

JONES ENGINEERING LLC

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 CIVIL ENGINEERING - LAND SURVEYING - SITE PLANNING

Date: 11/5/2019

Water Quality Volume (WQV) for Storage Sizing

Project: 59 WATERHOLE ROAD
 EAST HAMPTON, CT

Equation:

$$WQV = (1")(R)(A)/12$$

WQV= Water Quality Volume (ac-ft)

R = Volumetric Runoff Coefficient = 0.05+0.009 (I)

I = Percent Impervious Cover

A = Site Area in Acres

Additional impervious (sq.ft.)	Site Area "A" (acres)	Impervious Area (acres)	Impervious Cover "I" (%)	Runoff Coefficient "R"	Calculated
					WQV (cu-ft)
1,669	0.04	0.04	100.0	0.950	132

Note: Calculations 1" rain fall event (Section 7.4.1 of 2004 Connecticut Stormwater Quality Manual)

Storage (full storage to 1 area)

Required Volume: 132.1 cu-ft

Underground Storage (full house to 1 area)

Required Volume: 132.1 cu-ft

Provided Volume:

Depth (Feet)	1	1
Length Top (FEET)	20	16.0
Width Bottom FEET)	14	10.0
Volume Provided (CF)		<u>160</u>



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