

# RAINWATER HARVESTING FOR SOCIAL HOUSING SCHEMES

In response to growing demand, we have developed a solution specifically tailored for social housing schemes and other situations where several adjacent properties are owned by a common landlord.



Conventionally, a housing development will be designed so that each property has its own harvesting system, so each is responsible for its own components, and any power to supply the pump and other components. This works well in practice, but can prove expensive for the developer.

If each house is privately owned, then this remains the best solution. But when several properties are owned by a common landlord, such as a Housing Association, it is always more cost-effective to combine some of the elements, both in terms of initial expense and also running costs.

## The drawbacks of individual systems:

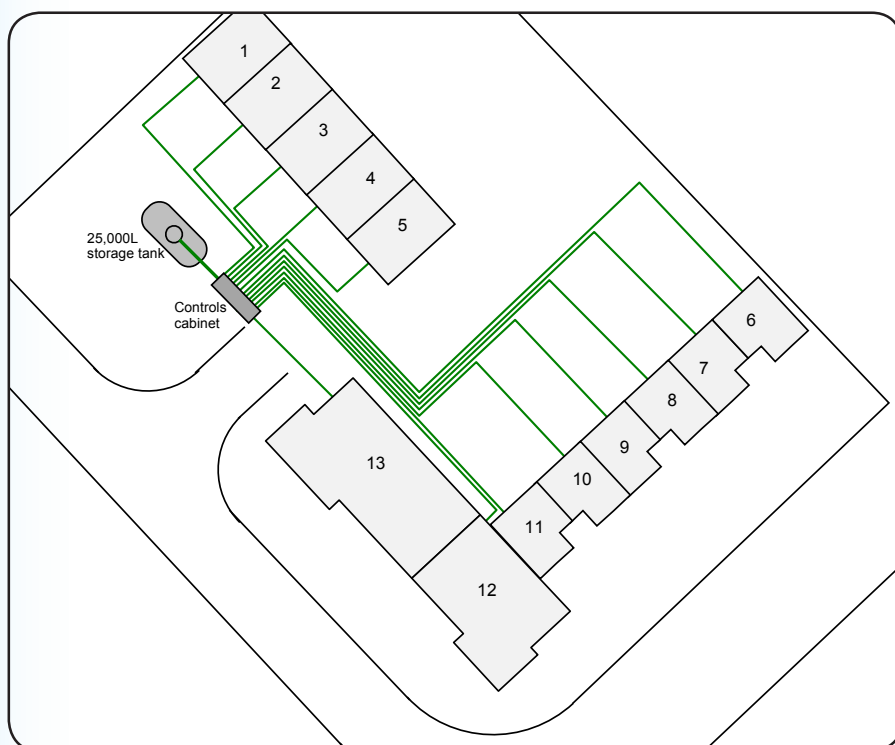
- separate tanks, so more excavation and pipework required<sup>1</sup>
- each tank needs its own pump and power supply
- each tank need its own filtration
- each unit needs its own powered mains water back-up supply
- maintenance requires access to each property

## The benefits of our multi-home system:

- a single tank can serve several properties (up to 10 or more, depending on layout)
- a single pump can supply all properties
- fewer filters are required to clean the incoming water<sup>2</sup>
- filters are easily accessed for cleaning without the need to open the tank - no safety risk
- all controls are located within a lockable external housing. Easily accessed for maintenance, but tamper-proof and no need to enter a property
- each property has its own header tank equipped with automatic mains water back-up, requiring no power supply

**Case study:**

Development of 13 properties in Cheltenham for a local Housing Association. The project was originally proposed to have 13 individual systems. By using just one large tank and a single vortex filter, we were able to supply all these properties from the same source. This resulted in a significant cost saving, and will simplify future maintenance.



The water from the storage tank is pumped to a nearby controls cabinet; the pump being operated by a variable speed controller within the cabinet. This also houses a pipe manifold and isolating valves.

From the manifold separate 20mm pipes lead to each property, where they connect to a small header tank.

This tank is specially adapted with dual inlets and a type AB air gap to meet the Water Regulations. If the rainwater fails for any reason, the header tanks will continue to function from the mains water supply.



*GRP insulated cabinet provides security and easy access for maintenance.*



Each property is fitted with a special header tank. This has dual inlets for mains and rainwater. By default it will always fill from the rainwater first, but will automatically fill from the mains supply if there is no rainwater available. To comply with regulations, the tank is fitted with a screened weir overflow. The complete assembly is mounted in a galvanised steel drip-tray, fitted with an overflow pipe. No electrics are required.