

APPENDIX 6

SURFACE WATER CALCULATIONS

Catchment 1:

Quick Storage Estimate

Variables

FSR Rainfall	Cv (Summer)	0.750	
Return Period (years)	100	Cv (Winter)	0.840
Region	England and Wales	Impervious Area (ha)	11.940
Map	MS-60 (mm)	Maximum Allowable Discharge (l/s)	62.1
	Ratio R	Infiltration Coefficient (m/hr)	0.00000
		Safety Factor	2.0
		Climate Change (%)	40

Analise OK Cancel Help

Enter Maximum Allowable Discharge between 0.0 and 999999.0

Quick Storage Estimate

Results

Global Variables require approximate storage of between 8245 m³ and 11591 m³.
These values are estimates only and should not be used for design purposes.

Analise OK Cancel Help

Enter Maximum Allowable Discharge between 0.0 and 999999.0

Quick Storage Estimate: 10,755m³ of Storage

Confidential

Catchment 2:

Quick Storage Estimate

Variables

FSR Rainfall	Cv (Summer)	0.750		
Return Period (years)	100	Cv (Winter)	0.840	
Region	England and Wales	Impermeable Area (ha)	11,100	
Map	MS-G0 (mm)	20.000	Maximum Allowable Discharge (l/s)	57.7
	Ratio R	0.350	Infiltration Coefficient (m/hr)	0.00000
			Safety Factor	2.0
			Climate Change (%)	40

Enter Maximum Allowable Discharge between 0.0 and 999999.0

Analyse OK Cancel Help

Quick Storage Estimate

Results

Global Variables require approximate storage of between 7666 m³ and 10777 m³.
These values are estimates only and should not be used for design purposes.

Enter Maximum Allowable Discharge between 0.0 and 999999.0

Analyse OK Cancel Help

Quick Storage Estimate: 10,000m³ of Storage

Confidential

Catchment 3:

Quick Storage Estimate

Variables

FSR Rainfall	Cv (Summer)	0.750	
Return Period (years)	100	Cv (Winter)	0.040
Region	England and Wales	Impermeable Area (ha)	19.3
Map	M5-60 (mm)	Maximum Allowable Discharge (l/s)	100.4
	Ratio R	Infiltration Coefficient (m/hr)	0.00000
		Safety Factor	2.0
		Climate Change (%)	40

Enter Area between 0.000 and 999.999

Analyse OK Cancel Help

Quick Storage Estimate

Results

Global Variables require approximate storage of between 13327 m³ and 18735 m³.
These values are estimates only and should not be used for design purposes.

Enter Area between 0.000 and 999.999

Analyse OK Cancel Help

Quick Storage Estimate: 17,383m³ of Storage

Confidential

Catchment 4:

Quick Storage Estimate

Variables	
FSR Rainfall	100
Return Period (years)	100
Region	England and Wales
Map	20.000
Ratio R	0.350
Cv (Summer)	0.750
Cv (Winter)	0.840
Impermeable Area (ha)	6.000
Maximum Allowable Discharge (l/s)	35.36
Infiltration Coefficient (m/hr)	0.00000
Safety Factor	2.0
Climate Change (%)	40

