


Knapp Hicks & Partners Ltd		Page 1
Kingston House Long Barrow Road Orbital Park      Ashford	36939 Dover Road Sandwich	
Date 21/01/2021 File 36939-KHP-CA-C-0001-SUR...	Designed by LB Checked by DK	
Causeway	Network 2020.1	

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m <sup>3</sup> /ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coefficient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

Number of Input Hydrographs	0	Number of Storage Structures	7
Number of Online Controls	2	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details


Rainfall Model	FSR	Ratio R	0.400
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)		26.250 Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0	DVD Status	ON
Analysis Timestep		Fine Inertia Status	ON
DTS Status			ON

Profile(s)		Summer and Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080	
Return Period(s) (years)		100
Climate Change (%)		40

**WARNING: Half Drain Time has not been calculated as the structure is too full.**

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surchage	First (Y) Flood	First (Z) Overflow	Overflow Act.
1.000	1	15 Winter	100	+40%	100/15 Summer			
2.000	2	15 Winter	100	+40%	100/15 Summer	100/15 Winter		
1.001	3	15 Winter	100	+40%	100/15 Summer			
1.002	4	15 Winter	100	+40%	100/15 Summer			
1.003	5	15 Winter	100	+40%	100/15 Summer			
1.004	6	480 Winter	100	+40%	100/15 Summer			
1.005	8	600 Winter	100	+40%	100/15 Summer			
3.000	8	960 Winter	100	+40%	100/15 Summer			
1.006	7	600 Winter	100	+40%	100/15 Summer	100/180 Winter		
4.000	9	30 Winter	100	+40%	100/15 Summer	100/30 Winter		
1.007	10	600 Winter	100	+40%	100/15 Summer	100/120 Winter		
1.008	11	360 Summer	100	+40%	100/15 Summer	100/60 Summer		

Knapp Hicks & Partners Ltd		Page 2
Kingston House Long Barrow Road Orbital Park Ashford	36939 Dover Road Sandwich	
Date 21/01/2021 File 36939-KHP-CA-C-0001-SUR...	Designed by LB Checked by DK	
Causeway		Network 2020.1

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Water		Surcharged		Flooded		Half Drain Pipe		Status
		Level (m)	Depth (m)	Volume (m³)	Flow / Cap. (l/s)	Overflow (l/s)	Time (mins)	Pipe Flow (l/s)		
1.000	1	7.430	0.395	0.000	0.39			32.0		SURCHARGED
2.000	2	7.343	0.768	3.354	1.48			10	53.1	FLOOD
1.001	3	7.372	0.905	0.000	1.17				77.3	FLOOD RISK
1.002	4	7.021	0.763	0.000	1.56				89.5	SURCHARGED
1.003	5	6.888	0.683	0.000	2.22			5	141.9	SURCHARGED
1.004	6	6.498	0.424	0.000	0.12				33.6	SURCHARGED
1.005	8	6.496	0.736	0.000	0.21				30.3	FLOOD RISK
3.000	8	6.494	0.744	0.000	0.02				3.6	SURCHARGED
1.006	7	6.494	0.791	34.297	0.06				12.6	FLOOD
4.000	9	6.580	1.005	0.126	1.18				63.0	FLOOD
1.007	10	6.485	1.029	26.688	0.07				10.7	FLOOD
1.008	11	6.802	1.769	2.343	0.36				5.0	FLOOD

PN	US/MH Name	Level Exceeded
1.000	1	
2.000	2	2
1.001	3	
1.002	4	
1.003	5	
1.004	6	
1.005	8	
3.000	8	
1.006	7	9
4.000	9	1
1.007	10	12
1.008	11	19