

**Consultation Response from KC,
Lead Local Flood Authority****2020/93954 Land at, Lingards Road, Slaithwaite, Huddersfield, HD7 5HY****Erection of 43 dwellings and associated works****Date Responded: 16th November 2022****Responding Officer: Paul Farndale****Responding Ref:**

Further to our comments of 22nd June 2022, subsequent submissions and a site meeting with the developer, the follow observations are made.

Surface Water Disposal

Kirklees LLFA would object to any pumped discharge of surface water. Current plans adhere to this stance.

Due to restrictions identified on the man-made watercourse crossing site from west to east, no connections of roof or road surface water should be made to this system, only land drainage renewal. Current plans adhere to this principle.

For the site to be drained by gravity, Kirklees LLFA does not object to a connection to public combined sewer for all plots than cannot provide a gravity to connection to agreed watercourse outfalls.

In reviewing discharge rates for the site, a 5l/s to local systems that ultimately connect to the river Colne can be increased to for the 1 in 100 year + 30% climate change critical storm event, (currently suggested as 6.6l/s in the submitted flood risk assessment). However, this is on the agreement that an LLFA instruction to renew an upsize 130mm x 220mm stone culvert identified in land to the west of the site to a yet to be agreed connection point in Manchester Road. **This verbal agreement has not translated onto plan and the LLFA OBJECTS to the application on the basis that off-site improvement are necessary to reduce risk posed by the increased volume of surface water dependent on this outfall.**

The planning officer needs to examine the aesthetics of altering surface levels to accommodate any attenuation.

Land Drainage and Watercourses

Off-site improvements mentioned above are necessary for this development not to increase flood risk off site. CCTV work to examine size and condition of a system running from the former location of the trough in Manchester Road and to an open section in the cemetery opposite is required to fully assess requirements for this development. From this a connection point for a renewed and upsized diversion of the 130mm x 220mm stone culvert shall be agreed and would require construction prior to other works on site.

The main, manmade, west to east watercourse running through the site has a suitable stand off from properties. However, clarification is required with regard to a blockage analysis given there is a restriction on flows in land to the east of the site. The flood risk assessment suggests properties have finished floor levels 300mm above adjacent ground levels. The LLFA would like to see a plan that where finished floor levels and the northern bank of this watercourse is engineering so water cannot spill toward houses. At the site meeting it was noted that this watercourse has overflowed previously at its interface with the pond in adjoining land. A suitable structure should engineer a safety overspill with pipework running to the current location of the 130mm x 220mm culvert (to be upgraded). Currently a

perimeter land drain is shown but not connected as an overflow. It is also shown as 150mm which would be considered inadequate. Further assessment is required.

The picking up of local springs to run in renewed pipework to the former pump house is agreed in principle. The methodology is not stated on the plan, e.g., and perforated manhole (inverse soakaway).

Clarity is required on all land drainage systems in a narrative additional to the submitted flood risk assessment. The LLFA required further information on systems and overflows running toward the former pump house and running into and out of the well identified. Plans should clearly show abandonment and renewal plans of all pipes. A catchment survey was discussed on site for adequate sizing of all land drainage pipework and watercourses and this has not been submitted. Further information is therefore required.

Once agreed, all watercourse and land drainage plans must be coloured and identified with labels to be included in a section 106 agreement so that riparian responsibilities that could rest with an individual household, are substituted, maintained and managed via a management company.

Small changes to drainage routes such as removing right angle bends to reduce risk of blockages can be conditioned once all principles and sizing has been finalised.

Flood Routing

Clarity is required for all access driveways from Lingards Road that water flows down Lingards Road will maintain is currently flow and not put these properties at risk. Previous problems further up Lingards Road has led to other watercourses discharging onto the highway and jumping road gullies. The FRA makes a statement that flows will continue. We do not believe this will be the case with the main access road. Although we believe a flood route will miss curtilages and enter the central watercourse this must be clearly identified on a plan.

Trial holes has seen the main south to north watercourse identified, further information on the diversion around the proposed layout is required, in particular reference to depths where steps are required to access higher ground. The LLFA would like to ensure risk of poor access is minimised.

Landscaping

An overlay of all land drainage and surface water drainage is required on landscaping plan to avoid planting within 5m of the centre line of pipework to help reduce the risk of root ingress.

Planning Officer Advice

The rights and responsibilities of land drainage to the former pump houses is advised as it serves the former farm to the east. Owners should be consulted.