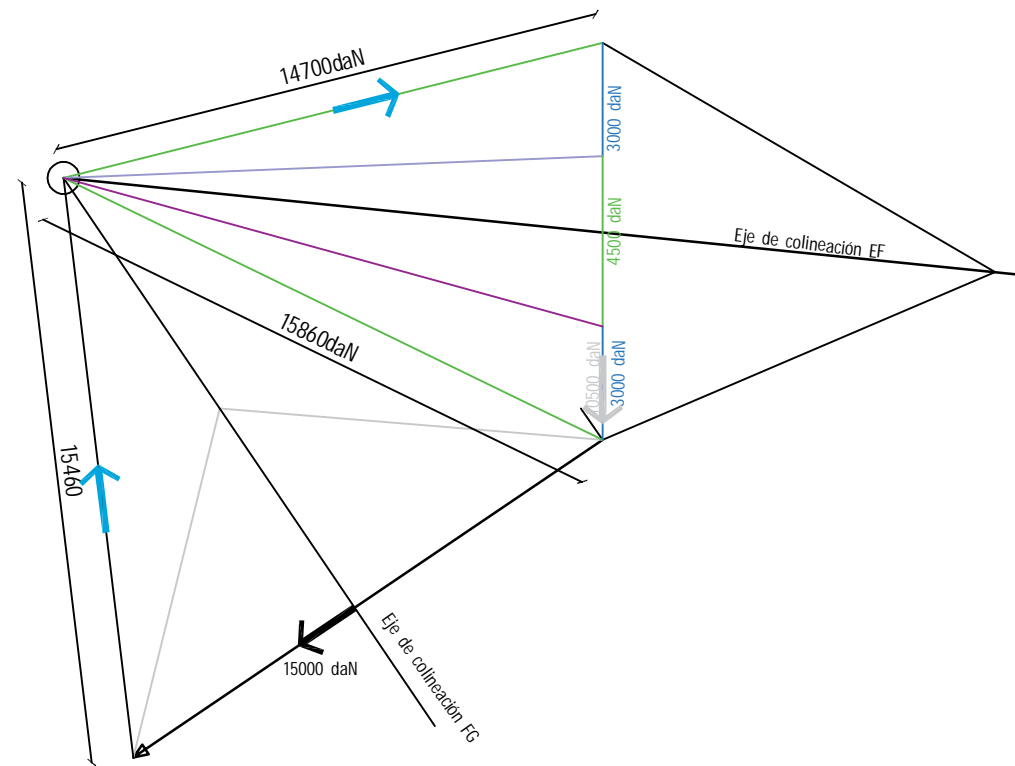
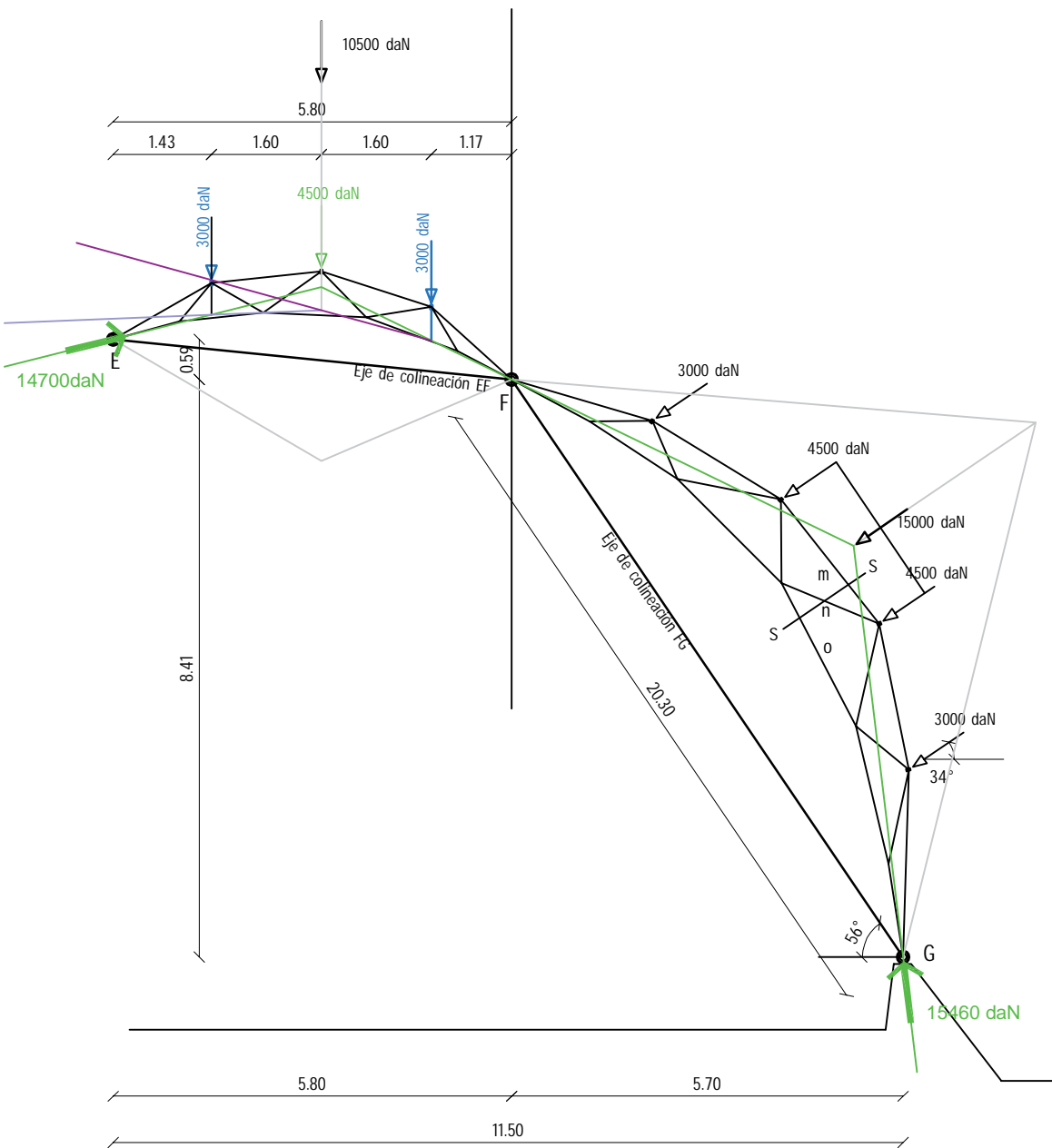
