

# Flow & Rain Gauge Report



June 2016

## **Project**

Title: Flow and Rain Gauge Survey

Client: UCD Campus

Contact: Enda Conaty/Peter O'Dwyer

Engineer: Ray Scully Date: June 2016

#### **Brief**

Lowflo was commissioned to carry out a Sewage Flow and Rain Gauge Survey at the UCD Campus. The purpose of the survey was to establish the current flow from the sewer outlet and also measure the amount of rainfall.

#### **Procedure**

- Install the probe into the outlet of the pipe
- Measure the level and input into the flow meter. We should now be able to get accurate flow data from the preprogrammed flow meter.
- Ensure equipment is left in a safe location and protected from bad weather conditions
- Replace cover to the manhole
- Raw data in output on an excel spreadsheet
- Graph presented in PDF format
- Place rain gauge on roof of Sutherland building
- Ensure equipment is left in a safe location
- Raw data in output on an excel spreadsheet
- Graph presented in PDF format

Kind Regards
Ray Scully
Operations Manager

#### Lowflo - Water Control & Leak Detection

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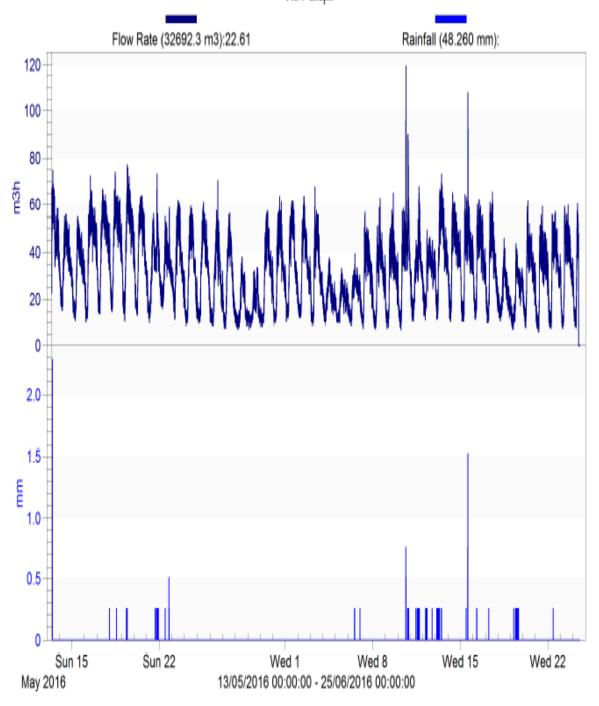
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Flow Graph.





### Flow Table

Main Outfall Flow Table

Date/Time	Flow Rate (m3h)	Flow Rate (m3h)	Flow Rate (m3h)	Flow Rate (m3)	Rainfall (mm)
	Average	Maximum	Minimum	Total	Summary
13/05/2016 00:0	39.388	74.735	22.609	945.315	3.302
14/05/2016 00:0	35.742	55.865	15.309	857.798	0.000
15/05/2016 00:0	32.198	54.847	10.983	772.749	0.000
16/05/2016 00:0	41.441	72.345	9.885	994.582	0.000
17/05/2016 00:0	42.741	66.635	13.933	1025.79	0.000
18/05/2016 00:0	44.296	74.014	14.652	1063.10	1.016
19/05/2016 00:0	44.643	77.247	10.885	1071.43	3.048
20/05/2016 00:0	40.192	63.851	13.131	964.615	0.000
21/05/2016 00:0	33.791	73.124	9.527	810.972	5.080
22/05/2016 00:0	33.749	58.496	16.175	809.981	2.032
23/05/2016 00:0	35.898	61.976	11.509	861.558	0.000
24/05/2016 00:0	32.315	59.237	8.526	775.567	0.000
25/05/2016 00:0	31.948	60.825	8.968	766.748	0.000
26/05/2016 00:0	28.296	70.358	8.289	679.113	0.000
27/05/2016 00:0	27.917	56.285	7.215	670.000	0.000
28/05/2016 00:0	17.962	37.919	6.918	431.079	0.000
29/05/2016 00:0	17.189	33.718	6.877	412.542	0.000
30/05/2016 00:0	30.219	57.218	7.971	725.253	0.000
31/05/2016 00:0	33.263	63.386	8.796	798.318	0.000
01/06/2016 00:0	35.172	61.557	10.207	844.137	0.000
02/06/2016 00:0	33.537	63.674	12.171	804.888	0.000
03/06/2016 00:0	31.987	67.618	8.737	767.693	0.000
04/06/2016 00:0	21.210	37.722	8.885	509.051	0.000
05/06/2016 00:0	19.289	33.279	9.522	462.928	0.000
06/06/2016 00:0	22.380	39.474	8.480	537.123	1.524
07/06/2016 00:0	29.701	56.655	7.237	712.832	0.000
08/06/2016 00:0	29.227	62.851	6.985	701.447	0.000
09/06/2016 00:0	30.938	65.091	7.381	742.521	0.000
10/06/2016 00:0	37.412	119.588	6.745	897.886	11.938
11/06/2016 00:0	31.270	67.763	10.468	750.473	4.318
12/06/2016 00:0	31.367	49.478	11.245	752.807	2.794
13/06/2016 00:0	41.519	73.220	11.435	996.457	3.810
14/06/2016 00:0	39.133	65.151	10.172	939.194	0.000
15/06/2016 00:0	38.171	107.786	10.345	916.099	5.080

PEAK FLOW MEASURED

## Flow Table

Date/Time	Flow Rate (m3h)	Flow Rate (m3h)	Flow Rate (m3h)	Flow Rate (m3)	Rainfall (mm)
16/06/2016 00:0	36.857	62.326	11.555	884.560	0.508
17/06/2016 00:0	32.773	65.305	9.229	786.544	0.254
18/06/2016 00:0	22.631	45.895	10.616	543.141	0.000
19/06/2016 00:0	22.995	43.690	6.899	551.891	3.302
20/06/2016 00:0	31.124	61.526	7.495	746.972	0.000
21/06/2016 00:0	30.884	59.037	5.829	741.217	0.000
22/06/2016 00:0	32.352	56.975	7.392	776.458	0.254
23/06/2016 00:0	33.523	59.627	7.241	804.544	0.000
24/06/2016 00:0	22.986	60.420	0.000	306.483	0.000
		Maximum Flow Rate 119.588 (m3h)	Minimum Flow Rate 0.000 (m3h)	Average Flow Rate 765.439 (m3)	Average Rainfall 1.122 (mm)
	Total 32913.9 m3			Total 32913.9	Total 48.260 mm