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Consulting Development Engineers

LONGFORD PARK, BANBURY FLOOD RISK AND DRAINAGE STATEMENT – PHASE 1 DEVELOPMENT AREA MAY 2013 REF. AB/20488

This Flood Risk and Drainage Statement has been prepared to accompany the Reserved Matters planning application for the Phase 1 development area at Longford Park, Banbury. The development will comprise of 215 dwelling accessed from a new traffic light junction off Oxford Road.

The purpose of this statement is to confirm the flood risk status of the site and outline the surface water and foul water drainage strategy for the proposed development and how this will be provided in accordance with the site wide masterplan, Design Code document and approved Flood Risk Assessment.

Flood Risk

The Phase 1 site area, as outlined in the approved Flood Risk Assessment prepared by Brookbanks Consulting dated November 2003 (ref. 1071/DFS/01), is located in Flood Zone 1 and therefore has a flood risk of less than 1 in 1000 year annual probability of fluvial flooding from rivers. This is confirmed on the Environment Agency flood map outlined below and the land is therefore suitable for residential development.



Source: Environment Agency (http://maps.environment-agency.gov.uk/)

Drainage

The surface water drainage strategy for the Phase 1 development area will follow the principles outlined in Figure 177 of the Design Code document, the approved Flood Risk Assessment and site wide masterplan.

A new surface water and foul water sewer network will be provided (mostly contained to the highway network) which will extend through the Phase 1 development area draining by gravity in accordance with the natural topography of the land. A proportion of the highway network (generally excluding primary and secondary streets) will comprise of permeable

Civil Engineering · Drainage · Flood Risk · Transport · Highways · Structures · Geotechnics · Contamination · Sustainability · Environment · Services · Geomatics Registered in England No. 07102309 VAT Registration No. 982 4164 04 Registered Office: 4-8 Kilwardby Street, Ashby-de-la-Zouch, Leicestershire LE65 2FU Mewies Engineering Consultants Ltd Directors: E Mewies BEng(Hons) CEng MICE, A Bennett BSc(Hons) MCIHT paving, which with the exception of the private areas, will be adopted by Oxfordshire County Council. It should however be noted the porosity of the soil has been found to be poor and so surface water from these roads will still discharge into the surface water sewer network however the provision of permeable paving will aid treatment of surface water to help improve quality.

In order to facilitate Phase 1, infrastructure within the wider Longford Park development area will be delivered to ensure foul and surface water drainage can discharge accordingly. The surface water sewer network will be laid out so that flows are conveyed to the north east and into a ditch network which discharges to the River Cherwell. In order deliver this outfall, a connection route beneath the Oxford Canal will be provided and a flow control device will be installed to control surface water flows to a maximum discharge rate 69.5 litres per second which is in accordance with the approved Flood Risk Assessment. This rate represents a 25% betterment over existing Greenfield run off rates from the full Longford Park development area.

In order to ensure surface water flows are attenuated accordingly, 3 new attenuation basins will be provided in accordance with Figure 117 of the Design Code and as shown on the wider site area masterplan. The ponds will provide storage for approximately 10,500m3 of surface water.

The foul sewer network will drain by gravity to a new pumping station located to the east of the Phase 1 development area and this will pump foul flows to the Thames Water adopted 500mm diameter rising main crossing the wider development area to the east.

All sewers will be designed in accordance with the latest Sewers for Adoption guidance and adopted by Thames Water under a Section 104 Agreement. The attenuation ponds/basins will be adopted by a suitable statutory body at the appropriate time.

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