

CAPITA

Consulting Civil, Structural & Geotechnical Engineers
Oak House, Reeds Crescent, Watford, WD24 4PH
Tel: 01923 817537
web site: www.capita.co.uk

CS/075666 – Former Nestle Site, Hayes

Ref. Hillingdon Borough Council Technical Assessment Proforma Parts 2.10 and 2.11.

Justification of Cv used

Ref. The Wallingford Procedure – Volume 1 Chapter 7

$$C_v = PR / PIMP$$

Where PIMP = surface intended to drain to the storm sewer (100%)

SOIL type = clay = 0.45

UCWI = 130 (winter)

$$PR = 0.829 PIMP + 25 SOIL + 0.078 UCWI - 20.7$$

$$PR = (0.829 \times 100) + (25 \times 0.45) + (0.078 \times 130) - 20.7$$

$$PR = \underline{83.59}$$

$$\text{Therefore } C_v = 83.59 / 100 = \underline{\mathbf{0.836}}$$

Cv used in Micro Drainage calculations for worst case (winter) storms = 0.84

PR = percentage runoff

PIMP = percentage impermeable area

UCMI = urban catchment wetness index