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3 Worsley Court High Street Worsley Manchester	Proposed SW Network Rev A Greenhill Nursery, Allerton	
Date Jul 14	Designed by RDE	
File 30075 Proposed SW Netw...	Checked by SRG	
Micro Drainage		Network 2014.1

1 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 * 10m³/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 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 FSR Ratio R 0.400
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 19.600 Cv (Winter) 0.840


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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 1, 30, 100
 Climate Change (%) 0, 0, 30

PN	Storm	Return Period	Climate Change	First X Surchage	First Y Flood	First Z Overflow	O/F Act.	Lvl Exc.
1.000	15 Winter	1	0%	100/15 Winter				
1.001	15 Winter	1	0%	100/15 Winter				
1.002	15 Winter	1	0%	100/15 Winter				
1.003	60 Winter	1	0%	100/15 Winter				
1.004	60 Winter	1	0%	100/15 Winter				
1.005	60 Winter	1	0%	100/15 Summer				
1.006	60 Winter	1	0%	30/120 Winter				
2.000	15 Winter	1	0%	100/15 Winter				
2.001	15 Winter	1	0%	100/15 Winter				
2.002	60 Winter	1	0%	100/15 Summer				
2.003	60 Winter	1	0%	30/60 Winter				
3.000	60 Winter	1	0%	100/15 Winter				
3.001	60 Winter	1	0%	100/15 Summer				
1.007	60 Winter	1	0%	30/60 Winter				
1.008	60 Winter	1	0%	30/60 Winter				
1.009	60 Winter	1	0%	30/60 Winter				
1.010	60 Winter	1	0%	1/15 Summer				
1.011	15 Summer	1	0%					


PN	US/MH Name	Water Level (m)	Surch'd Depth (m)	Flooded Volume (m³)	Pipe Flow / Cap. (l/s)	O'flow (l/s)	Pipe Flow (l/s)	Status
1.000	1	27.161	-0.789	0.000	0.02	0.0	11.0	OK
1.001	2	27.147	-0.745	0.000	0.06	0.0	25.9	OK

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

PN	US/MH Name	Water		Flooded		Pipe		Status
		Level (m)	Surch'd Depth (m)	Volume (m³)	Flow / Cap.	O'flow (l/s)	Flow (l/s)	
1.002	3	27.125	-0.741	0.000	0.05	0.0	25.3	OK
1.003	4	27.119	-0.713	0.000	0.05	0.0	23.0	OK
1.004	5	27.118	-0.679	0.000	0.04	0.0	22.2	OK
1.005	6	27.117	-0.647	0.000	0.03	0.0	23.0	OK
1.006	7	27.116	-0.567	0.000	0.04	0.0	29.9	OK
2.000	8	27.173	-0.759	0.000	0.04	0.0	29.7	OK
2.001	9	27.136	-0.743	0.000	0.05	0.0	44.5	OK
2.002	10	27.117	-0.618	0.000	0.04	0.0	29.0	OK
2.003	11	27.115	-0.535	0.000	0.06	0.0	25.5	OK
3.000	12	27.115	-0.713	0.000	0.01	0.0	8.0	OK
3.001	13	27.115	-0.619	0.000	0.02	0.0	16.0	OK
1.007	14	27.115	-0.513	0.000	0.09	0.0	64.9	OK
1.008	15	27.105	-0.458	0.000	0.04	0.0	56.8	OK
1.009	16	27.095	-0.416	0.000	0.04	0.0	36.5	OK
1.010	17	27.088	0.588	0.000	0.26	0.0	24.8	SURCHARGED
1.011	18	25.993	-0.052	0.000	0.94	0.0	24.9	OK

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30 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 * 10m³/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 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 FSR Ratio R 0.400
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 19.600 Cv (Winter) 0.840


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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 1, 30, 100
 Climate Change (%) 0, 0, 30

