Post

IC

Oil

Wood Sleepers Retaining 0.5m

Existing Log Shed Retained

Asphalt

Asphalt

Post And Wire Fence Ht=1.2m

Wood Closed Board Fence Ht=1.8m

Wood Post And Wire Fence Ht=1.2m

Wood P Ht=2.5m

Wood Ht=1.2m

Scrub

Scrub

Scrub

H1 – B2 Beech

H2 – B2 Beech

T4 – Pink

BTIC

TP

TANKED PERMEABLE PAVEMENT
L=24m,W=14m
Effective area (calculated in FLOW) = 336m²
Min. Ground level = 180.200
Sub level min. = 179.600
Gradient = 1:36.9
Catchment area =
Driveway area 342 + part roof area 49 = 0.039ha
See also note 3.

S1A
CL180.850
IL180.100

F1
CL180.350
IL179.350

F2
CL180.650
IL179.600

F3
CL180.425
IL179.675

S1B Flow Control
CL180.200
IL179.450
Orifice dia = 50mm

S1
CL179.600
IL178.750

GL179.400
IL178.950

S2
CL179.480
IL178.650

S3
CL179.400
IL178.525 (100)
IL178.475 (150)
IL178.525 approx. (rising main)

S4
CL179.425
IL178.375 (150)

S5
CL179.400
IL178.250

IL178.225

S6
CL181.000
IL180.100

S7
CL181.000
IL180.000

S8
CL177.850
IL177.100

S9
CL178.100
IL176.900

S10
CL178.600 (TBC)
IL177.250

F20
CL177.850
IL177.250

F21
CL177.850
IL177.150

F22 Pump
CL177.850
IL177.100 (in)
IL177.500 (out)

F4
CL179.900
IL179.050

F5
CL179.900
IL179.000 (TBC)

Rwp
Ceiling 180.400
IL180.200

1.000
1.001
1.002
1.003
1.004
1.005
2.000
2.001
2.002
4.000
4.001
150

Pump and chamber
CL179.450
IL176.825 (incoming 150mm)
IL175.625

SURFACE WATER PUMP
Emergency storage is designed for 30 year storm events. Two pumps are to be provided (duty and standby) in the event of pump 1 failure. The proposed dwelling will be fitted with solar panels and battery storage which will provide back-up during electricity supply failure

5Pe PACKAGE TREATMENT PLANT
(Sized to suit a 3 bedroom house,
with a short pumped outlet to drainage field)

CL180.000
IL179.650

CL179.850
IL179.550

CL179.775
IL179.075

PROPOSED DRAINAGE FIELD IS BASED ON AN ESTIMATED 52Vp. CLIENT TO CONFIRM ACTUAL Vp AND DRAINAGE FIELD SIZE ADJUSTED TO SUIT.

DISTRIBUTION CHAMBERS
MARSH INDUSTRIES OR SIMILAR

ADDITIONAL CHAMBERS WHERE REQUIRED TO ENSURE
-MIN. PIPE GRADIENT OF 1:200 AND
- MAX PIPE DEPTH OF 700mm

1:200

DRAINAGE FIELD
3 bedroom house = 5p system required
5 x 150 = 750 l/day

At = 5Pe x 52Vp x 0.25 = 65m²

Distribution trench length = 65/0.9m wide = 72.2m

SOAKAWAY - AQUACELL
L=25m, W=2m, 1200mm deep
Ground level = 179.400
Soffit level = 178.375

NOTES AND KEY

PROPOSED FOUL DRAIN 100mm UNLESS OTHERWISE SHOWN

PROPOSED FOUL WATER RISING MAIN, DESIGN BY PUMP SUPPLIER

PROPOSED STORM DRAIN 100mm UNLESS OTHERWISE SHOWN

PERFORATED SUB BASE COLLECTOR DRAIN 150mm SMOOTH BORE AND SLOTTED WRAPPED IN GEOTEXTILE. TRENCH WIDTH 450mm

100mm SMOOTH BORE SLOTTED PIPE

PROPOSED SURFACE WATER RISING MAIN, DESIGN BY PUMP SUPPLIER

PROPOSED STORM WATER DRAIN DI/STEEL PIPE. FIXINGS AND TYPE DESIGN BY OTHERS

S1 F1 PLASTIC 450mm DIA. CHAMBER.

1200 PCC CHAMBER

SILT TRAP
ACCESS COVERS TO BE C250

FLOW CONTROL CHAMBER
750x675mm PCC OR BRICK.
ORIFICE DIA = 50mm

YG YARD GULLY

FOUL PACKAGE PUMP
24 Hour storage for 5Pe = 750 litres
Alarm and control panel located to suit.
Pump and rising main design by supplier.

STORM PACKAGE PUMP
2.6mØ Spel V series or similar
Flow rate min. 12.5 litres/sec
Alarm and control panel located to suit.
Pump and rising main design by supplier.

DRAINAGE CHANNEL

TANKED PERMEABLE PAVEMENT DRIVEWAY

EXCEEDANCE ROUTE

1. FOR DRAINAGE, PERMEABLE PAVEMENT AND SOAKAWAY REFER TO 310-P1 Drainage Details.
2. FOR BRE 365 TEST REULTS AND GROUNDWATER MONITORING REFER TO 'Soakaway Tests and Groundwater monitoring data 2023-11-24.pdf'
3. REFER ALSO TO FLOW DRAINAGE ANALYSIS - 'Burberry House - Soakaway (Pumps off) Jan 2024.pdf' AND 'Burberry House - Soakaway (Pumps on) Jan 2024.pdf'

| REV | DATE | CAD | CHKD | DESCRIPTION |
|---|---|---|---|---|
| P3 | 15.01.24 | | | Permeable pavement and soakaway layout revised |
| P2 | 04.12.23 | | | Storm pump arrangement revised |
| P1 | 24.11.23 | | | First Issue |

STATUS: Preliminary

KB2 Consulting Engineers Ltd
W: KB-2.co.uk
T : 0117 929 7949
E : info@kb-2.co.uk
12 Dowry Square, Hotwells, Bristol, BS8 4SH

CLIENT:
TONY ILES

PROJECT:
BURBERRY HOUSE

DRAWING:
Proposed Drainage Layout
Sheet 1

SCALE: 1:100 SIZE: A1 FIRST ISSUE: Nov 23

CAD: ENG: CHECKED:

| PROJECT.No | COMPANY | VOLUME | LEVEL | TYPE | ROLE | DRAWING.No | REV |
|---|---|---|---|---|---|---|---|
| 223123 | KB2 | – | – | – | – | 300 | P3 |