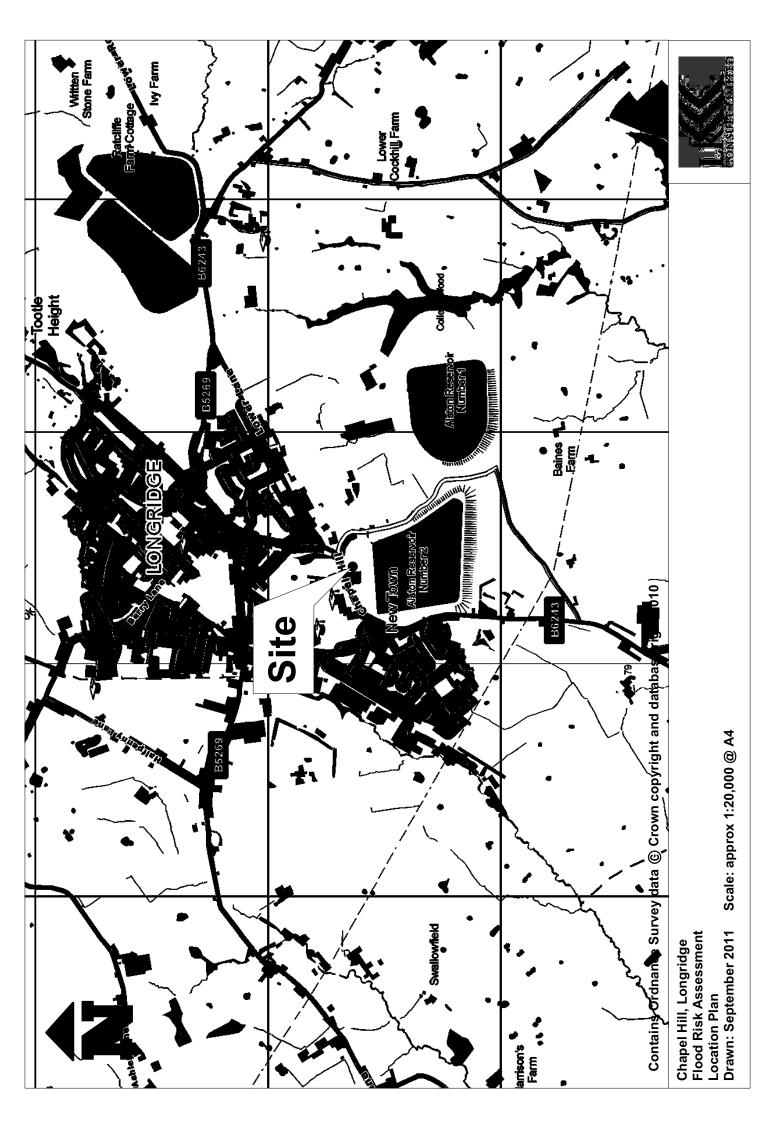
- The proposed floor levels of the buildings will be set above the extreme flood level and nominally above general site levels, providing freeboard should there be local ponding at times of heavy rainfall.
- Pedestrian and vehicular safe access to and from the site will be achievable under all foreseeable conditions via Chapel Hill and the existing road network.
- The proposed development provides an increase in impermeable area on the site, and therefore an increase in potential surface water runoff.
- The feasibility of infiltration systems will be investigated during the detailed design stage, but use is expected to be limited.
- Discussions with United Utilities and wildlife interests has confirmed that flows might be accommodated in the culvert and wetland areas to the south of the site after limiting by appropriate attenuation. Discussions continue in order to identify the most sustainable solution.
- There is adequate area available on site to accommodate all expected attenuation and soakaway options.
- Flood resilience measures are not considered to be necessary, and a formal evacuation plan is not required.

