

FUTURE UTILITY SOLUTIONS

LIVERPOOL SHOPPING PARK

Water supply design for a retail and commercial development

The Problem

With United Utilities being the UK's largest operator of water systems and owning over 40,000 km of water pipes it was found that information such as flows and pressures within the network were difficult to obtain. This impacted on time constraints imposed to meet planning conditions and obtain design approval.

The Approach

Due to the lack of information required, Waterco engineers used their comprehensive expertise and best practice to size the mains in accordance with UU guidelines. A ground contamination assessment report was also commissioned to advise the designers in their selection of the most appropriate pipeline material.

Project Deliverables

- Water supply design drawings and design record
- Pipe Size & Pipe Specification
- United Utilities & Fire & Rescue Service Consultations
- Designer's Risk Assessment (DRA)
- Design record and supporting information for United Utilities approval

The Outcome

The design was produced in accordance with the Code of Practice for the Self-Laying of Water Mains and Services - England and Wales - 2nd Edition and the United Utilities addendum. In the absence of flow and pressure information the mains were sized using the table in section 3.8 of the United Utilities Design. The specification for the scheme was included in the notes on the drawing. This included references to the Code of Practice and the United Utilities addendum, the Civil Engineering Specification for the Water Industry 7th Edition and the National Joint Utilities Group arrangement for utilities in footways.



Key Statistics



KEY BENEFITS

- Technical**
 Design of a water main required to support planning application
- Money**
 Lower cost solution offered to client
- Risk**
 No planning consent without United Utilities approval
- People**
 Availability of experienced technical designers
- Time**
 Urgent requirement to meet planning deadlines
- Value**
 Speedy response to hasten contractor mobilisation times
- Compliance**
 Compliant with governmental, Water Industry Registration Scheme (WIRS) and client requirements
- Environment**
 Ground investigations carried out to determine pipeline specification