

es	N.BSOAKAWAY SIZES HAV RATES TO BE CONFIRMED	'E BEEN DERVIDED FRO AT BASE LEVEL OF SOA	OM SUPPLEMENTARY PERCOLATIO KAWAY AT ACTUAL LOCATION PRI	N TESTING UNDERTAKEN B' OR TO THE COMMENCEMEN	Y BROWNFIELD CONSULTAN	CY ON JULY 2016 & F AKAWAY STRUCTUR	PERCOLATION E.		
te Cover Level	Incoming Invert Level	Effective Depth	Base Level of Soakaway	Type of Soakaway	Size of Soakaway (h)	Area	Percolation Value	Pit Diameters (m)	100year+30% level
	114.70	1m	113.70	Trench	2mx 14m	0.026	1.1x10-4	-	114.80
	115.05	0.75m	114.30	Trench	1m x 10m	0.014	1.4x10-4	-	115.21
	114.10	0.7m	113.40	Trench	1m x 20m	0.027	1.1x10-4	-	114.37
	113.40	0.7m	112.70	Trench	1m x 20m	0.023	1.1x10-4	-	114.527
	112.80	0.8m	112.00	Trench	1m x 10m	0.008	9x10-6	-	113.138
	113.85	1.15m	112.70	Trench	1.5m x 9m	0.012	9x10-6	-	114.061
	112.30	0.7m	111.60	Trench	1.4m x 24m	0.028	9x10-6	-	112.884
	113.35	1.15m	112.20	Trench	1.2m x 24m	0.022	9x10-6	-	113.55
	113.90	0.6m	113.30	Trench	0.6m x 21m	0.024	3.9x10-4	-	113.915
	114.40	0.6m	113.80	Trench	0.6m x 34m	0.026	2.4x10-4	-	114.55
	112.65	0.7m	111.95	Trench	1.5m x 11m	0.032	2.4x10-4	-	113.128
	112.20	0.6m	111.60	Trench	1m x 10m	0.016	2.4x10-4	-	112.77
	114.00	0.7m	113.30	Trench	0.6m x 28m	0.022	9.4x10-5	-	114.138
	114.20	0.6m	113.60	Trench	0.6m x 12m	0.011	3.9x10-4	-	114.30
	115.10	0.6m	114.50	Trench	1m x 24m	0.029	1.4x10-4	-	115.302
	114.40	0.6m	113.80	Trench	1m x 20m	0.022	1.4x10-4	-	114.528
	114.05	0.6m	113.45	Trench	0.6m x 18m	0.014	1.4x10-4	-	114.142
	114.20	1.3m	112.90	Trench	0.6m x 18m	0.007	4.2x10-3	-	112.954
	-	-	-	-	-	-	-	-	
	114.50	1.5m	113.00	Ring	1.05m Ø	0.013	3.9x10-4	1.575	
	114.00	1.15m	112.85	Ring	1.2m Ø	0.018	9x10-6	2.88	
	114.00	1.85m	112.15	Ring	1.2m Ø	0.012	9x10-6	2.88	
	113.40	1.25m	112.15	Ring	1.2m Ø	0.009	9x10-6	2.88	
	113.60	1.4m	112.20	Ring	1.2m Ø	0.009	3.9x10-4	2.88	
	112.90	0.5m	112.40	Ring	1.2m Ø	0.040	4.2x10-3	2.88	
	111.40	0.8m	110.60	Cellular Storage	4m x 15m x 0.8m	0.170	6.9x10-4	N/A	

 100mm compacted thickness coarse sand surround. - Geotextile wrap as Terram 1000 or similar approved. - 1000mm long x 500mm wide x

400mm high medium duty modular storage units as Wavin AquaCell Lite or similar approved Note; For duty, minimum cover and maximum depth SEE TABLE.

675

Max

675

1200

	Landcsaped Area	Trafficked Area Vehicles up to 2500kg	Trafficked Area Vehicles up to 2500kg		
Unit Type	Aquacell Lite	Aquacell Core	Aquacell Plus		
Minimum Cover	0.3m	0.75m	0.75m		
Max depth to base of unit	1.5m	4.25m	5.08m		

Soakaway (Modular Construction) The soakaway is to be constructed and backfilled in accordance with the

specification of the manufacturer of the modular storage units.

675 x 675mm clear opening and above $874mm\emptyset$ pipe 750x675mm square opening manhole cover and frame to BS EN124 bedded on class M1, M2 or Epoxy material may be used if required. M1, M2 or Epoxy Mortar haunching to manhole cover and frame Type 2 cover frame seating rings with 600x600 central access hole Type 1 cover frame seating ring with 600x600 eccentric access hole (BS752-3) bedded on mortar 10mm uncompressed thickness of approved sealant to all horizontal joints Precast concrete chamber sections ← 150thick Concrete surround. Ring dia. to be 1050mm where depth to soffit is less than 1.5m and 1200mm where depth to soffit is greater than 1.5m where pipe diameters are upto and including 150mm dia. Plastic encapsulated double step rungs. Precast concreet chamber sections set 75mm into base slab — Grade GEN3 conceret (Sulphate resisting) Typical Silt Trap Chamber

All chambers before entering into a Soakaway are to be silt traps to prevent ingress of detritus.