# APPENDIX A SITE DATA

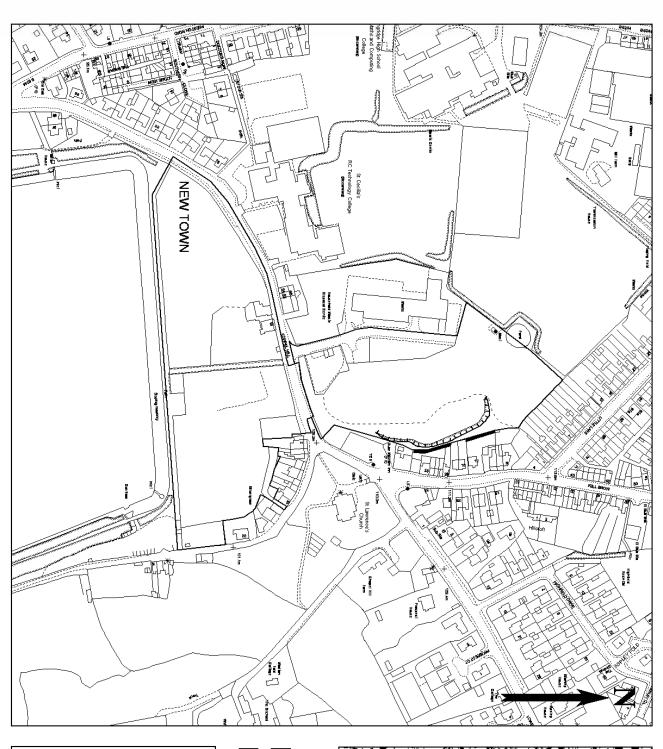
- Location Plan
- Site Plan
- Proposed development Plan

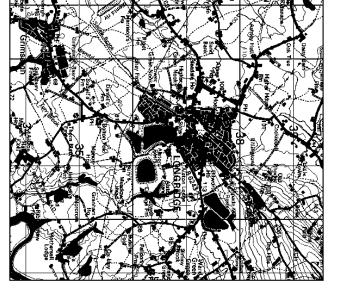
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# LAND AT CHAPEL HILL, LONGRIDGE





- Location of Property
- Site Boundaries
- Adjoining Land Ownership

# COPYRIGHT ACKNOWLEDGEMENT

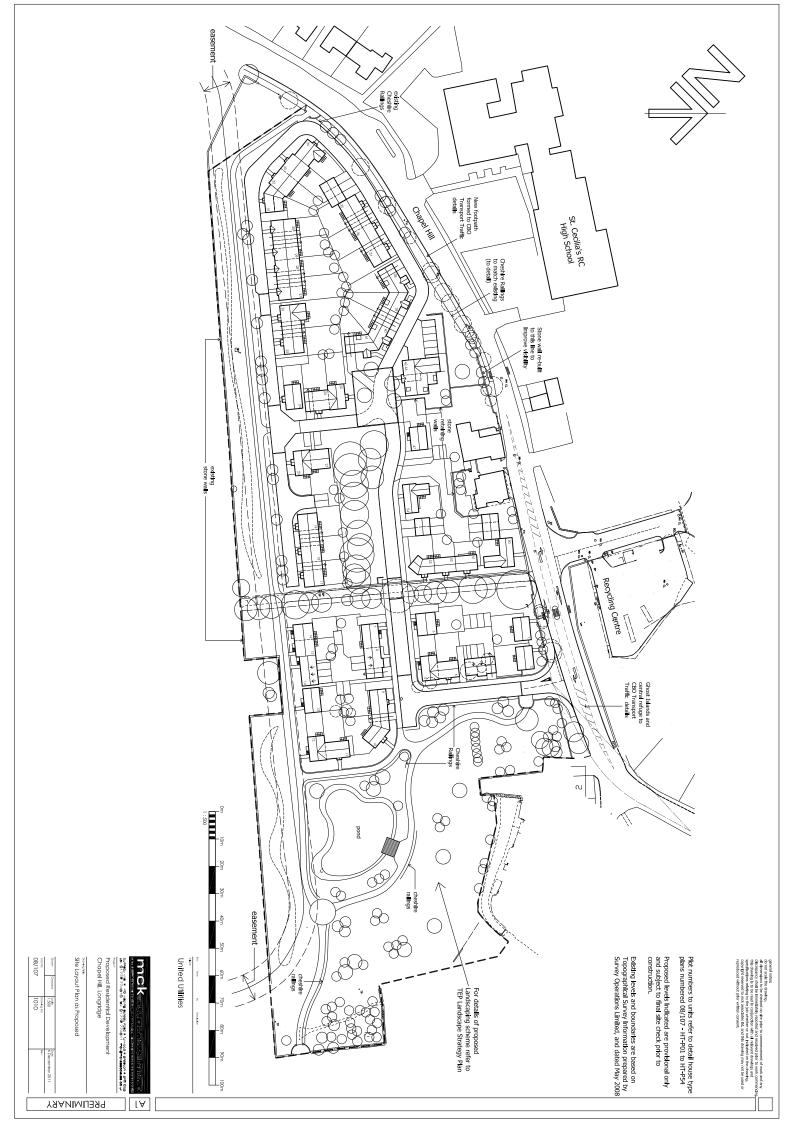
THIS PLAN IS BASED UPON THE ORDNANCE SURVEY MAP BY NWW LTD WITH THE SANCTION OF THE CONTROLLER OF H.M. STATIONERY OFFICE.

