

## Case Study

### Friars Walk, Newport

Weholite piping upgrades redeveloped Shopping Centre's drainage system



#### SDS Systems

Weholite Pipes, Flow Control and Manholes.

#### Client

Bowmer & Kirkland: main contractor;  
Churngold: groundworks contractor.

#### End Customer

Newport City Council and Queensberry Real Estate;  
Welsh Water.

#### Project

Friars Walk.

#### Purpose

To elevate Newport's place in national retail rankings by approx. 100 places.

#### Brief to SDS

To manage the safe and efficient dispersal of stormwater.

#### Timing

Construction commenced in 2014.

#### Project Background Information

Newport, in South Wales, is one of Wales' fastest growing cities, currently undergoing a comprehensive programme of regeneration at the heart of which is the 2020 Vision, a masterplan of citywide schemes and projects that aims to deliver a more prosperous and vibrant city. A central part of the city's regeneration is Friars Walk, a vibrant and modern retail and leisure scheme, sited between the River Usk and Newport's existing main retail zone, which aims to reinvigorate the High Street and restore civic pride by reconnecting a disjointed part of the cityscape to create a cohesive, attractive and accessible urban realm.

Encompassing some 36,000 square metres, the £110 million Friars Walk project includes a three-storey department store, seven major shop units and thirty standard size double height shops that are set either side of a pedestrian covered street, an eight-screen cinema, thirteen restaurants and five kiosks. Notable tenants

include Next, Topshop and New Look as well as major food and leisure brands including Nandos and Las Iguanas.

As well as the shopping centre, the design includes a 15 bay bus station and 345 space undercroft car park, as well as pedestrian links to the river and the University of South Wales and significant public realm works including improvements to John Frost Square and Usk Plaza.

As a result of Friars Walk, Newport's catchment will grow from 211,000 to 367,000 and achieve an estimated footfall of 10 to 12 million per annum\*; this is projected to double retail sales in the city by generating an additional £100 million revenue per annum.

\*(Source: Javelin/DTZ).

### Project Objectives

To ensure the shopping centre and its parking facilities are flood risk free.

### Project Requirements

To design and install the requisite surface water drainage system.

### SDS Product Features

A 750mm diameter Weholite HDPE pipe, supplied in the form of two sections each measuring 350 metres long and fitted with access shafts, replaces two major sewers that previously crossed the site at up to six metres deep directly below the main centrally positioned shopping mall.

Each pipe contains a flow control chamber equipped with stop logs and penstocks and an integral dry weather flow channel.

### Issues Overcome

Churngold was contracted to deliver the groundworks programme in which it encountered a number of significant challenges, chiefly a result of the development's location in a built-up urban area and the requirement for deep drainage.

Construction was obliged to continue over the newly installed Weholite sewer, repositioned without causing any interruption to services, and in difficult ground conditions as a result of the site's close proximity to the River Usk. At five column locations ground level bridging beams had to be installed to span the sewer; this allowed the columns to remain true to the designed grid pattern, even though the piles were installed off-grid in order to avoid the sewer alignment.

Additional logistical challenges emanated from the site's confinement on all sides by a main arterial road, a public highway, a live pedestrian area and an existing shopping centre.

Despite an aggressive Programme of Works, quality was of the utmost importance to the client and represented a goal to which all suppliers were mandated to subscribe.

### Results

In its first year of opening, the shopping centre has welcomed over 10 million visitors and created over 1,500 jobs, generating an estimated £20 million a year in salaries for the local economy. It has also achieved industry plaudits and recognition in winning the 2016 'Revo Gold Award' for "Best New Centre in England and Wales" and a 'Considerate Constructors Silver Award'.

Jessica Morden, Newport East MP, said: "It's no exaggeration to say that Friars Walk has breathed new life into the city centre", whilst Newport West MP, Paul Flynn, added: "Success breeds success. Newport has bucked the trend of retail decline and Friars Walk will generate its own momentum of continuing prosperity."



Images kindly supplied by Churngold and WaterProjectsOnline.