Analyse OK Cancel Help

Enter Maximum Allowable Discharge between 0.0 and 999999.0

Quick Storage Estimate

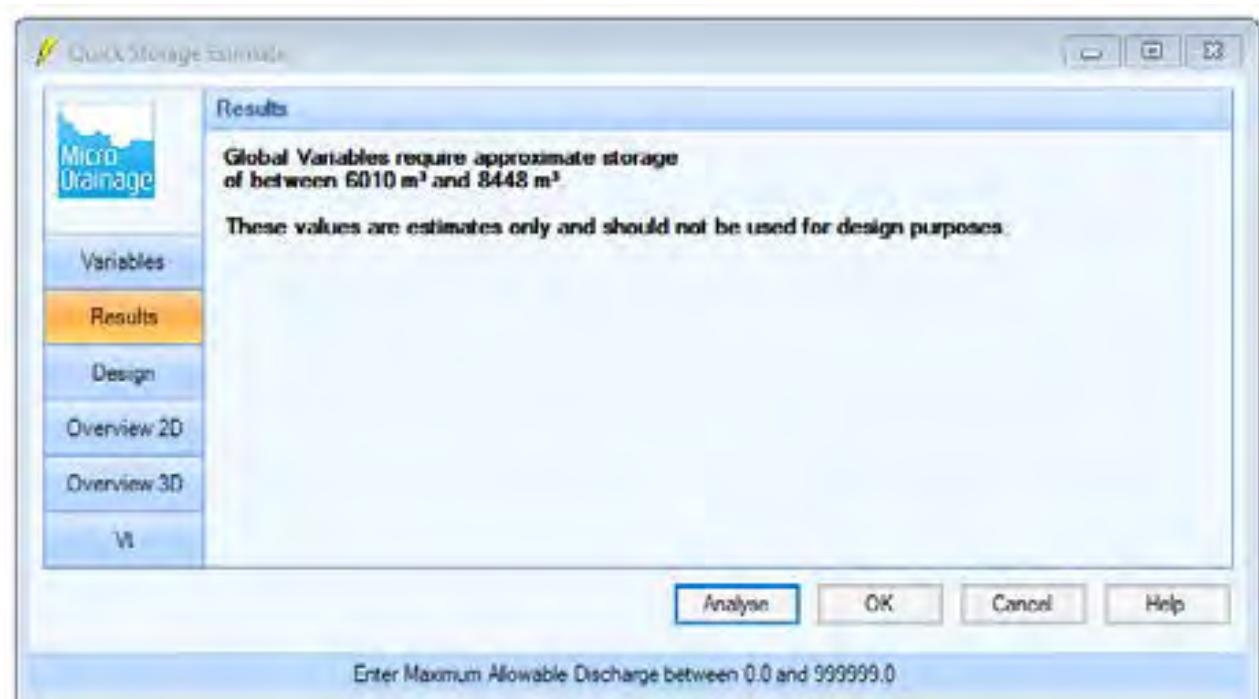
Results	
Global Variables require approximate storage of between 4694 m ³ and 6600 m ³ . These values are estimates only and should not be used for design purposes.	

Analyse OK Cancel Help

Enter Maximum Allowable Discharge between 0.0 and 999999.0

Quick Storage Estimate: 6,125m³ of Storage

Catchment 5:



Quick Storage Estimate: 7,850m³ of Storage

APPENDIX 7

FOUL WATER CALCULATIONS

BLOCK	FLATS			HOUSES				TOTAL HOMES	Peak Flow Rate from each Block (based on 4,000 l/ unit /day)	Average Flow Rate Avg = (Peak/6)
	1B2P	2B4P	TOTAL	2B4P	3B5P	4B6P	TOTAL			
S	87	118	205	0	0	0	0	205	9.47	1.6
F	18	24	42	12	30	21	63	105	4.87	0.8
A	0	0	0	14	64	53	131	131	6.06	1.0
B	1	2	3	27	188	72	287	290	13.45	2.2
C	7	9	16	12	185	118	315	331	15.31	2.6
D	40	53	93	37	44	22	103	196	9.07	1.5
E	41	55	96	40	109	45	194	290	13.41	2.2
G	27	37	64	14	42	8	64	128	5.93	1.0
H	211	285	495	0	0	0	0	495	22.94	3.8
P									0.00	0.0
Q									0.00	0.0
I	0	0	0	6	2	6	14	14	0.65	0.1
J	4	5	9	20	57	36	113	122	5.63	0.9
K	5	7	13	36	98	16	150	163	7.53	1.3
L	10	13	22	14	52	24	90	112	5.21	0.9
M	0	0	0	12	88	79	179	179	8.29	1.4
N	0	0	0	7	32	78	117	117	5.42	0.9
O	0	0	0	28	80	14	122	122	5.65	0.9
	449	608	1058	279	1071	592	1942	3000	138.87	23.1
								Secondary School	18.75	3.1
								Care Centre	20	3.3
								Primary School	11.38	1.9
								Total Demands (l/s)	189.00	31.50

Connection
via pump
station

Connection
via TWMH
5601

Connection
via 2701

Connection
via TWMH
1305

APPENDIX 8

FLOOD EXCEEDANCE ROUTES