For depths greater than 1.2m.

The Contractor is to check and verify in conjunction with the Architects details all setting out points. building and site dimensions, levels and sewer invert levels at connection points and ensure that they fully conversant with the contents and requirements of the site investigation report before work starts The Contractor is to comply in all respects with current building legislation, British Standard Specifications, Building Regulations etc., whether or not specifically stated on this drawing.

This drawing is not intended to show details of ground conditions or ground contaminants. Each area

ground relied upon to support any structure depicted (including drainage) must be investigated by the Contractor any areas of formation for said structures which do not accord with the anticipated condition as described in the site investigation report are to be immediately notified to the Engineer, where applicable. Any suspect fluid ground or ground contaminants on or within the ground should be further investigated by a suitable expert. Any earthworks shown indicate typical slopes for guidance only and should be investigated further by a suitable geotechnical expert. Where existing trees are shown to be retained they should be subject to a full Arboricultural inspecti for safety. All trees are to be planted so as to ensure they are a minimum of 5 metres from buildings and

3 metres from drainage and services, where applicable. A foundation is to be provided to accommoda the proposed tree planting, where applicable. © This drawing and the building works depicted are the copyright of Banners Gate Ltd and may not be reproduced or amended except by written permission. No liability will be accepted for amendment

made by other persons. GENERAL NOTES

1. This drawing is to be read in conjunction with relevant architectural and engineering drawings. 2. Levels indicated in blocks are Finished floor levels and are 150mm above adjacent

finished ground levels unless otherwise shown. 3. Levels of the existing road at the point of tie-in with proposed site road must be

checked prior to commencement of works. 4. Any discrepancies between the details shown and actual on site conditions to be reported immediately to the engineer prior to commencement of works.

5. CALA project number BA00013 BUILDING DRAINAGE

1. Building drainage shall comply with BS EN 752 1996 and the Building Regulations 2002 part H.

2. All building drainage shall be 100mm diameter unless shown otherwise.

3. All connections to adoptable sewers shall be 150mm diameter.

4. All building drainage shall be clayware to BS EN 295 or uPVC to BS 4660 with Class B or Class S bedding unless shown otherwise.

5. All pipes under buildings without suspended floors shall have Class S bedding.

6. Concrete protection shall be provided to all pipes with less than 300 cover in pedestrian areas, to all pipes with less than 600mm cover private driveways not used by commercial vehicles, and to all pipes with less than 1200mm cover in roads or private driveways used by commercial vehicles. Where concrete surround is specified flexibility of joints is to be maintained by using compressible bitumen impegnated fibreboard at each joint.

7. Where a pipe passes through a wall an opening is to be formed through the wall to give at least 50mm clearance around the pipe. Brickwork over shall be supported by a lintel. The opening is to be masked each side of the opening with rigid sheet material. Pipes embedded in walls shall have a joint formed within 150mm of each wall face. A rocker pipe of maximum 600mm length shall be used to continue the pipewok.

8. Where a pipe trench is within 1m of a building, the pipe is to be provided with concrete protection and the trench filled with concrete up to a level below the building equal to the distance from the building less 150mm.

9. Where the formation of a pipe trench is above original ground level levels are to be made up with well compacted DTp Type 2 material or better.

10. Inspection chambers located within garages are to have double seal bolt down covers.

11. All private drives which fall towards a public highway and exceed two parking bays in area are to be provided with a suitable gully or drainage channel to prevent water discharging onto the highway.

12. Where a driveway falls towards a dwelling it shall be provide with a suitable gully or drainage channel to prevent water damaging the building.

13. The invert level of an access chamber on a foul drain from a building is to be set 600mm below finished ground level unless otherwise shown.

14. The invert level of a rodding eye at the head of a surface water drain is to be set 450mm below finished ground level unless shown otherwise.

FOR CONSTRUCTION

Subject to Section 38 & 104 approval

с	Soakaway dimensions amended to suit additio	27/07/16	JB					
B	Content to the suit clients of the suit client	21/10/15	LJ					
-	First Issue	15/07/15	JB					
Rev.	Description		Date	Ву				
Client	Client							
Project								
Cotefield Farm Bodicote								
Title Construction Details Soakaways								
BANNERS GATE CIVIL, STRUCTURAL & ARCHITECTURAL DESIGN SERVICES 10-11 Birmingham Street, Halesowen, West Midlands B63 3HN Tel: 0121 687 1500 Fax: 0121 687 1501 E-mail: mail@bannersgate.com								
Scale	NTS @ A1	Drawn LJ						
Date	July 15	Checked JB						
File 15	031/dwgs/civils/current	Drawing 15031 /	311 C	_				