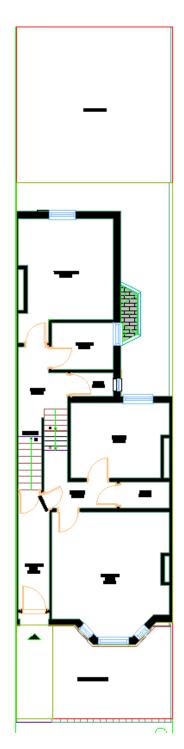
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EXISTING SITE PLAN



EXISTING AND PROPOSED IMPERMEABLE AREA

Existing site area: 129.3 sqm

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Ground and cellar: 83.9 sam Front entrance area: 4.03 sqm

Total Existing impermeable area: 87.93 sqm

68 % impermeable area

Rear addition: 9.4 sqm

Front entrance area: 4.03 sam

Light well: 5.60 sqm Green roof: -10.01 sqm

Total Proposed impermeable area: 92.92 sqm

Ground and cellar: 83.9 sqm

71 % impermeable area

If the front entrance area is made permeable,

Rear addition: 9.4 sam

Front entrance area: -4.03 sqm

Light well: 5.60 sqm Green roof: -10.01 sqm

Total Proposed impermeable area: 92.92 sqm

Ground and cellar: 83.9 sqm

68.7 % impermeable area

DESIGN RAINFALL

Greenfield run-off rates 1/100yr, 6 hour event

DESIGN RAINFALL

In accordance with the Wallingford Procedure

Tedds calculation version 2.0.02

Design rainfall intensity

Location of catchment area London

Storm duration D = 6 hrReturn period Period = 100 yr Ratio 60 min to 2 day rainfall r = 0.440Global warming

increase $p_{climate} = 40 \%$

Factor Z1 Z1 = 1.535yr return period storm $M5 6hr_i = 42.8 mm$ 100 yr return period storm M100_6hr = **80.0** mm Factor Z2 Z2 = 1.87

Design rainfall intensity $I_{max} = 13.3 \text{ mm/hr}$

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ATTENUATION TANK

Total Proposed impermeable area $A = 92.92 \text{ m}^2$ Design Rainfall (from calculations above) Imax = 13.3 mm/hr Volume of Attenuation tank $V = 6hr^*A^*Imax = 7.415 \text{ m}^3$

Depth of tank considered D = 1m

Area of tank required At = $V/D = 7.415 \text{ m}^2$

2.75mx2.75mx1m deep tank is required. The water will be discharged into the sewer at a rate of 2 l/s through pump.