PN	Storm	Return Period	Climate Change	First X Surchage	First Y Flood	First Z Overflow	O/F Act.	Lvl Exc.
1.000	120 Winter	30	0%	100/15 Winter				
1.001	120 Winter	30	0%	100/15 Winter				
1.002	120 Winter	30	0%	100/15 Winter				
1.003	120 Winter	30	0%	100/15 Winter				
1.004	120 Winter	30	0%	100/15 Winter				
1.005	120 Winter	30	0%	100/15 Summer				
1.006	120 Winter	30	0%	30/120 Winter				
2.000	120 Winter	30	0%	100/15 Winter				
2.001	120 Winter	30	0%	100/15 Winter				
2.002	120 Winter	30	0%	100/15 Summer				
2.003	120 Winter	30	0%	30/60 Winter				
3.000	120 Winter	30	0%	100/15 Winter				
3.001	120 Winter	30	0%	100/15 Summer				
1.007	120 Winter	30	0%	30/60 Winter				
1.008	120 Winter	30	0%	30/60 Winter				
1.009	120 Winter	30	0%	30/60 Winter				
1.010	120 Winter	30	0%	1/15 Summer				
1.011	240 Winter	30	0%					


PN	US/MH Name	Water Level (m)	Surch'd Depth (m)	Flooded Volume (m³)	Pipe Flow / O'flow Cap. (l/s)	Pipe Flow (l/s)	Status
1.000	1	27.697	-0.253	0.000	0.01	0.0	7.3 OK
1.001	2	27.697	-0.195	0.000	0.04	0.0	16.9 OK

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Micro Drainage	Network 2014.1	

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

PN	US/MH Name	Water		Flooded		Pipe		Status
		Level (m)	Surch'd Depth (m)	Volume (m³)	Flow / Cap.	O'flow (l/s)	Flow (l/s)	
1.002	3	27.697	-0.169	0.000	0.03	0.0	15.2	OK
1.003	4	27.697	-0.135	0.000	0.04	0.0	22.7	OK
1.004	5	27.695	-0.102	0.000	0.04	0.0	19.9	OK
1.005	6	27.693	-0.071	0.000	0.03	0.0	19.5	OK
1.006	7	27.692	0.008	0.000	0.04	0.0	23.9	SURCHARGED
2.000	8	27.701	-0.231	0.000	0.03	0.0	21.2	OK
2.001	9	27.701	-0.178	0.000	0.04	0.0	29.9	OK
2.002	10	27.697	-0.037	0.000	0.03	0.0	24.4	OK
2.003	11	27.692	0.041	0.000	0.04	0.0	17.2	SURCHARGED
3.000	12	27.692	-0.136	0.000	0.01	0.0	10.6	OK
3.001	13	27.691	-0.043	0.000	0.02	0.0	13.5	OK
1.007	14	27.691	0.064	0.000	0.06	0.0	42.8	SURCHARGED
1.008	15	27.691	0.127	0.000	0.03	0.0	39.5	SURCHARGED
1.009	16	27.691	0.180	0.000	0.03	0.0	29.5	SURCHARGED
1.010	17	27.690	1.191	0.000	0.26	0.0	24.8	SURCHARGED
1.011	18	25.993	-0.052	0.000	0.94	0.0	24.8	OK

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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 * 10m³/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 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

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 M5-60 (mm) 19.600 Cv (Winter) 0.840


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

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
 Return Period(s) (years) 1, 30, 100
 Climate Change (%) 0, 0, 30

PN	Storm	Return Period	Climate Change	First X Surchage	First Y Flood	First Z Overflow	O/F Act.	Lvl Exc.
1.000	180 Winter	100	+30%	100/15 Winter				
1.001	180 Winter	100	+30%	100/15 Winter				
1.002	180 Winter	100	+30%	100/15 Winter				
1.003	180 Winter	100	+30%	100/15 Winter				
1.004	180 Winter	100	+30%	100/15 Winter				
1.005	180 Winter	100	+30%	100/15 Summer				
1.006	180 Winter	100	+30%	30/120 Winter				
2.000	180 Winter	100	+30%	100/15 Winter				
2.001	180 Winter	100	+30%	100/15 Winter				
2.002	180 Winter	100	+30%	100/15 Summer				
2.003	180 Winter	100	+30%	30/60 Winter				
3.000	180 Winter	100	+30%	100/15 Winter				
3.001	180 Winter	100	+30%	100/15 Summer				
1.007	180 Winter	100	+30%	30/60 Winter				
1.008	180 Winter	100	+30%	30/60 Winter				
1.009	180 Winter	100	+30%	30/60 Winter				
1.010	180 Winter	100	+30%	1/15 Summer				
1.011	180 Winter	100	+30%					

PN	US/MH Name	Water Level (m)	Surch'd Depth (m)	Flooded Volume (m³)	Pipe Flow / Cap. (l/s)	O'flow (l/s)	Pipe Flow (l/s)	Status
1.000	1	28.797	0.847	0.000	0.01	0.0	8.5	SURCHARGED
1.001	2	28.798	0.906	0.000	0.05	0.0	23.0	SURCHARGED

