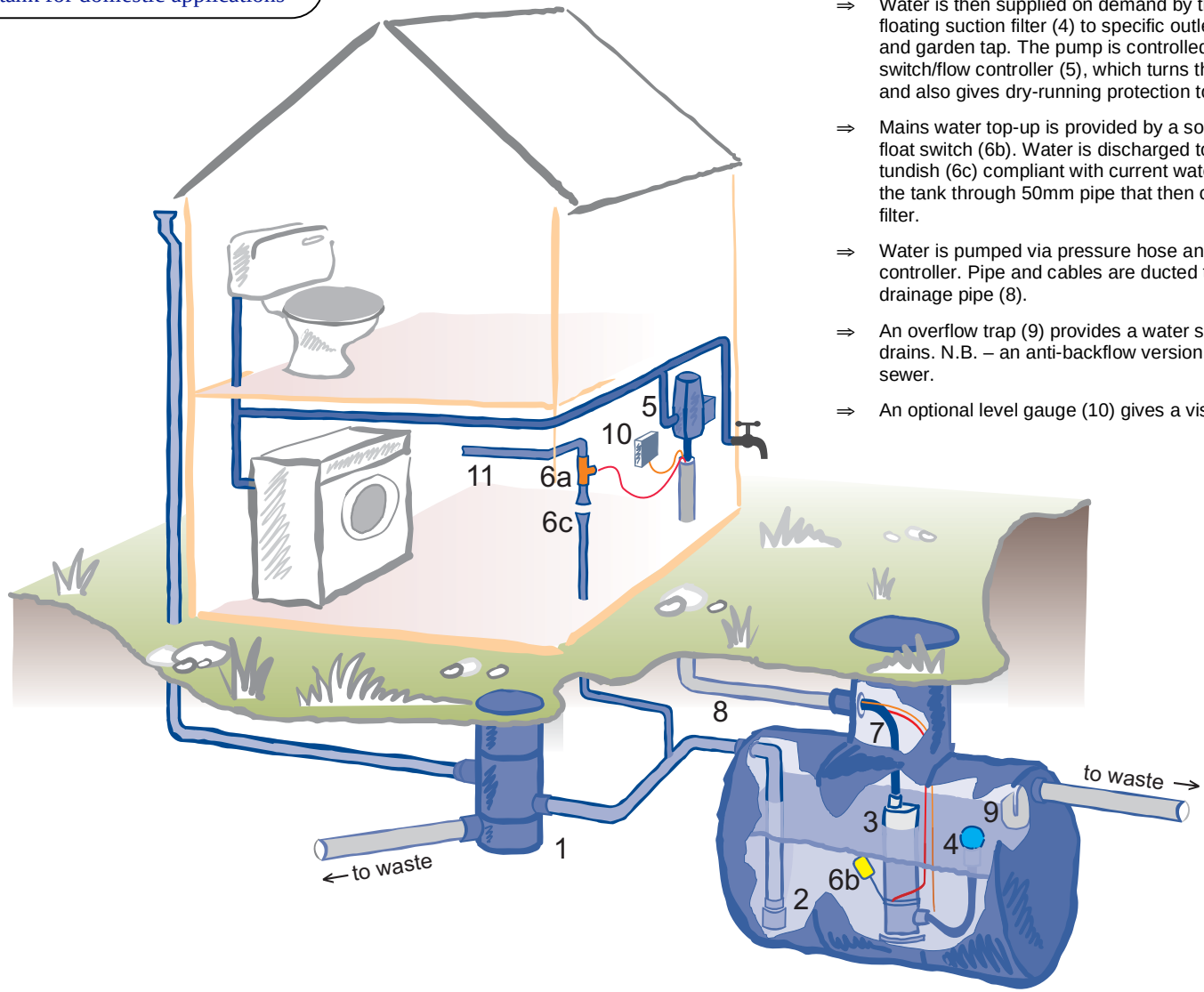
RAINHARVESTING · SYSTEMS

Typical direct (pressurised) rainwater harvesting system with GRP tank for domestic applications



⇒ Rainwater is collected from the roof drainage system by the underground Wisy WFF vortex filter (1). This filters out the debris from the water and diverts about 95% of it into the storage tank. The remaining water goes to soakaway or storm drain in the usual manner, as does the excess water from the tank. As water enters the tank it passes through a calmed inlet (2) which calms the flow of water and prevents disturbance of the float switch and any sediments.

⇒ Water is then supplied on demand by the submersible pump (3) through a floating suction filter (4) to specific outlets, usually WCs, washing machine and garden tap. The pump is controlled by a combined pressure switch/flow controller (5), which turns the pump on and off when required and also gives dry-running protection to the pump if it should be necessary.

⇒ Mains water top-up is provided by a solenoid valve (6a) controlled by a float switch (6b). Water is discharged to the tank via a type AA air gap tundish (6c) compliant with current water regulations. This gravity-feeds to the tank through 50mm pipe that then connects to the outlet pipe from the filter.

⇒ Water is pumped via pressure hose and 32mm MDPE (7) up to the flow controller. Pipe and cables are ducted to the house through a 110mm drainage pipe (8).

⇒ An overflow trap (9) provides a water seal against any foul odours from drains. N.B. – an anti-backflow version is available when connecting to sewer.

⇒ An optional level gauge (10) gives a visual indication of tank water level.