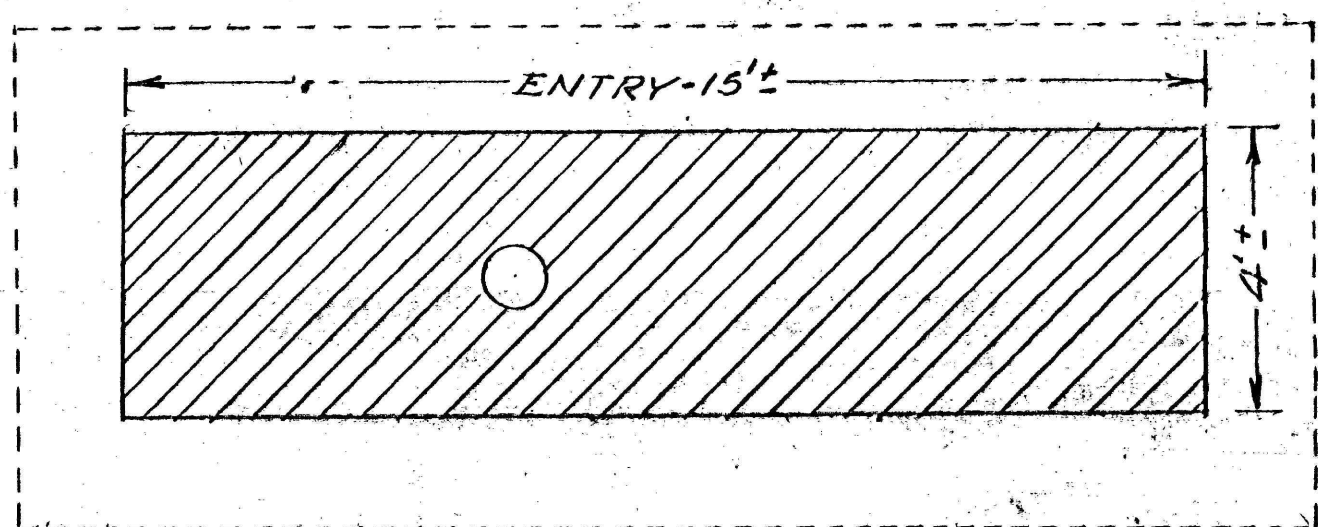
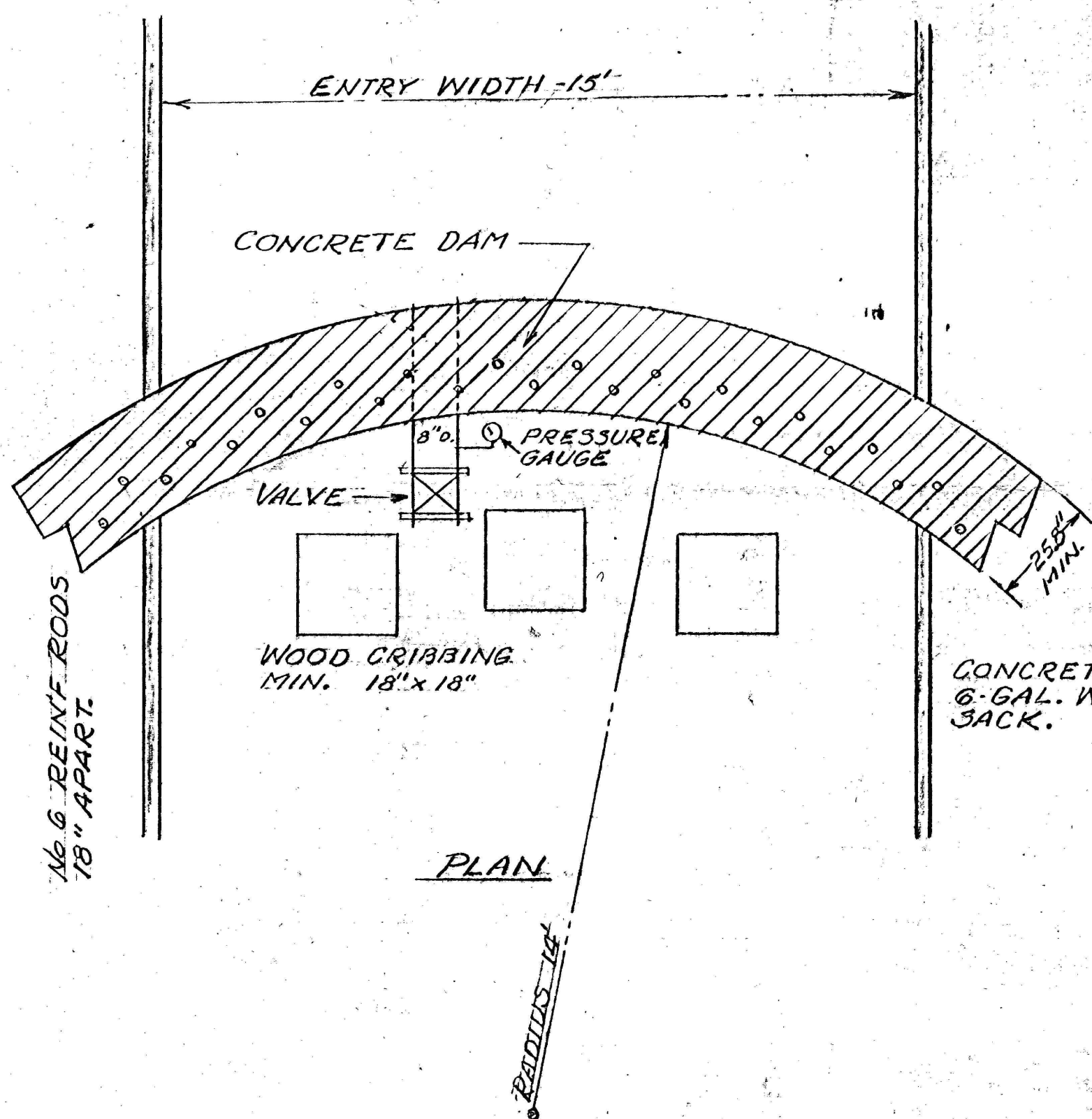


