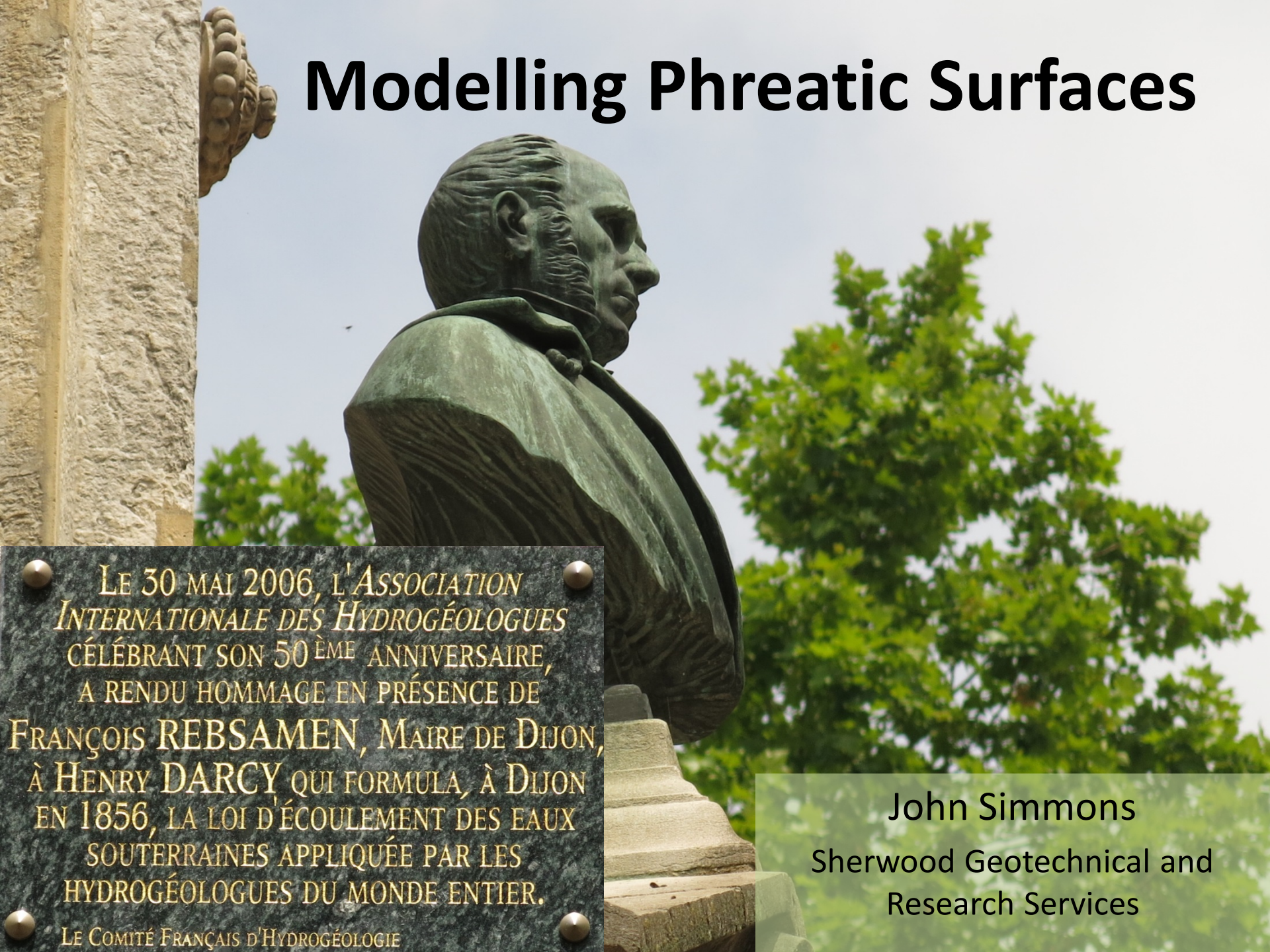


Modelling Phreatic Surfaces



LE 30 MAI 2006, L'ASSOCIATION
INTERNATIONALE DES HYDROGÉOLOGUES
CÉLÉBRANT SON 50^{ÈME} ANNIVERSAIRE,
A RENDU HOMMAGE EN PRÉSENCE DE
FRANÇOIS REBSAMEN, MAIRE DE DIJON,
À HENRY DARCY QUI FORMULA, À DIJON
EN 1856, LA LOI D'ÉCOULEMENT DES EAUX
SOUTERRAINES APPLIQUÉE PAR LES
HYDROGÉOLOGUES DU MONDE ENTIER.
LE COMITÉ FRANÇAIS D'HYDROGÉOLOGIE

John Simmons
Sherwood Geotechnical and
Research Services

What's a Phreatic Surface?

