

## Stormwater Management - Soakaway Design

### Project & Site Details

|                |                     |             |              |
|----------------|---------------------|-------------|--------------|
| Project Number | MWH050813-01        | Produced by | M. Whittaker |
| Site Name      | 33 Ferringham Lane  | Checked by  |              |
| Client         | Chris Uden Aquatech |             |              |
| Location       | Worthing            | Date        | 5-Aug-13     |

### Drainage Details

|                                                                 |      |                                                   |                   |
|-----------------------------------------------------------------|------|---------------------------------------------------|-------------------|
| Area to be drained (m²)                                         | 307  | Return Period (years)                             | 30                |
| Catchment                                                       | Roof | Rainfall ratio, r value<br>(M5 - 60 ÷ M5 - 2 day) | 0.35              |
| Rainfall for 60 minute storm,<br>5 yr frequency (M5 - 60), (mm) | 19   | Country                                           | England and Wales |
| Percentage run-off (%)                                          | 90   | Climate Change (%)                                | 25                |
| Factor of safety against failure                                | 2    | AquaCell Units Required                           | Core              |

### Soil Parameters

|                                |          |                          |         |
|--------------------------------|----------|--------------------------|---------|
| Infiltration coefficient (m/s) | 8.07E-06 | Source                   | S.I.R.  |
| Soil Type                      | Unknown  | Depth to Groundwater (m) | Unknown |

### Soakaway Parameters

|            |     |           |    |
|------------|-----|-----------|----|
| Length (m) | 6   | Width (m) | 6  |
| Depth (m)  | 0.4 | Void (%)  | 95 |

### Results

|                               |       |
|-------------------------------|-------|
| Critical storm duration (hrs) | 10.00 |
| Storage Height (m)            | 0.40  |
| Time to half empty (hrs)      | 10.88 |

### AquaCell Modular Units

|        | Number | Dimension (m) |
|--------|--------|---------------|
| Length | 6      | 6             |
| Width  | 12     | 6             |
| Height | 1      | 0.4           |
| Total  | 72     |               |