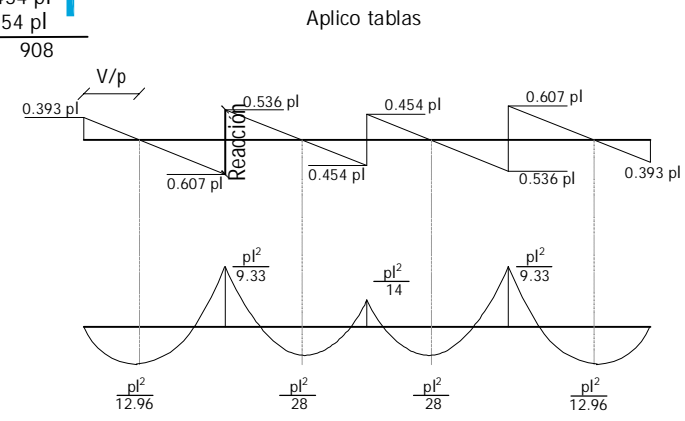
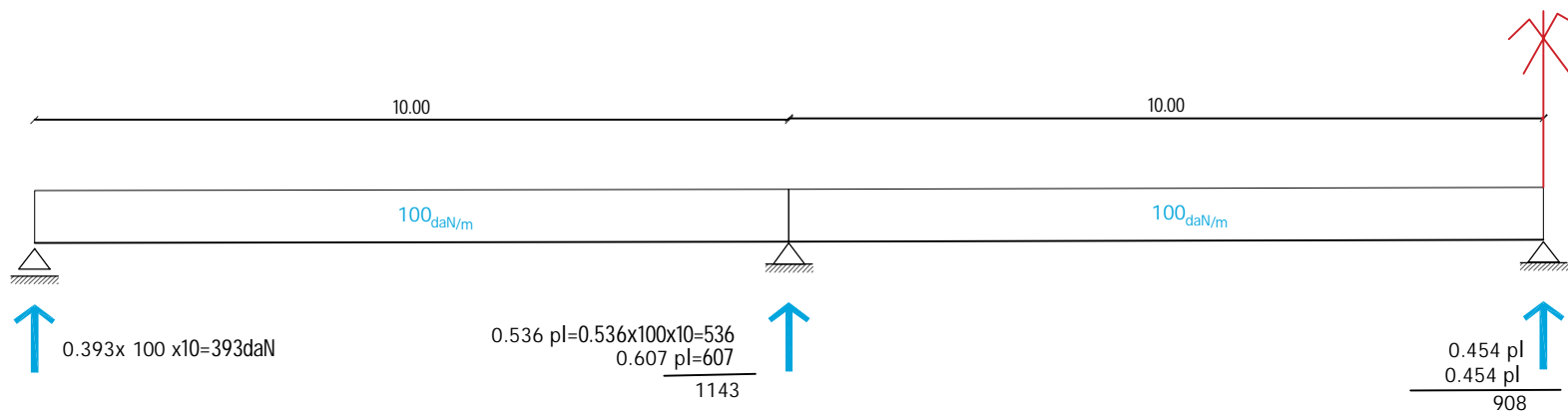