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NGR: SD 603 366

Scale: 1:2,500 at A3



## APPENDIX B ENVIRONMENT AGENCY DATA

- EA Web-Based Flood Mapping
- EA Groundwater Source Protection Zone Mapping
- Correspondence

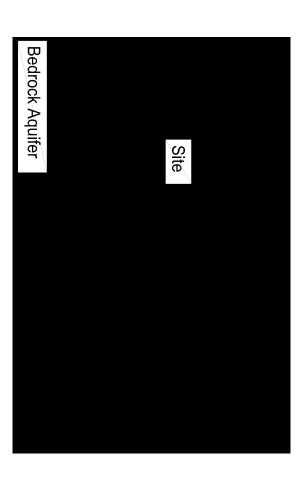
LK Consult December 2011

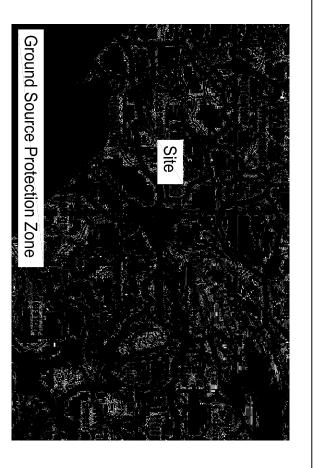
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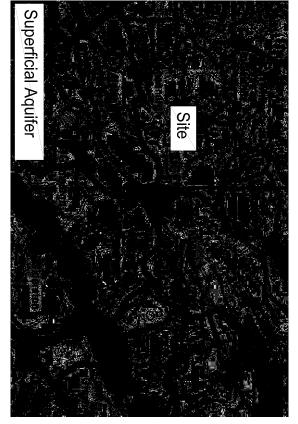


Chapel Hill, Longridge Flood Risk Assessment EA Web Based Flood Mapping
Drawn: September 2011 Scale: NTS









Chapel Hill, Longridge Flood Risk Assessment

**Environment Agency Web Based Groundwater Mapping** 

Drawn: September 2011 Scale: NTS



### **EMAIL CORRESPONDENCE WITH ENVIRONMENT AGENCY**

From: NW North Preston, Information Requests [mailto:nwnorthpreston@environment-agency.gov.uk]

Sent: 07 October 2008 10:29

To: Phil Hunter

Subject: RE: PRR 9746 - Chapel Hill, Longridge

Phil

We have no record of flooding at this location from rivers or the sea.

Regards, Alicia

Alicia Cottam, Information Officer, Business Planning & Performance Team Tel: 01772 714247 <a href="mailto:nwnorthpreston@environment-agency.gov.uk">nwnorthpreston@environment-agency.gov.uk</a>

**From:** Phil Hunter [mailto:P.Hunter@thelkgroup.com]

**Sent:** 07 October 2008 07:31

**To:** NW North Preston, Information Requests **Subject:** RE: PRR 9746 - Chapel Hill, Longridge

Thanks Alicia
And no flooding history either?
Phil

JM Philip Hunter Associate

From: NW North Preston, Information Requests [mailto:nwnorthpreston@environment-agency.gov.uk]

Sent: 06 October 2008 16:52

To: Phil Hunter

Subject: PRR 9746 - Chapel Hill, Longridge

Dear Phil

### Chapel Hill, Longridge

Thank you for your recent enquiry.

- We can confirm the the above site is not at flood risk.
- We do not hold any levels or defence information for the site.

This information is subject to the attached terms and conditions.

Should you require any further information, please do not hesitate to contact me on 01772 714247 or by e-mail.

Yours sincerely

Alicia Cottam Information Officer Business Planning & Performance Team Tel: 01772 714247

nwnorthpreston@environment-agency.gov.uk

FAO Alicia Cottom......

Environment Agency Customer External Relations Dept North-west Region, Central Area Lutra House, Dodd Way, Walton Summit, Bamber Bridge, Preston, Lancashire, PR5 8BX

Dear Sir/Madam/Ms

RE: Request for Information to Support a Flood Risk Assessment of Sites on Chapel Hill, Longridge. Grid Ref: 360440, 436685.

Leyden Kirby Associates has been commissioned by the owner of the above sites to undertake a Flood Risk Assessment (FRA) of proposed development. A plan showing the extent of interest is attached.



Chapel Hill Site & Location Pl...

The sites lie on the south side of Longridge, on the north and south sides of Chapel Hill (B6243) and are well to the north and elevated from the River Ribble. The sites are indicated on your web-based flood mapping to be in Zone 1. An extract is enclosed below to show the location.



chapel hill ea floodmap 1.jpg ...