ELEVATION

SCALE $\frac{3}{8}" = 1'$

COMPUTATION:

PEELE'S MINING ENGINEERS HANDBOOK, PAGE 13-06

$$t = pw \frac{\sqrt{0.4r-1}}{45}$$

t = THICKNESS IN INCHES.

$P =$ EXTERNAL RADIUS IN INCHES, $14' \times 12 = 168''$

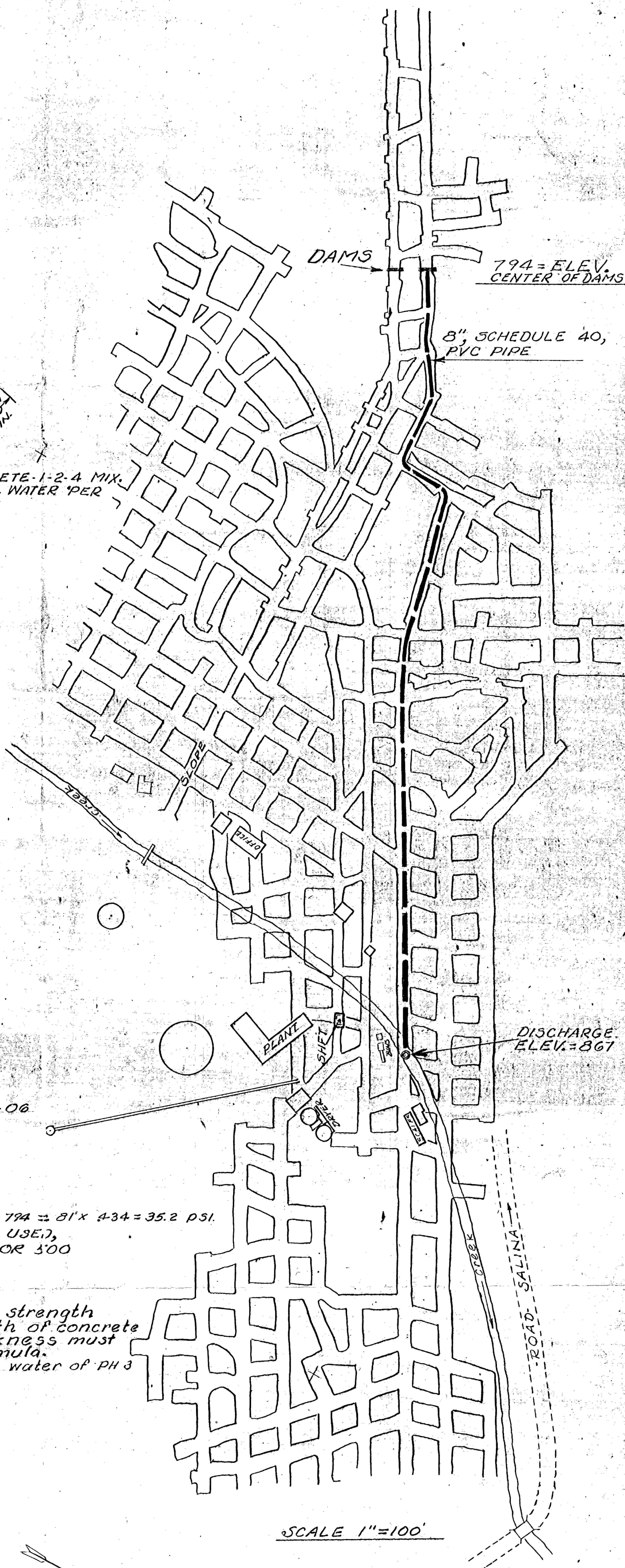
W = WIDTH OF SPAN IN INCHES, $15 \times 12 = 180"$

$p = \text{MAXIMUM WATER PRESSURE } 165/\text{sq. in.} = 875 - 794 = 81 \times 4.34 = 35.2 \text{ PSI.}$

$\sigma =$ SAFE COMPRESSIVE STRENGTH OF MATERIAL USED,
WITH FACTOR OF SAFETY OF 8 = $\frac{4000 \text{ PSI}}{8}$ OR 500

$$t = 25.8'' = 26'' \text{ MIN.}$$

Contractor to provide 4,000 psi compressive strength of concrete at 28 days. If compressive strength of concrete less than the above is provided, the dam thickness must be changed in accordance with the design formula. [concrete to be used which is resistant to mine water of PH 3



SCALE 1"=100'

REF /

JAMISON COAL COMPANY
PROPOSED CONCRETE DAMS
— COCHRAN MINE —
SALINA PA.

4-25-1966