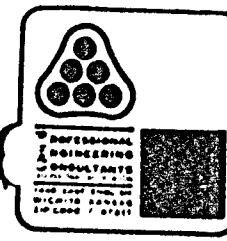
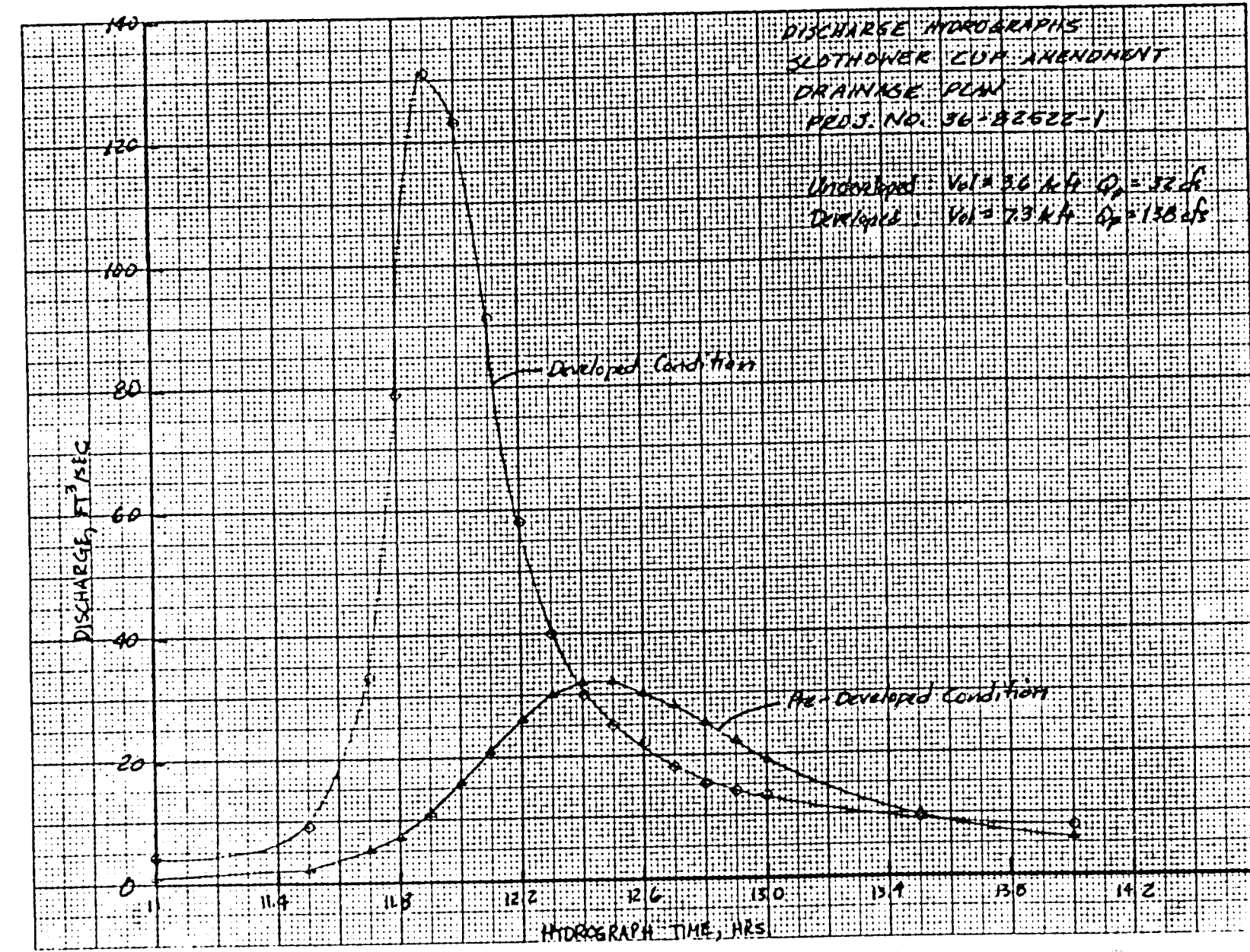


$$K = \frac{6.14 \times 19.7}{640} = 0.1890$$



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 Project Slothower CUP Amendment  
 Item Outfall Control Structure - Node A

HW Elev = 137 for 100-yr  
 TW Elev @ End of pipe = 130.5 =  
 1" Head @ Node B grate

Check inlet control  
 30" CMP

$L = 275'$   
 $S = 0.0234$  F1/ft  
 $Q = 32$  cfs max

$\frac{HW}{D} = 1.3$   
 $HW = 1.3 \times 2.5 + 128 = 131 < 137$

Try metal pipe  
 $Q = KV\sqrt{S}$

24" RCP

$K = \frac{Q}{V\sqrt{S}}$   
 $\frac{1.49 AR^{2/3}}{n} = \frac{Q}{\sqrt{S}}$   
 $\frac{nQ}{1.49\sqrt{S}} = AR^{2/3}$

$\frac{HW}{D} = 2.15$   
 $HW = 2.15 \times 2 + 128 = 132.3 < 137$

$\frac{(0.024 \times 32)}{1.49 \sqrt{0.0234}} = AR^{2/3} = 3.36$

use 30" CMP

Use 24" RCP or 30" CMP

Try RCP

$Q = KV\sqrt{S}$   
 $K = \frac{Q}{V\sqrt{S}} = \frac{32}{\sqrt{0.0234}} = 208$   
 use 24" RCP