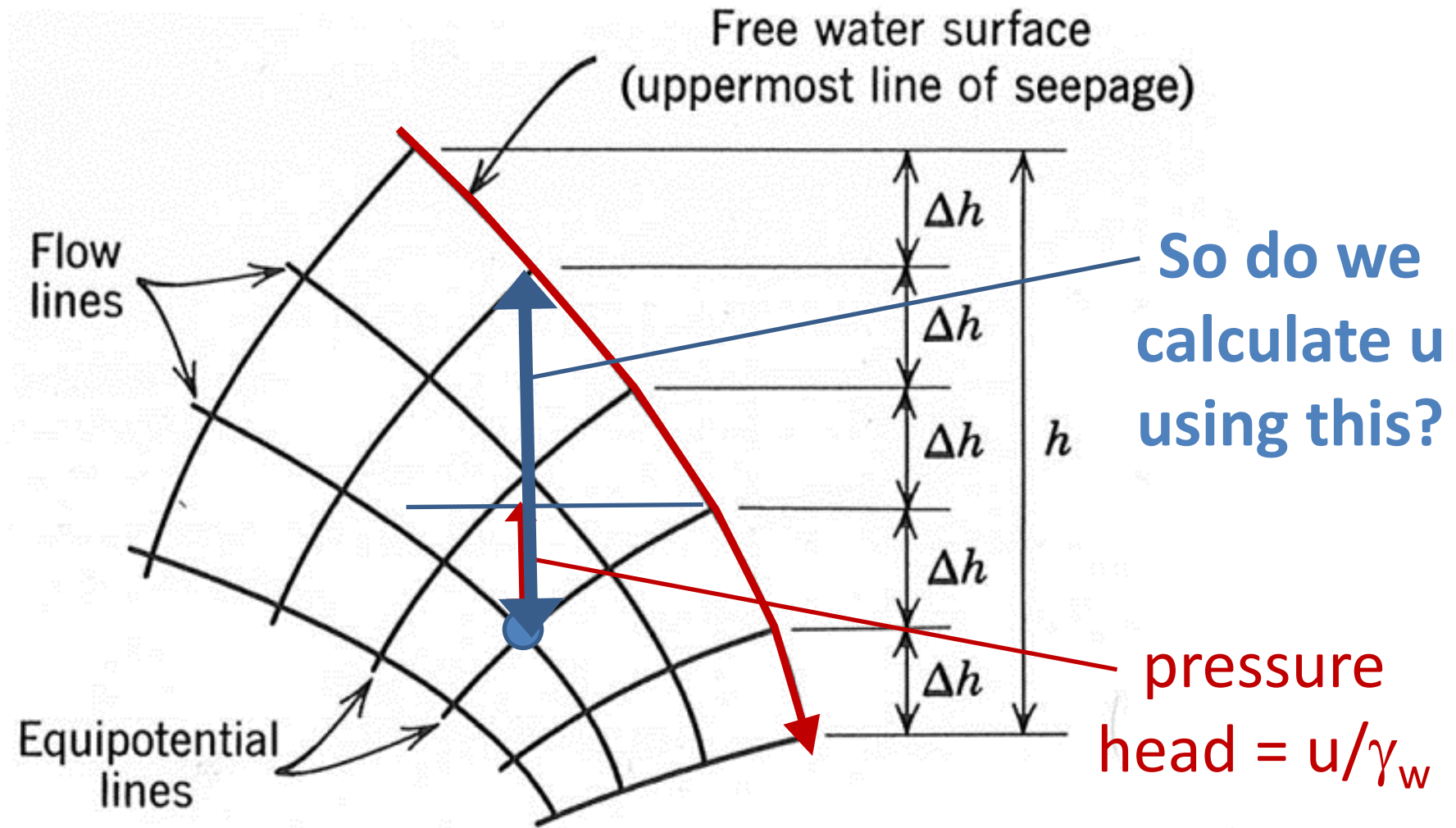


FIG. 3.8 General condition for line of seepage. (After A. Casagrande, 1937.) H.Cedergren. Seepage Drainage and Flow Nets

Ask Harry... or Don

