2.0 Foul Drainage.

2.1 The proposed foul drainage scheme is to run the foul discharge from the holiday let flats by buried gravity drainage pipework designed in accordance with Building Regulations Part H1 and H2 run to a septic tank treatment unit located buried in the soft landscaping about 10 metres to the west of the building. The treated run off from the septic tank treatment unit is to run to a drainage field in the soft landscaping located at last 15 metres to the west of the building and within 30 metres of tanker access for occasional removal of sludge.

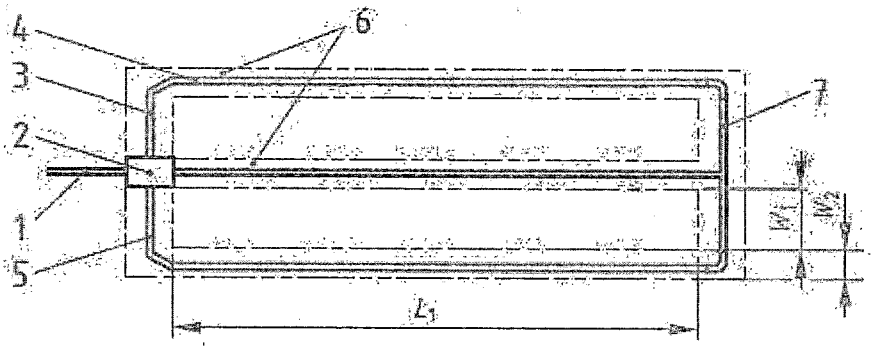
2.2 The septic tank treatment unit is to be in accordance with BS 6297, BS EN 12566 and BS EN 752 and as supplied by Kingspan or equivalent, model Biotech P12, sized for the use and occupancy of the holiday lets and located 10 metres to the west of the building.

The treatment plant is to treat to an average final effluent of less than 20mg/l Biochemical Oxygen Demand (BOD), 30mg/l suspended solids and 20mg/l ammonia and sized for a maximum flow 2.4 m^3/day.

The treatment plant is to have 3 stage treatment process:-

- Separation of incoming sewage to solids and liquid with liquid passed on the dividing baffle.
- Biological treatment of screen liquid sewage.
- Final settlement allowing solids to settle and clarified liquor to pass up to discharge to the drainage field.

2.3 The drainage field is to be sized and located as the relevant standards as 2.2 above, with indicative layout as below as 3 trench example from BS 6297. Sizing of the drainage field is to be determined by an on site percolation test of the soil infiltration rate as specified in BS 6297 and Part H2 of the Building Regulations.



Key			
a)	Five trenches	5	Sand layer, if necessary to level distribution chamber and pipework
b)	Three trenches	6	Distribution layer
c)	Two trenches	7	End connection with ventilation and access, if necessary
1	Connection pipe		
2	Distribution chamber	W_1	Natural ground width between trenches $\geq$ 1 m
3	Distribution pipe	W_2	Distribution layer width 0.3 m to 0.9 m
4	Infiltration pipe	L_1	Distribution layer length $\leq$ 30 m

3.0 Rainwater Disposal.

3.1 The proposed rainwater disposal is to be via a sustainable scheme utilising the existing pond and reed bed and filter strip ditch/depression on the south side of the site which will act as temporary ponding area for the run off as indicated on the drainage strategy plan drawing and in accordance with the SuDS scheme options outlined in the flood risk assessment to dispose of the rain water run off from the roof areas of the converted building. The courtyard, access driveway and car parking areas are to be permeable and self draining.

3.2 The rainwater drainage system will be designed in accordance with Part H3 of the Building Regulations and BS EN 752-4 to a design rainfall intensity of 0.022 litres/second per sqm on the roof areas as diagram 1 of the Regulation as applicable to the location of the site. The rainwater system gutters, down pipes and buried rainwater pipework will be sized for the run off flow rate at the design rainfall intensity and in accordance with BS EN 752.

3.3 The soil percolation rate for the rainwater disposal shall be determined in accordance with the procedure in BRE Digest 365 revised 2016 for soil infiltration rate for a return period of 100 years as required plus an allowance of 30% for climate change . This test will be used to confirm that the drainage ditch has sufficient capacity to provide infiltration to the ground from the design rainwater run off from the building.

PROPOSED SEPTIC TANK WITHIN 30 METRES OF TANKER LOCATION

PROPOSED FOUL DRAINAGE TO SEPTIC TANK AND SOAKAWAY

PROPOSED PERMEABLE DRIVEWAY, PATHS AND CAR PARKING AREA

PROPOSED RAINWATER DRAINAGE TO POND AND FILTER STRIP/DITCH.

30.01 m

EXISTING POND AND REEDS

PROPOSED FOUL DRAINAGE TO SEPTIC TANK AND SOAKAWAY

TREATED FOUL DISCHARGE TO SOAKAWAY. SIZE TO BE CONFIRMED BY SOIL PERCOLATION TEST.

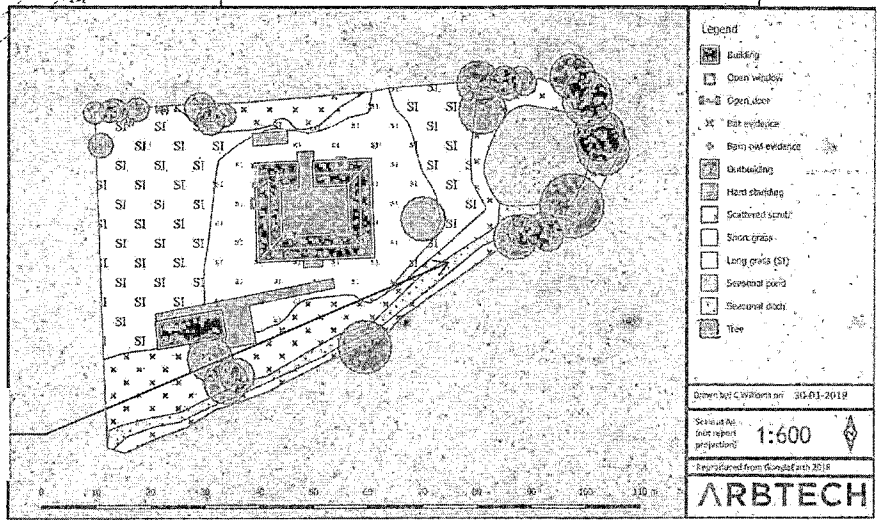
RAINWATER OVERFLOW FROM POND TO FILTER STRIP/DITCH.

PROPOSED FOUL DRAINAGE TO SEPTIC TANK AND SOAKAWAY

PROPOSED RAINWATER DRAINAGE TO POND AND FILTER STRIP/DITCH.

RAINWATER OVERFLOW FROM POND TO FILTER STRIP/DITCH.

COPY OF SITE PLAN SHOWING LANDSCAPE.



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Rev	Description	Chk'd	Date

Client Name: Mr & Mrs R Slater

Project Name: WATERSIDE FARM, EAST END, PAGNESHAM, ESSEX SS4 2EJ

Drawing Title: FOUL DRAINAGE & RAINWATER DISPOSAL STRATEGY.

Date	Scale	Drawn	Checked	Approved
06-10-22	AS SHOWN	JP	JP	JP

Project Number	Drawing Number	Revision
4770	4770-221007-01	1