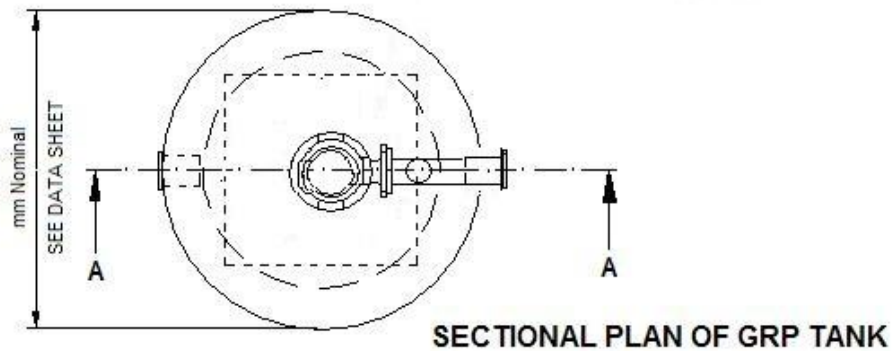
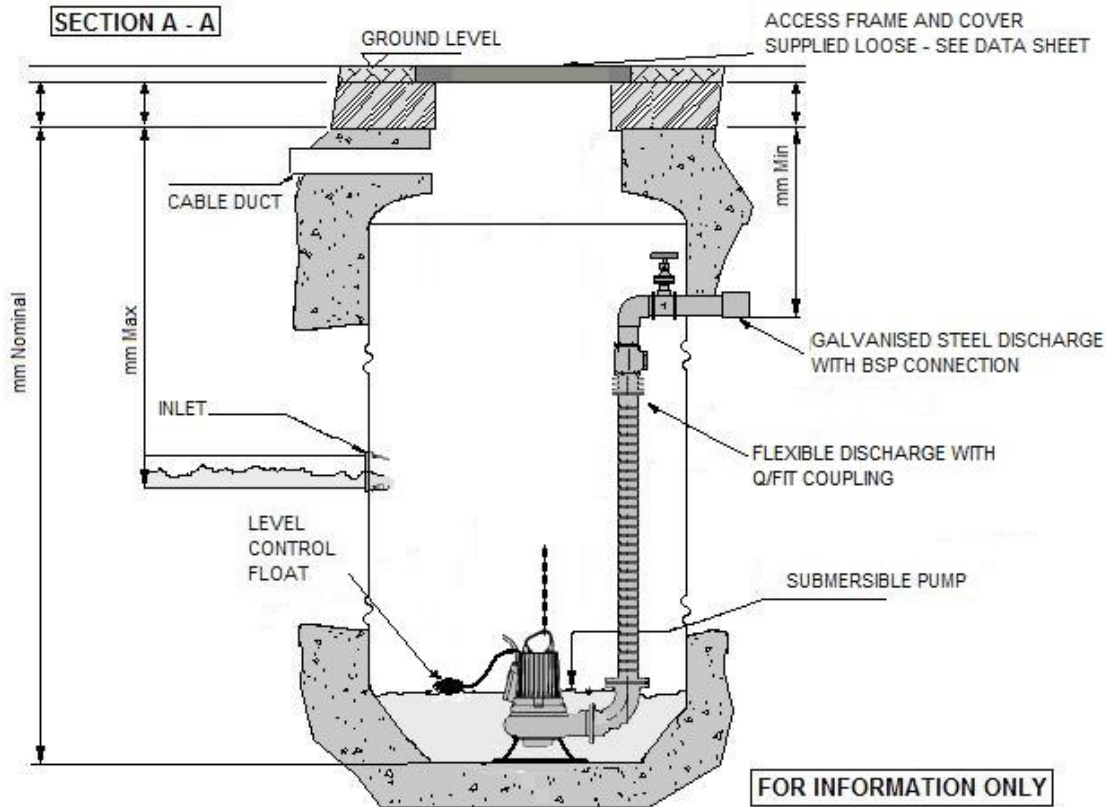


SINGLE PUMP ECO STATION GENERAL ARRANGEMENT DETAILS



SPSE ECO Station – 1m diameter x 1700mm deep comprising:

- 2 no 110mm inlet spigots (Foul Inlet + Cable Duct)
- Pressed Steel Access Cover + Frame
- Internal Flexible Pipework, Valves, Q/Fit coupling, Solid Galvanised discharge
- Single Freestanding 230v-1ph-50hz Submersible Pump c/w Integral Float switch

