

**DOWDELL ENGINEERING ASSOCIATES**

Engineers, Surveyors & Land Planners  
 P.O. BOX 1684 3949 Old Post Road  
 CHARLESTOWN, RHODE ISLAND 02813  
 (401) 364-1027 FAX (401) 364-0854

JOB 3370 - TODINO DRAINAGE DESIGN

SHEET NO. 1/1 OF \_\_\_\_\_

CALCULATED BY MLD DATE 9/15/22

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

SCALE \_\_\_\_\_

EXISTING CONDITIONS → #67A FIFTH AVE, NARR  
 HOUSE = 757 SF TOTAL LOT SIZE = 16,469 SF  
 DRIVEWAY = 483 SF  
 SHED = 116 SF  
 Σ = 1,356 SF

TOTAL RUNOFF, 25-YR STORM (6.1")

$(16,469 - 1,356) \text{ SF} \times 0.3 \left(\frac{6.1}{12}\right) = 2,305 \text{ CF}$   
 $1,356 \times 0.9 \left(\frac{6.1}{12}\right) = 620 \text{ CF}$

TOTAL EXISTING RUNOFF = 2,925 CF

PROPOSED CONDITIONS

HOUSE = 3,166 SF

DRIVEWAY = 0 SF (CRUSHED STONE APPROVED WITH CONDITIONS AS

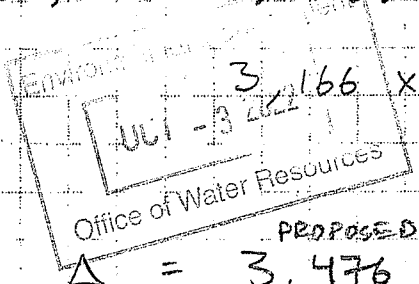
SPECIFIED IN THE LETTER OF APPROVAL

$(16,469 - 3,166) \text{ SF} \times 0.3 \left(\frac{6.1}{12}\right) = 2,925 \text{ CF}$  DATED: NOV 04 2022 FILE #: 22-0464

NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Nancy L. Freeman*

TOTAL PROPOSED RUNOFF = 3,476 CF



$\Delta = \text{PROPOSED } 3,476 \text{ CF} - \text{EXISTING } 2,925 \text{ CF} = \underline{\underline{551 \text{ CF STORAGE REQ'D}}}$

PROPOSED INFILTRATION CALLS

① CRUSHED STONE DRIVEWAY, 40% VOIDS, 12" DEEP

$695 \text{ SF} \times 1 \text{ FT} \times 0.40 = \boxed{278 \text{ CF STORED IN D.W.}}$

② INFILTRATION TRENCHES (36" WIDE X 24" DEEP) 40% VOIDS

2.4 CF STORAGE / LF

$551 - 278 = 273 \text{ CF REQ'D} / 2.4 \text{ CF/LF}$

= 114 LF TRENCHES REQ'D  $\boxed{273 \text{ CF STORED IN TRENCHES}}$

USE 6 - 20 LF LONG TRENCHES

SEE SERC PLAN FOR PLACEMENT