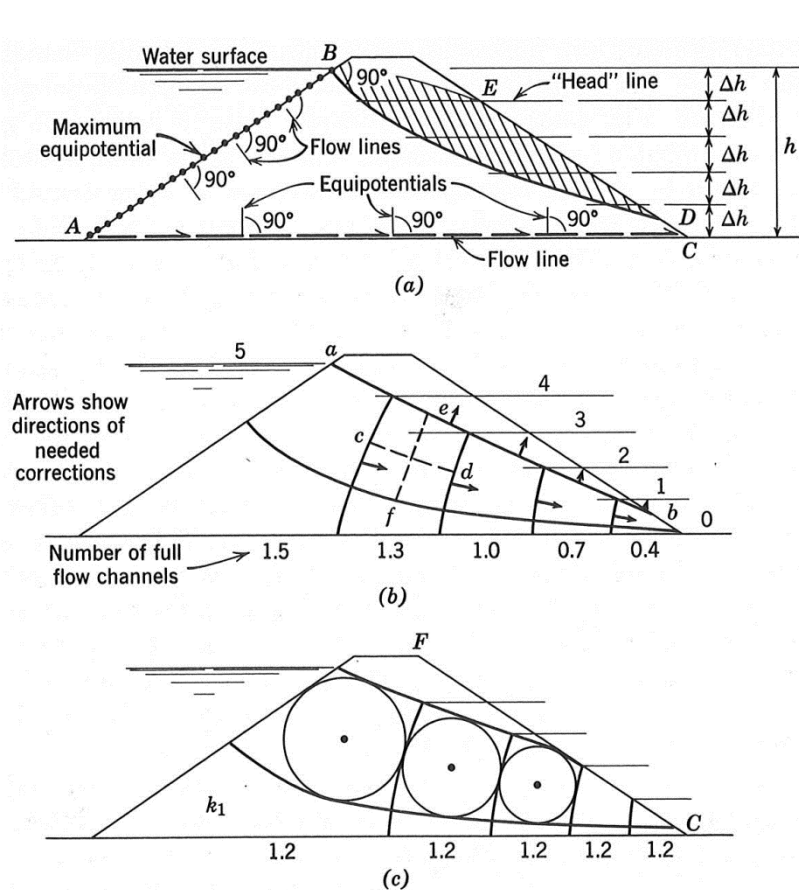


FIG. 4.4 Flow net for homogeneous dam on impervious foundation (Example 4). (a) Known conditions. (b) Trial saturation line and flow net. (c) Final flow net.

