

1. Project & Site Details	Project / Site Name (including sub-catchment / stage / phase where appropriate)	Sion Court
	Address & post code	Sion Court, Sion Road, Twickenham, TW1 3DD
	OS Grid ref. (Easting, Northing)	E 516661 N 173457
	LPA reference (if applicable)	
	Brief description of proposed work	Demolition of 19 garages and 1 flat behind Sion Court and erection of 5 dwellings.
	Total site Area	1390 m <sup>2</sup>
	Total existing impervious area	1120 m <sup>2</sup>
	Total proposed impervious area	740 m <sup>2</sup>
	Is the site in a surface water flood risk catchment (ref. local Surface Water Management Plan)?	No
	Existing drainage connection type and location	Connection surface water sewer on Lebanon Park assumed.
	Designer Name	Sam Pucknell
	Designer Position	Consultant
	Designer Company	Wallingford HydroSolutions

2. Proposed Discharge Arrangements	<b>2a. Infiltration Feasibility</b>		
	Superficial geology classification	Langley silt member (clay and silt)	
	Bedrock geology classification	London clay formation	
	Site infiltration rate	TBC	m/s
	Depth to groundwater level	< 3	m below ground level
	Is infiltration feasible?	No	
	<b>2b. Drainage Hierarchy</b>		
		<i>Feasible (Y/N)</i>	<i>Proposed (Y/N)</i>
	1 store rainwater for later use	Y	Y
	2 use infiltration techniques, such as porous surfaces in non-clay areas	N	N
	3 attenuate rainwater in ponds or open water features for gradual release	N	N
	4 attenuate rainwater by storing in tanks or sealed water features for gradual release	Y	Y
	5 discharge rainwater direct to a watercourse	N	N
	6 discharge rainwater to a surface water sewer/drain	Y	Y
	7 discharge rainwater to the combined sewer.	N	N
<b>2c. Proposed Discharge Details</b>			
Proposed discharge location	Surface water sewer under Lebanon Park		
Has the owner/regulator of the discharge location been consulted?	Yes, see Appendix 2 of the report		

3a. Discharge Rates & Required Storage				
	Greenfield (GF) runoff rate (l/s)	Existing discharge rate (l/s)	Required storage for GF rate (m <sup>3</sup> )	Proposed discharge rate (l/s)
Q <sub>bar</sub>	0.06	<del>0.06</del>	<del>0.06</del>	<del>0.06</del>
1 in 1	0.05	0.7		
1 in 30	0.16	1.92		
1 in 100	0.22	2.52		
1 in 100 + CC	<del>0.22</del>	<del>2.52</del>	65	0.2
Climate change allowance used		40%		
3b. Principal Method of Flow Control		Hydrobrake		
3c. Proposed SuDS Measures				
	Catchment area (m <sup>2</sup> )	Plan area (m <sup>2</sup> )	Storage vol. (m <sup>3</sup> )	
Rainwater harvesting	290	<del>290</del>	0	
Infiltration systems	0	<del>0</del>	0	
Green roofs	0	290	0	
Blue roofs	0	0	0	
Filter strips	0	0	0	
Filter drains	0	0	0	
Bioretention / tree pits	0	0	0	
Pervious pavements	420	420	0	
Swales	0	0	0	
Basins/ponds	0	0	0	
Attenuation tanks	0	<del>0</del>	65	
<b>Total</b>	<b>710</b>	<b>710</b>	<b>65</b>	

4a. Discharge & Drainage Strategy	Page/section of drainage report
Infiltration feasibility (2a) – geotechnical factual and interpretive reports, including infiltration results	Section 5.5.3
Drainage hierarchy (2b)	Section 5.5
Proposed discharge details (2c) – utility plans, correspondence / approval from owner/regulator of discharge location	Section 5.2
Discharge rates & storage (3a) – detailed hydrologic and hydraulic calculations	Section 5.6
Proposed SuDS measures & specifications (3b)	Section 5.6
4b. Other Supporting Details	Page/section of drainage report
Detailed Development Layout	Section 2.3
Detailed drainage design drawings, including exceedance flow routes	Appendix 4
Detailed landscaping plans	Section 2.3
Maintenance strategy	Section 5.7
Demonstration of how the proposed SuDS measures improve:	
a) water quality of the runoff?	Section 5.6.1
b) biodiversity?	Section 5.5.4
c) amenity?	Section 5.5.4