

Winter Soil Infiltration Testing Results

TP#1 BRE365 Trial Pit – 1130mm long x 490mm wide x 500mm deep
Wednesday February 25th 2026 -- 4.920 E-06 metres/second
Thursday February 26th 2026 -- 4.156 E-06 metres/second
Friday February 27th 2026 -- 3.745 E-06 metres/second

The Minimum Rate used in the calculations from the three tests within the Trial Pit TP#1 was 3.745 E-06 metres/second.
A Factor of Safety of 3 was applied in the calculations for the design for the Geocellular Soakaway Structure.

198 square metres measured Roof Area
Urban Creep @ 10% addition >> 19.8 square metres
Total Contributing Roof Area >> 217.8 square metres

70 square metres Permeable Pavement
Urban Creep not applicable here
60mm Porous Paving Blockwork
50mm Laying Course
340mm No-Fines Coarse Graded Aggregate
Total Depth >> 450mm

DRAWING LEGEND

SURFACE WATER DRAINAGE

SIC	INSPECTION CHAMBER CP DENOTES CATCHPIT
SW	SURFACE WATER SEWER
R	RAINWATER PIPE
RE	RODDING EYE

FOUL WATER DRAINAGE

FW	EXISTING FOUL WATER SEWER
FIC	INSPECTION CHAMBER
FW	FOUL WATER SEWER
DP	DRAINAGE POINT

NOTES		
CONTRACTORS MUST VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING ANY WORK ON SHOP DRAWINGS		
DO NOT SCALE FROM THIS DRAWING		
RCD CONSULTANTS LTD COPYRIGHT		
NOTES		
1. ALL DIMENSIONS IN MILLIMETERS UNLESS NOTED OTHERWISE.		
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER ENGINEERING DRAWINGS AND CALCULATIONS ASSOCIATED WITH THIS PROJECT.		
3. ALL COMPONENTS AND MATERIALS ARE TO BE MANUFACTURED AND SUPPLIED IN ACCORDANCE WITH THE RELEVANT BRITISH STANDARDS, AND Laid AND BACKFILLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND THE RELEVANT BRITISH STANDARDS.		
4. THE CONTRACTOR SHALL, BEFORE COMMENCING THE WORKS, VERIFY ALL SITE AND SETTING OUT DIMENSIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TRUE AND PROPER SETTING OUT OF THE WORKS AND FOR THE CORRECTNESS OF THE POSITION, LEVELS, DIMENSIONS, AND ALIGNMENT OF ALL PARTS OF THE WORKS.		
5. ALL BUILDING DRAINAGE TO BE INSTALLED, AND TESTED IN COMPLIANCE WITH THE BUILDING REGULATIONS 2000 DRAINAGE AND WASTE DISPOSAL APPROVED DOCUMENT H 2002 EDITION.		
6. SMALL LIGHTWEIGHT ACCESS COVERS SHOULD BE SECURED (FOR EXAMPLE WITH SCREWS) TO DETER UNAUTHORISED ACCESS.		
7. ALL ABOVE GROUND DRAINAGE TO INCORPORATE RODDING ACCESS FACILITIES.		
8. IN-SITU CONCRETE FOR USE IN GENERAL DRAINAGE WORKS, GRADE TO BS: 5328.		
9. FOR INTERNAL DRAINAGE POSITIONS REFER TO ARCHITECT'S CURRENT WORKING DRAWINGS.		
10. FOR LANDSCAPING SURFACE MATERIAL FINISHES REFER TO ARCHITECT'S CURRENT WORKING DRAWINGS.		
11. ALL PIPES TO BE 100mm DIAMETER UNLESS NOTED OTHERWISE.		

EXISTING AND PROPOSED FLOOD EXCEEDANCE ROUTE

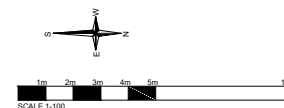
Shallow Soil Infiltration Trial Pit TP#1 @ 500mm deep

Groundwater Monitoring Point GWP #1 Peak Groundwater Level at 4.331 metres AOD

110mm diameter vent from the Soakaway, with fitted cowl, set to upstand of 400mm Above Ground Level, carefully obscured within the landscaped border area. Full details in the Constructional Details.

GEOCELLULAR STORAGE
SOAKAWAY 6m00 X 12m00
FOOTPRINT AREA 72m2
COVER LEVEL 6.00
SOAKAWAY SOFFIT 5.65
SOAKAWAY BASE 5.35
ROOF AREA (inc Urban creep) 217.8m2
DRIVEWAY AREA 70 m2
TOTAL DRAINED AREA 287.8m2

PERMEABLE PAVING ENTRANCE & DRIVEWAY
FOOTPRINT AREA 70m2
BLOCKWORK COVER LEVEL 5.80
TOP OF COARSE GRADED AGGREGATE 5.69
BASE OF COARSE GRADED AGGREGATE 5.35
DEPTH OF COARSE GRADED AGGREGATE 0.34
FORMATION LEVEL 5.35



REV	AMENDMENT	DATE	CHKD
P8	IMPERMEABLE AREAS ADDED	09.08.2026	RAC
P7	PRELIMINARY ISSUE	06.08.2026	RAC
P6	PRELIMINARY ISSUE	17.04.2026	RAC
P5	PRELIMINARY ISSUE	14.04.2026	RAC
P4	PRELIMINARY ISSUE	23.03.2026	RAC
P3	PRELIMINARY ISSUE	15.09.2025	RAC
P2	PRELIMINARY ISSUE	10.06.2025	RAC
P1	PRELIMINARY ISSUE	09.06.2025	RAC

DRAWING STATUS			
PRELIMINARY			
RCD			
RCD CONSULTANTS LTD EMAIL: ray@rcd-consultants.com			
CLIENT			
PROJECT PROPOSED RESIDENTIAL DEVELOPMENT 1 BURLEY ROAD FELPHAM, PO22 7NF			
DRAWING TITLE DRAINED AREAS PLAN			
CIVILS			
SCALE 1:100 @ A1 1:200 @ A3	DRAWN BY STC	CHECKED RAC	DATE JUN 2025
DRAWING NUMBER 1111-2528-IMP-10-a			REVISION P8