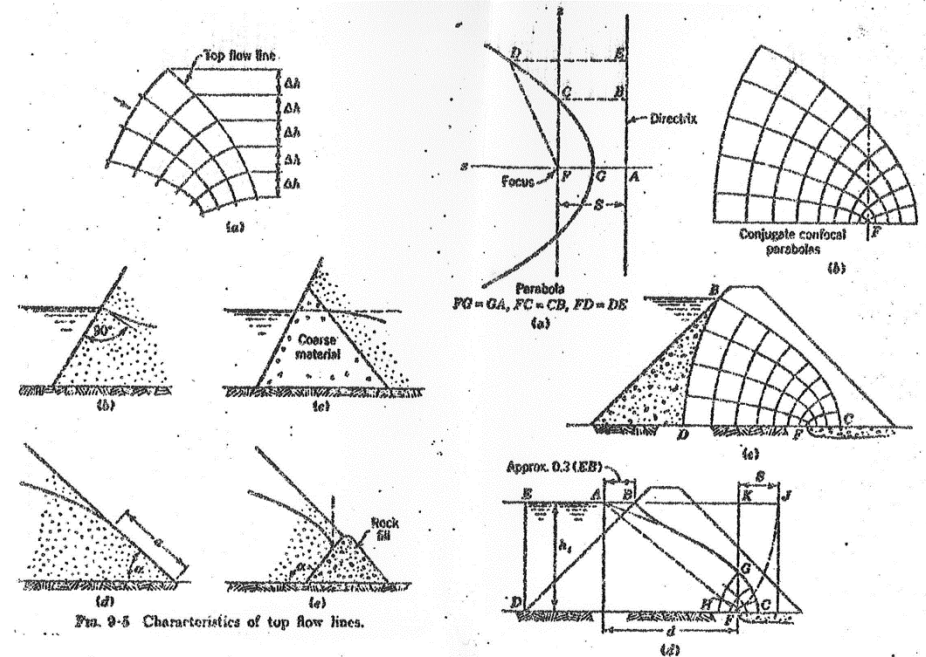


FIG. 9-5 Characteristics of top flow lines.

FIG. 9-6 The flow net consisting of confocal parabolas.

