

Odyssey				Page 1	
Tuscany House		Stakers Farm, Yapton 19-156			
White Hart Lane		POS A - Infiltration Blanket			
Baskingstoke RG21 4AF		Rev B			
Date 05/10/2020 11:25		Designed by AK			
File POS_A Infiltration		Checked by			
XP Solutions		Source Control 2020.1			
<u>Summary of Results for 10 year Return Period (+40%)</u>					
Half Drain Time : 1497 minutes.					
Storm Event		Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³) Status
15 min Summer		0.181	0.181	0.6	36.7 O K
30 min Summer		0.237	0.237	0.6	48.1 O K
60 min Summer		0.297	0.297	0.6	60.1 Flood Risk
120 min Summer		0.439	0.439	0.6	73.3 Flood Risk
180 min Summer		0.450	0.450	0.6	80.8 Flood Risk
240 min Summer		0.457	0.457	0.6	85.6 Flood Risk
360 min Summer		0.465	0.465	0.6	90.9 Flood Risk
480 min Summer		0.469	0.469	0.6	93.3 Flood Risk
600 min Summer		0.470	0.470	0.6	94.4 Flood Risk
720 min Summer		0.470	0.470	0.6	94.7 Flood Risk
960 min Summer		0.469	0.469	0.6	93.7 Flood Risk
1440 min Summer		0.463	0.463	0.6	89.8 Flood Risk
2160 min Summer		0.457	0.457	0.6	85.3 Flood Risk
2880 min Summer		0.452	0.452	0.6	82.0 Flood Risk
4320 min Summer		0.445	0.445	0.6	77.4 Flood Risk
5760 min Summer		0.440	0.440	0.6	74.1 Flood Risk
7200 min Summer		0.437	0.437	0.6	71.6 Flood Risk
8640 min Summer		0.434	0.434	0.6	69.7 Flood Risk
10080 min Summer		0.432	0.432	0.6	68.2 Flood Risk
15 min Winter		0.203	0.203	0.6	41.2 O K
Storm Event		Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	
15 min Summer		87.620	0.0	22	
30 min Summer		57.683	0.0	37	
60 min Summer		36.448	0.0	66	
120 min Summer		22.639	0.0	126	
180 min Summer		16.928	0.0	186	
240 min Summer		13.676	0.0	244	
360 min Summer		10.003	0.0	364	
480 min Summer		7.960	0.0	482	
600 min Summer		6.652	0.0	602	
720 min Summer		5.738	0.0	722	
960 min Summer		4.539	0.0	960	
1440 min Summer		3.269	0.0	1242	
2160 min Summer		2.374	0.0	1604	
2880 min Summer		1.907	0.0	2016	
4320 min Summer		1.430	0.0	2852	
5760 min Summer		1.183	0.0	3688	
7200 min Summer		1.034	0.0	4472	
8640 min Summer		0.933	0.0	5280	
10080 min Summer		0.861	0.0	6144	
15 min Winter		87.620	0.0	22	
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White Hart Lane		POS A - Infiltration Blanket			
Baskingstoke RG21 4AF		Rev B			
Date 05/10/2020 11:25		Designed by AK			
File POS_A Infiltration		Checked by			
XP Solutions		Source Control 2020.1			
<u>Summary of Results for 10 year Return Period (+40%)</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	0.266	0.266	0.6	54.0	O K
60 min Winter	0.431	0.431	0.6	67.6	Flood Risk
120 min Winter	0.453	0.453	0.6	82.6	Flood Risk
180 min Winter	0.465	0.465	0.6	91.2	Flood Risk
240 min Winter	0.474	0.474	0.6	96.8	Flood Risk
360 min Winter	0.483	0.483	0.6	103.2	Flood Risk
480 min Winter	0.487	0.487	0.6	106.4	Flood Risk
600 min Winter	0.490	0.490	0.6	108.1	Flood Risk
720 min Winter	0.491	0.491	0.6	108.8	Flood Risk
960 min Winter	0.491	0.491	0.6	108.7	Flood Risk
1440 min Winter	0.486	0.486	0.6	105.5	Flood Risk
2160 min Winter	0.477	0.477	0.6	99.3	Flood Risk
2880 min Winter	0.470	0.470	0.6	94.7	Flood Risk
4320 min Winter	0.459	0.459	0.6	87.1	Flood Risk
5760 min Winter	0.450	0.450	0.6	80.6	Flood Risk
7200 min Winter	0.442	0.442	0.6	75.2	Flood Risk
8640 min Winter	0.435	0.435	0.6	70.6	Flood Risk
10080 min Winter	0.328	0.328	0.6	66.6	Flood Risk
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	57.683	0.0	37		
60 min Winter	36.448	0.0	66		
120 min Winter	22.639	0.0	124		
180 min Winter	16.928	0.0	182		
240 min Winter	13.676	0.0	242		
360 min Winter	10.003	0.0	358		
480 min Winter	7.960	0.0	476		
600 min Winter	6.652	0.0	590		
720 min Winter	5.738	0.0	706		
960 min Winter	4.539	0.0	932		
1440 min Winter	3.269	0.0	1370		
2160 min Winter	2.374	0.0	1728		
2880 min Winter	1.907	0.0	2188		
4320 min Winter	1.430	0.0	3112		
5760 min Winter	1.183	0.0	3984		
7200 min Winter	1.034	0.0	4896		
8640 min Winter	0.933	0.0	5712		
10080 min Winter	0.861	0.0	6560		
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XP Solutions Source Control 2020.1		

Rainfall Details

Rainfall Model	FEH
Return Period (years)	10
FEH Rainfall Version	2013
Site Location	GB 497682 103581 SU 97682 03581
Data Type	Point
Summer Storms	Yes
Winter Storms	Yes
Cv (Summer)	0.750
Cv (Winter)	0.840
Shortest Storm (mins)	15
Longest Storm (mins)	10080
Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.227

Time (mins)	Area	Time (mins)	Area
From:	To: (ha)	From:	To: (ha)
0	4 0.154	4	8 0.073

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Model Details

Storage is Online Cover Level (m) 0.580

Complex Structure

Infiltration Blanket

Infiltration Coefficient Base (m/hr)	0.00648	Diameter/Width (m)	26.0
Safety Factor	2.0	Length (m)	26.0
Porosity	0.30	Cap Volume Depth (m)	0.330
Invert Level (m)	0.000		

Infiltration Basin

Invert Level (m)	0.430	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	1.00
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	680.0	0.150	728.0

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