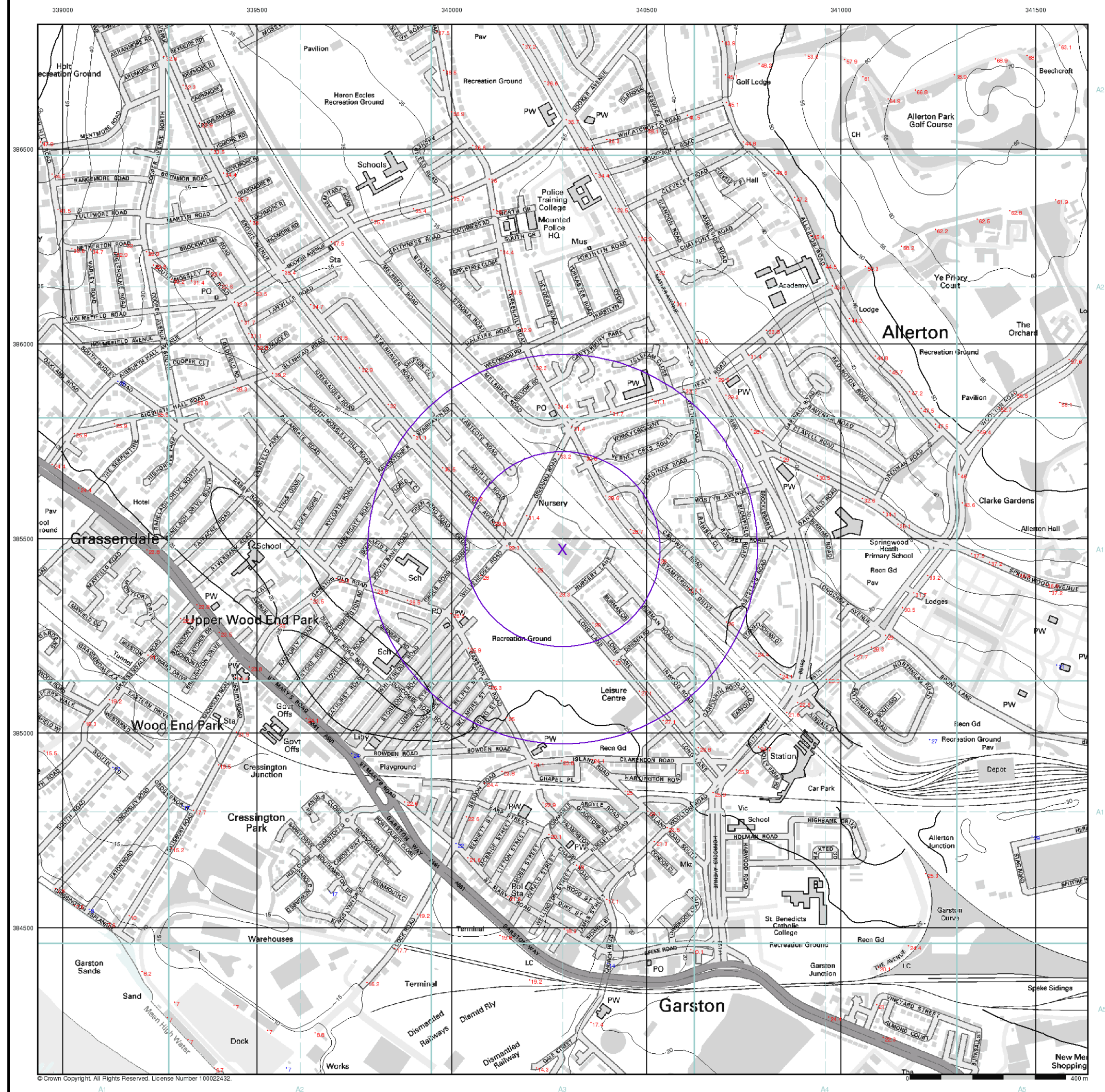
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100 year Return Period Summary of Critical Results by Maximum Level
(Rank 1) for Storm

