Application for Residential Development at
Mitton Road, Whalley

Utilities Assessment

July 2012

Where quality lives

David Wilson Homes

Development at Mitton Road/Broad Lane, Whalley - Foul Drainage Arrangements

A. Executive Summary

Utility Law Solutions (ULS), a company that specialises in water and drainage law and its related technical aspects, has been appointed by David Wilson Homes North West to confirm the foul drainage strategy for their proposed development site at Mitton Road/Broad Lane, Whalley.

This report outlines the proposals for effectually draining the foul flows from the site and, following discussions with United Utilities Water (the statutory sewerage undertaker for the area), sets out the impact of the proposed development on the existing public sewerage and sewage treatment infrastructure to which it will communicate.

This modest site of 137 residential units will not generate significant foul flows and it is not anticipated that any adverse effect on the public sewerage system in Whalley will occur once the site is complete and drainage is connected. To verify this a meeting with United Utilities has taken place which, together with subsequent exchanges of information, has confirmed the foul drainage position. The discussions with United Utilities in early 2012 were based on a development of 150 dwellings, but since then the scheme design has evolved and, as indicated above, it now provides for a reduced proposal of 137 units. A summary of the results of the communication with United Utilities is set out in section B below.

B. Site Drainage and Connection to the Public Sewerage System

The foul drainage system serving the development will be of conventional design with each property communicating with a foul sewer network located within the adoptable highway. It is not currently envisaged that a pumping station will be required to enable foul flows to communicate with the public sewerage system.

The foul drainage from the development can readily be discharged into the adjoining public sewerage system which already passes through the site. Under section 106(1) of the Water Industry Act 1991 the owner or occupier of any premises has a statutory entitlement to have his drains or sewers communicate with the public sewer of any sewerage undertaker.

In accordance with the new legislative regime under section 42 of the Flood and Water Management Act 2010 and the new mandatory build standards for sewers, which are likely to be brought into force by the time the detailed drainage design for

the development commences, the onsite foul sewers will be subject to an adoption agreement under section 104 of the Water Industry Act 1991. The on-site sewers will ultimately be vested in United Utilities and become part of the wider public sewerage network.

C. Discussions with United Utilities

ULS met with representatives of United Utilities and exchanged information to gain a full understanding of the public sewerage system in Whalley, the sewage treatment capacity at Whalley Wastewater Treatment Works and what effect they considered the new foul flows from this site would have on their network.

Like many systems in the North West, the public sewers in Whalley are of a combined nature, taking both foul drainage and surface water. The public sewer network to which the foul drainage from the proposed site will be connected comprises of gravity sewers which drain in a westerly direction terminating at a pumping station with an incorporated combined sewer overflow. This pumping station pumps flow directly to Whalley Waste Water Treatment Works, where all flows from the Whalley catchment are treated.

Initially ULS met with United Utilities to gain an understanding of whether there were any existing problems with the public sewerage network to which the site will drain and to explain the development proposals in order to confirm that capacity exists both in the sewerage network and the treatment works to cope with the additional flows from the site once constructed.

At this meeting, United Utilities indicated that Whalley Waste Water Treatment Works has limited spare capacity to deal with new flows being connected to the catchment. It is understood that investigations are ongoing in relation to the capacity issues at the treatment works and it is likely that plans to make improvements to the Works will be included in United Utilities next price review. Based on current assessments carried out by United Utilities, they estimate that the treatment works has spare capacity for an additional 222 new dwellings and that this will be allocated on a first come first served basis to sites which are granted planning permission. It was also agreed at the meeting that ULS would provide further details in relation to the development to allow United Utilities to hydraulically model the effect that the new foul flows from the development would have on their network.

Following the meeting, ULS provided plans and a development profile to United Utilities to allow them to model the impact that the foul flows from the development would have on the existing public sewerage network. The hydraulic modelling results, based on 150 units, received from United Utilities indicate as follows:

1. There are no adverse effects on the sewerage network with regards flooding (no new sewer flooding and no increase in existing model predicted flooding) and sewer surcharging).
2. United Utilities has confirmed that there are currently no DG5 sewer flooding issues within the immediate vicinity of the proposed development.
3. There will be a predicted increase in annual spill volume from the combined sewer overflow upstream of the Whalley WwTW of 3.7% (an additional 2,165m3) and there will be an increase of 3 additional spills in a year due to the development. The increase in spill frequency and volumes are within 5% of the baseline situation. This change in performance *should* be within acceptable thresholds to the Environment Agency based on United Utilities previous experiences of similar situations.

