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|-------------|--------------------------------|--------|-----------------|
| Client:     |                                | Date:  | 13 January 2020 |
| Project:    |                                | Quote: |                 |
| Description | Large Nursery Standpipe System | Rev:   | 0               |

## Overview of system

This system includes a 10,000l plastic tank, Lowara BGM7 pump with Genyo auto-start, 100m of 32mm and 25m of 25mm MDPE underground pipework, four standpipes and the necessary fittings required. Please note that this system is rated to run two standpipes at any one time for maximum effectiveness. More standpipes can be operated at the same time, but the available flow will be reduced. If the output of the system continuously exceeds the flow from the mains supply, the tank will empty, and the pump will shut down.

## Pipework and Fittings

### Distribution Pipework

For durability, all underground pipework is minimum 10 bar polythene (PE). PE pipe has excellent resistance to frost and physical damage. Underground fittings are WRC approved compression fittings, by Plassim, for a long and trouble-free life.

### Trenches

As the system will be drained down the pipework should be laid in trenches 300mm deep (750mm deep for mains water supply to tank). The Water Authority may require either irrigation Warning Tape or marking tape to BS1710 to be fitted to the pipe (Available from Access, supplied at additional cost).

### Standpipe Hose Points

The hose points will consist of a frost valve with back-plate mounted on a post (provided by client) or back to a wall. A polythene pipe will rise to the tap position from the underground supply pipe.

## Pump Equipment

### 10,000l tank

To comply with the Water Supply (Water Fittings) Regulations 1999, the system includes a 10000l break tank and pump. The 10000-litre capacity tank provides a Type AB air gap to prevent backflow into the public mains and is supplied with a 3/4" BSPM float valve inlet. The base needs to be suitable to support the weight of the unit.

The tank will be fitted with a 3/4" ball float valve inlet and 2" outlet with isolation valve. 1" suction hose will connect the tank to the pump.

The tank will be delivered direct from the manufacturer. Access for a large lorry will be required. Off-loading of the tank is the responsibility of the client. The tank has 4 no. moulded lifting lugs equally spaced around the top.

**Warning:** The unit must be protected from frost. To comply with the Water Regulations, there will be an **unrestricted water flow** from the overflow weir, if there is an inlet valve failure.

### Pump with Genyo Auto-Start

The pressurised supply to the system is provided by a compact Lowara e-HM..S Series pump with stainless steel body, motor shaft and impellers for long life. The e-HM range is designed for heavy-duty industrial applications, are quiet running and supplied with highly efficient motors to keep energy consumption to a minimum.

A Lowara Genyo controller will start the pump automatically as soon as the hose point is opened. The controller includes a built-in non-return valve and dry running protection.

The pump has a 0.75kW single phase motor with a 5A full load current.

The pump must be protected from the elements, either in an existing building or a ventilated enclosure provided by the client. The pump must be protected from frost damage.

Due to the nature of the equipment, some drainage of water onto the floor is to be expected, during routine maintenance or should a fault develop. It is the responsibility of the client to check the suitability of the proposed equipment and its proposed location before installation.

## Installation

### Installation by Client

The installation time estimate for the project in man hours can be provided on request.

ACCESS will provide assistance with the installation by means of:

- Parts supplied packed and labelled.
- Full instructions and specific drawings (Hard copies and PDF).
- Telephone support during installation.

### Servicing

To maintain the efficiency and reliability of the irrigation system, it is important that it is regularly serviced. Access have devised a service routine which ensures this. The schedules detailing the works involved in each service visit will be supplied on request. It is recommended that the Spring and Winter service is carried out as a minimum.

## General Details

### Water Supply

A mains water supply capable of delivering an output of not less than 800 L/h is required at the tank. The pipework must comply with the Water Supply (Water Fittings) Regulations 1999 and include an isolating stopcock.

### Electricity Supply

A 13 amp 3-pin weatherproof plug socket, with RCD protection, is required for the pump.

### Maintenance

The system requires draining down in the Winter time to prevent frost damage and re-commissioning in the early Spring. ACCESS can provide a Service Contract to do this.

### Location of Equipment

It is assumed that all pump and tank equipment, etc. will be installed in a suitable area outside. Due to the nature of the equipment, some drainage of water onto the floor is to be expected, either during the normal operation of the equipment, during routine maintenance or should a fault develop. **In the case of air gap tanks, a fault in the main inlet valve will result in an uncontrolled flow of water out of the tank weir. This must be taken into account when considering the tank location.** It is the responsibility of the client to check the suitability of the proposed equipment and its proposed location before installation.

### Permissions Required

If water is being drawn from the public main, it is a legal requirement that the local Water Company be informed before installation begins. If required, ACCESS Irrigation can handle these permissions, for a charge of £50 + VAT. The application process normally takes approximately three weeks. ACCESS Irrigation reserves the right to charge for drawings, specification etc, if the Water Company refuses permission due to no fault of ACCESS. Any additional requirements requested by the Water Company but not included in the quotation will be charged extra.

If it is proposed to draw water from a river or groundwater source, it is the client's responsibility to obtain any permissions or licences from the Environment Agency.

### Legionnaires Disease

It is the responsibility of the user of the irrigation system to satisfy themselves that they have taken every precaution against airborne contaminated water droplets (Legionnaires Disease) when using the system. Information on Legionnaires Disease can be found on the Health and Safety Executive website, in Document L8: 'Approved Code of Practice (ACoP) Control of Legionnaires Disease and Management in Water Systems'.

### Plans

Where quotations have been provided from clients' plans, any inaccuracies or items omitted from the plan that cause unscheduled costs will be passed on to the client. ACCESS will provide scale plans for pipe/trenching runs and a general layout of the pump area when requested. ACCESS expect these to be added to the master plans by the architect. Any other plans requested will be charged extra.

### Winter Work

Where the system is installed out of season, the system should be completed, tested and demonstrated to the client; then left drained down for the winter.

**Copyright**

Designs and drawings for the irrigation system are owned by ACCESS Irrigation. If the designs or similar are used as a basis for other contractors to install the irrigation systems, ACCESS Irrigation shall make a minimum consultancy charge of £800.

**Terms and Conditions**

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