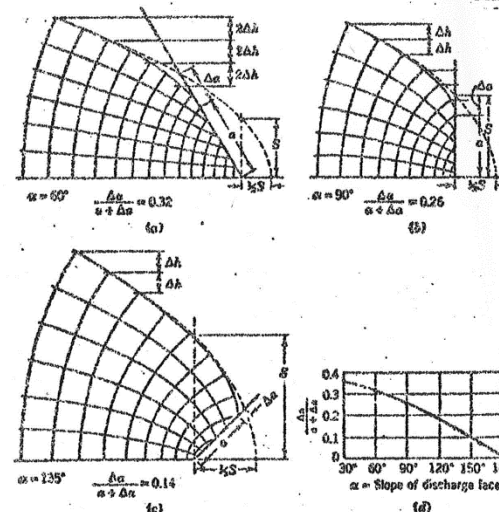


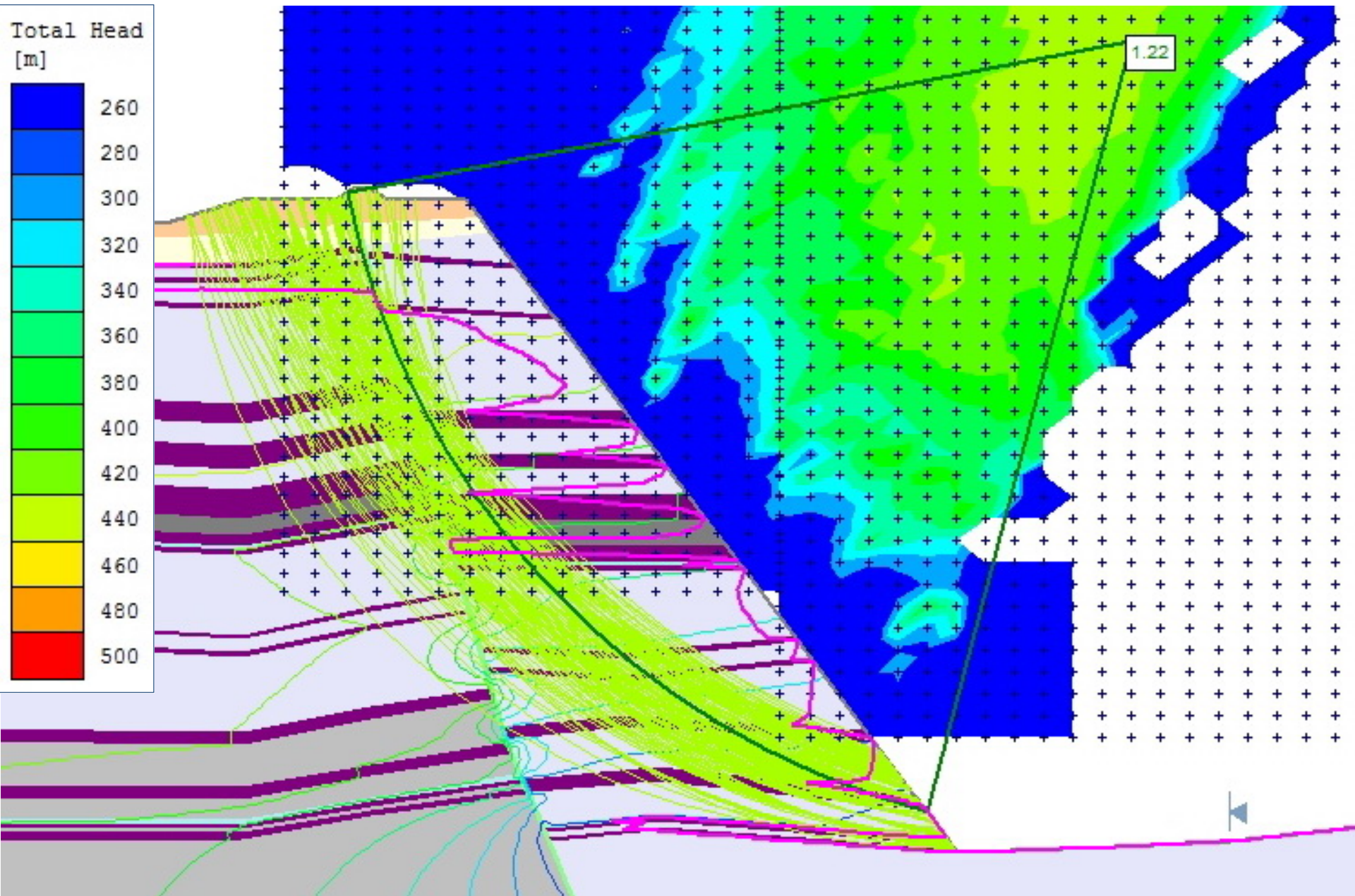
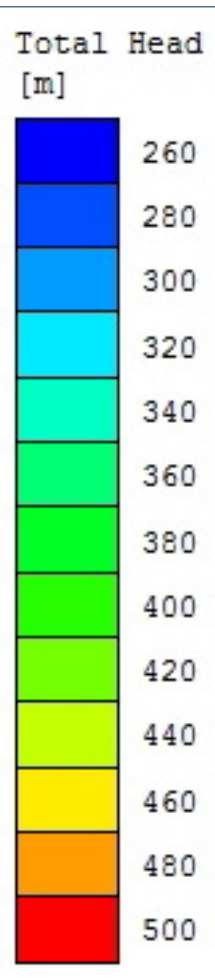
FIG. 9-7 Flow nets for downstream portions of dams with various discharge slopes, showing comparison with the parabolic case. (A. Casagrande.)

C.E. 341

GUIDES TO DRAWING FLOW NETS

- Top Flow Lines at Atmospheric Pressure
- From: Taylor's "Fundamentals of Soil Mechanics", Wiley 1948

or use FEA?



COEFFICIENT OF PERMEABILITY