PN	US/MH Name	Water		Flooded		Pipe		Status
		Level (m)	Surch'd Depth (m)	Volume (m³)	Flow / Cap.	O'flow (l/s)	Flow (l/s)	
1.002	3	28.797	0.931	0.000	0.04	0.0	19.8	SURCHARGED
1.003	4	28.797	0.965	0.000	0.06	0.0	31.2	SURCHARGED
1.004	5	28.797	1.000	0.000	0.06	0.0	29.2	SURCHARGED
1.005	6	28.797	1.033	0.000	0.04	0.0	31.1	SURCHARGED
1.006	7	28.797	1.113	0.000	0.07	0.0	47.8	SURCHARGED
2.000	8	28.797	0.865	0.000	0.04	0.0	26.4	SURCHARGED
2.001	9	28.797	0.918	0.000	0.05	0.0	40.2	SURCHARGED
2.002	10	28.797	1.063	0.000	0.07	0.0	50.0	SURCHARGED
2.003	11	28.796	1.146	0.000	0.11	0.0	48.1	SURCHARGED
3.000	12	28.796	0.968	0.000	0.02	0.0	12.7	SURCHARGED
3.001	13	28.796	1.062	0.000	0.03	0.0	26.8	SURCHARGED
1.007	14	28.796	1.168	0.000	0.17	0.0	122.9	SURCHARGED
1.008	15	28.794	1.231	0.000	0.10	0.0	131.2	SURCHARGED
1.009	16	28.793	1.283	0.000	0.14	0.0	131.6	SURCHARGED
1.010	17	28.792	2.293	0.000	0.26	0.0	24.9	SURCHARGED
1.011	18	25.993	-0.052	0.000	0.95	0.0	24.9	OK

APPENDIX J
Envirocheck Flood
Data








IronsideFarrar
Environmental Consultants

EA Flood Data Map (1:10,000)

General

-  Specified Site
-  Specified Buffer(s)
-  Bearing Reference Point

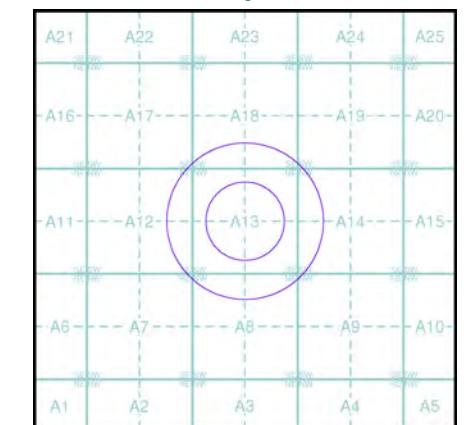
Environment Agency Flood Data

-  Extreme Flooding from Rivers or Sea without Defences (Zone 2)
 Flooding from Rivers or Sea without Defences (Zone 3)
 Area Benefiting from Flood Defence
 Flood Water Storage Areas
 Flood Defence

Contours (height in metres)

- | | | | |
|------------------|--|--------|-------------|
| Standard Contour | | *167.8 | Spot Height |
| Index Contour | | *45.8 | Air Height |

EA Flood Data Map - Slice A



Order Details

Order Number: 57393565_1_1
Customer Ref: 30075
National Grid Reference: 340280, 385470
Slice: A
Site Area (Ha): 0.01
Search Buffer (m): 500

Site Details

Site at 340270, 385460



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk

RMS 75 year Return Flood Map (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

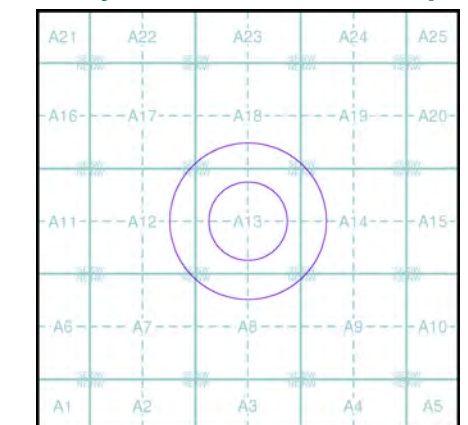
RMS 75 year Return Flood Data

Flood Depth (mm)	Defended Flood	Undefended Flood	Pluvial & Minor River Flood (flood depth n/a)
0 - 200			
201 - 500			
501 - 2000			
2001 +			

Contours (height in metres)

Standard Contour			Spot Height
Index Contour			Air Height

RMS 75 year Return Flood Map - Slice A



Order Details

Order Number: 57393565_1_1
 Customer Ref: 30075
 National Grid Reference: 340280, 385470
 Slice: A
 Site Area (Ha): 0.01
 Search Buffer (m): 500

Site Details

Site at 340270, 385460