To complete the FRA we would be grateful if you could supply us with the following, if available, for the vicinity of the site:

- Records of any historic flood events and potential sources of flooding from rivers, land drainage, groundwater, foul and surface water sewers on site and in the area.
- Details of any current flood warning system in force for the locality.
- A copy of your detailed flood zone map and the modelled flood extent plans for the area (if relevant).

If you have any queries please get in touch with the undersigned on 0151 235 8718 (O), 07767 408765 (M) or at  $\underline{p.hunter@thelkgroup.com}$ .

We are, of course, happy to pay your reasonable charge for this service. Please let me know by return what information is available and what the charge will be and we will pay the relevant fees by credit card as soon as possible.

Many thanks.

Yours faithfully,

JM Philip Hunter Associate

# APPENDIX C CORRESPONDENCE WITH CONSULTEES

- United Utilities
- Ribble Valley Borough Council

LK Consult December 2011

Ref: L007-002 - Final

### **EMAIL CORRESPONDENCE WITH UNITED UTILITIES**

**From:** Lunt, John [mailto:John.Lunt@uuplc.co.uk]

Sent: 28 April 2011 09:39

To: Phil Hunter

**Subject:** RE: Longridge proposed development - pre-application re-enquiry.

Hi Phil,

In reply to the wastewater aspect of your enquiry below, I can confirm that a proposed development serving approximately 60 dwellings and discharging foul water only in to the public sewerage system would be acceptable in principle to UU.

Further to the comment above please note, I have also passed your "Water" enquiry on to UU's Ian Wilkinson as requested.

If I can be of any further assistance in the meantime then please don't hesitate to get in touch.

Regards,

John Lunt Business Analyst DDI – 01925 678311

**From:** Phil Hunter [mailto:P.Hunter@thelkgroup.com]

**Sent:** 26 April 2011 08:11

To: Lunt, John

**Subject:** Longridge proposed development - pre-application re-enquiry.

John

Andrew Lessens of UUPS has asked me to revisit the preliminary consultation that took place in 2008 for the southern of the two UU proposed development sites at Longridge, and has given me your name as a place to start. Previous correspondence is below. Location and site plans are attached.

It is now confirmed that surface water flows can be separated for disposal via existing surface water sewer/culvert to east and west of the site and the necessary attenuation is being incorporated into the masterplan. So we are happy that that aspect is dealt with.

However, you can see that David Hardman noted that foul discharge was not going to be an issue at the time he was consulted. We would now like to re-confirm that that is still the case. Also to check on the availability of the necessary potable supply. The scheme has reduced in size since the previous consultation and now stands at approximately 60 units. If we said 3 persons/property average and 180l/h/d then I make that 180 population and 32.4 cu m per day.

I understand that you are only responsible for the foul drainage system and would therefore be grateful if you could refer me to the relevant person for the potable supply consultation.

Many thanks.

Kind Regards

Phil Hunter Associate **From:** Donaghy, Mark [mailto:Mark.Donaghy@uuplc.co.uk]

**Sent:** 09 October 2008 14:19

To: Leyssens, Andrew

Cc: Fillingham, Mark; Phil Hunter; Ajaz, Sabaa; Steer, Paula M; Hardman, David

**Subject:** RE: Longridge - Sewer Flooding

### Andrew

I am not aware of these flooding issues in Longridge and have not been involved in any discussions with councillors/council officials/MPs about the problem.

Let me know if you need any help regarding communications with the MP.

Many thanks

### **Mark Donaghy**

Public Affairs Manager United Utilities Telephone no: 01925 237016 Mobex no: 55159

Fax: 01925 537514

Email: mark.donaghy@uuplc.co.uk

**From:** Leyssens, Andrew **Sent:** 09 October 2008 11:41

To: Hardman, David; Donaghy, Mark

Cc: Fillingham, Mark; Phil Hunter; Ajaz, Sabaa; Steer, Paula M

**Subject:** Longridge - Sewer Flooding

Thanks David.

I've forwarded your email to Phil Hunter who is our flood risk assessment consultant. Through the master planning process and the usual requirements on the EA on drainage I liked to think we are able to ensure the surface water is separated and held back.

In addition it would useful to obtain some background information on the extent and nature of the current problem as it is likely to be an issue which will be raised during the public consultation process and in our consultation with local councillors. It would be useful to know:

- 1) approximate number of properties affected;
- 2) approximate location of properties affected;
- 3) approximate frequency of flooding;
- 4) does UU have any plans to address the sewer flooding problem. If yes what are the timescales for this; and
- 5) have any discussions taken place between UU and any local representatives (councillors, the local MP, Chief Exec. at the Council)? Do you know if we still have key customer managers for local authorities?

