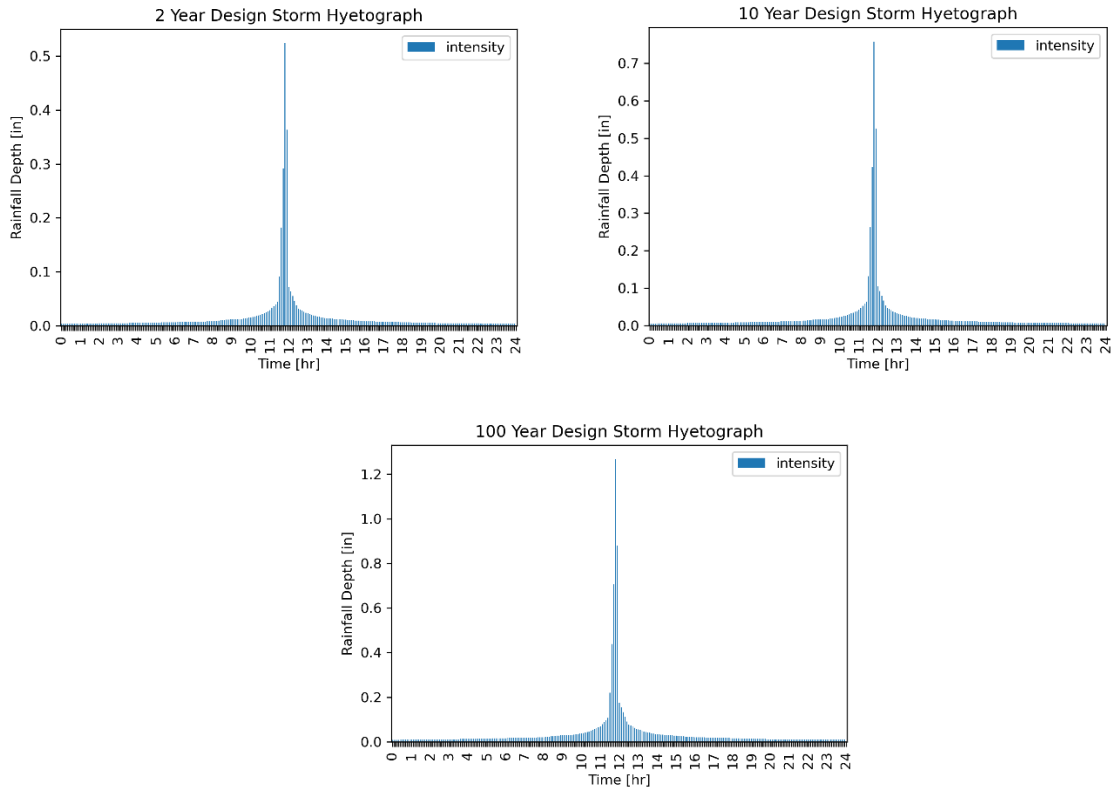


Phase 1 – A2

Ian Stewart

Design Rainfall Hyetographs



Soil Report

Area (ft ²)	Hydrological Soil Group
155091.02	B
1001.88	B
44283.1	A/D

Report from NRCS is attached below.

Curve Number Calculation

Area Name	Area [ft ²] (percent)	Curve Number
A ₁	155091.02 (77.4)	65
A ₂	1001.88 (0.5)	65
A ₃	44283.1 (22.1)	43
Total	200376 (100)	60

$$CN = \frac{C_1 A_1 + C_2 A_2 + C_3 A_3}{A_1 + A_2 + A_3} = \frac{0.774 \times 65 + 0.005 \times 65 + 0.221 \times 43}{1} = 60.14$$

$$S_D = \frac{1000 - 10CN}{CN} = 6.66$$

$$I_\alpha = 0.2S_D$$

