



## KILDARE TOWN SEWERAGE SCHEME

Provision of an upgraded sewerage system and a new 28,000pe WwTW and 15km effluent outfall

**Client: Kildare County Council**

### SUMMARY:

**Value:** €20,000,000  
**Population Served:** 28,000 p.e.  
**Procurement:** Design, Build and Operate  
**Status:** On going

**Services Provided:**  
Network Modelling, Preliminary Designs  
Environmental Impact Statement  
DBO Tender Documents

Kildare Town is one of the growth centres in County Kildare and the existing sewerage infrastructure has reached capacity. Nicholas O'Dwyer carried out preliminary designs on the upgrading of the sewerage network following the production of an Infoworks™ hydraulic model of the network system. Time Series modelling had indicated that a storm detention tank size of 4,700m<sup>3</sup> was required and this was constructed in accordance with our detailed design under the M7 motorway contract. The motorway was to separate the detention tank and the WwTW.

Nicholas O'Dwyer (lead consultant) in association with Tobin (network design) and Entec UK (EIS) were subsequently appointed to implement the provision of the upgraded network and the new WwTW. With responsibility for the WwTW element a suitable receiving water had to be established for the effluent from the new plant. The existing plant (9,700pe) discharged to a small stream which was at the limit of its assimilative capacity. An analysis was carried out of all possible solutions for a discharge location (including pumping ground water to the stream to increase low flows). Having carried out the cost and risk analysis, an outfall to the River Barrow some 15km east was proposed.

The expansion of the WwTW was examined and the decision taken to abandon the existing process and redevelop the treatment plant within the confines of the existing site thus avoiding additional land costs. This would need to be carried out in a phased manner to ensure continuity of treatment during construction. Following acceptance of the outline design, an EIS was prepared and certified by An Bord Plannala with minimal conditions. DBO documents have been prepared and a pre-qualification procedure under the restricted procedure has been completed.



**Nicholas O'Dwyer**  
CONSULTING ENGINEERS