

Developers Name
Development Address

David Skyes.
Ferns, Wexford

Date 01-Oct-25
SOIL INDEX CHART Per

missible Outflow for Flow Restrictors

Qbar = Permissible outflow (l/s)

Area = Site area (square m)

SAAR = Standard annual average rainfall (mm)

Soil = Soil index

0.10	Very Low	Sandy, Well Drained
0.30	Low	Intermediate soil (silty)
0.37	Moderate	Intermediate Soil (sandy)
0.47	High	Clayey, poorly drained
0.53	Very High	Steep, rocky area

SAAR = 1160 mm

Soil = 0.47 mm

(Based on "Stormwater Management Policy for Developers" (Aug 1998)

(Dublin Corporation Draft Report) - Based on areas UNDER 24 Ha.

$$Qbar = 0.00108 \times (Area)^{Power0.89} \times (SAAR)^{Power1.17} \times (Soil)^{Power2.17}$$

Area 40,607.00 m²

Impermeable Area 13,906.00 m²

Allowable Run-off (Qbar) 12.0000 litres/sec As per Dublin Corporation Guidelines

Run off in litres per second per hectare 2.96 l/s/ha but not greater than 4.0 l/s/ha

These value are obatined from a Depth Duration Frequency Model. Available for download at

Rainfall Depth (mm) www.met.ie/climate/dataproducts/Estimation-of-point-rainfall-frequencies

Duration	Return Period (Years)						
(min)	1.00	5.00	10.00	20.00	30.00	50.00	100.00
30.00	6.80	11.40	14.10	17.30	19.30	22.20	26.80
60.00	8.70	13.90	17.00	20.40	22.60	25.70	30.60
120.00	11.00	17.00	20.40	24.10	26.50	29.80	34.90
240.00	14.00	20.80	24.50	28.50	31.10	34.60	39.90
360.00	16.10	23.30	27.30	31.40	34.10	37.70	43.10
720.00	20.50	28.50	32.70	37.20	40.00	43.70	49.30
1,440.00	26.10	34.80	39.30	44.00	46.80	50.70	56.30

Outflow (m3)

Duration	Return Period (Years)						
(min)	1.00	5.00	10.00	20.00	30.00	50.00	100.00
30.00	94.56	158.53	196.07	240.57	268.39	308.71	372.68
60.00	120.98	193.29	236.40	283.68	314.28	357.38	425.52
120.00	152.97	236.40	283.68	335.13	368.51	414.40	485.32
240.00	194.68	289.24	340.70	396.32	432.48	481.15	554.85
360.00	223.89	324.01	379.63	436.65	474.19	524.26	599.35
720.00	285.07	396.32	454.73	517.30	556.24	607.69	685.57
1,440.00	362.95	483.93	546.51	611.86	650.80	705.03	782.91

Storage Reqd. (m3)

Duration	Return Period (Years)						
(min)	1.00	5.00	10.00	20.00	30.00	50.00	100.00
30.00	72.96	136.93	174.47	218.97	246.79	287.11	351.08
60.00	77.78	150.09	193.20	240.48	271.08	314.18	382.32
120.00	66.57	150.00	197.28	248.73	282.11	328.00	398.92
240.00	21.88	116.44	167.90	223.52	259.68	308.35	382.05
360.00	0.00	64.81	120.43	177.45	214.99	265.06	340.15
720.00	0.00	0.00	0.00	0.00	37.84	89.29	167.17
1,440.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Storage Required for 1 in 30 year storm 247 m³

Storage Required for 1 in 100 year storm 351 m³

Hydrobrake to limit flow to 12.00 litres per second

Prepared by Justin Kelly. Chartered Engineer.