Plano de Situación
1m 1unidad autocad

Plano Operatorio
1Unidad autocad 2000daN

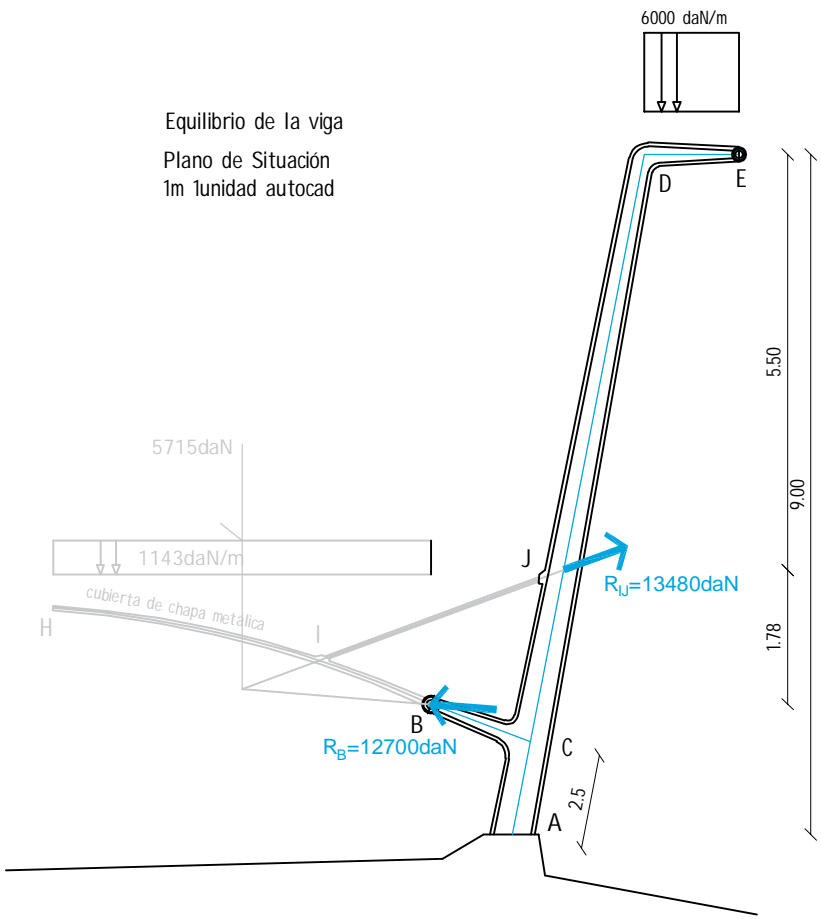


CORTE escala 1/200

