

**CITY OF AURORA 100 YEAR CALCULATION SHEET FOR STORMWATER MANAGEMENT**

Project Name: \_\_\_\_\_  
 Tributary Area: \_\_\_\_\_ ACRES

RUNOFF COEFFICIENT CALCULATIONS

IMPERVIOUS AREA: \_\_\_\_\_ X 0.96 = \_\_\_\_\_ Cr = \_\_\_\_\_  
 GRASS AREA: \_\_\_\_\_ X 0.50 = \_\_\_\_\_  
 POROUS PVMT \_\_\_\_\_ X 0.50 = \_\_\_\_\_  
 BLUE/GREEN DET: \_\_\_\_\_ X 0.90 = \_\_\_\_\_  
 WET RETENTION: \_\_\_\_\_ X 1.00 = \_\_\_\_\_  
 \_\_\_\_\_ TOTAL = \_\_\_\_\_  
 Cf = Cr \* 1.25 =   
 Cf may be greater than 1.0

RELEASE RATES

Allowable release rate is the lesser value of: 1) 0.10 cfs/ac  
 2) The runoff rate under existing conditions in cfs/ac

Release rate in CFS is above condition multiplied times the area \_\_\_\_\_ cfs = Qr

STORAGE VOLUME CALCULATION

Storm Duration (HRS)	Rainfall Intensity (IN/HR)	Runoff Rate (CFS)	Release Rate (CFS)	Storage Rate (CFS)	Storage Required (AC-FT)
t	I	Q=Cf*I*A	Qr	Qs=Q-Qr	Qs*t/12
0.50	6.34				
1.00	4.03				
2.00	2.49				
3.00	1.83				
4.00	1.44				
5.00	1.26				
6.00	1.07				
8.00	0.92				
10.00	0.77				
12.00	0.62				
15.00	0.54				
18.00	0.45				
21.00	0.40				
24.00	0.36				

REQUIRED STORAGE:  ac-ft

REQUIRED STORAGE for INDIAN & BLACKBERRY CREEK WATERSHEDS add 10%  ac-ft



REVISIONS

100 YEAR CALCULATION SHEET FOR STORMWATER MANAGEMENT

EXHIBIT IV - 1