**Mark D** – I've copied you in on the above to see if you have any knowledge of the sewer flooding problem in Longridge. We're in the process of preparing an application for planning permission and any information which you may be able to provide in response to the above queries would be useful.

Thanks again.

Andrew Leyssens

From: Hardman, David Sent: 09 October 2008 09:46 To: Leyssens, Andrew

Subject: RE: Ribble Valley Sites: Chapel Hill & Altham PS 2

This is all about the separation of surface water and discharge elsewhere than the public combined sewer as per 'Future Water' and our previous discussions.

If you can achieve this with these proposed developments there is no issue in accepting foul sewage into the combined sewer.

Regards, David Hardman

**From:** Leyssens, Andrew **Sent:** 08 October 2008 20:15

To: Hardman, David

**Cc:** Ajaz, Sabaa; Fillingham, Mark; Steer, Paula M; Phil Hunter **Subject:** RE: Ribble Valley Sites: Chapel Hill & Altham PS 2

### David

Do you have any more detailed information on the sewer flooding in Longridge. For a settlement like Longridge, the nature of our development proposal is large (I would expect at least 100 units) and therefore we need to ensure that we have a full understanding of the issues. Especially given the emotive nature of sewer flooding. Would you also be able to provide an operational contact for our flood risk assessment consultant to liaise with?

I appreciate there are confidentiality / property blight issues associated with sewer flooding and therefore we'll ensure that any information that you are able to provide is carefully dealt with in the flood risk assessment and any of the associated planning application supporting documents.

Grateful for your advice.

Thanks for your assistance on this.

Kind regards - Andrew

Andrew Leyssens | Senior Planner | United Utilities | Property Solutions | Coniston Buildings, Lingley Mere Business Park, Lingley Green Avenue, Warrington, WA5 3UU

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From: Hardman, David Sent: 08 October 2008 10:45

To: Ajaz, Sabaa

Subject: RE: Ribble Valley Sites: Chapel Hill & Altham PS

Further to my previous email, I attach extracts of my response in respect of these sites:

"Longridge - Sites 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 62, 173, 174, 187, 235, 236, 237, 238, 240

### **Sewer Flooding**

Further to your enquiry, I can advise that we have many records of internal public sewer flooding of a property in this vicinity as a result of overloaded sewers. It is particularly important that surface water is separated and does not pass to foul combined public sewer. This is to preserve wastewater network capacity, reduce the risk of flooding, reduce risk of pollution caused by overflows of foul sewage at combined sewer overflows and this is particularly significant for Longridge as the Wastewater Treatment Works serving the town is at Clifton Marsh on the Fylde coast.

### **Reservoir Inundation**

Sites 235 & 236 are at theoretical risk of reservoir inundation in the event of dam failure but this risk is very remote"

Please note that sites 235 & 236 were at the South West of Alton No 2 reservoir whereas your sites are to the North of Alston No 2 (Ribble Valley Sites, 47, 62 and 240).

### "Simonstone – Site 104

### **Sewer Flooding**

Further to your enquiry, I can advise that we have no record of internal public sewer flooding of properties in this vicinity as a result of overloaded sewers. i.e. no properties on the 'at risk' register as compiled for our Regulator.

### **Reservoir Inundation**

The site is at theoretical risk of reservoir inundation in the event of dam failure but this risk is very remote"

Site 104 is Altham Water Pumping Station

Regards, David Hardman United Utilities Asset Protection Tel No 01925 537258

From: Hardman, David Sent: 06 October 2008 14:06

To: Ajaz, Sabaa

Subject: RE: Ribble Valley Sites: Chapel Hill & Altham PS

Thanks Sabaa.

I will be responding to Ribble Valley tomorrow and will send you a copy my response for these three sites,

Regards, David Hardman United Utilities Asset Protection Tel No 01925 537258

From: Ajaz, Sabaa

Sent: 06 October 2008 13:19

To: Hardman, David

Cc: Leyssens, Andrew; Bostock, Lesley A

Subject: Ribble Valley Sites: Chapel Hill & Altham PS

Dave,

Further to our meeting today, please find attached the plans for:

- Chapel Hill (Sites 1 & 2); and
- Altham PS.

The outfall discussed by Andrew has been identified with a green circle on the Altham PS plan. This outfall does not appear to be in UU ownership.

Please do not hesitate to contact me if you require further information.

Kind regards,

Sabaa