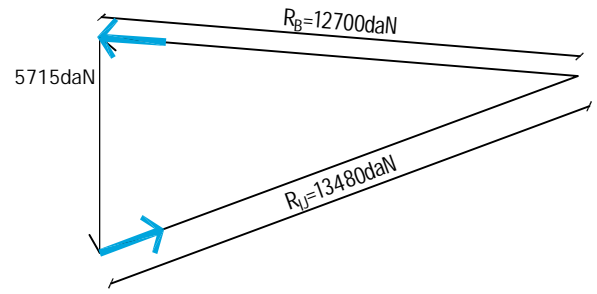


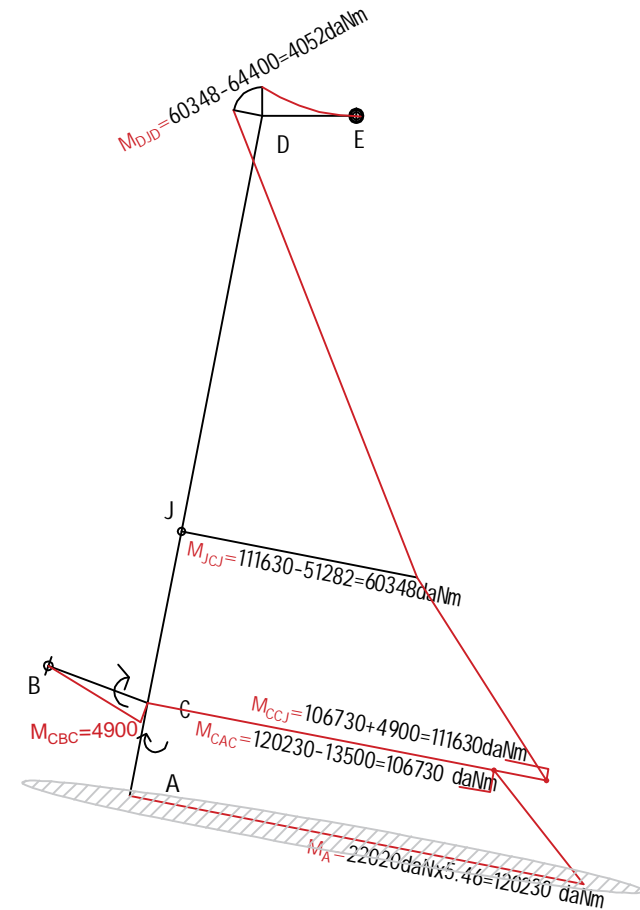
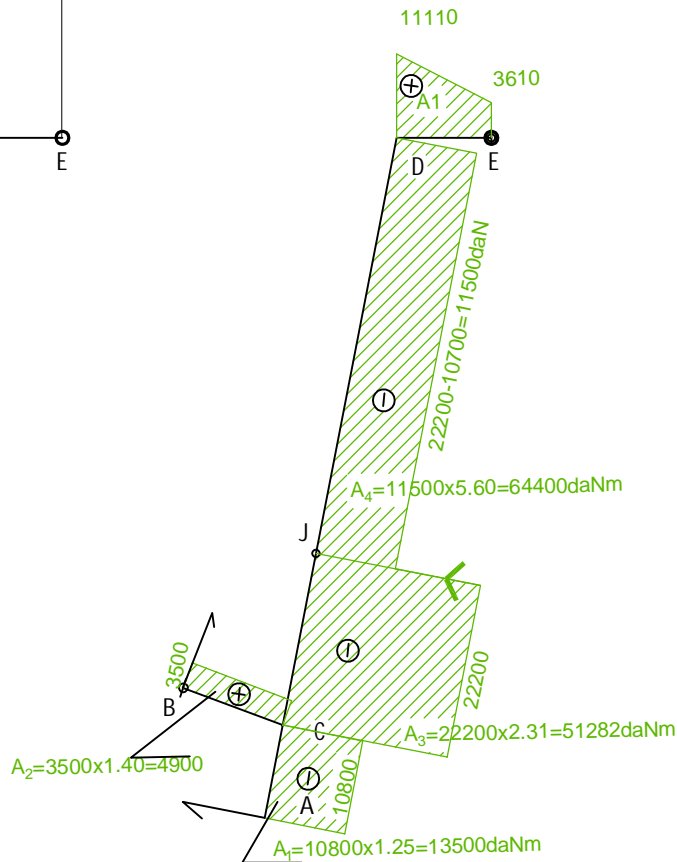
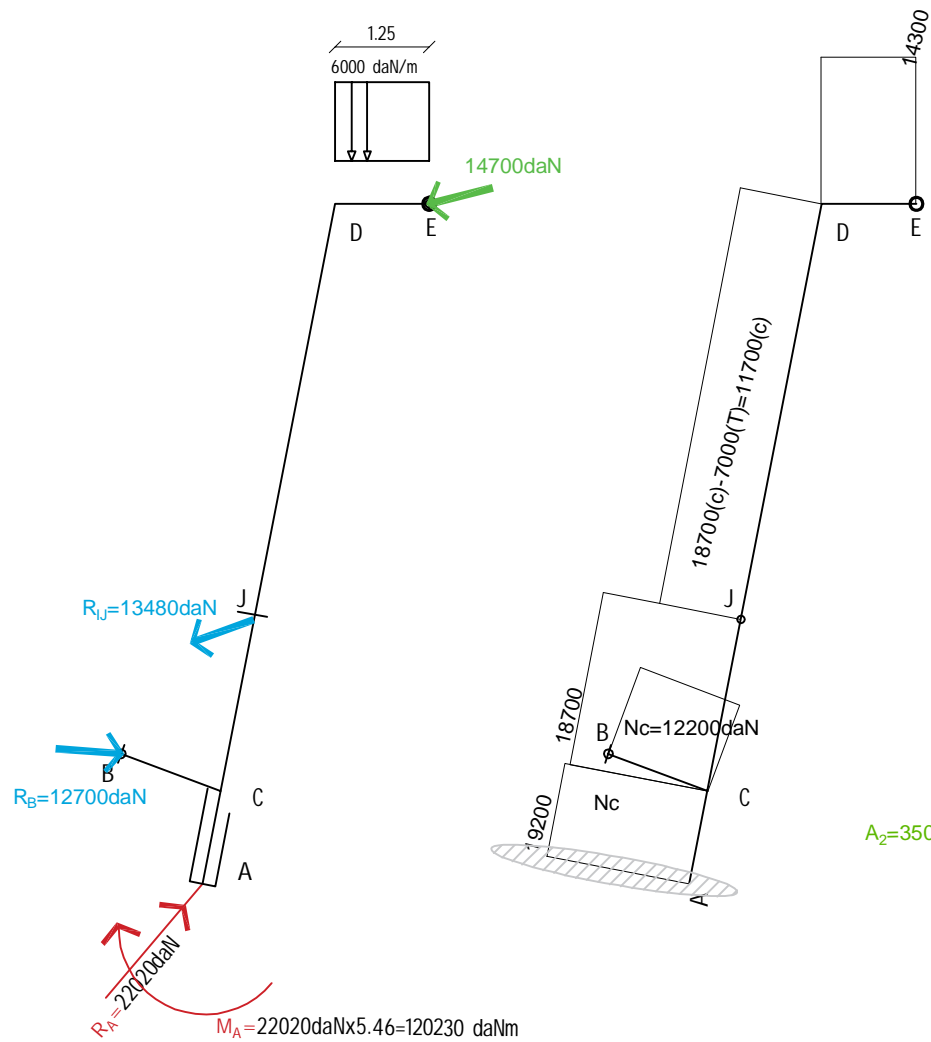
Aplico tablas

