

Q=CiA

Total Area (Acres)	2.77
C (impervious)	0.96
C (pervious)	0.44
Tc (minutes)	5
i ₅ (in/hr)	8.4
i ₂₅ (in/hr)	11.1
i ₁₀₀ (in/hr)	13.542

Pre-construction	Post-construction	Description	"C"
Area (acres)	Area (acres)		
0.33	0.38	Landscaped Areas	0.44
2.44	2.39	Impervious Areas	0.96
2.77	2.77	Total	

C (weighted)

$$C_{\text{Pre-Construction}}^{\text{weighted}} = \frac{(0.33)(0.44) + (2.44)(0.96)}{2.77} = 0.90 \quad 0.9$$

$$C_{\text{Post-Construction}}^{\text{weighted}} = \frac{(0.38)(0.44) + (2.39)(0.96)}{2.77} = 0.89 \quad 0.89$$

Existing

Q ₅ (cfs)	20.94
Q ₂₅ (cfs)	27.67
Q ₁₀₀ (cfs)	33.76

Proposed

Q ₅ (cfs)	20.71
Q ₂₅ (cfs)	27.36
Q ₁₀₀ (cfs)	33.39

*Runoff is decreased