

## Essex and Suffolk Water– Refurbishment of River Intake Dual Flow Band Screens – Langford, Chelmer and Blackwater WTW, Chelmsford.

### Langford, Chelmer and Blackwater WTW, Chelmsford

- On-site build
- Twenty Five year old screens given new lease of life with a minimum ten life expectancy.
- Minimisation of downtime
- Upgraded OEM parts used

#### The Brief

As part of the River intake screen overhaul program, Jacopa were approached to refurbish several sites: Langford-Blackwater, Langford-Chelmer, Stratford St. Mary and Brantham. Some of the screens were in very poor condition and out of service. Chelmer has two Dual Flow Band Screens, one of which was out of service and the existing screen was in poor condition with the following defects:

- Mesh panels missing
- Chain fixings heavily corroded.
- Chain Rollers and Sprockets heavily worn
- Collapsed Bearings

#### The Solution

Essex and Suffolk requirements dictated that the screens were to have a minimum five to ten years additional life expectancy, this was due in part to Environment Agency regulations regarding eel protection. Following full inspection Jacopa proposed a refurbishment of the screens including making some changes to bring parts in line with the latest technology.

#### The Outcome

The Screen was refurbished by Jacopa to the highest specification with OEM parts changed and upgraded where possible by Jacopa. Essex and Suffolk Water were then able to operate the screen to abstract water from the River Chelmer whereas prior to this only one of the screens was operational resulting in flow intake being reduced.

