Fareham Borough Council Examination of the Local Plan Part 3: The Welborne Plan

Provision of Wastewater Services

Statement from Southern Water September 2014

Introduction

Southern Water supplies quality drinking water to almost 2.4 million people and treats and recycles wastewater from nearly 4.5 million people across Kent, Sussex, Hampshire and the Isle of Wight.

Each day, 730 million litres of wastewater flow by gravity or is pumped through our sewer networks of more than 39,600 kilometres, before it is treated and recycled at 368 treatment works.

Southern Water is the incumbent sewerage undertaker in Fareham Borough. The Welborne Plan makes provision for up to 6,000 new houses and 20ha of employment land on a greenfield site to the north of Fareham. Wastewater services to this new community can be separated into two elements: wastewater drainage and wastewater treatment.

Wastewater treatment

Wastewater treatment capacity to serve the new settlement at Welborne can be provided at Peel Common Wastewater Treatment Works (WTW).

This WTW is one of Southern Water's largest operational sites serving extensive parts of south Hampshire, including parts or all of Eastleigh, Fareham and Gosport Boroughs, as well as small parts of Winchester. The site comprises 37 acres and treats around 800 litres of wastewater every second.

The WTW operates in accordance with an environmental permit set and monitored by the Environment Agency. The permit stipulates the maximum Dry Weather Flow that the company is permitted to release, and the environmental standards that are required to be met in the treatment of wastewater. The parameters of the permit ensure that the Environment Agency's water quality objectives are achieved.

Southern Water has assessed the headroom available in the environmental permit at Peel Common WTW taking all likely future development draining to the catchment as a whole into account. We have used adopted and emerging development plan documents to inform our assessment. We have concluded that there is sufficient headroom in the environmental permit at Peel Common WTW to serve the overall level of development, including the new settlement

at Welborne. As the incumbent wastewater service provider we have included the settlement in our demand forecast for the WTW.

Investment may be required to provide additional hardware and treatment processes in order to take full advantage of the headroom available in the environmental permit. This investment can be planned, funded and delivered through the water industry's price review process. The price review is carried out by Ofwat, the economic regulator, every five years. This process provides repeated opportunities to plan and deliver necessary investment over the lifetime of the Welborne Plan.

Wastewater drainage

Our position statement dated 31 October 2011 explains the position with regard to on-site and off-site sewerage infrastructure, i.e. the network of underground sewers that would, when constructed, convey wastewater from the properties to the wastewater treatment works for treatment.

In summary, major off-site infrastructure will be required to connect Welborne to Peel Common WTW. Although the infrastructure is significant and would need to cross the M27, we have not identified any fundamental "show stopper" constraint that could prevent delivery. The precise engineering configuration and route of the infrastructure needs to be investigated.

Taking account of recent discussions and the housing and employment trajectories set out in the Welborne Plan, we have identified one short term and two long term options:

- short term option: potential to provide capacity in the existing sewerage system close to Welborne through minor works, to accommodate early phases of development,
- long term option 1: flows could be directed through the existing Fareham urban area:
- long term option 2: flows could be directed through open land to the west to minimise disruption in the urban area.

The long term options would either involve upsizing the existing network through Fareham, or by-passing the urban area by constructing new underground sewers from the development directly to Peel Common WTW. The short term option will review likely connection points and upsize works to the existing infrastructure while the long term solution is being constructed. The short term solution will ensure that the delivery of the first phases of housing will not be impacted by the development of the long term solution.

An application under Section 98 of the Water Industry Act 1991 is the correct route by which to initiate a study to investigate these options. This application could be initiated by the developers, the landowners or Fareham Borough Council.

Once a S98 application is received, Southern Water will build a cost estimate of the drainage study to review the three options for serving the development with foul drainage. This will be presented to the applicant for consideration. To progress further, the study itself would need to be commissioned by the applicant and carried out by Southern Water. The long and short term options could at this point be split into two separate reports so the short term solution is delivered sooner. Southern Water welcomes early involvement with the S98 applicant, and would be happy to arrange meetings to review progress.

Capacity of the existing sewerage system in the vicinity of Welborne

The existing local sewerage system in the vicinity of the proposed new community is located on the fringes of the current catchment and are relatively small in size. Existing capacity is therefore likely to be very limited. However, Southern Water could investigate, as part of a S98 application, whether a limited amount of capacity could be made available in the short term through minor works to accommodate development for the first few years of housing and employment completions. We would need to work with you to understand precisely when the connections are likely to become 'live'.

If it is feasible to make capacity available for an agreed first phase, a legal agreement would need to be put in place between the planning authority and the developer to limit the number of connections to those agreed, in consultation with Southern Water. Unless a legal agreement is in place there is a risk that the number of connections could exceed the capacity made available, leading to the system becoming overloaded and consequent foul water flooding.