Topographic Profiles
Gradient / Slope
Scale

CI = 20 ft.

Profile Line

N

Scrap paper
Profiles should have:
- Title
- Start and End points marked
- Direction Marked
- Horizontal scale (from map)
- Vertical Exaggeration
Vertical Scale
1 in = 60 ft
1 in = 60 ft x 12 in/ft = 720 in
Vscale = 1:720
Hscale = 1:24,000

Vertical Exaggeration
V.E. = Vscale
\[
\frac{1}{720}\\
\frac{1}{24,000} = 33.3X
\]

Slope / Gradient
\[
\text{Slope} = \frac{\text{rise}}{\text{run}}
\]
Rise = 80 ft
Run = 2 in x 24,000 = 48,000 inches = 4000 ft
Slope = 80 ft / 4000 ft = .02
.02 x 100 = 2%