

STORM WATER RUNOFF CALCULATIONS

DESTINATION HEALTH

MAY 11, 2020

RUNOFF PEAK DISCHARGE CALCULATIONS

RATIONAL METHOD – ASCE 1992 & ROSSMILLER 1980

$$Q = C \times i \times A$$

SITE UNDEVELOPED

2 YEAR .125 x .86 x 1.55 = .0166 cu. ft. / sec

25 YEAR .125 x 1.48 X .17 = .0314 cu. ft. / sec

SITE DEVELOPED

UNDEVELOPED PORTION

2 YEAR .125 x .86 x .069 = .0074 cu. ft. / sec

25 YEAR .125 x 1.48 x .069 = .027 cu. ft. / sec

BUILDINGS AND PARKING

2 YEAR .85 x .86 x .080 = .062 cu. ft. / sec

25 YEAR .85 x 1.48 x .080 = .1006 cu. ft. / sec

PARKING RUNOFF TO BREWER AVENUE

2 YEAR .85 x .86 x .017 = .012 cu. ft. / sec

25 YEAR .85 x 1.48 x .017 = .021 cu. ft. / sec