ELEMENTAL SOLUTIONS

NATURAL WASTEWATER TREATMENT · CONSERVATION · REUSE

The Wilderness Centre, Waste water treatment Gloucester County Council

Design

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Client:

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The Wilderness Centre Waste water treatment Gloucestershire County Council

1. SUMMARY

The Old filter and soakaway are falling apart. It is hoped to create a new system that is ecological. By this is meant a system that is appropriate for the centre rather than one with 'green' icons. The key to this is the geology that is itself a porous and deep filter.

2. INTRODUCTION

The use and situation of the centre was covered in the report of December 2001. The centre currently uses about 3.5 cu.m per day. It is hoped to reduce this amount by water economies in the near future.

The system consists of a separator and chamber to collect and compost the solids and a soakaway to dispose of the liquid to the soil.

3. STATEMENT OF VESTED INTERESTS

In our pursuit of environmental best practice, Elemental Solutions have developed and sourced a range of technologies for which we are at present sole UK suppliers. Where an alternative product or technology exists we will aim to make this clear as well as declaring our commercial interest or monopoly. It is not our intention to compromise our impartiality and we welcome questioning of our recommendations at all stages. Companies with whom we have a vested interest and whose products we may be recommending for this project:

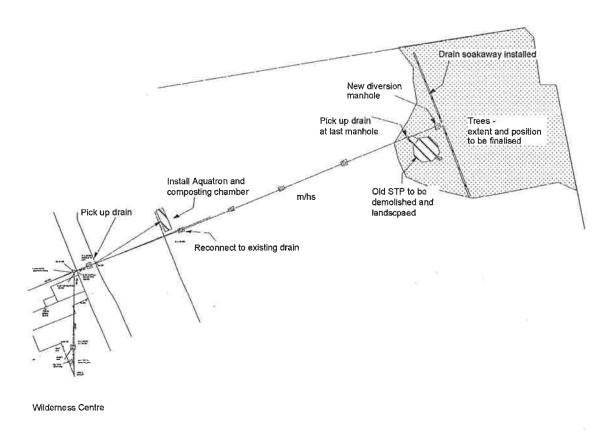
Aquatron separators

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4. DRAWINGS

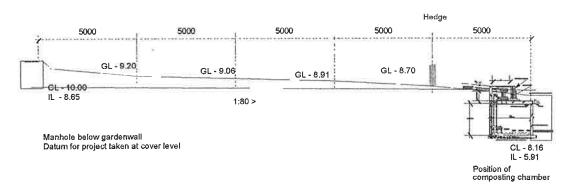
4.1.1. Drawing 1



This shows the outline of the whole system in situ. The jobs which need to be done are shown;-

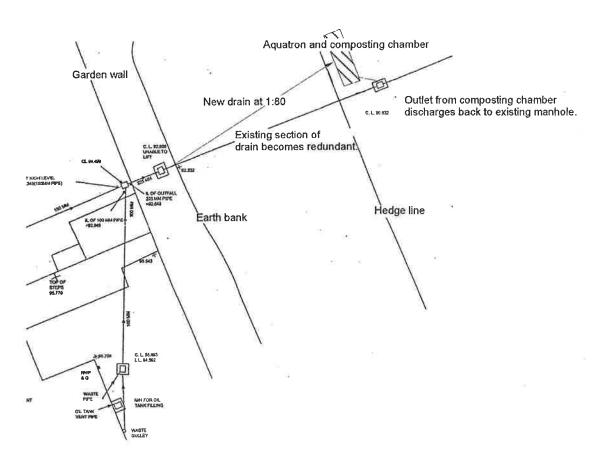
- A trench is dug across the flat lawn below the ha ha wall
- The Aquatron chamber is constructed
- The effluent from the Aquatron is set back to the old drain run
- The existing pipe run is continued below the existing septic tank to a new manhole
- The clinker is excavated from the existing filter bed and installed into one arm of the trench arch soakaway
- The new sewage system is connected up
- The old sewage system is demolished and the rubble is put in the second arm of the trench arch soakaway
- The site is landscaped
- The lower site is fenced off and planted with trees

4.1.2. Drawing 2



The levels across the flat lawn below the ha ha wall are given with the suggested pipe run in relation to the new Aquatron chamber

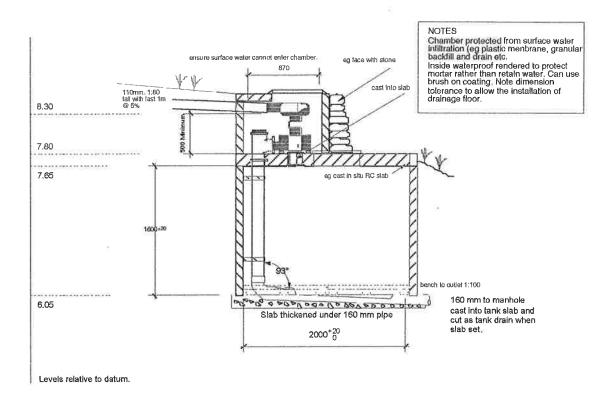
4.1.3. Drawing 3



The information from the section in drawing 2 is clarified in the plan in this drawing. The new pipe run avoids the existing run so the Aquatron chamber can be constructed whilst the old run continues to function.

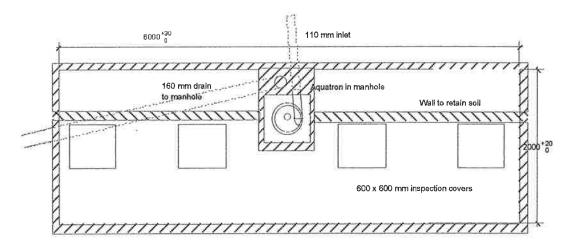
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4.1.4. Drawing 4



This section gives details of the Aquatron chamber.

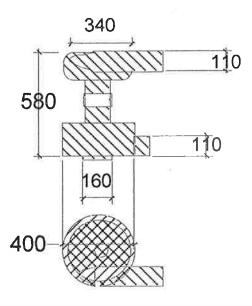
4.1.5. Drawing 5



The same tank is seen in section for clarification

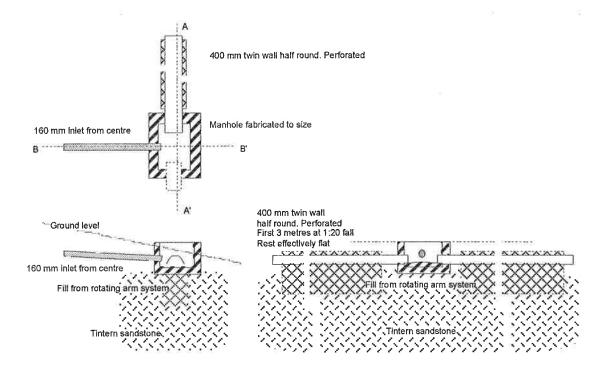
4.1.6. Drawing 6

This simply gives the dimensions of the Aquatron separator itself



4.1.7. Drawing 7

This indicates how the soakaway is to be constructed.



If you have any questions please get back to me a bout the system report.

Sincerely

Mark Moodie, Elemental Solutions.