With regard to point 3. above, as the Environment Agency are a statutory consultee on planning applications they will no doubt confirm this position in due course. However, the 137 houses that are now proposed will give rise to very low foul flows from the site which, as a proportion of total flows discharging from the combined sewer overflow when it is operating in storm conditions will, in reality, be insignificant.

Available capacity is reviewed by United Utilities for all planning applications and specifically, United Utilities has commented as follows:-

"United Utilities Water plc (UUW) will provide information on connection points and maximum permitted discharge rates to public sewers in response to enquiries by developers and in response to Planning Applications where Planning Authorities have elected to consult UUW on drainage matters.

However, the points of connection and discharge rates cannot be allocated and reserved for a particular development. UUW reserves the right to revise the connection point and discharge rate current at the time that a formal application for connection to public sewer is made, in order to take account of possible changes in discharges to the public sewer between the date of the enquiry and the date of the connection being required".

D. Treatment Works

As indicated above, United Utilities has stated that Whalley Waste Water Treatment Works has limited spare capacity to deal with new flows being connected to the catchment that it serves. While the number of units proposed for this development should not cause a problem in the short term, United Utilities will need to have regard to the operation of the Works and ensure that it stays within the consent conditions that are imposed by the Environment Agency on both the combined sewer overflow and the treated effluent discharge from the Works.

The funding for improvements to the sewage treatment activity comes from general water charges rather than from new development and the way that such developments impact on a particular sewage treatment works. Water companies are financed in 5 yearly cycles (AMP periods) and have flexibility in the way that such funding is applied. Therefore in this case, even if it were required, it would not be possible for the developer to bring forward the delivery of the necessary improvements, as unlike improvements to the public sewerage network, improvements to sewage treatment cannot be funded in this way. In any event, given the timescales that are likely to arise in relation to the commencement of this development there is adequate time for United Utilities to plan for improvements to the Works either as part of the spend for the current AMP period or under the next spending cycle which will commence on 1st April 2015.

E. Conclusion

Connection of foul flows from the proposed development to the public sewerage network will not be a material consideration in terms of any adverse effects on either the public sewerage system or the treatment facilities at the Wastewater Treatment Works.

Philip R. Day
Director
Utility Law Solutions Ltd

24th May 2012

Utility Law Solutions Ltd. is owned and managed by Philip Day who has worked in the water industry for over 30 years, primarily in a legal role. Before leaving Severn Trent Water to set up Utility Law Solutions four years ago, Philip was their Principal Legal Advisor for Asset Management matters. In this role Philip's responsibilities were wide ranging and included the provision of legal advice and support to the business in relation to all asset management issues arising out of the company activities in sewage treatment, water supply and networks (water main and sewerage systems). One of the main activities of ULS is the provision of practical support and advice in relation to water and sewerage law and its application in the construction industry. During his time with Severn Trent Water, Philip was inter alia directly responsible for all legal aspects relating to:–

- Advice on the effects of the Water Industry Act 1991 and related legislation
- Obligations of sewerage undertakers in relation to the section 94 duty
- Formulation of policies and procedures in relation to the connection of infrastructure to new developments including resolution of development related problems/disputes
- Sustainable Drainage Systems (SuDS) - Member of the National SuDS Working Group providing legal support which culminated in the Interim Code of Practice for Sustainable Drainage Systems
- Sewers for Adoption – Provision of legal support for Sewers for Adoption 5 and 6, including creating a new national agreement
- Development through Water UK involvement, of water company positions in relation to Private Sewers legislation, New Roads and Street Works and Traffic Management Acts, Environmental Liability Directive, Section 101A (rural sewers) applications and processes and Environmental Information Regulations
- Development of waste to energy specialist operating agreements relating to sewerage and sewage disposal with external companies
- Requisitioning of water mains and sewers
- Adoption of water mains and sewers

Alex Day, also a Director with ULS, previously worked for a water and sewerage company evaluating the technical designs submitted by developers for their sites and the impact they would have on the public sewer network. Joining ULS 6 months ago, for the past 5 years Alex has worked as a consultant to the house building industry and amongst other things has supplied advice to clients on designing drainage systems for developments which will minimise impact on existing infrastructure and will be suitable for adoption by sewerage undertakers.