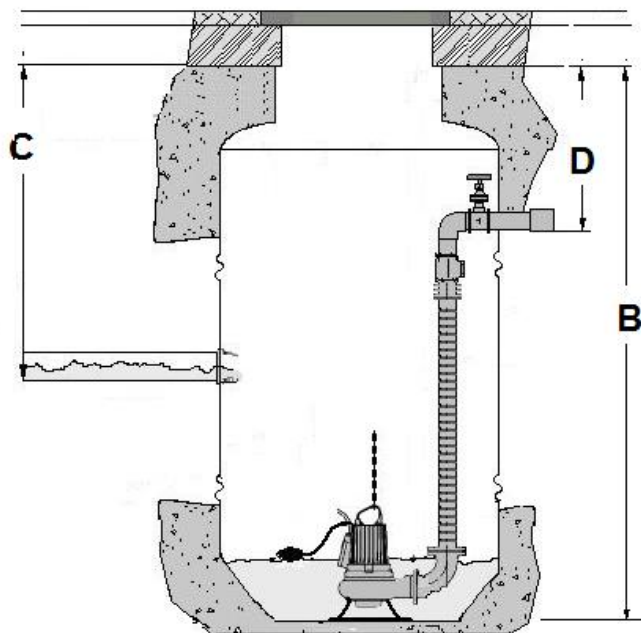
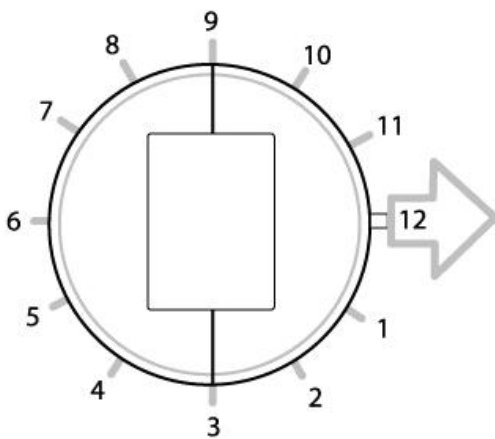
PACKAGED PUMP SYSTEM SITE DETAIL SHEET

Please complete the table below and indicate the positions of the inlet(s) on the plan below. Manufacture of the pump station cannot commence until this sheet is completed, signed and returned.

Client	SPS Contract Ref.....
Site Address.....	Tank Diameter "A".....
.....	Tank Depth "B".....
.....	Inlet Height "C".....
.....	Inlet Height "C".....
.....	Inlet Height "C".....
.....	Discharge Depth "D".....
	Inlet Positions Please mark on Plan View
	Inlet Diameter's (OD).....
	Inlet Material.....
	Number of Inlets.....
	Discharge Position 12 O'clock as Standard
Electrical Supply.....240v Or 415v.....	Discharge Diameter's (OD).....
Cover TypeA15, B125 or D400.....	Discharge Material
	Number of Pumps.....
Site Contact.....	Client Signature.....
Site Telephone.....	Print.....
	Position.....

NECK EXTENSION BY OTHERS

Plan View Side Elevation



PUMP CHAMBER INSTALLATION GUIDE HEALTH & SAFETY AT WORK 1974

NOTICE

As with all site work the dangers of working with water and electricity pose severe threats to health if obvious and fundamental precautions are not taken. Therefore if you are in any doubt to any of the following, please don't hesitate to contact us.

All site work should be undertaken by qualified personnel only.

Please read and understand the following instructions in full before commencing the installation. These instructions are provided as a general guide and do not allow for non-standard site specific issues which may arise. Failure to adhere to these instructions may compromise the structural or operational integrity of the product which will be deemed outside the responsibility of SPSE Ltd.

DELIVERY

THE CONTRACTOR IS RESPONSIBLE FOR OFFLOADING & INSTALLATION. THE FOLLOWING INSTRUCTIONS ARE OFFERED FOR GUIDANCE ONLY. SPSE LTD CANNOT ACCEPT ANY RESPONSIBILITY FOR INCORRECT OFF-LOADING OR INSTALLATION.

- OFF-LOAD THE UNIT USING SUITABLE MECHANICAL EQUIPMENT OPERATED BY TRAINED PERSONNEL.
- ONLY LIFT THE UNIT WITH CERTIFIED WEBBING STRAPS
- DO NOT WRAP CHAINS AROUND THE UNIT
- DO NOT LIFT THE TANK IF IT CONTAINS ANY WATER
- DO NOT SUBJECT THE TANK TO SHARP IMPACTS
- DO CHECK THAT ALL ITEMS DELIVERED CORRESPOND WITH THE PACKING NOTE

During storage on site the tank should be placed on level ground avoiding all possibility of accidental damage. The tank should be tied down during periods of high winds. If the tank does not contain stabilising feet then it should be chocked with suitable materials.

IF IN DOUBT WITH REGARD TO ANY ASPECT OF THESE INSTRUCTIONS PLEASE CALL THE NUMBER LISTED OVERLEAF.

