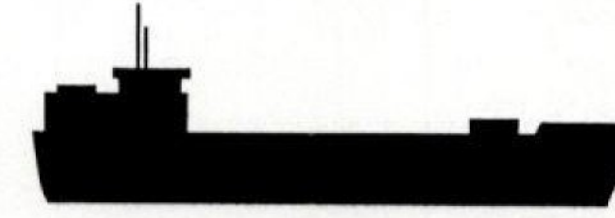
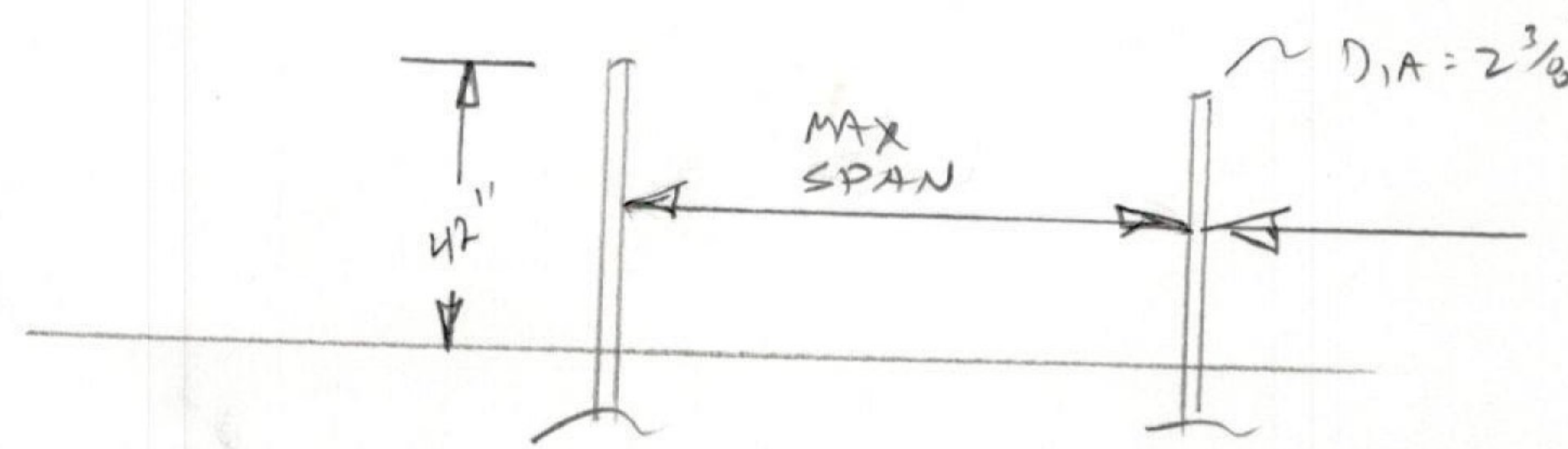
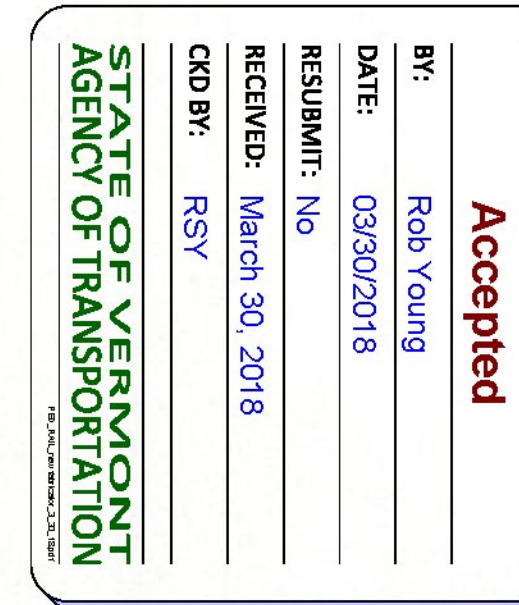


# Savoy Engineering



Project: WOODS HOLE BRIDGE Date: 3-9-18 Sheet     of      
 Prepared By: Phil Savoy P.E. Project Details: RAILING POST STRENGTH

POSTS: SL480, 2" PIPE,  $Z = 0.7309 \text{ in}^3$ ,  $S = 36 \text{ KSI}$



$$\text{MAX SPAN} = 61 \frac{3}{8}'' - 2 \frac{3}{8}'' = 59'', \quad 59 \frac{0}{12} = 4.91 \text{ feet}$$

$$W = 50 \frac{\#}{\text{linft}}, \quad \text{POST LOADING} = \text{L.L.} = 200 + \text{SOL}$$

$$200 + 50(4.91) = 445.5 \#$$

$$S = \frac{M}{Z} = \frac{(445.5)(42'')}{0.7309 \text{ in}^3} = 25,599 \text{ psi}$$

$$FS = \frac{36000}{25,599} = \underline{0.71 \text{ OK}} > 0.6$$

