1 Design Considerations

1.1 Attenuation

- The combined run off rate has been noted as a maximum of 35l/s, with 30l/s being utilised by the Triton Square connection. The preliminary design for St Anne's was based on 5 l/s flow from site.
- The limited footprint of the site means the current size and location of the attenuation units is the maximum they can be, plan size, depth size cannot be increased due to the final connection depth
- Rainwater into the system has been conservatively calculated as the full plan area of the site has been accounted for.
- Inflow could be reduced by reduction of water flowing into drains;
  (a) Permeable rear yard
  (b) Taking account of the storage volume within biodiverse roof and water butt
- However the storage unit available cannot be increased due to site constraints and any reduction in flow by decreasing flow at vortex control may lead to exceedance and further maintenance

1.2 Exceedance

- No exceedance is expected within the current scheme due to conservative design

1.3 Sewer Connection

- Thames Water confirmed no objection to combined capacity of 35l/s at pre-planning stage through a combined application.
- A conditional consent for a new connection has been approved by Thames Water in application DS4073672.
  - 1 x 150mm diameter direct combined water connection to public 1067mm x 889mm combined water sewer in Laxton Place, via a core drilled saddle connection.

2 Maintenance Plan

This maintenance plan outlines the long term maintenance of the proposed sustainable drainage system installed at St Anne's development.

- The SUDS strategy has been designed as a low maintenance system utilising below ground attenuation
- Manholes with sumps have been provided at either end of the attenuation tank
- No access available to attenuation units it is not expected to be required as there are no moving parts
- The flow control unit has no moving parts and is self-activating and therefore require low maintenance. It is recommended that each unit be inspected monthly for three months and thereafter at six monthly intervals with hose down if required

The below plan should be read in conjunction with all relevant drawings to confirm the location of all SUDs systems on site.

REGULAR MAINTENANCE		
Item	Maintenance Task	Task Frequency
Hard Surfaces	Sweep and brush paving/ hard surfaces	Autumn (after leaf fall)
Street	Collect all litter or other debris from site	As required
OCCASIONAL TASKS		
Item	Maintenance Task	Task Frequency
Manholes	The sumps should be inspected and cleaned annually in the first instance to gauge amount of solids entering system. Remove silt and check free flow	Annually
Hydro brake	Should be periodically inspected for blockages. It is recommended that each unit be inspected monthly for three months and thereafter at six monthly intervals with hose down if required	Every 6 months
REMEDIAL TASKS		
Item	Maintenance Task	Task Frequency
Inspection points	Inspection is recommended following a major storm	As required