1. Excavate to the tank dimensions allowing a further 225mm minimum to all sides and 300mm to the base. Level the base of the excavation. The excavation should be carried out in accordance with BS 8000 – 1:1989 Workmanship on building sites. The excavation should be prepared such that there is no risk of puncture or any other damage to the tank structure during installation.
2. In wet ground conditions it is important that the excavation is kept dry throughout the installation and until the concrete surround has cured (normally seven days). The use of pumps and pump sumps is recommended in cases of high water tables de-watering equipment may be required.
3. Pour the concrete base to a level of AT LEAST 300mm and level. Re-enforcing mesh is recommended prior to concrete being introduced. Allow initial set.
4. Lower the tank into position onto wet concrete using slings taking care not to damage any external flanges or pipework. Ensure correct orientations of the inlet/outlet pipework and any other connections.
5. Stabilise tank in excavation taking care not to distort unit.
6. Place temporary covers over all tank apertures

7. Commence back filling with concrete at a maximum of 500mm lifts allowing an initial set before the next pour, at the same time commence charging each chamber of the tank with water such that the levels of concrete and water remain equal. The concrete needs to be evenly distributed around the tank at all times.
DO NOT DISCHARGE CONCRETE DIRECTLY ONTO THE TANK BODY.
8. Ensure the concrete is worked under the tank to prevent voids compact by hand. **Do not use vibrating pokers.** Over compaction of the concrete may result in damage or distortion of the tank structure.
9. Connect and seal pipe work. NB: Tanks supplied with loose turret(s). The turret(s) should be fitted into position and a waterproof seal made between the mating services with a proprietary waterproof sealant (not of SPSE supply). In areas of high water table, it may be necessary to wrap suitable tape or equivalent around the joint to prevent water ingress.
It is the responsibility of the installer to ensure a water tight seal.
10. Continue placing concrete until a minimum cover of 230mm above the top of the tank is achieved (based on a maximum turret depth of 1m).
11. Back fill excavation to ground level. Free flowing material (not sand) may be used above concrete if desired. Position manhole covers and frames over turrets.

NOTE

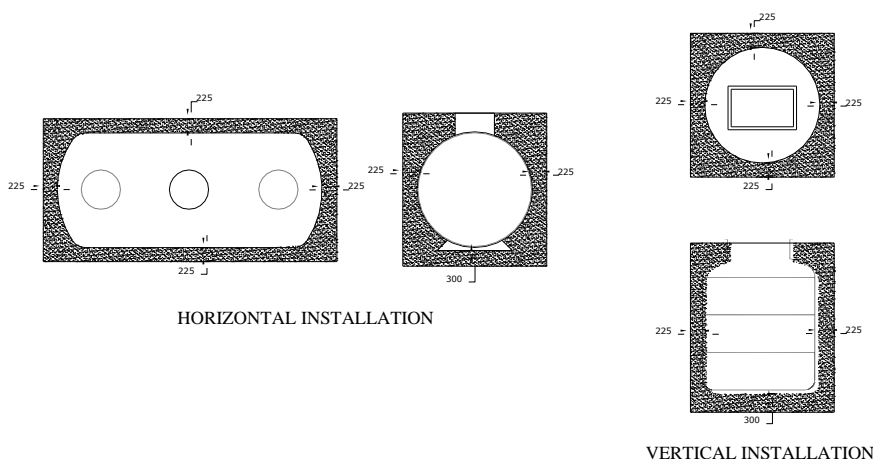
- a) In areas where very high water tables are a problem it may be advisable to provide a weighing slab to prevent flotation.
- b) If installed in areas of traffic or if superimposed loadings will be applied above the tank, a suitably designed reinforced concrete slab should be constructed to dissipate any of these loadings from the unit. A suitably compressible material will be required between the slab and the unit if the slab is constructed directly above the tank.

INSTALLATION NOTES

All installation procedures should be carried out observing the requirements of the **Health and Safety at Work Act** and involving good building practice.

During installation the following will be required.

- 1) Normal construction equipment and plant
- 2) Concrete to 20 Newton's/mm and 30-55 slump
- 3) An adequate supply of water capable of keeping up with the rate of concrete back-filling
- 4) Pumping equipment where necessary



Southern Pump Services

Engineering Limited

Specialists in Foul & Storm Water Pumping Stations
Installation | Maintenance | Service

WE RECOMMEND THAT ONCE THE SYSTEM HAS BEEN COMPLETELY INSTALLED, OUR ENGINEER ATTEND THE SITE TO COMMISSION THE SYSTEM.

If any further information is required please contact Southern Pump Services Limited – 0208 991 6650