Equilibrio de la viga
Plano de Situación
1m 1unidad autocad



Plano Operatorio
1Unidad autocad 2000daN





Verificamos con $M = \text{daN.m}$ y $N = \text{daN}$

1- Análisis de Primer Orden

$$\sigma_{\text{adm}} > \frac{M_{\text{máx}}}{W_{\text{res}}} + \frac{N}{A}$$

$$1400 \text{ daN/cm}^2 > \frac{12023000 \text{ daNcm}}{898 \text{ cm}^3} + \frac{19200 \text{ daN}}{106.6 \text{ cm}^2} = 1518 \text{ daN}$$

2- Análisis de segundo orden

$$\sigma_{\text{adm}} > \frac{M_{2\text{do orden}}}{W_{\text{res}}} + \frac{N}{A}$$

$$M_{2\text{do orden}} = \frac{M_{1\text{er orden}}}{1 - \frac{N}{N_{\text{euler}}}} \quad N_{\text{euler}} = \frac{\pi^2 \times E \times I}{l_0^2}$$

$$l_0 = l \times \alpha$$

3- Tensiones Rasantes

$$\zeta_{\text{adm}} > \frac{V_{\text{máx}}}{\dot{A}_{\text{alma}}}$$

4- Plano de menor inercia (pandeo)

$$\frac{\sigma_{\text{adm}}}{\omega_p} > \frac{N}{A}$$

5- Deformaciones

$$\text{flecha}_{\text{adm}} > \text{flecha}_{\text{real}}$$