

FLOW CONTROL GATE ASSEMBLY

ABSTRACT

This invention relates to flow control gate assemblies, in particular to a purpose-designed self-regulating water flow control gate for installation close to or at merging junctions of open drainage systems to improve the water flow characteristic at the confluence. A basic automatic flow control gate in the form of a single planar rigid gate is mounted to a fixed wall or fixed axial support at a merging junction for angular rotation about a vertical axis. The basic automatic flow control gate swings dynamically in response to the discharge rate from the main drain and the tributary into an optimal position that balances the inertial forces from the merging streams and reduce or minimise the back flow due to hydraulic formation or physical elements at peak discharge rate. One or more automatic flow control gates may be installed at such merging junctions.

FIG 2