



**Winnipeg Design Rainstorms (McClaren, 1974)**

Interval	Average Rainfall Intensity (mm/hr) For Given Interval and Return Period						
	1 YR	2 YR	5 YR	10 YR	25 YR	50 YR	100 YR
5 minutes	82	109	146	169	204	231	258
10 minutes	64	82	110	128	155	175	196
15 minutes	50	66	88	104	125	142	159
30 minutes	28	43	57	68	82	92	103
1 hour	20	26	35	41	50	56	63
2 hours	11	15	20	24	29	33	37
6 hours	6	6	8	10	12	13	15
12 hours	4	4	5	5	7	7	8

source: 2 to 25 year return period from James F. McClaren (1974), 50 and 100 yr from Acres (1978)  
 notes: design storms for summer period (June, July and August)

- Rainfall Gauge Station Location
- 4 30 Min Intensity (mm/hr)
- 2 YR Return Period Isoline
- Combined Sewer Boundary

**ALL MEASUREMENTS ARE METRIC**

**MESSAGE:**  
 This information has been gathered and compiled by the City of Winnipeg for its own use. Although it is the best information available to the City at this time, the City assumes no responsibility for its accuracy and will not accept liability for any use made of it or actions taken in reliance on it.



**Water and Waste Department**

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*Rainfall intensity over a 30 min duration for the morning of August 13, 2010*