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

Simulation Criteria

Areal Reduction Factor	1.000	Manhole Headloss Coeff (Global)	0.500	MADD Factor * 10m³/ha Storage	2.000
Hot Start (mins)	0	Foul Sewage per hectare (l/s)	0.000	Inlet Coeffiecient	0.800
Hot Start Level (mm)	0	Additional Flow - % of Total Flow	0.000	Flow per Person per Day (l/per/day)	0.000

Number of Input Hydrographs 0	Number of Offline Controls 0	Number of Time/Area Diagrams 0
Number of Online Controls 1	Number of Storage Structures 1	Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model	FEH	D3 (1km)	0.234
FEH Rainfall Version	1999	E (1km)	0.332
Site Location	GB 526100 184450 TQ 26100 84450	F (1km)	2.519
C (1km)	-0.025	Cv (Summer)	0.750
D1 (1km)	0.330	Cv (Winter)	0.840
D2 (1km)	0.277		

Margin for Flood Risk Warning (mm)	300.0	DVD Status	ON
Analysis Timestep 2.5 Second Increment (Extended)		Inertia Status	ON
DTS Status	OFF		

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)	2, 30, 100
Climate Change (%)	0, 0, 40

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

PN	US/MH Name	Event	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status

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

PN	US/MH Name	Event	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status
S1.000	S1	15 minute 2 year Winter I+0%	50.000	48.348	-0.452	0.000	0.13		69.7	OK
S2.000	S2	15 minute 2 year Winter I+0%	50.500	47.910	-0.366	0.000	0.08		21.1	OK
S1.001	S2	15 minute 2 year Winter I+0%	50.000	47.684	-0.362	0.000	0.33		149.4	OK
S3.000	S3	15 minute 2 year Winter I+0%	50.000	48.369	-0.431	0.000	0.17		81.8	OK
S3.001	S4	15 minute 2 year Winter I+0%	50.000	48.091	-0.447	0.000	0.15		82.4	OK
S1.002	S5	480 minute 2 year Winter I+0%	49.500	46.761	0.138	0.000	0.27		7.9	SURCHARGED

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

Simulation Criteria

Areal Reduction Factor	1.000	Manhole Headloss Coeff (Global)	0.500	MADD Factor * 10m³/ha Storage	2.000
Hot Start (mins)	0	Foul Sewage per hectare (l/s)	0.000	Inlet Coeffiecient	0.800
Hot Start Level (mm)	0	Additional Flow - % of Total Flow	0.000	Flow per Person per Day (l/per/day)	0.000

Number of Input Hydrographs	0	Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls	1	Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model	FEH	D3 (1km)	0.234
FEH Rainfall Version	1999	E (1km)	0.332
Site Location	GB 526100 184450 TQ 26100 84450	F (1km)	2.519
C (1km)	-0.025	Cv (Summer)	0.750
D1 (1km)	0.330	Cv (Winter)	0.840
D2 (1km)	0.277		

Margin for Flood Risk Warning (mm)	300.0	DVD Status	ON
Analysis Timestep 2.5 Second Increment (Extended)		Inertia Status	ON
DTS Status	OFF		

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)	2, 30, 100
Climate Change (%)	0, 0, 40

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

PN	US/MH Name	Event	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status

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

PN	US/MH Name	Event	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status
S1.000	S1	15 minute 30 year Winter I+0%	50.000	48.454	-0.346	0.000	0.35		187.1	OK
S2.000	S2	15 minute 30 year Winter I+0%	50.500	47.970	-0.306	0.000	0.21		56.6	OK
S1.001	S2	15 minute 30 year Winter I+0%	50.000	47.915	-0.131	0.000	0.96		431.7	OK
S3.000	S3	15 minute 30 year Winter I+0%	50.000	48.491	-0.309	0.000	0.46		219.9	OK
S3.001	S4	15 minute 30 year Winter I+0%	50.000	48.200	-0.338	0.000	0.39		221.2	OK
S1.002	S5	600 minute 30 year Winter I+0%	49.500	47.340	0.717	0.000	0.28		8.0	SURCHARGED

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

Simulation Criteria

Areal Reduction Factor	1.000	Manhole Headloss Coeff (Global)	0.500	MADD Factor * 10m³/ha Storage	2.000
Hot Start (mins)	0	Foul Sewage per hectare (l/s)	0.000	Inlet Coeffiecient	0.800
Hot Start Level (mm)	0	Additional Flow - % of Total Flow	0.000	Flow per Person per Day (l/per/day)	0.000

Number of Input Hydrographs 0	Number of Offline Controls 0	Number of Time/Area Diagrams 0
Number of Online Controls 1	Number of Storage Structures 1	Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model	FEH	D3 (1km)	0.234
FEH Rainfall Version	1999	E (1km)	0.332
Site Location	GB 526100 184450 TQ 26100 84450	F (1km)	2.519
C (1km)	-0.025	Cv (Summer)	0.750
D1 (1km)	0.330	Cv (Winter)	0.840
D2 (1km)	0.277		

Margin for Flood Risk Warning (mm)	300.0	DVD Status	ON
Analysis Timestep 2.5 Second Increment (Extended)		Inertia Status	ON
DTS Status	OFF		

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)	2, 30, 100
Climate Change (%)	0, 0, 40

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

PN	US/MH Name	Event	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status

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

PN	US/MH Name	Event	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status
S1.000	S1	15 minute 100 year Winter I+40%	50.000	49.279	0.479	0.000	0.75		395.4	SURCHARGED
S2.000	S2	15 minute 100 year Winter I+40%	50.500	48.997	0.721	0.000	0.44		120.2	SURCHARGED
S1.001	S2	15 minute 100 year Winter I+40%	50.000	48.834	0.788	0.000	2.01		904.5	SURCHARGED
S3.000	S3	15 minute 100 year Winter I+40%	50.000	48.802	0.002	0.000	1.00		478.2	SURCHARGED
S3.001	S4	720 minute 100 year Winter I+40%	50.000	48.413	-0.126	0.000	0.05		30.8	OK
S1.002	S5	720 minute 100 year Winter I+40%	49.500	48.412	1.789	0.000	0.29		8.5	SURCHARGED

Cont'd./… 7

Appendix B – Proposed Drainage Strategy